

# HEALTH INFORMATION STANDARDS COMMITTEE FOR ALBERTA APPROVAL/SIGNOFF FORM

Standard:	EMERGENCY HEALTH SERVICES -	Patient Care Report Minimum Data Set
Original Sin Mark Brissor A/Chair Health Inforn Committee fo	n, nation Standards	May 19 <sup>th</sup> , 2006 Date

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May 19<sup>th</sup>, 2006

Date



# **HEALTH INFORMATION STANDARD**

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# EMERGENCY HEALTH SERVICES - PATIENT CARE REPORT MINIMUM DATA SET

STATUS: APPROVED VERSION 1.0

STATUS DATE: 2006-MAY-16

# **REVISION HISTORY**

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#### INTRODUCTION

This document explains the Minimum Data Set for Emergency Health Services Patient Care Reporting used for gathering information required during the Pre-Hospital care of a patients through ambulance related services and procedures. The elements included span the major subject areas of the Patient Care Report (PCR); namely PCR Response Information, Person Health Status Information, and PCR Service Event Information subject areas.

These elements link with other health industry stakeholder / professional reporting so all elements that are measured alike follow the same format. This allows tracking of patients throughout an event, or throughout an event to discharge.

This document is divided into the following sections:

#### Introduction

Provides a brief description of the purpose and contents of the document.

### Patient Care Report (PCR) Subject Area

Provides a background on how the minimum data set has been defined and presents business context information for the PCR data standards.

#### **Conceptual Model**

Provides information that helps to put PCR business and data elements in the context of the overall health system.

#### **Logical Data Model**

Presents an Entity Relationship Diagram (ERD) at the logical level to facilitate understanding of the business data, the relationship, and information requirements of PCR.

#### **Data Element Standards**

Presents the standard specification for each of the PCR data groups and data elements using the HISCA standard template format.

#### BACKGROUND

In April 1998, representatives from the Alberta Ambulance Operators Association (AAOA) and Emergency Health Services Branch (EHS), Alberta Health and Wellness, met to discuss the need for the objective identification, validation and acceleration of the adoption of best practices for emergency medical services in Alberta.

Following this meeting a committee was formed to assist Alberta ambulance operators in establishing goals and performance measures for the delivery of emergency medical services in Alberta. The committee is composed of representatives from the AAOA, Emergency Health Services, the City of Edmonton Emergency Response Department, and the City of Calgary Emergency Medical Services Department.

The goals of the committee are:

- To establish a minimum set of standardized definitions of performance measures (reporting requirements) which could be promoted provincially and nationally;
- To identify common data elements;
- To educate Emergency Medical Services (EMS) stakeholders in the province on the purpose and benefits of benchmarking;
- To identify core data for analysis.

Initially, the focus of the committee was to encouraging benchmarking of EMS within Alberta; however, as a common set of definitions and data elements is promoted nationally, it will eventually become possible to benchmark ambulance services in Alberta with other services provincially and then nationally.

#### **Business Case for the Alberta Health and Wellness System**

Alberta Health and Wellness requires EMS data to assess the health status of the population, the impact of EMS programs, as well as the usage of EMS services. The service providers currently record detailed information about EMS health events. All ambulance trips and details of care provided to the patient are recorded on Patient Care Reports (PCR), which are then reported to Emergency Health Services, Alberta Health & Wellness.

The existing PCR computer system used today was developed to enable the collection of data from the PCR forms, and to facilitate the reporting of PCR data within AH&W to the ambulance operators and to outside agencies. Since its implementation, the PCR system has produced suspect data, and has been used very minimally by the ambulance operators.

The data identifies service recipients and details regarding EMS events. It is somewhat useful for high level planning, but detailed information is collected with insufficient edit checks to ensure its accuracy. The identification of service recipient is not consistent and often unsuitable for electronic identification.

#### **Benefits to Stakeholders**

The benefits to the public as a result of this initiative include

- EHS, which is responsible for setting appropriate and beneficial public health policy, will be better positioned to proceed with the development of new systems to acquire EMS related data.
- EHS will have better information to assist in creating effective EMS programs for the population. This data will be useful for determining levels of service required and additional training or equipment that should be available in different areas.
- EMS providers will benefit from improved analysis of EMS procedure results. Procedures
  performed in the Pre-Hospital interval can be related to later in-hospital treatments and
  the final outcome for the patient. This will provide valuable evidence on the values of
  certain procedures.

- A recently completed MLA review recommended significant restructuring of the delivery of EMS services in Alberta. A minimum data set would be an asset when new responsibilities are defined.
- In the absence of an EHS initiative to develop a standard data capture mechanism for use by ambulance operators, a number of EMS providers have developed and are developing internal systems for electronic capture of PCR data. A well-defined minimum data set is essential to minimize wasted effort on their part and to build working relationships with them.

## Feasibility and Ease or Difficulty of Implementation

In general, there is a strong demand from industry stakeholders for improved PCR reporting. The implementation tasks will be considerably easier when the user community is involved with the design and development of a solution that recognizes their needs and appears to be progressing consistently.

Over the next few years, technology will likely make vast improvements in communication and devices to enable remote reporting and data retrieval. An ongoing issue will remain with the technological disparity between various ambulance operators and even among the EMS personnel. Formidable technical requirements cannot be imposed on the personnel, particularly in some of the rural areas. A successful implementation will have to consider the acceptability of various technologies, not just the capabilities of the technology.

#### Impact on Privacy, Confidentiality and Security

Alberta Health and Wellness commenced a Privacy Impact Assessment (PIA) regarding their requirement to receive detailed EMS data in accordance with the proposed standard. The Privacy Impact Assessment for EHS - PCR MDS was accepted by the Privacy Commissioner in March 2005.

#### **Results of the Literature Review**

As described in the Background section, a committee representing all stakeholders was formed and engaged to develop the 'Benchmarking of EMS in Alberta' documents in April 1998. The committee included representatives from the AAOA and Emergency Health Services, as well as the City of Edmonton Emergency Response Department and the City of Calgary Emergency Medical Services Department.

During the preparation of the consultation paper, the committee drew extensively on current research in the field of performance measurement and, more specifically, in EMS benchmarking. The purpose of the paper was to propose, and get feedback on, common definitions and data elements required to benchmark emergency medical services in Alberta.

Existing provincial data standards were also reviewed and used where applicable. This included utilizing HISCA data standards and data standards from Government of Alberta Standards Sub committee, notably Municipal Affairs for the 'City Code'.

Formal minimum data standards for patient care reporting do not exist provincially or nationally that PCR could use.

#### Relationship to Legislation and/or Existing Standards

Currently, Ambulance Operators are required to report detailed PCR data, either in paper form or in some cases, electronically on diskette. They are to forward the PCR data at least on a monthly basis, although some smaller operations fail to be that regular.

As the information requirements of PCR were identified, existing standards were used to align the PCR minimum data set. The alignment process included:

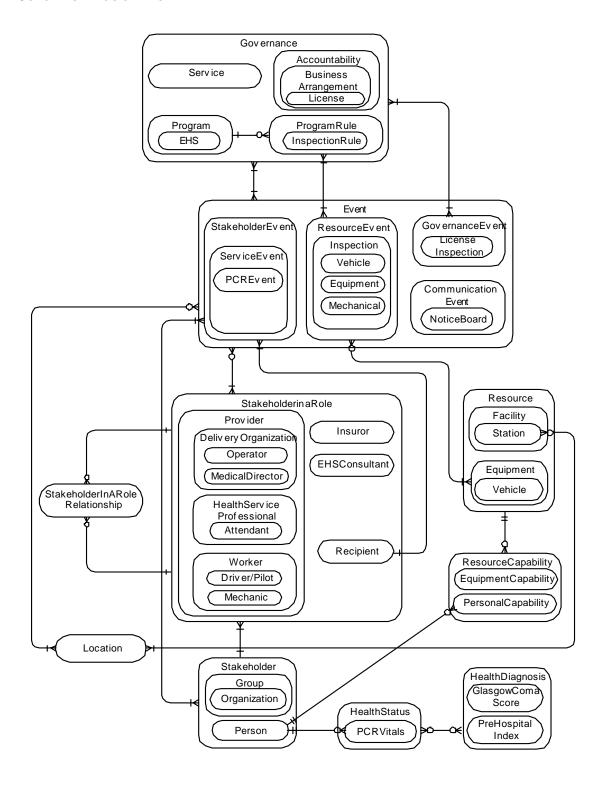
1. Standards already Approved or Accepted in Draft format by HISCA were adopted wherever possible.

## **Summary of Consensus to Date**

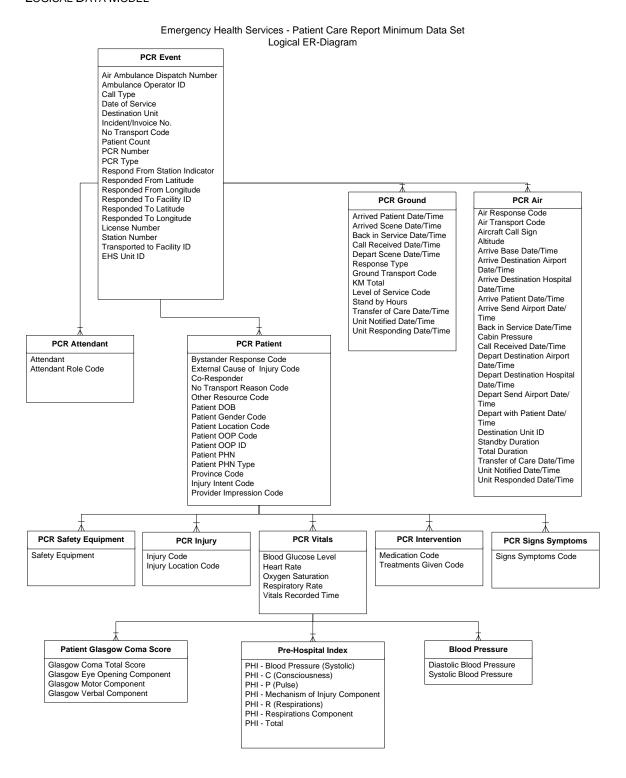
The Benchmarking Document was distributed to each of the Ambulance Operators for review and comment. The resulting consultation paper "Benchmarking of Emergency Medical Services in Alberta" (February 1999) is attached as **Appendix A.** 

This HISCA submission is based upon the Benchmarking Document with final input from an internal Emergency Health Services (EHS) working committee.

#### CONCEPTUAL LOGICAL MODEL



#### LOGICAL DATA MODEL



**PCR EVENT Compound Name Parent Compound Name Component Name** Air Ambulance Dispatch Number Ambulance Operator ID Call Type Date of Service **Destination Unit** Incident/Invoice No. No Transport Code Patient Count **PCR Number PCR Type** Respond From Station Indicator Responded From Latitude Responded From Longitude Responded To Facility ID Responded To Latitude Responded To Longitude License Number Station Number Transported to Facility ID **EHS Unit ID** PCR Attendant PCR Ground PCR Air **PCR** Patient **EHS - PCR MDS** Submission Requirement for the Standard **Obligation** Mandatory Cardinality **Submitting Organization** Alberta Health and Wellness Standard Reference The Patient Care Report captures the minimum data set Definition required for Alberta Health and Wellness. **Business Rule/Coding** Guideline

Data Element Name	Air Ambulance Dispatch Number
Compound Name	PCR Event
Submission	EHS - PCR MDS
Requirement for the Standard	Records the air ambulance dispatch number issued by Air Ambulance Dispatch for ground ambulances providing support to air ambulances.
Submitting Organization	Alberta Health and Wellness
Standard Reference	
Definition	Unique number generated by Air Ambulance Dispatch.
Information Exchange Format Type	CHAR
Information Exchange Format Length	20
Information Exchange Format Mask	
Presentation/Display Format	
Obligation	Conditional
Cardinality	
Business Rule/Coding Guideline	Mandatory if response is for Air Ambulance
Implementation Consideration	
Permissible Data Element Value	
Synonymous Name	

Data Element Name | Ambulance Operator ID **Compound Name** PCR Event Submission **EHS - PCR MDS** Requirement for the Standard Legal and regulatory standards require that each ambulance operator be registered with EHS. Each ambulance operator is assigned an operator identifier for reference within the EHS application systems. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Definition Unique identifier generated and assigned by AAIMS for each ambulance operator registered with Alberta Health and Wellness. **Information Exchange Format NUMBER** Type Information Exchange Format Length **Information Exchange Format** Mask **Presentation/Display Format** Obligation Mandatory Cardinality **Business Rule/Coding** Guideline Implementation Consideration Permissible Data Element | 0001-9999 **Value Synonymous Name** 

Data Element Name	Coll Tyre
Compound Name	
Submission	
Requirement for the Standard	Used to categorize the types of service delivered, and allows planning of EMS resource allocation.
Submitting Organization	Alberta Health and Wellness
Standard Reference	Benchmarking of Emergency Medical Services in Alberta
Definition	Code to indicate the type of call an ambulance responded to (i.e. emergency, rendezvous, transfer, etc.)
Information Exchange Format Type	CHAR
Information Exchange Format Length	2
Information Exchange Format Mask	
Presentation/Display Format	
Obligation	Mandatory
Cardinality	
Business Rule/Coding Guideline	Scene/Emergency Refers to direct response to scene of incident or injury, such as roadway, etc. This code should not be used by the second unit which receives the transfer of a patient from another EMS responder prior to arrival at a medical facility or final destination which is coded as a rendezvous.  Rendezvous Refers to a situation in which a second ambulance unit receives the transfer of a patient from first ambulance unit before arrival at a medical facility. Can be used when two units meet to complete the initial scene response or during transfers.  Unscheduled Transfer Refers to transfers of patients from one facility to another facility. This code should not be used for planned, scheduled transfers, which are coded separately. This code should not be used by the second unit involved in the transfer of a patient from one EMS responder to another responder during an unscheduled inter-facility transfer, which is also coded as a rendezvous.  Scheduled Transfer Refers to transfers of patients from one facility to another facility, as defined above for unscheduled transfer. However, this code is chosen when the transfer is scheduled in advance, such as a planned morning transfer of a patient from one hospital to another.

Between RHA and within RHA Refers to unscheduled and scheduled transfers. Between RHA is for transfers which occur between two regional health authorities and with RHA is for transfers which occur within one regional health authority. Air Ambulance Support Refers to a situation in which a ground ambulance unit transports a patient to an aircraft or from an aircraft as a part of an Air Ambulance service. Return to Residence Refers to a situation in which an ambulance unit transports a patient to his/her place of residence. Implementation Consideration **Permissible Data Element** C1 / Scene/emergency Value C2 / Rendezvous C3 / Unscheduled transfer, between RHA C4 / Unscheduled transfer, within RHA C5 / Scheduled transfer, between RHA C6 / Scheduled transfer, within RHA C7 / Air ambulance support C8 / Return to residence **Synonymous Name** 

**Synonymous Name** 

**Data Element Name** Date of Service PCR Event **Compound Name** Submission **EHS - PCR MDS** Requirement for the Standard Legal and regulatory standards require that each PCR have a

Date of Service recorded. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Start date the incident occurred and/or ambulance service was Definition provided. DATE **Information Exchange Format** Type **Information Exchange Format** 10 Length **Information Exchange Format** YYYY/MM/DD **Presentation/Display Format Obligation** | Mandatory Cardinality **Business Rule/Coding** Valid Date Guideline **Implementation Consideration Permissible Data Element** Value

**Data Element Name** | Destination Unit PCR Event **Compound Name** Submission **EHS - PCR MDS** Requirement for the Standard Legal and regulatory standards require that each certified ambulance be clearly identifiable by unit number displayed on the vehicle in fixed locations. This number must be clearly displayed on each vehicle. **Submitting Organization** Alberta Health and Wellness **Standard Reference** EHS assigned unit number of the ground ambulance vehicle Definition responding to a requirement to complete the transportation of the patient to the destination point. **Information Exchange Format NUMBER** Type Information Exchange Format Length **Information Exchange Format** Mask **Presentation/Display Format** Obligation Mandatory Cardinality **Business Rule/Coding** Guideline Implementation Consideration Permissible Data Element | 1 to 9999 Value **Synonymous Name** 

**Business Rule/Coding** 

**Implementation Consideration** 

**Permissible Data Element** 

**Synonymous Name** 

Guideline

Value

Operator ID.

Data Element Name | Incident/Invoice No. **Compound Name** PCR Event EHS - PCR MDS Submission Requirement for the Standard As more ambulance operators computerize their dispatch and call information processing, internal identifiers of foreign systems may be useful in investigative situations. This number will provide the possibility of a linkage from the PCR record to the related information in the source system. This is the unique number within an individual dispatch area's records that identifies the incoming incident reports. Useful for linking to other health files. **Submitting Organization** Alberta Health and Wellness Benchmarking of Emergency Medical Services in Alberta. Standard Reference Definition A unique number generated by individual Dispatch Centers for an incident. CHAR Information Exchange Format **Information Exchange Format** 16 Length **Information Exchange Format** Mask **Presentation/Display Format Obligation** Optional Cardinality

> This identifier may vary in format for each dispatch center. Uniqueness will only be guaranteed when combined with the

Data Element Name | No Transport Code PCR Event **Compound Name** Submission **EHS - PCR MDS** Identifies if a patient was not transported. Requirement for the Standard **Submitting Organization** Alberta Health and Wellness **Standard Reference** Definition Code to indicate a patient was not transported. **BOOLEAN** Information Exchange Format **Type** Information Exchange Format 1 **Information Exchange Format Presentation/Display Format** Conditional Obligation Cardinality **Business Rule/Coding** Mandatory if a patient was not transported by the responding ambulance unit. Guideline Implementation Consideration **Permissible Data Element** Value **Synonymous Name** 

Implementation Consideration

Permissible Data Element | 0 - 99

**Synonymous Name** 

**Value** 

**Data Element Name** Patient Count PCR Event **Compound Name** Submission **EHS - PCR MDS** Requirement for the Standard At times, one vehicle will be used to treat and/or transport more than one patient at a time. This element serves to verify data integrity, and can also be used in allocation of funding or billing. **Submitting Organization** Alberta Health and Wellness Standard Reference | EHS Working Committee **Definition** The total number of patients treated on this trip. Information Exchange Format | NUMBER Information Exchange Format | 2 Length **Information Exchange Format** Mask **Presentation/Display Format** Obligation Mandatory Cardinality **Business Rule/Coding** Guideline

Data Element Name | PCR Number **Compound Name** PCR Event EHS - PCR MDS **Submission** Requirement for the Standard Each physical patient care report is pre-printed with a unique number for identification purposes. Currently the paper copy is the required legal instance of the PCR and the PCR Number is the specific key to a specific report. This is the central and most important number in the Pre-Hospital portion of the EMS information system. Every response must result in a PCR even if there is no patient. A response will have multiple PCRs if there are multiple patients. If multiple responders respond to one incident, there will be multiple PCR's as well. **Submitting Organization** Alberta Health and Wellness **Standard Reference Definition** A unique number assigned to identify each Patient Care Report. (PCR) Information Exchange Format | NUMBER Type Information Exchange Format 9 Length **Information Exchange Format** Mask **Presentation/Display Format Obligation** | Mandatory Cardinality **Business Rule/Coding** This identifier is preprinted on the PCR forms. Number Guideline allocation is controlled by EHS. Implementation Consideration This number currently is printed as a document identifier on each PCR form. Not all operators use identical forms, nor are they printed by the same supplier, so number uniqueness issues have arisen in the past. Permissible Data Element Value **Synonymous Name** 

Data Element Name	PCR Type
Compound Name	PCR Event
Submission	EHS - PCR MDS
Requirement for the Standard	Identifies whether the type of Patient Care Report is for ground or air ambulance service.
Submitting Organization	Alberta Health and Wellness
Standard Reference	
Definition	Indicator for what type of PCR (Ground or Air)
Information Exchange Format Type	BOOLEAN
Information Exchange Format Length	1
Information Exchange Format Mask	
Presentation/Display Format	
Obligation	Mandatory
Cardinality	
Business Rule/Coding Guideline	
Implementation Consideration	
Permissible Data Element Value	
Synonymous Name	

-	
Data Element Name	Respond From Station Indicator
Compound Name	PCR Event
Submission	EHS - PCR MDS
Requirement for the Standard	The rationale for this data element has been defined as part of the Respond from Coordinates compound.
Submitting Organization	Alberta Health and Wellness
Standard Reference	
Definition	Indicator to identify the ambulance unit responded from its station. Acts as a default to indicate the GPS coordinates of that station/base.
Information Exchange Format Type	BOOLEAN
Information Exchange Format Length	1
Information Exchange Format Mask	
Presentation/Display Format	
Obligation	Optional
Cardinality	
Business Rule/Coding Guideline	
Implementation Consideration	
Permissible Data Element Value	
Synonymous Name	

Responded From Latitude Data Element Name **Compound Name** PCR Event **EHS - PCR MDS** Submission Requirement for the Standard The rationale for this data element has been defined as part of the Respond To Coordinates compound. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Standard: Government of Alberta Data Standards Data Element Name: Geographic Location Coordinates V1.1 The decimal degrees of latitude of the location that the Definition responding unit responded from. **Information Exchange Format** CHAR Information Exchange Format | 11 Length Information Exchange Format SNN.NNNNNNN Mask **Presentation/Display Format Obligation** Optional Cardinality **Business Rule/Coding** Negative (-) values are South of the equator, Positive (+) are Guideline North of the equator Values are expressed as decimal values, rather than the traditional degrees, minutes, seconds format. It is not expected that this field will be utilized until the Implementation Consideration corresponding unit is equipped with a GPS. **Permissible Data Element** (-)90.0000000 through +90.0000000 Value **Synonymous Name** 

Responded From Longitude Data Element Name **Compound Name** PCR Event **EHS - PCR MDS** Submission Requirement for the Standard The rationale for this data element has been defined as part of the Respond To Coordinates compound. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Standard: Government of Alberta Data Standards Data Element Name: Geographic Location Coordinates V1.1 The decimal degrees of longitude of the location that the Definition responding unit responded from. **Information Exchange Format** CHAR Information Exchange Format | 11 Length Information Exchange Format SNN.NNNNNNN Mask **Presentation/Display Format Obligation** Optional Cardinality **Business Rule/Coding** Negative (-) values are South of the equator, Positive (+) are Guideline North of the equator Values are expressed as decimal values, rather than the traditional degrees, minutes, seconds format. It is not expected that this field will be utilized until the Implementation Consideration corresponding unit is equipped with a GPS. **Permissible Data Element** (-)180.0000000 through +180.0000000 Value **Synonymous Name** 

Data Element Name | Responded To Facility ID **Compound Name PCR Event EHS - PCR MDS** Submission Requirement for the Standard When an ambulance trip involves responding to a location and transfer a patient from a registered facility, the standard identifier for the facility must be used. **Submitting Organization** Alberta Health and Wellness **Standard Reference** The Facility ID, as defined in the Alberta Health and Wellness Definition Interim Facility Registry System, of the facility that the patient was transported from. (i.e. Active Treatment Center, Auxiliary Hospital, etc.) Information Exchange Format **CHAR** Type Information Exchange Format | 6 Length **Information Exchange Format** Mask **Presentation/Display Format** Obligation Conditional Cardinality **Business Rule/Coding** Mandatory when the ambulance responds to a known facility Guideline and not specified if the response was not to a registered **Implementation Consideration** Alignment with the Pharmaceutical Information Network Clinical Data Set. The list of facilities is currently under review. The current CLASS (Alberta Health & Wellness Claims Assessment System) values will be used until new values are available. When defined, the Facility Registry may result in a new format for the Facility ID. **Permissible Data Element** Value **Synonymous Name** 

**Data Element Name** Responded To Latitude **Compound Name** PCR Event **EHS - PCR MDS** Submission Requirement for the Standard The rationale for this data element has been defined as part of the Respond To Coordinates compound. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Standard: Government of Alberta Data Standards Data Element Name: Geographic Location Coordinates V1.1 The decimal degrees of latitude of the location that the Definition responding unit responded to. **Information Exchange Format** CHAR Information Exchange Format | 11 Length Information Exchange Format SNN.NNNNNNN Mask **Presentation/Display Format Obligation** Optional Cardinality **Business Rule/Coding** Negative (-) values are South of the equator, Positive (+) are Guideline North of the equator Values are expressed as decimal values, rather than the traditional degrees, minutes, seconds format. It is not expected that this field will be utilized until the Implementation Consideration corresponding unit is equipped with a GPS. **Permissible Data Element** (-)90.0000000 through +90.0000000 Value **Synonymous Name** 

**Data Element Name** Responded To Longitude **Compound Name** PCR Event **EHS - PCR MDS** Submission Requirement for the Standard The rationale for this data element has been defined as part of the Respond To Coordinates compound. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Standard: Government of Alberta Data Standards Data Element Name: Geographic Location Coordinates V1.1 The decimal degrees of longitude of the location that the Definition responding unit responded to. **Information Exchange Format** CHAR Information Exchange Format | 11 Length Information Exchange Format SNNN.NNNNNNN Mask **Presentation/Display Format Obligation** Optional Cardinality **Business Rule/Coding** Negative (-) values are South of the equator, Positive (+) are Guideline North of the equator Values are expressed as decimal values, rather than the traditional degrees, minutes, seconds format. It is not expected that this field will be utilized until the Implementation Consideration corresponding unit is equipped with a GPS. **Permissible Data Element** (-)180.0000000 through +180.0000000 Value **Synonymous Name** 

Data Element Name | License Number PCR Event **Compound Name** Submission **EHS - PCR MDS** Requirement for the Standard Legal and regulatory standards require that each ambulance operator be licensed and registered with EHS. EHS assigns a license identifier for each ambulance operators for reference with the EHS. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Definition EHS assigned license identifier for the ambulance operator that responded to the incident CHAR **Information Exchange Format** Information Exchange Format | 5 Length Information Exchange Format A9999 Mask **Presentation/Display Format** Obligation Mandatory Cardinality **Business Rule/Coding** Guideline Implementation Consideration **Permissible Data Element** Value **Synonymous Name** 

**Data Element Name** | Station Number **Compound Name** PCR Event Submission **EHS - PCR MDS** Requirement for the Standard Legal and regulatory standards require that each station be registered with EHS. EHS assigns a station number for each station for reference within the EHS application systems. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Definition Number assigned by EHS to uniquely identify a Station. A station can be a Fire Hall, Ambulance Bay, EMS Services, etc. **Information Exchange Format** NUMBER Information Exchange Format 3 Length **Information Exchange Format** Mask **Presentation/Display Format Obligation** | Mandatory **Cardinality Business Rule/Coding** Guideline Implementation Consideration Permissible Data Element 001 - 999 Value **Synonymous Name** 

Data Element Name | Transported to Facility ID **Compound Name** PCR Event **EHS - PCR MDS** Submission Requirement for the Standard When an ambulance trip involves transporting a patient to a facility, the standard identifier for the facility must be used. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Definition The Facility ID, as defined in the Alberta Health and Wellness Interim Facility Registry System, of the facility that the patient was transported to. (i.e. Active Treatment Center, Auxiliary Hospital, etc.) Information Exchange Format CHAR **Information Exchange Format** 6 Length **Information Exchange Format** Mask **Presentation/Display Format** Obligation Conditional Cardinality **Business Rule/Coding** Mandatory when the ambulance responds to a known facility Guideline and not specified if the response was not to a registered facility. Implementation Consideration Alignment with the Pharmaceutical Information Network Clinical Data Set. The list of facilities is currently under review. The current CLASS (Alberta Health & Wellness Claims Assessment System) values will be used until new values are available. When defined, the Facility Registry may result in a new format for the Facility ID. **Permissible Data Element** Value **Synonymous Name** 

Guideline

Value

Implementation Consideration

Permissible Data Element

**Synonymous Name** 

Data Element Name | EHS Unit ID **Compound Name** PCR Event Submission **EHS - PCR MDS** Requirement for the Standard Legal and regulatory standards require that each certified ambulance be clearly identifiable by unit number displayed on the vehicle in fixed locations. This number must be clearly displayed on each vehicle. **Submitting Organization** Alberta Health and Wellness Standard Reference | Ambulance Services Act Definition Unique ID for the vehicle assigned by EHS, representing the chassis and the ambulance unit. This will be either a 4 character ID for ground vehicle, or the 6 character call sign for an aircraft. CHAR Information Exchange Format **Information Exchange Format** 6 **Information Exchange Format** Mask **Presentation/Display Format Obligation** Mandatory Cardinality **Business Rule/Coding** Any valid Ambulance Unit ID assigned by EHS.

Compound Name	PCR Attendant
Parent Compound Name	PCR Event
Component Name	Attendant Attendant Role Code
Submission	EHS - PCR MDS
Requirement for the Standard	
Obligation	Mandatory
Cardinality	
Submitting Organization	Alberta Health and Wellness
Standard Reference	
Definition	
Business Rule/Coding Guideline	

Data Element Name | Attendant PCR Attendant **Compound Name** Submission **EHS - PCR MDS** Requirement for the Standard The level of qualification of attendants is necessary in defining the level of the service available during an incident. The Ambulance Services Act defines the level of service operators may provide. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Alberta College of Paramedics: Health Disciplines Act Benchmarking of Emergency Medical Services in Alberta Ambulance Services Act The Alberta College of Paramedics registration Number for the **Definition** attendant(s). Information Exchange Format **CHAR** Type Information Exchange Format | 8 Length Information Exchange Format | A9999999 Mask **Presentation/Display Format Obligation** | Mandatory **Cardinality Business Rule/Coding** Any valid Alberta College of Paramedics registration number **Guideline** for a practicing attendant. **Implementation Consideration Permissible Data Element** Value **Synonymous Name** 

Data Element Name | Attendant Role Code **Compound Name** PCR Attendant Submission **EHS - PCR MDS** Requirement for the Standard Identifies which attendant provided a treatment or medication. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Code to indicate the role of the attendant for the duration of the Definition response. (i.e. Attendant A Primary, Attendant B/Driver or Attendant C/Student) CHAR **Information Exchange Format** Type Information Exchange Format | 1 Length Information Exchange Format | A Mask **Presentation/Display Format** Obligation Conditional **Cardinality Business Rule/Coding** Mandatory when the patient receives a treatment or Guideline medication. **Implementation Consideration** Permissible Data Element | A - Primary Value B - Driver C - Student **Synonymous Name** 

**Standard Reference** 

**Business Rule/Coding** 

Definition

Guideline

Compound Name | PCR Ground Parent Compound Name PCR Event Arrived Patient Date/Time **Component Name** Arrived Scene Date/Time Back in Service Date/Time Call Received Date/Time Depart Scene Date/Time Response Type **Ground Transport Code** KM Total Level of Service Code Stand by Hours Transfer of Care Date/Time Unit Notified Date/Time Unit Responded Date/Time Submission **EHS - PCR MDS** Requirement for the Standard Conditional Obligation **Cardinality Submitting Organization** Alberta Health and Wellness

**Data Element Name** | Arrived Patient Date/Time **Compound Name** PCR Ground **EHS - PCR MDS Submission** Requirement for the Standard 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 attendant(s) are delayed or prevented from establishing contact because of fire or adverse conditions from approaching the patient, this time will be useful. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Standard: HISCA Standard Format HL7 Version 2.4 Data Element Name: Date, Time Timestamp (TS) Time the responding attendant(s) established direct contact Definition with patient. Information Exchange Format | DATETIME Information Exchange Format | 19 Length Information Exchange Format | YYYY/MM/DD HH:MM:SS Mask **Presentation/Display Format Obligation** Mandatory Cardinality **Business Rule/Coding** Coding Guidelines: Search and rescue operations will also note delays between arrival at the overall scene and the actual Guideline patient contact. Also important as patients' perception of EMS response interval is from the time call requesting service was made to the time when EMS personnel arrive at their side to deliver care. For this entity, the Time portion is meaningless without the **Implementation Consideration** Date portion, and so it is defined as one entity that can be externally represented as two components, the Date and Time. Internally, timestamps are often simply a number of time units since a known reference date, with no delineation into the date and time components. **Permissible Data Element** Value **Synonymous Name** 

**Data Element Name** | Arrived Scene Date/Time **Compound Name** PCR Ground **EHS - PCR MDS Submission** Requirement for the Standard Permits measurement of the time required for the responding ambulance vehicle to go from the station to the scene. This data element refers to the physical motion of the responding EMS vehicle. **Submitting Organization** Alberta Health and Wellness Standard: HISCA Standard Format HL7 Version 2.4 Standard Reference Data Element Name: Date, Time Timestamp (TS) Time the responding ambulance unit or aircraft stops physical Definition motion at scene (last place that the unit or vehicle stops prior to assessing the patient). Information Exchange Format DATETIME Type **Information Exchange Format** 19 Information Exchange Format | YYYY/MM/DD HH:MM:SS Mask **Presentation/Display Format Obligation** Mandatory Cardinality **Business Rule/Coding** Coding Guidelines: If an individual attendant arrives at the Guideline 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. **Implementation Consideration** For this entity, the Time portion is meaningless without the Date portion, and so it is defined as one entity that can be externally represented as two components, the Date and Time. Internally, timestamps are often simply a number of time units since a known reference date, with no delineation into the date and time components. **Permissible Data Element** Value **Synonymous Name** 

Data Element Name	Back in Service Date/Time
Compound Name	PCR Ground
Submission	EHS - PCR MDS
Requirement for the Standard	Permits assessment of the delay between arrival at destination and availability of the responding ambulance unit.
Submitting Organization	Alberta Health and Wellness
Standard Reference	Standard: HISCA Standard Format HL7 Version 2.4 Data Element Name: Date, Time Timestamp (TS)
Definition	The date and time that the responding ambulance unit is back in service or arrives back in its response area or base and available to provide another service.
Information Exchange Format Type	DATETIME
Information Exchange Format Length	19
Information Exchange Format Mask	YYYY/MM/DD HH:MM:SS
Presentation/Display Format	
Obligation	Mandatory
Cardinality	
Business Rule/Coding Guideline	
Implementation Consideration	For this entity, the Time portion is meaningless without the Date portion, and so it is defined as one entity that can be externally represented as two components, the Date and Time. Internally, timestamps are often simply a number of time units since a known reference date, with no delineation into the date and time components.
Permissible Data Element Value	
Synonymous Name	

**Data Element Name** | Call Received Date/Time **Compound Name PCR Ground EHS - PCR MDS** Submission Requirement for the Standard Provides the start point of the dispatch component of the EMS response. This data element allows managers to assess delays between the time of incident report and the notification of EMS dispatchers. **Submitting Organization** Alberta Health and Wellness Standard Reference Standard: HISCA Standard Format HL7 Version 2.4 Data Element Name: Date, Time Timestamp (TS) The time that a call is first answered by a Public Safety Definition Answering Point (PSAP) or other designated agency. Information Exchange Format **DATETIME** Type Information Exchange Format 19 Length Information Exchange Format | YYYY/MM/DD HH:MM:SS Mask **Presentation/Display Format** Obligation Optional Cardinality **Business Rule/Coding** Guideline **Implementation Consideration** For this entity, the Time portion is meaningless without the Date portion, and so it is defined as one entity that can be externally represented as two components, the Date and Time. Internally, timestamps are often simply a number of time units since a known reference date, with no delineation into the date and time components. **Permissible Data Element** Value **Synonymous Name** 

**Data Element Name** | Depart Scene Date/Time **Compound Name PCR Ground** Submission **EHS - PCR MDS** Requirement for the Standard Permits calculation of scene time by subtracting the time of arrival at scene from the time unit left scene. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Standard: HISCA Standard Format HL7 Version 2.4 Data Element Name: Date, Time Timestamp (TS) Definition Time when the response unit begins physical motion from scene. **Information Exchange Format** DATETIME Information Exchange Format | 19 Length Information Exchange Format YYYY/MM/DD HH:MM:SS Mask **Presentation/Display Format Obligation** Mandatory Cardinality **Business Rule/Coding** Guideline Implementation Consideration For this entity, the Time portion is meaningless without the Date portion, and so it is defined as one entity that can be externally represented as two components, the Date and Time. Internally, timestamps are often simply a number of time units since a known reference date, with no delineation into the date and time components. **Permissible Data Element** Value **Synonymous Name** 

Data Element Name	Response Type
Compound Name	PCR Ground
Submission	EHS - PCR MDS
Requirement for the Standard	Allows system administrators to know the frequency with which responder units are using light and sirens/type of priority. Such usage carries explicit risks and EMS managers are responsible to assume that light and sirens/type of priority are used appropriately.
Submitting Organization	Alberta Health and Wellness
Standard Reference	Benchmarking of Emergency Medical Services in Alberta
Definition	Code to indicate whether lights/sirens/type of priority were used in the response to an incident.
Information Exchange Format Type	CHAR
Information Exchange Format Length	3
Information Exchange Format Mask	
Presentation/Display Format	
Obligation	Mandatory
Cardinality	
Business Rule/Coding Guideline	
Implementation Consideration	
Permissible Data Element Value	R1 / Non-emergent, no lights/sirens R2 / Emergent, with lights/sirens
Synonymous Name	

**Ground Transport Code** Data Element Name PCR Ground **Compound Name** Submission **EHS - PCR MDS** Requirement for the Standard Allows 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. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Benchmarking of Emergency Medical Services in Alberta Code to indicate whether lights/sirens were used in the Definition transport of the patient from an incident. **CHAR Information Exchange Format** Information Exchange Format | 3 Length **Information Exchange Format** Mask **Presentation/Display Format Obligation** Conditional Cardinality **Business Rule/Coding** Mandatory when a patient is transported. Guideline Implementation Consideration **Permissible Data Element** U1 / Non-emergent, no lights/sirens U2 / Emergent, with lights/sirens Value **Synonymous Name** 

Data Element Name | KM Total PCR Ground **Compound Name** Submission **EHS - PCR MDS** Requirement for the Standard In some billing situations, the total distance traveled may be a component in the amount that can be charged for the response. **Submitting Organization** Alberta Health and Wellness **Standard Reference EHS Working Committee** Total number of (kilometers for ground ambulance, miles for air Definition ambulance) traveled from start of a response until the ambulance unit is back in service. **Information Exchange Format NUMBER** Information Exchange Format | 5 Length **Information Exchange Format** Mask **Presentation/Display Format** Obligation Mandatory **Cardinality Business Rule/Coding**  Decimals not accepted Guideline · System default to kilometers if ground ambulance and miles if air ambulance Implementation Consideration **Permissible Data Element** 0 - 99999 Value **Synonymous Name** 

**Synonymous Name** 

Data Element Name | Level of Service Code **Compound Name** PCR Ground Submission **EHS - PCR MDS** Requirement for the Standard Used to categorize the level of service that was available for a Alberta Health and Wellness **Submitting Organization Standard Reference EHS Working Committee** Ambulance Services Act Code to indicate the level of service that the operator is Definition certified to provide. (I.e. ALS - Advanced Life Support, BLS -Basic Life Support or EMR - Emergency Medical Responder.) **Information Exchange Format** CHAR Information Exchange Format | 3 Length Information Exchange Format Mask **Presentation/Display Format** Obligation Mandatory Cardinality **Business Rule/Coding** Guideline **Implementation Consideration** Permissible Data Element | LS1 / ALS – Advanced Life Support LS2 / BLS – Basic Life Support Value LS3 / EMR – Emergency Medical Responder

**Data Element Name** | Stand by Hours **Compound Name PCR Ground EHS - PCR MDS** Submission Requirement for the Standard Permits measurement of the amount of time required for the attendants to stand by (wait) at the destination place. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Standard: HISCA Standard Format HL7 Version 2.4 Data Element Name: Date, Time Timestamp (TS) Definition Amount of time a service involved standby (waiting) time. TIME Information Exchange Format Type Information Exchange Format | 8 Length Information Exchange Format HH:MM:SS Mask **Presentation/Display Format Obligation** | Conditional Cardinality **Business Rule/Coding** Mandatory when a service involves stand-by (wait) time. Guideline **Implementation Consideration** For this entity, the Time portion is meaningless without the Date portion, and so it is defined as one entity that can be externally represented as two components, the Date and Time. Internally, timestamps are often simply a number of time units since a known reference date, with no delineation into the date and time components. **Permissible Data Element** Value Synonymous Name

Data Element Name | Transfer of Care Date/Time **Compound Name** PCR Ground **EHS - PCR MDS** Submission Requirement for the Standard Permits measurement of the time required for the attendant(s) to transfer the care of the patient to a personnel at the destination place. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Standard: HISCA Standard Format HL7 Version 2.4 Data Element Name: Date, Time Timestamp (TS) Definition Time when responsibility for the patient's care has been transferred. DATETIME Information Exchange Format **Information Exchange Format** 19 Length YYYY/MM/DD HH:MM:SS Information Exchange Format Mask **Presentation/Display Format** Obligation Conditional Cardinality **Business Rule/Coding** Mandatory only when a patient is transported. Guideline **Implementation Consideration** For this entity, the Time portion is meaningless without the Date portion, and so it is defined as one entity that can be externally represented as two components, the Date and Time. Internally, timestamps are often simply a number of time units since a known reference date, with no delineation into the date and time components. **Permissible Data Element** Value **Synonymous Name** 

**Data Element Name** Unit Notified Date/Time **Compound Name** PCR Ground **EHS - PCR MDS** Submission Requirement for the Standard Permits the measurement of the actual 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. **Submitting Organization** Alberta Health and Wellness Standard Reference Standard: HISCA Standard Format HL7 Version 2.4 Data Element Name: Date, Time Timestamp (TS) The time that Dispatch Center notifies an individual ambulance Definition unit. Information Exchange Format **DATETIME** Type Information Exchange Format 19 Length Information Exchange Format | YYYY/MM/DD HH:MM:SS Mask **Presentation/Display Format** Obligation Mandatory Cardinality **Business Rule/Coding** Guideline **Implementation Consideration** For this entity, the Time portion is meaningless without the Date portion, and so it is defined as one entity that can be externally represented as two components, the Date and Time. Internally, timestamps are often simply a number of time units since a known reference date, with no delineation into the date and time components. **Permissible Data Element** Value **Synonymous Name** 

Data Element Name | Unit Responded Date/Time **Compound Name** PCR Ground **EHS - PCR MDS Submission** Requirement for the Standard Permits measurement of delay between notification of EMS responder and the actual mobilization of the response unit. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Standard: HISCA Standard Format HL7 Version 2.4 Data Element Name: Date, Time Timestamp (TS) Definition The time that Dispatch Center notifies an individual ambulance unit. Information Exchange Format DATETIME Information Exchange Format | 19 Length Information Exchange Format YYYY/MM/DD HH:MM:SS Mask **Presentation/Display Format Obligation** | Mandatory Cardinality **Business Rule/Coding** Coding Guidelines: This data element refers to physical motion of the responding EMS vehicle, and does not refer to individual Guideline 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. For this entity, the Time portion is meaningless without the **Implementation Consideration** Date portion, and so it is defined as one entity that can be externally represented as two components, the Date and Time. Internally, timestamps are often simply a number of time units since a known reference date, with no delineation into the date and time components. **Permissible Data Element** Value **Synonymous Name** 

Compound Name | PCR Air **Parent Compound Name** PCR Event Air Response Code **Component Name** Air Transport Code Aircraft Call Sign Altitude Arrive Base Date/Time Arrive Destination Airport Date/Time Arrive Destination Hospital Date/Time Arrive Patient Date/Time Arrive Send Airport Date/Time Back in Service Date/Time Cabin Pressure Call Received Date/Time Depart Destination Airport Date/Time Depart Destination Hospital Date/Time Depart Send Airport Date/Time Depart with Patient Date/Time **Destination Unit ID** Standby Duration **Total Duration** Transfer of Care Date/Time Unit Notified Date/Time Unit Responded Date/Time Submission **EHS - PCR MDS** Requirement for the Standard Conditional **Obligation** Cardinality **Submitting Organization** Alberta Health and Wellness **Standard Reference Definition Business Rule/Coding** Guideline

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Data Element Name	Air Response Code
Compound Name	PCR Air
Submission	EHS - PCR MDS
Requirement for the Standard	Allows system administrators to know the frequency of the type of priority used in the response. Such usage carries explicit risks and EMS managers are responsible to assume that types of priority are used appropriately.
Submitting Organization	Alberta Health and Wellness
Standard Reference	Benchmarking of Emergency Medical Services in Alberta
Definition	Code to indicate the type of priority used in the response to an incident.
Information Exchange Format Type	CHAR
Information Exchange Format Length	3
Information Exchange Format Mask	
Presentation/Display Format	
Obligation	Mandatory
Cardinality	
Business Rule/Coding Guideline	
Implementation Consideration	
Permissible Data Element Value	R3 / Red R4 / Yellow R5 / Green R6 / Blue R7 / White
Synonymous Name	

Data Element Name	Air Transport Code
Compound Name	PCR Air
Submission	EHS - PCR MDS
Requirement for the Standard	Allows system administrators to know the frequency of the type of priority used in the transportation of the patient. Such usage carries explicit risks and EMS managers are responsible to assume that types of priority are used appropriately.
Submitting Organization	Alberta Health and Wellness
Standard Reference	Benchmarking of Emergency Medical Services in Alberta
Definition	Code to indicate the type of priority used in the transport of the patient from an incident.
Information Exchange Format Type	CHAR
Information Exchange Format Length	3
Information Exchange Format Mask	
Presentation/Display Format	
Obligation	Mandatory
Cardinality	
Business Rule/Coding Guideline	
Implementation Consideration	
Permissible Data Element Value	U4 / Red U5 / Yellow U6 / Green U7 / Blue U8 / White
Synonymous Name	

Data Element Name | Aircraft Call Sign PCR Air **Compound Name** Submission **EHS - PCR MDS** Requirement for the Standard Legal and regulatory standards require that each certified aircraft be clearly identifiable by aircraft call sign displayed on the aircraft in fixed locations. This number must be clearly displayed on each aircraft. **Submitting Organization** Alberta Health and Wellness **Standard Reference Definition** Unique identifier issued by Transport Canada. **Information Exchange Format** CHAR **Information Exchange Format** 6 Length **Information Exchange Format** Mask **Presentation/Display Format** Obligation Mandatory Cardinality **Business Rule/Coding** Guideline Implementation Consideration Permissible Data Element A-AAAA **Value Synonymous Name** 

**Synonymous Name** 

Data Element Name | Altitude PCR Air **Compound Name** Submission **EHS - PCR MDS** Requirement for the Standard The recording of the altitude of the aircraft during the transportation of the patient to be considered in the evaluation of patient care and condition. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Definition The measurements of altitude of the aircraft during the transportation of the patient. Information Exchange Format | NUMBER Information Exchange Format | 10 Length **Information Exchange Format** Mask **Presentation/Display Format Obligation** Optional Cardinality **Business Rule/Coding** Guideline **Implementation Consideration** Permissible Data Element | 99999/9999 Value

**Data Element Name** | Arrive Base Date/Time **Compound Name** PCR Air Submission **EHS - PCR MDS** Provides the time the patient arrived at the Base. This data Requirement for the Standard element allows manager to assess delays between the time of the transfer of care of the patient and when the unit is back at the base. **Submitting Organization** Alberta Health and Wellness Standard Reference Standard: HISCA Standard Format HL7 Version 2.4 Data Element Name: Date, Time Timestamp (TS) Time the responding unit arrived at the base. Definition Information Exchange Format **DATETIME Information Exchange Format** | 19 Length Information Exchange Format | YYYY/MM/DD HH:MM:SS Mask **Presentation/Display Format** Obligation Optional Cardinality **Business Rule/Coding** Guideline **Implementation Consideration** For this entity, the Time portion is meaningless without the Date portion, and so it is defined as one entity that can be externally represented as two components, the Date and Time. Internally, timestamps are often simply a number of time units

and time components.

**Permissible Data Element** 

**Synonymous Name** 

Value

since a known reference date, with no delineation into the date

**Data Element Name** Arrive Destination Airport Date/Time **Compound Name** PCR Air Submission **EHS - PCR MDS** Requirement for the Standard Provides the time the patient arrived at the Destination Airport. This data element allows manager to assess delays between the time of the incident report and the arrival at the destination airport. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Standard: HISCA Standard Format HL7 Version 2.4 Data Element Name: Date, Time Timestamp (TS) Time the responding unit and patient arrives at the destination Definition airport. Information Exchange Format **DATETIME** Type Information Exchange Format 19 Length Information Exchange Format YYYY/MM/DD HH:MM:SS Mask **Presentation/Display Format** Obligation Optional Cardinality **Business Rule/Coding** Guideline **Implementation Consideration** For this entity, the Time portion is meaningless without the Date portion, and so it is defined as one entity that can be externally represented as two components, the Date and Time. Internally, timestamps are often simply a number of time units since a known reference date, with no delineation into the date and time components. **Permissible Data Element** Value **Synonymous Name** 

Data Element Name | Arrive Destination Hospital Date/Time **Compound Name** PCR Air Submission **EHS - PCR MDS** Requirement for the Standard Provides the time the patient arrived at the Destination Hospital. This data element allows manager to assess delays between the time of the incident report and the arrival at the destination hospital. **Submitting Organization** Alberta Health and Wellness Standard Reference Standard: HISCA Standard Format HL7 Version 2.4 Data Element Name: Date, Time Timestamp (TS) The time the responding unit and patient arrives at the Definition destination hospital. Information Exchange Format **DATETIME** Type Information Exchange Format 19 Length Information Exchange Format | YYYY/MM/DD HH:MM:SS Mask **Presentation/Display Format** Obligation Optional Cardinality **Business Rule/Coding** Guideline **Implementation Consideration** For this entity, the Time portion is meaningless without the Date portion, and so it is defined as one entity that can be externally represented as two components, the Date and Time. Internally, timestamps are often simply a number of time units since a known reference date, with no delineation into the date and time components. **Permissible Data Element** Value **Synonymous Name** 

**Data Element Name** | Arrive Patient Date/Time **Compound Name** PCR Air Submission **EHS - PCR MDS** Requirement for the Standard Provides the time the attendant(s) arrived at the patient. This data element allows manager to assess delays between the time of the incident reported and the time the unit arrives at with the patient. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Standard: HISCA Standard Format HL7 Version 2.4 Data Element Name: Date, Time Timestamp (TS) The time the responding attendant(s) establish direct contact Definition with patient. Information Exchange Format **DATETIME** Type Information Exchange Format 19 Length Information Exchange Format YYYY/MM/DD HH:MM:SS Mask **Presentation/Display Format** Obligation Mandatory Cardinality **Business Rule/Coding** Guideline **Implementation Consideration** For this entity, the Time portion is meaningless without the Date portion, and so it is defined as one entity that can be externally represented as two components, the Date and Time. Internally, timestamps are often simply a number of time units since a known reference date, with no delineation into the date and time components. **Permissible Data Element** Value **Synonymous Name** 

**Data Element Name** | Arrive Send Airport Date/Time **Compound Name** PCR Air Submission **EHS - PCR MDS** Requirement for the Standard Provides the time the patient arrived at the sending airport. This data element allows manager to assess delays between the time of the incident reported and the time the unit arrived at the airport. **Submitting Organization** Alberta Health and Wellness Standard Reference Standard: HISCA Standard Format HL7 Version 2.4 Data Element Name: Date, Time Timestamp (TS) The time the responding unit arrives at the sending airport with Definition the patient. Information Exchange Format **DATETIME** Type Information Exchange Format 19 Length Information Exchange Format YYYY/MM/DD HH:MM:SS Mask **Presentation/Display Format** Obligation Mandatory Cardinality **Business Rule/Coding** Guideline **Implementation Consideration** For this entity, the Time portion is meaningless without the Date portion, and so it is defined as one entity that can be externally represented as two components, the Date and Time. Internally, timestamps are often simply a number of time units since a known reference date, with no delineation into the date and time components. **Permissible Data Element** Value **Synonymous Name** 

Data Element Name | Back in Service Date/Time PCR Air **Compound Name** Submission **EHS - PCR MDS** Requirement for the Standard Permits assessment of the delay between arrival at destination and availability of the response unit. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Standard: HISCA Standard Format HL7 Version 2.4 Data Element Name: Date, Time Timestamp (TS) Definition Time that the responding unit is back in service and available to provide another service. **DATETIME Information Exchange Format** Information Exchange Format | 19 Length Information Exchange Format YYYY/MM/DD HH:MM:SS Mask **Presentation/Display Format Obligation** Mandatory Cardinality **Business Rule/Coding** Guideline Implementation Consideration For this entity, the Time portion is meaningless without the Date portion, and so it is defined as one entity that can be externally represented as two components, the Date and Time. Internally, timestamps are often simply a number of time units since a known reference date, with no delineation into the date and time components. **Permissible Data Element** Value **Synonymous Name** 

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Data Element Name	Cabin Pressure
Compound Name	PCR Air
Submission	EHS - PCR MDS
Requirement for the Standard	The recording of the cabin pressure of the aircraft during the transportation of the patient to be considered in the evaluation of patient care and condition.
Submitting Organization	Alberta Health and Wellness
Standard Reference	
Definition	The measurements of the cabin pressure during the transportation of the patient.
Information Exchange Format Type	NUMBER
Information Exchange Format Length	10
Information Exchange Format Mask	
Presentation/Display Format	
Obligation	Optional
Cardinality	
Business Rule/Coding Guideline	
Implementation Consideration	
Permissible Data Element Value	99999/9999
Synonymous Name	

**Data Element Name** | Call Received Date/Time **Compound Name** PCR Air **EHS - PCR MDS** Submission Requirement for the Standard Provides the start point of the dispatch component of the EMS response. This data element allows managers to assess delays between the time of incident report and the notification of EMS dispatchers. **Submitting Organization** Alberta Health and Wellness Standard Reference Standard: HISCA Standard Format HL7 Version 2.4 Data Element Name: Date, Time Timestamp (TS) Time the call is first answered by a Public Safety Answering Definition Point (PSAP) or other designated agency. Information Exchange Format **DATETIME** Type Information Exchange Format 19 Length Information Exchange Format | YYYY/MM/DD HH:MM:SS Mask **Presentation/Display Format** Obligation Mandatory Cardinality **Business Rule/Coding** Guideline **Implementation Consideration** For this entity, the Time portion is meaningless without the Date portion, and so it is defined as one entity that can be externally represented as two components, the Date and Time. Internally, timestamps are often simply a number of time units since a known reference date, with no delineation into the date and time components. **Permissible Data Element** Value **Synonymous Name** 

**Data Element Name** | Depart Destination Airport Date/Time PCR Air **Compound Name** Submission **EHS - PCR MDS** Requirement for the Standard Provides the time the patient departs the Destination Airport. This data element allows manager to assess delays between the time of the incident reported and the time the unit departs from the destination hospital. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Standard: HISCA Standard Format HL7 Version 2.4 Data Element Name: Date, Time Timestamp (TS) Time the responding unit departed the destination airport **Definition Information Exchange Format DATETIME Information Exchange Format** 19 Length Information Exchange Format YYYY/MM/DD HH:MM:SS Mask **Presentation/Display Format Obligation** Mandatory Cardinality **Business Rule/Coding** Guideline **Implementation Consideration** For this entity, the Time portion is meaningless without the Date portion, and so it is defined as one entity that can be externally represented as two components, the Date and Time. Internally, timestamps are often simply a number of time units since a known reference date, with no delineation into the date and time components. **Permissible Data Element** Value **Synonymous Name** 

**Data Element Name** | Depart Destination Hospital Date/Time PCR Air **Compound Name** Submission **EHS - PCR MDS** Requirement for the Standard Provides the time the patient departs the Destination Hospital. This data element allows manager to assess delays between the time of the incident reported and the time the unit departs from the destination hospital. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Standard: HISCA Standard Format HL7 Version 2.4 Data Element Name: Date, Time Timestamp (TS) Time the responding unit cleared the destination hospital. **Definition Information Exchange Format DATETIME Information Exchange Format** 19 Length Information Exchange Format YYYY/MM/DD HH:MM:SS Mask **Presentation/Display Format Obligation** Mandatory Cardinality **Business Rule/Coding** Guideline **Implementation Consideration** For this entity, the Time portion is meaningless without the Date portion, and so it is defined as one entity that can be externally represented as two components, the Date and Time. Internally, timestamps are often simply a number of time units since a known reference date, with no delineation into the date and time components. **Permissible Data Element** Value **Synonymous Name** 

**Data Element Name** | Depart Send Airport Date/Time PCR Air **Compound Name EHS - PCR MDS** Submission Requirement for the Standard Provides the time the patient depart the sending airport. This data element allows manager to assess delays between the time of the incident reported and the time the unit departs from the sending airport. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Standard: HISCA Standard Format HL7 Version 2.4 Data Element Name: Date, Time Timestamp (TS) Time the responding unit departs with the patient from the Definition sending airport. Information Exchange Format **DATETIME** Type Information Exchange Format | 19 Length Information Exchange Format | YYYY/MM/DD HH:MM:SS Mask **Presentation/Display Format** Obligation Mandatory Cardinality **Business Rule/Coding** Guideline **Implementation Consideration** For this entity, the Time portion is meaningless without the Date portion, and so it is defined as one entity that can be externally represented as two components, the Date and Time. Internally, timestamps are often simply a number of time units since a known reference date, with no delineation into the date and time components. EMS Dispatch refers to a facility that operates the dispatching of EMS services for an area. This may be quite separate from the Public Service Answering Point. Permissible Data Element Value **Synonymous Name** 

**Data Element Name** | Depart with Patient Date/Time PCR Air **Compound Name** Submission **EHS - PCR MDS** Requirement for the Standard Provides the time the patient departed the Destination Airport. This data element allows manager to assess delays between the time of the incident reported and the time the unit departs with the patient. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Standard: HISCA Standard Format HL7 Version 2.4 Data Element Name: Date, Time Timestamp (TS) Time the responding unit leaves the scene with the patient. **Definition** Information Exchange Format **DATETIME Information Exchange Format** 19 Length Information Exchange Format | YYYY/MM/DD HH:MM:SS Mask **Presentation/Display Format** Obligation Mandatory Cardinality **Business Rule/Coding** Guideline **Implementation Consideration** For this entity, the Time portion is meaningless without the Date portion, and so it is defined as one entity that can be externally represented as two components, the Date and Time. Internally, timestamps are often simply a number of time units since a known reference date, with no delineation into the date and time components. **Permissible Data Element** Value **Synonymous Name** 

Data Element Name | Destination Unit ID PCR Air **Compound Name** Submission **EHS - PCR MDS** Requirement for the Standard Legal and regulatory standards require that each certified ambulance be clearly identifiable by unit number displayed on the vehicle in fixed locations. This number must be clearly displayed on each vehicle. **Submitting Organization** Alberta Health and Wellness **Standard Reference** EHS assigned unit number of the ground ambulance vehicle Definition responding to a requirement to complete the transportation of the patient to the destination point. **Information Exchange Format NUMBER** Type Information Exchange Format Length **Information Exchange Format** Mask **Presentation/Display Format** Obligation Optional Cardinality **Business Rule/Coding** Guideline Implementation Consideration Permissible Data Element | 0001 - 9999 **Value Synonymous Name** 

Data Element Name	Standby Duration
Compound Name	PCR Air
Submission	EHS - PCR MDS
Requirement for the Standard	Identifies the amount of time the attendants/unit were required to standby at the destination point.
Submitting Organization	Alberta Health and Wellness
Standard Reference	
Definition	Amount of time the trip involved standby (waiting) time.
Information Exchange Format Type	TIME
Information Exchange Format Length	8
Information Exchange Format Mask	HH:MM:SS
Presentation/Display Format	
Obligation	Optional
Cardinality	
Business Rule/Coding Guideline	Mandatory when a service involves stand-by (wait) time.
Implementation Consideration	For this entity, the Time portion is meaningless without the Date portion, and so it is defined as one entity that can be externally represented as two components, the Date and Time. Internally, timestamps are often simply a number of time units since a known reference date, with no delineation into the date and time components.
Permissible Data Element Value	
Synonymous Name	

**Data Element Name** | Total Duration PCR Air **Compound Name** Submission **EHS - PCR MDS** Requirement for the Standard In some billing situations, the total time may be a component in the amount that be charge for the response. This data element also allows for the planning of EMS resource allocation. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Standard: HISCA Standard Format HL7 Version 2.4 Data Element Name: Time Timestamp (TS) Complete amount of time for the entire trip from departure time Definition to return to base time. **Information Exchange Format** TIME Type Information Exchange Format | 8 Length Information Exchange Format | HH:MM:SS Mask **Presentation/Display Format** Obligation Optional Cardinality **Business Rule/Coding** Guideline **Implementation Consideration Permissible Data Element** Value **Synonymous Name** 

**Data Element Name** Transfer of Care Date/Time PCR Air **Compound Name** Submission **EHS - PCR MDS** Requirement for the Standard Provides a record of the transfer of responsibility to the destination service provider. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Standard: HISCA Standard Format HL7 Version 2.4 Data Element Name: Date, Time Timestamp (TS) Time when responsibility for the patient's care has been Definition transferred. **DATETIME Information Exchange Format** Information Exchange Format | 19 Length Information Exchange Format YYYY/MM/DD HH:MM:SS Mask **Presentation/Display Format Obligation** Mandatory Cardinality **Business Rule/Coding** Guideline Implementation Consideration For this entity, the Time portion is meaningless without the Date portion, and so it is defined as one entity that can be externally represented as two components, the Date and Time. Internally, timestamps are often simply a number of time units since a known reference date, with no delineation into the date and time components. **Permissible Data Element** Value **Synonymous Name** 

**Data Element Name** Unit Notified Date/Time **Compound Name** PCR Air **EHS - PCR MDS** Submission Requirement for the Standard 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. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Standard: HISCA Standard Format HL7 Version 2.4 Data Element Name: Date, Time Timestamp (TS) Date and time that EMS Dispatch notifies the unit. Definition Information Exchange Format **DATETIME** Information Exchange Format | 19 Length Information Exchange Format | YYYY/MM/DD HH:MM:SS Mask **Presentation/Display Format** Obligation Mandatory Cardinality **Business Rule/Coding** Guideline **Implementation Consideration** For this entity, the Time portion is meaningless without the Date portion, and so it is defined as one entity that can be externally represented as two components, the Date and Time. Internally, timestamps are often simply a number of time units since a known reference date, with no delineation into the date and time components. EMS Dispatch refers to a facility that operates the dispatching of EMS services for an area. This may be guite separate from the Public Service Answering Point. **Permissible Data Element** Value **Synonymous Name** 

Data Element Name | Unit Responded Date/Time **Compound Name** PCR Air **EHS - PCR MDS** Submission Requirement for the Standard Provides the time the aircraft took off from its destination airport. This data element allows manager to assess delays between the time of the incident reported and the time the unit departs with the patient. **Submitting Organization** Alberta Health and Wellness Standard Reference Standard: HISCA Standard Format HL7 Version 2.4 Data Element Name: Date, Time Timestamp (TS) Time the responding unit was wheels-up after receiving the Definition call. Information Exchange Format **DATETIME** Type Information Exchange Format 19 Length Information Exchange Format | YYYY/MM/DD HH:MM:SS Mask **Presentation/Display Format** Obligation Mandatory Cardinality **Business Rule/Coding** Guideline **Implementation Consideration** For this entity, the Time portion is meaningless without the Date portion, and so it is defined as one entity that can be externally represented as two components, the Date and Time. Internally, timestamps are often simply a number of time units since a known reference date, with no delineation into the date and time components. **Permissible Data Element** Value

Compound Name | PCR Patient Parent Compound Name | PCR Event Bystander Response Code Component Name External Cause of Injury Code Co-Responder No Transport Reason Code Other Resource Code Patient DOB Patient Gender Code Patient Location Code Patient OOP Code Patient OOP ID Patient PHN Patient PHN Type Province Code Injury Intent Code Provider Impression Code PCR Safety Equipment PCR Injury **PCR Vitals PCR** Intervention PCR Signs Symptoms Submission EHS - PCR MDS Requirement for the Standard Obligation Mandatory Cardinality Alberta Health and Wellness **Submitting Organization Standard Reference Definition Business Rule/Coding** Guideline

**Data Element Name** Bystander Response Code **PCR** Patient **Compound Name** Submission **EHS - PCR MDS** Requirement for the Standard Provides information concerning the early use of CPR or defibrillation in the patient treatment **Submitting Organization** Alberta Health and Wellness **Standard Reference EHS Working Committee** Provides information concerning the early use of CPR or Definition defibrillation in the patient treatment. CHAR **Information Exchange Format** Type Information Exchange Format | 2 Length **Information Exchange Format Presentation/Display Format** Obligation Optional Cardinality **Business Rule/Coding** Guideline **Implementation Consideration Permissible Data Element** Bystander Response Code **Value Synonymous Name** 

Data Element Name | External Cause of Injury Code **Compound Name PCR Patient EHS - PCR MDS** Submission Requirement for the Standard It is necessary to have a broad taxonomy for defining the external causes of injury, and ICD-10-CA provides such taxonomy. **Submitting Organization** Alberta Health and Wellness Standard Reference ICD-10-CA: 'External causes of morbidity and mortality' Benchmarking of Emergency Medical Services in Alberta **Definition** Code which depicts the external cause of injury. Information Exchange Format | CHAR Information Exchange Format | 7 Length **Information Exchange Format** Mask **Presentation/Display Format Obligation** | Optional Cardinality **Business Rule/Coding** While ICD-10-CA provides a much more exhaustive set of possible values, the following have been identified as a Guideline required base set. Other valid ICD-10-CA codes will be allowed if and when operators are able to collect more explicit indications. **Implementation Consideration** It has been traditional to attempt to assign a single external cause of injury 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 codes. External Cause of Injury Code **Permissible Data Element** Value **Synonymous Name** 

**Data Element Name** | Co-Responder **PCR** Patient **Compound Name** Submission **EHS - PCR MDS** Requirement for the Standard Provides information concerning the early use of CPR or defibrillation in the patient treatment. **Submitting Organization** Alberta Health and Wellness **Standard Reference EHS Working Committee** Definition Indicates that trained personnel other than the crew of the responding ambulance provided care on scene, CPR or defibrillation. **Information Exchange Format** CHAR Information Exchange Format | 2 **Information Exchange Format** Mask **Presentation/Display Format Obligation** Optional Cardinality **Business Rule/Coding** Guideline Implementation Consideration Permissible Data Element Co-responder Code Value **Synonymous Name** 

**Data Element Name** No Transport Reason Code **Compound Name PCR Patient EHS - PCR MDS Submission** Requirement for the Standard 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. Alberta Health and Wellness **Submitting Organization** Standard Reference Benchmarking of Emergency Medical Services in Alberta Definition This code is used to indicate the reason that there was no transport associated with this PCR. Information Exchange Format CHAR Information Exchange Format | 2 Length **Information Exchange Format** Mask **Presentation/Display Format Obligation** | Mandatory Cardinality **Business Rule/Coding** Mandatory when a patient is not transported by a responding Guideline ambulance unit. Coding Guidelines No patient found If not cancelled, but no patient can be found by the responder. Transfer care to other EMS agency 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. 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 himself 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. Refused care 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. 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. Cancelled This code means that the EMS response was cancelled en route or on scene. Provided back-up/Assistance only This code is used when a responding ambulance unit acted as a secondary unit and provided back-up or only assistance to a primary responding ambulance unit. **Implementation Consideration** Permissible Data Element | N1 No patient found N2 Transfer care to other EMS agency N3 Treated and released N4 No treatment required N5 Refused care N6 Dead at scene N7 Cancelled N8 Provided back-up/assistance only **Synonymous Name** 

Data Element Name	Other Resource Code
Compound Name	PCR Patient
Submission	EHS - PCR MDS
Requirement for the Standard	Provides information concerning additional qualified personnel that were in attendance to the patient during the trip outside of the crew for this ambulance.
Submitting Organization	Alberta Health and Wellness
Standard Reference	
Definition	Indicates that trained personnel other than the crew of this ambulance were present for the trip.
Information Exchange Format Type	CHAR
Information Exchange Format Length	4
Information Exchange Format Mask	
Presentation/Display Format	
Obligation	Optional
Cardinality	
Business Rule/Coding Guideline	
Implementation Consideration	
Permissible Data Element Value	OR1 / ICU/CCU - Intensive Care Unit/Cardiac Care Unit OR2 / NICU/PICU - Neonatal Intensive Care Unit/Pediatric Intensive Care Unit OR3 / RN Assist OR4 / Physician Assist OR5 / RN & Physician Assist OR6 / Firefighter Assist
Synonymous Name	

Data Element Name | Patient DOB **PCR Patient Compound Name** Submission **EHS - PCR MDS** Provides demographic data on the patient, the date of birth. Requirement for the Standard **Submitting Organization** Alberta Health and Wellness **Standard Reference** Definition Date of birth of the patient Information Exchange Format **CHAR Type Information Exchange Format** 8 YYYY/MM/DD Information Exchange Format Mask **Presentation/Display Format** Obligation Mandatory Cardinality **Business Rule/Coding** Guideline **Implementation Consideration Permissible Data Element** Value

Data Element Name	Patient Gender Code
Compound Name	PCR Patient
Submission	EHS - PCR MDS
Requirement for the Standard	Provides information concerning the gender of the patient.
Submitting Organization	Alberta Health and Wellness
Standard Reference	
Definition	Code to indicate the gender of the patient.
Information Exchange Format	CHAR
Туре	
Information Exchange Format Length	1
Information Exchange Format Mask	
Presentation/Display Format	
Obligation	Mandatory
Cardinality	
Business Rule/Coding Guideline	
Implementation Consideration	
Permissible Data Element Value	
Synonymous Name	

**Data Element Name** | Patient Location Code **Compound Name PCR Patient EHS - PCR MDS** Submission Requirement for the Standard Location type of the incident is important for epidemiologists as well as EMS planners deciding where to allocate EMS resources. ICD-10-CA defines the 'Place of occurrence code' to be used in conjunction with the 'External causes of morbidity and mortality'. **Submitting Organization** Alberta Health and Wellness Standard Reference ICD-10-CA 'Place of occurrence codes'/'External causes of morbidity and mortality'. Code to depict the type of location where the incident Definition occurred. This location refers to the location where the injury occurred, not necessarily the origin of the transport. **CHAR** Information Exchange Format Type Information Exchange Format | 2 Length **Information Exchange Format** Mask **Presentation/Display Format Obligation** Optional Cardinality **Business Rule/Coding** While ICD-10-CA provides a much more exhaustive set of Guideline possible values, the following have been identified as a required base set. Other valid ICD-10-CA codes will be allowed if and when operators are able to collect more explicit indications. Implementation Consideration **Permissible Data Element Patient Location Code** Value

Data Element Name	Patient OOP Code
Compound Name	PCR Patient
Submission	EHS - PCR MDS
Requirement for the Standard	
Submitting Organization	Alberta Health and Wellness
Standard Reference	
Definition	Identifies that the patient recorded on the PCR is from another province within Canada.
Information Exchange Format Type	BOOLEAN
Information Exchange Format Length	1
Information Exchange Format Mask	
Presentation/Display Format	
Obligation	Conditional
Cardinality	
Business Rule/Coding Guideline	
Implementation Consideration	
Permissible Data Element Value	
Synonymous Name	

Data Element Name | Patient OOP ID **PCR** Patient **Compound Name** Submission **EHS - PCR MDS** Requirement for the Standard **Submitting Organization** Alberta Health and Wellness **Standard Reference** Unique system generated personal health number assigned by Definition the province providing health coverage for their residents. **Information Exchange Format NUMBER Information Exchange Format** 15 Length **Information Exchange Format** Mask **Presentation/Display Format** Obligation Conditional Cardinality **Business Rule/Coding** Mandatory if OOP personal health number is selected. Guideline **Implementation Consideration Permissible Data Element** Value

Data Element Name	Patient PHN
Compound Name	PCR Patient
Submission	EHS - PCR MDS
Requirement for the Standard	
Submitting Organization	Alberta Health and Wellness
Standard Reference	
Definition	Unique system generated personal health number assigned by Stakeholder for residents of Alberta.
Information Exchange Format Type	NUMBER
Information Exchange Format Length	9
Information Exchange Format Mask	9999999
Presentation/Display Format	
Obligation	Conditional
Cardinality	
Business Rule/Coding Guideline	Mandatory is Alberta PHN is selected.
Implementation Consideration	
Permissible Data Element Value	
Synonymous Name	

**Business Rule/Coding** 

**Synonymous Name** 

Implementation Consideration

Permissible Data Element

Guideline

Value

**Data Element Name** | Patient PHN Type **PCR** Patient **Compound Name** Submission **EHS - PCR MDS** Requirement for the Standard An indicator to determine if the patient health coverage is responsibility of Alberta, another province or outside of the country. **Submitting Organization** Alberta Health and Wellness **Standard Reference** An indicator that identifies if the patient's health coverage is Definition provided by a specific province or a other issuer. (i.e. Alberta, OOP or Other) **NUMBER Information Exchange Format** Information Exchange Format Length **Information Exchange Format** Mask **Presentation/Display Format** Obligation Mandatory Cardinality

**Data Element Name** | Province Code **PCR** Patient **Compound Name** Submission **EHS - PCR MDS** Requirement for the Standard This data intended to identify the province responsible for the health coverage of the patient if applicable. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Definition A code to indicate which province is responsible for the health coverage of the patient. CHAR **Information Exchange Format** Type Information Exchange Format | 2 Length **Information Exchange Format Presentation/Display Format** Obligation Conditional Cardinality Mandatory if OOP personal health number is selected. **Business Rule/Coding** Guideline **Implementation Consideration Permissible Data Element** Value **Synonymous Name** 

Data Element Name | Injury Intent Code **Compound Name PCR Patient** EHS - PCR MDS **Submission** Requirement for the Standard Intended to help injury surveillance specialists who are interested in homicide and suicides, inflicted child injuries, etc. This information may also be of use in suicide or spousal/child abuse prevention programs. The EMS provider may be in a unique situation to assess this issue which would then be of enormous value to the medical personnel caring for the patient. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Benchmarking of Emergency Medical Services in Alberta. Definition Code to depict the intent of the individual inflicting injury. **CHAR** Information Exchange Format Information Exchange Format | 2 Length **Information Exchange Format** Mask **Presentation/Display Format** Optional Obligation Cardinality **Business Rule/Coding Coding Guidelines** Guideline If the data element is collected, the EMS provider should indicate that an event is intentional if he or she has any suspicion of such. The data element is not intended to carry legal significance, but rather is intended to assist researchers in identifying possible cases of intentional injury for further study. If a firearm or stabbing is involved, this data element is redundant with proper coding of the external cause of injury, which permits coding for intentional injury on self or others. It is clear that the EMS provider will often not be able to assess Implementation Consideration this question. Permissible Data Element | 11 / Intentional, self Value 12 / Intentional, other 13 / Unintentional 14 / Unknown **Synonymous Name** 

**Data Element Name** | Provider Impression Code **Compound Name PCR Patient** EHS - PCR MDS Submission Requirement for the Standard In order to determine whether the treatments or medications provided match protocols that relate to the clinical impression. a standard for recording the clinical impression is required. Submitting Organization Alberta Health and Wellness Standard Reference ICD-10-CA Benchmarking of Emergency Medical Services in Alberta Code representing a clinical assessment as provided by the Definition primary attendant. Information Exchange Format | CHAR Information Exchange Format | 2 Length **Information Exchange Format** Mask **Presentation/Display Format** Obligation Mandatory Cardinality **Business Rule/Coding** Coding Guidelines Guideline 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. All values entered will be validated against the ICD-10-CA This list may be amended to suit changing needs of the industry, but values will be coded as ICD-10-CA codes. These are the codes as identified to date, additional codes Implementation Consideration may be added which conform to HISCA standard. Provider Impression Code **Permissible Data Element** Value **Synonymous Name** 

Compound Name	PCR Safety Equipment
Parent Compound Name	PCR Patient
Component Name	Safety Equipment
Submission	EHS - PCR MDS
Requirement for the Standard	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.
Obligation	Optional
Cardinality	
Submitting Organization	Alberta Health and Wellness
Standard Reference	
Definition	
Business Rule/Coding Guideline	

**Data Element Name** | Safety Equipment **Compound Name** PCR Safety Equipment EHS - PCR MDS Submission Requirement for the Standard Submitting Organization Alberta Health and Wellness Standard Reference Benchmarking of Emergency Medical Services in Alberta. Definition Safety equipment in use by patient at time of injury. Information Exchange Format | NUMBER Type Information Exchange Format | 2 **Information Exchange Format Presentation/Display Format** Obligation Optional Cardinality **Business Rule/Coding Coding Guidelines** Guideline None used - If the EMS responder knows that no safety device was employed. **Implementation Consideration** Multiple values permitted. 01 / None used Permissible Data Element 02 / Lap Belt Value 03 / Shoulder and lap belt 04 / Driver airbag deployed 05 / Passenger airbag deployed 06 / Side airbag deployed 07 / Child seat, forward facing 08 / Child seat, rear facing 09 / Use of appropriate helmet 10 / Use of inappropriate helmet 11 / Eye protection 12 / Flotation device **Synonymous Name** 

**Standard Reference** 

**Business Rule/Coding** 

Definition

Guideline

diagnosis.

PCR Injury

Parent Compound Name PCR Patient

Component Name Injury Code Injury Location Code

Submission EHS - PCR MDS

Requirement for the Standard

Obligation Optional

Cardinality

Submitting Organization Alberta Health and Wellness

This compound reflects the clinical impression of injury by the EMS responder, not necessarily the final, correct medical

Data Element Name Injury Code **PCR** Injury **Compound Name** Submission **EHS - PCR MDS** Requirement for the Standard This is a crucial data element (injury description) that will enable EMS planners to know what type 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. 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. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Definition Code to indicate the description of injury. (i.e. burn injury, contusion, etc.) NUMBER Information Exchange Format Information Exchange Format | 1 Length **Information Exchange Format** Mask **Presentation/Display Format Obligation** | Conditional Cardinality **Business Rule/Coding** Mandatory is an injury location code is specified. Guideline Implementation Consideration Permissible Data Element | Injury Code Value **Synonymous Name** 

**Data Element Name** Injury Location Code **Compound Name PCR** Injury Submission **EHS - PCR MDS** Requirement for the Standard This is a crucial data element (injury body location) that will enable EMS planners to know what type 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. 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. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Definition Code to indicate the location of injury on the body. (i.e. head, face, ankle, etc.) **CHAR** Information Exchange Format Information Exchange Format | 1 Length **Information Exchange Format** Mask **Presentation/Display Format Obligation** | Conditional Cardinality **Business Rule/Coding** Mandatory if an injury code is specified. Guideline Implementation Consideration Permissible Data Element | Injury Location Code Value **Synonymous Name** 

h	
Compound Name	PCR Intervention
Parent Compound Name	PCR Patient
Component Name	Medication Code Treatments Code
Submission	EHS - PCR MDS
Requirement for the Standard	
Obligation	Optional
Cardinality	
Submitting Organization	Alberta Health and Wellness
Standard Reference	
Definition	
Business Rule/Coding Guideline	

**Data Element Name** | Medication Code **Compound Name PCR** Intervention **EHS - PCR MDS** Submission Requirement for the Standard Intended to provide planners and educators with information about which drugs are administered in the field, by whom, and for what indications. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Health Canada" 'QRYM\_ACTIVE\_INGREDIENTS' table available for download on their web-site. (http://www.hc-sc.gc.ca/hpb-dgps/therapeut/htmleng/dpd.html) Benchmarking of Emergency Medical Services in Alberta Definition Identification of medication for which the administration was attempted or performed on patient. CHAR Information Exchange Format Information Exchange Format | 4 Information Exchange Format Mask **Presentation/Display Format Obligation** | Conditional Cardinality **Business Rule/Coding** Mandatory if an attendant was specified as administering a Guideline medication. **Implementation Consideration** The identification scheme will follow the HC-AIGC medication code standards **Permissible Data Element Medication Code** Value **Synonymous Name** 

Data Element Name | Treatments Code **Compound Name PCR** Intervention **EHS - PCR MDS Submission** Requirement for the Standard Intended to provide ambulance service 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. **Submitting Organization** Alberta Health and Wellness Standard Reference Benchmarking of Emergency Medical Services in Alberta Definition Code to identify the treatments or assessments attempted or performed on the patient. CHAR Information Exchange Format Information Exchange Format | 3 **Information Exchange Format** Mask **Presentation/Display Format Obligation** | Conditional Cardinality **Business Rule/Coding** Mandatory if an attendant was specified as attempting or Guideline performing a treatment. **Implementation Consideration** The identification scheme follows the ICD-10-CA9-CM/CCI Procedure Classification. While the use of 'rubic's portion of a code is not technically permitted within CCI, there are some instances where there is little practical choice. The best example being the 'Obstetrical care' treatment. Even though specific codes are not practical now, in the future mobile electronic devices may make the selection of definitive codes feasible. Until then, the use of rubics retains the basis of the classification scheme for data analysis. Permissible Data Element | Assessment Treatment Value **Synonymous Name** 

Compound Name	PCR Signs Symptoms
Parent Compound Name	PCR Patient
Component Name	Signs Symptoms Code
Submission	EHS - PCR MDS
Requirement for the Standard	
Obligation	Mandatory
Cardinality	
Submitting Organization	Alberta Health and Wellness
Standard Reference	
Definition	
Business Rule/Coding Guideline	

**Data Element Name** | Signs Symptoms Code **Compound Name** PCR Signs Symptoms **EHS - PCR MDS** Submission Requirement for the Standard 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. **Submitting Organization** Alberta Health and Wellness **Standard Reference** ICD-10-CA Benchmarking of Emergency Medical Services in Alberta Code to indicate the signs and symptoms reported to and/or Definition observed by the attendant. Information Exchange Format CHAR Type Information Exchange Format 3 Length Information Exchange Format Mask **Presentation/Display Format Obligation** | Mandatory Cardinality **Business Rule/Coding** Guideline Implementation Consideration All values entered will be validated against the ICD-10-CA values. **Permissible Data Element** Sign Symptom Code Value

Compound Name	PCR Vitals
Parent Compound Name	PCR Patient
Component Name	Blood Glucose Level Heart Rate Oxygen Saturation Respiratory Rate Vitals Recorded Time Pre-Hospital Index Blood Pressure Patient Glasgow Coma Score Pre-Hospital Index Mechanism of Injury Blood Pressure
Submission	EHS - PCR MDS
Requirement for the Standard	
Obligation	Optional
Cardinality	
Submitting Organization	Alberta Health and Wellness
Standard Reference	
Definition	
Business Rule/Coding Guideline	

Data Element Name | Blood Glucose Level **PCR Vitals Compound Name** Submission **EHS - PCR MDS** Requirement for the Standard The rationale for this data element has been defined as part of the Patient Vital Signs cluster. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Definition Blood glucose level is the amount of glucose (sugar) in the blood. It is also known as serum glucose level. The amount of glucose in the blood is expressed as millimoles per litre (mmol/l). **NUMBER Information Exchange Format** Information Exchange Format Length **Information Exchange Format** Mask **Presentation/Display Format** Obligation Optional Cardinality **Business Rule/Coding** Guideline Implementation Consideration Permissible Data Element | 1 to 9999 Value **Synonymous Name** 

**Data Element Name** | Heart Rate Compound Name **PCR Vitals EHS - PCR MDS Submission** The rationale for this data element has been defined as part of Requirement for the Standard the Patient Vital Signs cluster. The heart rate is a component of various triage scoring systems, and permits a rough assessment of the severity of illness of the patient. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Definition The number of beats per minute. Heart rate can be determined by taking the pulse. A number indicating the patient's palpated or auscultated heart rate expressed in number per minute. The measurement of heart rate is in beats per minute. Note that 'Heart Rate' is the correct name for this element. Pulse is a more inclusive term that can include both the heart rate, and characteristics of the heart rhythm. Information Exchange Format | NUMBER Type Information Exchange Format | 3 Length **Information Exchange Format** Mask **Presentation/Display Format Obligation** | Optional Cardinality **Business Rule/Coding** This data element is based on the physical examination of the Guideline patient, and the pulse must be palpated or auscultated. An electrical rhythm is not sufficient, as the patient could have electromechanical dissociation. Successful readings are recorded as a three digit value Unknown – When a reading was attempted, but could not be determined Not applicable – When the value is not applicable or not attempted If a patient has electromechanical dissociation, code 000. Implementation Consideration Permissible Data Element 000-300 / Reading obtained and recorded Value 888 / Unknown 999 / Not applicable **Synonymous Name** 

**Data Element Name** Oxygen Saturation **Compound Name PCR Vitals EHS - PCR MDS** Submission Requirement for the Standard The rationale for this data element has been defined as part of the Patient Vital Signs cluster. **Submitting Organization** Alberta Health and Wellness **Standard Reference EHS Working Committee** Definition The percentage of the haemoglobin that is saturated by oxygen as measured by oximetry. **NUMBER** Information Exchange Format Type Information Exchange Format | 3 Length **Information Exchange Format** Presentation/Display Format **Obligation** Optional Cardinality **Business Rule/Coding** This data element is typically measured using an oximeter. Guideline Successful readings are recorded as a three digit value Unknown – When a reading was attempted, but could not be determined Not applicable – When the value is not applicable or not attempted The determination of oxygen-haemoglobin saturation of blood either by withdrawing a sample and passing it through a classical photoelectric oximeter or by electrodes attached to some translucent part of the body like finger, earlobe, or skin fold. It includes non-invasive oxygen monitoring by pulse oximetry. Implementation Consideration **Permissible Data Element** 000-100 / Reading obtained and recorded Value 888 / Unknown 999 / Not applicable **Synonymous Name** 

**Data Element Name** Respiratory Rate Compound Name **PCR Vitals EHS - PCR MDS Submission** Requirement for the Standard The rationale for this data element has been defined as part of the Patient Vital Signs cluster. This is a component of several triage-scoring systems and provides some assessment of severity of illness or injury. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Definition The number of breaths per minute (or, more formally, the number of movements indicative of inspiration and expiration per unit time). In practice, the respiratory rate is usually determined by counting the number of times the chest rises (or falls) per minute. By whatever means, the aim is to determine if the respirations are normal, abnormally fast (tachypnea), abnormally slow (bradypnea), or nonexistent (apnea). A number indicating the patient's unassisted respiratory rate expressed as number per minute. Information Exchange Format | NUMBER Type Information Exchange Format | 3 Length **Information Exchange Format** Mask **Presentation/Display Format** Optional Obligation Cardinality **Business Rule/Coding** Guideline **Implementation Consideration Permissible Data Element** Successful readings are recorded as a three digit value Value Unknown – When a reading was attempted, but could not be determined Not applicable – When the value is not applicable or not attempted If a patient is not breathing and requires artificial ventilation, code 000. In practice, the respiratory rate is usually determined by counting the number of times the chest rises (or falls) per minute. By whatever means, the aim is to determine if the respirations are normal, abnormally fast (tachypnea), abnormally slow (bradypnea), or nonexistent (apnea). Synonymous Name

**Data Element Name** | Vitals Recorded Time **PCR Vitals Compound Name** Submission **EHS - PCR MDS** Requirement for the Standard The patient parameters are only meaningful in the context of when they were measured. The measurement time is critical for the evaluation of patient care and condition. **Submitting Organization** Alberta Health and Wellness **Standard Reference Definition** Time when the vitals were collected by the attendant. **Information Exchange Format** TIME **Type** Information Exchange Format | 8 Length Information Exchange Format | HH:MM:SS Mask **Presentation/Display Format** Obligation Optional **Cardinality Business Rule/Coding** Mandatory when vitals and an attendant are specified. Guideline **Implementation Consideration Permissible Data Element** Value **Synonymous Name** 

**Business Rule/Coding** 

Guideline

Patient Glasgow Coma Score **Compound Name Parent Compound Name** PCR Vitals Glasgow Coma Total Score **Component Name** Glasgow Eye Opening Component Glasgow Motor Component Glasgow Verbal Component **EHS - PCR MDS** Submission Requirement for the Standard Optional Obligation Cardinality **Submitting Organization** Alberta Health and Wellness **Standard Reference** Definition The Glasgow coma scale assesses the degree of coma in patients with craniocerebral injuries; also assesses brain function, brain damage, and patient progress. The score and its components are also parts of a variety of triage scoring systems. The Glasgow Coma Scale has been defined and

used since circa 1974.

Data Element Name | Glasgow Coma Total Score **Compound Name** Patient Glasgow Coma Score EHS - PCR MDS Submission Requirement for the Standard The rationale for this data element has been defined as part of the Patient Glasgow coma score cluster. While this value can be computed by summing the three component values, historical data has only provided the total score, and not the component values. **Submitting Organization** Alberta Health and Wellness **Standard Reference** This is one of the defined components for the Glasgow Coma Scale. The Glasgow Coma Scale has been defined and used since circa 1974. The sum of the three individual components of the Glasgow Definition Coma Score. Information Exchange Format | NUMBER Information Exchange Format | 2 Length **Information Exchange Format** Mask **Presentation/Display Format Obligation** Optional Cardinality **Business Rule/Coding** Guideline **Implementation Consideration Permissible Data Element** Value **Synonymous Name** 

Obligation

Cardinality

Guideline

Permissible Data Element | Value/Assessment Criteria

Value

**Business Rule/Coding** 

**Synonymous Name** 

**Implementation Consideration** 

Optional

4 = spontaneous

3 = to voice 2 = to pain 1 = none

Data Element Name | Glasgow Eye Opening Component

Patient Glasgow Coma Score **Compound Name** Submission **EHS - PCR MDS** Requirement for the Standard The rationale for this data element has been defined as part of the Patient Glasgow coma score cluster. **Submitting Organization** Alberta Health and Wellness **Standard Reference** This is one of the defined components for the Glasgow Coma Scale. The Glasgow Coma Scale has been defined and used since circa 1974. Definition Code to rate the patient's eye opening component of the Glasgow coma score. **Information Exchange Format** NUMBER Information Exchange Format | 1 Length Information Exchange Format Mask **Presentation/Display Format** 

**Data Element Name** | Glasgow Motor Component **Compound Name** Patient Glasgow Coma Score Submission **EHS - PCR MDS** Requirement for the Standard The rationale for this data element has been defined as part of the Patient Glasgow coma score cluster. **Submitting Organization** Alberta Health and Wellness **Standard Reference** This is one of the defined components for the Glasgow Coma Scale. The Glasgow Coma Scale has been defined and used since circa 1974. Definition Code to rate the patient's motor component of the Glasgow coma score. Information Exchange Format NUMBER Information Exchange Format | 1 Length Information Exchange Format Mask **Presentation/Display Format** Obligation Optional Cardinality **Business Rule/Coding** Guideline **Implementation Consideration** Permissible Data Element | Value/Assessment Criteria Value 6 = Obeys Commands 5 = Localize Pain 4 = Withdraw (Pain) 3 = Flexion (Pain) 2 = Extension (Pain) 1 = None**Synonymous Name** 

Data Element Name | Glasgow Verbal Component **Compound Name** Patient Glasgow Coma Score Submission **EHS - PCR MDS** Requirement for the Standard The rationale for this data element has been defined as part of the Patient Glasgow coma score cluster. **Submitting Organization** Alberta Health and Wellness **Standard Reference** This is one of the defined components for the Glasgow Coma Scale. The Glasgow Coma Scale has been defined and used since circa 1974. Definition Code to rate the patient's verbal component of the Glasgow coma score. Information Exchange Format NUMBER Information Exchange Format | 1 Length Information Exchange Format Mask **Presentation/Display Format** Obligation Optional Cardinality **Business Rule/Coding** Guideline **Implementation Consideration** Permissible Data Element | Value/Assessment Criteria Value 5 = Oriented4 = Confused 3 = Inappropriate words 2 = Incomprehensible sounds 1 = None**Synonymous Name** 

Compound Name	Pre-Hospital Index
Parent Compound Name	PCR Vitals
Component Name	PHI - Blood Pressure (Systolic) Component PHI - Consciousness Component PHI - Pulse Component PHI - Mechanism of Injury Component PHI - Respirations Component PHI - Total
Submission	EHS - PCR MDS
Requirement for the Standard	
Obligation	Optional
Cardinality	
Submitting Organization	Alberta Health and Wellness
Standard Reference	
Definition	Pre-Hospital Index – The PHI scale assesses the patient overall condition of the patient and his/her progress
Business Rule/Coding Guideline	

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Data Element Name	PHI - Blood Pressure (Systolic) Component
Compound Name	Pre-Hospital Index
Submission	EHS - PCR MDS
Requirement for the Standard	Provides information concerning the assessment of the patient based on a variety of triage scoring systems.
Submitting Organization	Alberta Health and Wellness
Standard Reference	
Definition	Code to rate the patient's systolic blood pressure component of the Pre-Hospital Index Score
Information Exchange Format Type	NUMBER
Information Exchange Format Length	1
Information Exchange Format Mask	
Presentation/Display Format	
Obligation	Optional
Cardinality	
Business Rule/Coding Guideline	
Implementation Consideration	
Permissible Data Element Value	Value/Assessment Criteria 0 = > 100 1 = 86 - 100 2 = 75 - 85 5 = 0 - 74
Synonymous Name	

Data Element Name | PHI - Consciousness Component **Compound Name** Pre-Hospital Index Submission **EHS - PCR MDS** Requirement for the Standard Provides information concerning the assessment of the patient based on a variety of triage scoring systems. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Definition Code to rate the patient's level of consciousness component of the Pre-Hospital Index Score. NUMBER **Information Exchange Format** Type Information Exchange Format Length **Information Exchange Format Presentation/Display Format** Obligation Optional Cardinality **Business Rule/Coding** Guideline **Implementation Consideration Permissible Data Element** Value/Assessment Criteria 0 = NormalValue 3 = Confused/Combative 5 = No intelligible Words **Synonymous Name** 

Data Element Name	PHI - Pulse Component
Compound Name	Pre-Hospital Index
Submission	EHS - PCR MDS
Requirement for the Standard	Provides information concerning the assessment of the patient based on a variety of triage scoring systems.
Submitting Organization	Alberta Health and Wellness
Standard Reference	
Definition	Code to rate the patient's pulse component of the Pre-Hospital Index Score
Information Exchange Format Type	NUMBER
Information Exchange Format Length	1
Information Exchange Format Mask	
Presentation/Display Format	
Obligation	Optional
Cardinality	
Business Rule/Coding Guideline	
Implementation Consideration	
Permissible Data Element Value	
Synonymous Name	

Data Element Name | PHI - Mechanism of Injury Component **Compound Name** Pre-Hospital Index **EHS - PCR MDS** Submission Requirement for the Standard Provides information concerning the assessment of the patient based on a variety of triage scoring systems. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Definition Code to rate the patient's mechanism of injury component of the Pre-Hospital Index Score. **NUMBER Information Exchange Format** Type Information Exchange Format | 1 Length **Information Exchange Format** Mask **Presentation/Display Format Obligation** Optional Cardinality **Business Rule/Coding** Guideline **Implementation Consideration** Permissible Data Element Value/Assessment Criteria If any of the following are present, add 4 Value - MVC pt. ejected or roll-over w/o seatbelt - MVC death or serious injury to occupant in same vehicle - MVC steering wheel deformed or interior instruction > 20" (45 - Motorcycle crash; victim separated from bike @ > 30 kph - Pedestrian or cyclist struck @ velocity > 15 kph - Penetrating injury to head, chest, abdomen or groin - Fall > 3m (10 ft.)**Synonymous Name** 

**Data Element Name** PHI - Respirations Component **Compound Name** Pre-Hospital Index Submission **EHS - PCR MDS** Requirement for the Standard Provides information concerning the assessment of the patient based on a variety of triage scoring systems. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Definition Code to rate the patient's respiratory component of the Pre-Hospital Index Score. **NUMBER Information Exchange Format** Type Information Exchange Format Length **Information Exchange Format Presentation/Display Format Obligation** Optional Cardinality **Business Rule/Coding** Guideline **Implementation Consideration Permissible Data Element** Value/Assessment Criteria 0 = NormalValue 3 = Labored5 = < 10/min.**Synonymous Name** 

**Data Element Name** PHI - Total Pre-Hospital Index **Compound Name** Submission EHS - PCR MDS Requirement for the Standard Provides information concerning the assessment of the patient based on a variety of triage scoring systems. **Submitting Organization** Alberta Health and Wellness **Standard Reference** Definition The total amount provides an assessment of the patient's condition and his/her progress. **NUMBER Information Exchange Format** Type Information Exchange Format | 2 Length **Information Exchange Format Presentation/Display Format Obligation** Optional Cardinality **Business Rule/Coding** Guideline **Implementation Consideration Permissible Data Element** Value **Synonymous Name** 

**Business Rule/Coding** 

Guideline

**Compound Name Blood Pressure Parent Compound Name PCR Vitals** Diastolic Blood Pressure **Component Name** Systolic Blood Pressure Submission **EHS - PCR MDS** Requirement for the Standard **Obligation** Optional Cardinality Alberta Health and Wellness **Submitting Organization Standard Reference Definition** The force that the circulating blood exerts on the walls of the This measurement is divided into systolic (pressure during contraction of the heart) and diastolic (pressure during relaxation phase).

Data Element Name	Diastolic Blood Pressure
Compound Name	
Submission	EHS - PCR MDS
Requirement for the Standard	The rationale for this data element has been defined as part of the Patient Vital Signs.
Submitting Organization	Alberta Health and Wellness
Standard Reference	
Definition	The pressure exerted on the walls of the arteries when the heart is the relaxation phase (diastole). A number indicating the patient's diastolic blood pressure measured in millimeters of Hg.
Information Exchange Format Type	NUMBER
Information Exchange Format Length	3
Information Exchange Format Mask	
Presentation/Display Format	
Obligation	Optional
Cardinality	
Business Rule/Coding Guideline	Successful readings are recorded as a three digit value  Blood Pressure is usually displayed as Systolic/Diastolic in the format 999/999.  For a Palpated reading, the Diastolic value of '777' is presented as 'P', e.g. 120/P
	Palpated reading – For a palpated reading, only the Systolic value is measurable. Unknown – When a reading was attempted, but could not be determined Not applicable – When the value is not applicable or not attempted
Implementation Consideration	The Diastolic Blood Pressure is normally used in conjunction with the Systolic Blood Pressure.
Permissible Data Element Value	000-300 / Reading obtained and recorded 777 / Palpated reading - Diastolic Blood Pressure unknown 888 / Unknown 999 / Not applicable
Synonymous Name	

Data Element Name	Systolic Blood Pressure
Compound Name	Blood Pressure
Submission	EHS - PCR MDS
Requirement for the Standard	The rationale for this date lament has been defined as part of the Patient Vital Signs Cluster.
Submitting Organization	Alberta Health and Wellness
Standard Reference	
Definition	The pressure exerted on the walls of the arteries during the contraction phase of the heart. A number indicating the patient's systolic blood pressure measured in millimeters of Hg.
Information Exchange Format Type	NUMBER
Information Exchange Format Length	3
Information Exchange Format Mask	
Presentation/Display Format	
Obligation	Optional
Cardinality	
Business Rule/Coding Guideline	Successful readings are recorded as a three digit value Blood Pressure is usually displayed as Systolic/Diastolic in the format 999/999.  Unknown – When a reading was attempted, but could not be determined  Not applicable – When the value is not applicable or not attempted
Implementation Consideration	The Systolic Blood Pressure is normally used in conjunction with the Diastolic Blood Pressure.
Permissible Data Element Value	000-300 / Reading obtained and recorded 888 / Unknown 999 / Not applicable
Synonymous Name	

# PERMISSIBLE VALUE LIST

# Provider Impression

Code	Description
 P1	Abdominal pain/problems
P2	Airway obstruction
P3	Allergic/anaphylactic reaction
P4	Behavioral/psychiatric
P5	Burns
P6	Cardiac arrest
P7	Cardiac rhythm disturbance
P8	Chest pain, Ischemic
P9	Chest pain, Non-cardiac
P10	Dementia
P11	Drowning
P12	Electrocution
P13	Epistaxis
P14	Fever
P15	General malaise/unwell
P16	G/I bleed
P17	Hyperglycemia
P18	Hypoglycemia
P19	Hyperthermia
P20	Hypothermia
P21	Inhalation injury - smoke
P22	Inhalation injury - toxic gas, other
P23	Miscarriage
P24	OB delivery
P25	Obvious death
P26	Poisoning
P27	Pregnancy and complications of
P28	Renal colic
P29	Respiratory arrest
P30	Respiratory distress
P31	Seizure
P32	Sexual assault/rape
P33	Shock - hypovolemic or other
P34	Stings/venomous bites
P35	Stroke/CVA/TIA
P36	Syncope/fainting
P37	Traumatic injury
P88	Unknown
P99	Not applicable

# **Sign Symptom**

CodeDescriptionS1Active bleedingS2Altered level of consciousness/confusedS3Breathing difficulty/dyspneaS4Blood in urine (hematuria)S5Bloody stoolsS6BurnsS7Cardio-respiratory arrestS8Childbirth, imminentS9ChokingS10Deformity, limbS11DiarrheaS12Diaphoretic/sweatingS13DizzinessS14Fever/hyperthermiaS15LethargicS16HypothermiaS17LaborS18Nausea/vomitingS19Numbness/decreased sensationS20Pain, abdominalS21Pain, backS22Pain, chestS23Pain, earS24Pain, eyeS25Pain, flankS26Pain, generalizedS27Pain, headacheS28Pain, limbS29PalpitationsS30ParalysisS31Seizure/convulsionsS32Swelling/edemaS33SyncopeS34Uncooperative/combativeS35Unresponsive/unconsciousnessS36Vaginal BleedingS37WeaknessS99Not Applicable	Sign Sy	· -
S2 Altered level of consciousness/confused S3 Breathing difficulty/dyspnea S4 Blood in urine (hematuria) S5 Bloody stools S6 Burns S7 Cardio-respiratory arrest S8 Childbirth, imminent S9 Choking S10 Deformity, limb S11 Diarrhea S12 Diaphoretic/sweating S13 Dizziness S14 Fever/hyperthermia S15 Lethargic S16 Hypothermia S17 Labor S18 Nausea/vomiting S19 Numbness/decreased sensation S20 Pain, abdominal S21 Pain, back S22 Pain, chest S23 Pain, ear S24 Pain, eye S25 Pain, flank S26 Pain, generalized S27 Pain, headache S28 Pain, limb S29 Palpitations S30 Paralysis S31 Seizure/convulsions S32 Swelling/edema S33 Syncope S34 Uncooperative/combative S35 Unresponsive/unconsciousness S36 Vaginal Bleeding S37 Weakness		
S3 Breathing difficulty/dyspnea S4 Blood in urine (hematuria) S5 Bloody stools S6 Burns S7 Cardio-respiratory arrest S8 Childbirth, imminent S9 Choking S10 Deformity, limb S11 Diarrhea S12 Diaphoretic/sweating S13 Dizziness S14 Fever/hyperthermia S15 Lethargic S16 Hypothermia S17 Labor S18 Nausea/vomiting S19 Numbness/decreased sensation S20 Pain, abdominal S21 Pain, back S22 Pain, chest S23 Pain, ear S24 Pain, eye S25 Pain, flank S26 Pain, generalized S27 Pain, headache S28 Pain, limb S29 Palpitations S30 Paralysis S31 Seizure/convulsions S32 Swelling/edema S33 Syncope S34 Uncooperative/combative S35 Unresponsive/unconsciousness S36 Vaginal Bleeding S37 Weakness		
S4 Blood in urine (hematuria) S5 Bloody stools S6 Burns S7 Cardio-respiratory arrest S8 Childbirth, imminent S9 Choking S10 Deformity, limb S11 Diarrhea S12 Diaphoretic/sweating S13 Dizziness S14 Fever/hyperthermia S15 Lethargic S16 Hypothermia S17 Labor S18 Nausea/vomiting S19 Numbness/decreased sensation S20 Pain, abdominal S21 Pain, back S22 Pain, chest S23 Pain, ear S24 Pain, eye S25 Pain, flank S26 Pain, generalized S27 Pain, headache S28 Pain, limb S29 Palpitations S30 Paralysis S31 Seizure/convulsions S32 Swelling/edema S33 Syncope S34 Uncooperative/combative S35 Unresponsive/unconsciousness S36 Vaginal Bleeding S37 Weakness		
S5 Bloody stools S6 Burns S7 Cardio-respiratory arrest S8 Childbirth, imminent S9 Choking S10 Deformity, limb S11 Diarrhea S12 Diaphoretic/sweating S13 Dizziness S14 Fever/hyperthermia S15 Lethargic S16 Hypothermia S17 Labor S18 Nausea/vomiting S19 Numbness/decreased sensation S20 Pain, abdominal S21 Pain, back S22 Pain, chest S23 Pain, ear S24 Pain, eye S25 Pain, flank S26 Pain, generalized S27 Pain, headache S28 Pain, limb S29 Palpitations S30 Paralysis S31 Seizure/convulsions S32 Swelling/edema S33 Syncope S34 Uncooperative/combative S35 Unresponsive/unconsciousness S36 Vaginal Bleeding S37 Weakness	-	
S6 Burns S7 Cardio-respiratory arrest S8 Childbirth, imminent S9 Choking S10 Deformity, limb S11 Diarrhea S12 Diaphoretic/sweating S13 Dizziness S14 Fever/hyperthermia S15 Lethargic S16 Hypothermia S17 Labor S18 Nausea/vomiting S19 Numbness/decreased sensation S20 Pain, abdominal S21 Pain, back S22 Pain, chest S23 Pain, ear S24 Pain, eye S25 Pain, flank S26 Pain, generalized S27 Pain, headache S28 Pain, limb S29 Palpitations S30 Paralysis S31 Seizure/convulsions S32 Swelling/edema S33 Syncope S34 Uncooperative/combative S35 Unresponsive/unconsciousness S36 Vaginal Bleeding S37 Weakness	-	Blood in urine (hematuria)
S7 Cardio-respiratory arrest S8 Childbirth, imminent S9 Choking S10 Deformity, limb S11 Diarrhea S12 Diaphoretic/sweating S13 Dizziness S14 Fever/hyperthermia S15 Lethargic S16 Hypothermia S17 Labor S18 Nausea/vomiting S19 Numbness/decreased sensation S20 Pain, abdominal S21 Pain, back S22 Pain, chest S23 Pain, ear S24 Pain, eye S25 Pain, flank S26 Pain, generalized S27 Pain, headache S28 Pain, limb S29 Palpitations S30 Paralysis S31 Seizure/convulsions S32 Swelling/edema S33 Syncope S34 Uncooperative/combative S35 Unresponsive/unconsciousness S36 Vaginal Bleeding S37 Weakness	-	Bloody stools
S8 Childbirth, imminent S9 Choking S10 Deformity, limb S11 Diarrhea S12 Diaphoretic/sweating S13 Dizziness S14 Fever/hyperthermia S15 Lethargic S16 Hypothermia S17 Labor S18 Nausea/vomiting S19 Numbness/decreased sensation S20 Pain, abdominal S21 Pain, back S22 Pain, chest S23 Pain, ear S24 Pain, eye S25 Pain, flank S26 Pain, generalized S27 Pain, headache S28 Pain, limb S29 Palpitations S30 Paralysis S31 Seizure/convulsions S32 Swelling/edema S33 Syncope S34 Uncooperative/combative S35 Unresponsive/unconsciousness S36 Vaginal Bleeding S37 Weakness		Burns
S9 Choking S10 Deformity, limb S11 Diarrhea S12 Diaphoretic/sweating S13 Dizziness S14 Fever/hyperthermia S15 Lethargic S16 Hypothermia S17 Labor S18 Nausea/vomiting S19 Numbness/decreased sensation S20 Pain, abdominal S21 Pain, back S22 Pain, chest S23 Pain, ear S24 Pain, eye S25 Pain, flank S26 Pain, generalized S27 Pain, headache S28 Pain, limb S29 Palpitations S30 Paralysis S31 Seizure/convulsions S32 Swelling/edema S33 Syncope S34 Uncooperative/combative S35 Unresponsive/unconsciousness S36 Vaginal Bleeding S37 Weakness	S7	Cardio-respiratory arrest
S10Deformity, limbS11DiarrheaS12Diaphoretic/sweatingS13DizzinessS14Fever/hyperthermiaS15LethargicS16HypothermiaS17LaborS18Nausea/vomitingS19Numbness/decreased sensationS20Pain, abdominalS21Pain, backS22Pain, chestS23Pain, earS24Pain, eyeS25Pain, flankS26Pain, generalizedS27Pain, headacheS28Pain, limbS29PalpitationsS30ParalysisS31Seizure/convulsionsS32Swelling/edemaS33SyncopeS34Uncooperative/combativeS35Unresponsive/unconsciousnessS36Vaginal BleedingS37Weakness	S8	
S11 Diarrhea S12 Diaphoretic/sweating S13 Dizziness S14 Fever/hyperthermia S15 Lethargic S16 Hypothermia S17 Labor S18 Nausea/vomiting S19 Numbness/decreased sensation S20 Pain, abdominal S21 Pain, back S22 Pain, chest S23 Pain, ear S24 Pain, eye S25 Pain, flank S26 Pain, generalized S27 Pain, headache S28 Pain, limb S29 Palpitations S30 Paralysis S31 Seizure/convulsions S32 Swelling/edema S33 Syncope S34 Uncooperative/combative S35 Unresponsive/unconsciousness S36 Vaginal Bleeding S37 Weakness	S9	Choking
S12 Diaphoretic/sweating S13 Dizziness S14 Fever/hyperthermia S15 Lethargic S16 Hypothermia S17 Labor S18 Nausea/vomiting S19 Numbness/decreased sensation S20 Pain, abdominal S21 Pain, back S22 Pain, chest S23 Pain, ear S24 Pain, eye S25 Pain, flank S26 Pain, generalized S27 Pain, headache S28 Pain, limb S29 Palpitations S30 Paralysis S31 Seizure/convulsions S32 Swelling/edema S33 Syncope S34 Uncooperative/combative S35 Unresponsive/unconsciousness S36 Vaginal Bleeding S37 Weakness	S10	Deformity, limb
S13 Dizziness S14 Fever/hyperthermia S15 Lethargic S16 Hypothermia S17 Labor S18 Nausea/vomiting S19 Numbness/decreased sensation S20 Pain, abdominal S21 Pain, back S22 Pain, chest S23 Pain, ear S24 Pain, eye S25 Pain, flank S26 Pain, generalized S27 Pain, headache S28 Pain, limb S29 Palpitations S30 Paralysis S31 Seizure/convulsions S32 Swelling/edema S33 Syncope S34 Uncooperative/combative S35 Unresponsive/unconsciousness S36 Vaginal Bleeding S37 Weakness	S11	Diarrhea
S14 Fever/hyperthermia S15 Lethargic S16 Hypothermia S17 Labor S18 Nausea/vomiting S19 Numbness/decreased sensation S20 Pain, abdominal S21 Pain, back S22 Pain, chest S23 Pain, ear S24 Pain, eye S25 Pain, flank S26 Pain, generalized S27 Pain, headache S28 Pain, limb S29 Palpitations S30 Paralysis S31 Seizure/convulsions S32 Swelling/edema S33 Syncope S34 Uncooperative/combative S35 Unresponsive/unconsciousness S36 Vaginal Bleeding S37 Weakness	S12	Diaphoretic/sweating
S15LethargicS16HypothermiaS17LaborS18Nausea/vomitingS19Numbness/decreased sensationS20Pain, abdominalS21Pain, backS22Pain, chestS23Pain, earS24Pain, eyeS25Pain, flankS26Pain, generalizedS27Pain, headacheS28Pain, limbS29PalpitationsS30ParalysisS31Seizure/convulsionsS32Swelling/edemaS33SyncopeS34Uncooperative/combativeS35Unresponsive/unconsciousnessS36Vaginal BleedingS37Weakness	S13	Dizziness
S16HypothermiaS17LaborS18Nausea/vomitingS19Numbness/decreased sensationS20Pain, abdominalS21Pain, backS22Pain, chestS23Pain, earS24Pain, eyeS25Pain, flankS26Pain, generalizedS27Pain, headacheS28Pain, limbS29PalpitationsS30ParalysisS31Seizure/convulsionsS32Swelling/edemaS33SyncopeS34Uncooperative/combativeS35Unresponsive/unconsciousnessS36Vaginal BleedingS37Weakness	S14	Fever/hyperthermia
S17LaborS18Nausea/vomitingS19Numbness/decreased sensationS20Pain, abdominalS21Pain, backS22Pain, chestS23Pain, earS24Pain, eyeS25Pain, flankS26Pain, generalizedS27Pain, headacheS28Pain, limbS29PalpitationsS30ParalysisS31Seizure/convulsionsS32Swelling/edemaS33SyncopeS34Uncooperative/combativeS35Unresponsive/unconsciousnessS36Vaginal BleedingS37Weakness	S15	Lethargic
S18Nausea/vomitingS19Numbness/decreased sensationS20Pain, abdominalS21Pain, backS22Pain, chestS23Pain, earS24Pain, eyeS25Pain, flankS26Pain, generalizedS27Pain, headacheS28Pain, limbS29PalpitationsS30ParalysisS31Seizure/convulsionsS32Swelling/edemaS33SyncopeS34Uncooperative/combativeS35Vaginal BleedingS37Weakness	S16	Hypothermia
S19 Numbness/decreased sensation S20 Pain, abdominal S21 Pain, back S22 Pain, chest S23 Pain, ear S24 Pain, eye S25 Pain, flank S26 Pain, generalized S27 Pain, headache S28 Pain, limb S29 Palpitations S30 Paralysis S31 Seizure/convulsions S32 Swelling/edema S33 Syncope S34 Uncooperative/combative S35 Unresponsive/unconsciousness S36 Vaginal Bleeding S37 Weakness	S17	Labor
S20 Pain, abdominal S21 Pain, back S22 Pain, chest S23 Pain, ear S24 Pain, eye S25 Pain, flank S26 Pain, generalized S27 Pain, headache S28 Pain, limb S29 Palpitations S30 Paralysis S31 Seizure/convulsions S32 Swelling/edema S33 Syncope S34 Uncooperative/combative S35 Vaginal Bleeding S37 Weakness	S18	Nausea/vomiting
S21 Pain, back S22 Pain, chest S23 Pain, ear S24 Pain, eye S25 Pain, flank S26 Pain, generalized S27 Pain, headache S28 Pain, limb S29 Palpitations S30 Paralysis S31 Seizure/convulsions S32 Swelling/edema S33 Syncope S34 Uncooperative/combative S35 Unresponsive/unconsciousness S36 Vaginal Bleeding S37 Weakness	S19	Numbness/decreased sensation
S22 Pain, chest S23 Pain, ear S24 Pain, eye S25 Pain, flank S26 Pain, generalized S27 Pain, headache S28 Pain, limb S29 Palpitations S30 Paralysis S31 Seizure/convulsions S32 Swelling/edema S33 Syncope S34 Uncooperative/combative S35 Unresponsive/unconsciousness S36 Vaginal Bleeding S37 Weakness	S20	Pain, abdominal
S23 Pain, ear S24 Pain, eye S25 Pain, flank S26 Pain, generalized S27 Pain, headache S28 Pain, limb S29 Palpitations S30 Paralysis S31 Seizure/convulsions S32 Swelling/edema S33 Syncope S34 Uncooperative/combative S35 Unresponsive/unconsciousness S36 Vaginal Bleeding S37 Weakness	S21	Pain, back
S24 Pain, eye S25 Pain, flank S26 Pain, generalized S27 Pain, headache S28 Pain, limb S29 Palpitations S30 Paralysis S31 Seizure/convulsions S32 Swelling/edema S33 Syncope S34 Uncooperative/combative S35 Unresponsive/unconsciousness S36 Vaginal Bleeding S37 Weakness	S22	Pain, chest
S25 Pain, flank S26 Pain, generalized S27 Pain, headache S28 Pain, limb S29 Palpitations S30 Paralysis S31 Seizure/convulsions S32 Swelling/edema S33 Syncope S34 Uncooperative/combative S35 Unresponsive/unconsciousness S36 Vaginal Bleeding S37 Weakness	S23	Pain, ear
S26 Pain, generalized S27 Pain, headache S28 Pain, limb S29 Palpitations S30 Paralysis S31 Seizure/convulsions S32 Swelling/edema S33 Syncope S34 Uncooperative/combative S35 Unresponsive/unconsciousness S36 Vaginal Bleeding S37 Weakness	S24	Pain, eye
S27 Pain, headache S28 Pain, limb S29 Palpitations S30 Paralysis S31 Seizure/convulsions S32 Swelling/edema S33 Syncope S34 Uncooperative/combative S35 Unresponsive/unconsciousness S36 Vaginal Bleeding S37 Weakness	S25	Pain, flank
S28Pain, limbS29PalpitationsS30ParalysisS31Seizure/convulsionsS32Swelling/edemaS33SyncopeS34Uncooperative/combativeS35Unresponsive/unconsciousnessS36Vaginal BleedingS37Weakness	S26	Pain, generalized
S29PalpitationsS30ParalysisS31Seizure/convulsionsS32Swelling/edemaS33SyncopeS34Uncooperative/combativeS35Unresponsive/unconsciousnessS36Vaginal BleedingS37Weakness	S27	Pain, headache
S30 Paralysis S31 Seizure/convulsions S32 Swelling/edema S33 Syncope S34 Uncooperative/combative S35 Unresponsive/unconsciousness S36 Vaginal Bleeding S37 Weakness	S28	Pain, limb
S31 Seizure/convulsions S32 Swelling/edema S33 Syncope S34 Uncooperative/combative S35 Unresponsive/unconsciousness S36 Vaginal Bleeding S37 Weakness	S29	Palpitations
S32 Swelling/edema S33 Syncope S34 Uncooperative/combative S35 Unresponsive/unconsciousness S36 Vaginal Bleeding S37 Weakness	S30	Paralysis
S33 Syncope S34 Uncooperative/combative S35 Unresponsive/unconsciousness S36 Vaginal Bleeding S37 Weakness	S31	Seizure/convulsions
S34 Uncooperative/combative S35 Unresponsive/unconsciousness S36 Vaginal Bleeding S37 Weakness	S32	Swelling/edema
S34 Uncooperative/combative S35 Unresponsive/unconsciousness S36 Vaginal Bleeding S37 Weakness	S33	Syncope
S36 Vaginal Bleeding S37 Weakness	S34	Uncooperative/combative
S37 Weakness	S35	Unresponsive/unconsciousness
	S36	Vaginal Bleeding
S99 Not Applicable	S37	Weakness
	S99	Not Applicable

**Injury Location Code** 

Code	Description
Α	Head/face
В	Neck
С	Back
D	Chest
E	Abdomen
F	Pelvis
G	Shoulder/upper arm
Н	Elbow/forearm
I	Wrist/hand
J	Hip/thigh
K	Knee/lower leg
L	Ankle/foot
М	Multiple body sites
N	Other

**Injury Code** 

injury Code	
Code	Description
1	Abrasion/ superficial injury
2	Amputation, complete
3	Amputation, partial
4	Burn injury
5	Contusion
6	Crush injury
7	Dislocation
8	Fracture
9	Open wound/ laceration
10	Sprain
99	Unspecified

# **Assessment Treatment**

	ment i reatment
Code	Description
_T1	Assessment (examination)
T2	Bandaging
T3	Control bleeding
T4	Extrication of patient
T5	Spinal immobilization devices
_T6	Splinting
_T7	Traction splint
T8	Vital signs
T9	Blood glucose testing
T10	Pulse oximetry (SPo2)
T20	Airway - oropharyngeal (OPA)
T21	Airway - combi-tube
T22	Airway - laryngeal mask adjunct (LMA)
T23	Airway - nasopharyngeal
T24	Bag-value mask (BVM)
T25	Cricothyrotomy
T26	End-tidal CO2 monitoring
T27	Esophageal intubation detector
T28	Intubation - endotracheal (ET tube)
T29	Intubation - nasotracheal
T30	Intermit positive pressure breathing device
T31	Manual airway maneuvers
T32	Percuntaneous transtraceal ventilation (PTTV)
T33	Suction - deep chest
T34	Suction - endotracheal
T35	Suction - meconium aspiration
T36	Suction - nasopharyngeal
T37	Suction - nasotracheal
T38	Suction - oropharyngeal
T39	Suction - tracheal
T45	Cardiac monitoring - twelve lead
T46	Cardiac monitoring - basic
T47	Cardioversion
T48	Cardio pulmonary resuscitation (CPR)
T49	Defibrillation
T50	Transcutaneous pacing (TCP)
T51	Vagal maneuver
T60	Endotracheal
T61	Intramuscular
T62	Intranasal
T63	Intravenous
T64	Nebulized
T65	Oral
T66	Rectal
T67	Subcutaneous
101	

T68	Sublingual
T69	Topical
T70	Assist patient with own meds
T80	IV infusions - initiate, monitor and maintain
T81	Intraosseous infusion
T82	OB delivery
T83	Rapid Sequence Induction (RSI)
T84	Rapid Sequence Sedation (RSS)
T85	Draw blood - arterial blood gas sample
T86	Draw blood - external jugular venipuncture
T87	Draw blood - femoral venipuncture
T88	Draw blood - other venipuncture
T89	Gastric tubes
T90	Monitoring chest tube
T91	Needle thoracostomy
T92	Suturing
T93	Urinary catherization
T99	Other

# **Patient Location**

· ationit	Location
Code	Description
L1	Home
L2	Residential institution
L3	School
L4	Public administration area
L5	Health facility
L6	Other institution
L7	Sports or athletics area
L8	Park
L9	Street
L10	Highway
L11	Intersection
L12	Sidewalk
L13	Ditch
L14	Trade or service area
L15	Industrial worksite
L16	Farm
L17	Body of water
L18	Other specified place
L19	Unspecified place

**External Cause of Injury** 

	De constitution of the con		
Code	Description		
_E1	Bicycle related incident		
E2	Motorcycle related incident		
E3	Motor vehicle, traffic collision		
E4	Motor vehicle, non-traffic collision		
E5	Off-road vehicle		
E6	Pedestrian vs. vehicle collision		
E7	Aircraft related, powered		
E8	Aircraft related, non-powered		
E9	Assault - bodily force		
E10	Bitten by animal		
E11	Chemical ingestion		
E12	Drug ingestion		
E13	ETOH ingestion		
E14	Electrocution (non-lightning)		
E15	Excessive heat		
E16	Excessive cold		
E17	Fall < 10 feet		
E18	Fall > 10 feet		
E19	Fire/flames		
E20	Gunshot - handgun		
E21	Gunshot - rifle, shotgun		
E22	Hanging/other mechanical suffocation		
E23	Lightning		
E24	Machinery-related incident		
E25	Radiation exposure, including sun		
E26	Sexual assault/rape		
E27	Stabbing		
E28	Venomous bites and stings (plants, animals)		
E29	Water-related incident		
E99	Not applicable		

**Bystander Response** 

_ ,	-,		
Code	Description		
B1	Cardiopulmonary Resuscitation		
B2	Automated External Defibrillator		
	Cardiopulmonary Resuscitation & Automated External		
B3	Defibrillator		

Co-Responder

Code	Description
CR1	On Scene
CR2	Cardiopulmonary Resuscitation
CR3	Automated External Defibrillator
CR4	Cardiopulmonary Resuscitation & Automated External Defibrillator

# Medication

Aspirin Charcodote	
Name	
Cordarone	
ad	
ride	
onate	
azem	
enist	
opin opin	
l-load	
AIG code; May only be used by	
e from Health Cda	
te	
eload	
parin Inj	
lution	
HCL	
load	
% 250 ml premix bag	
pam	
ulphate Inj 50%	
Osmitrol 20	

M250	Meperidine HCL	Demerol/Meperidine	
M255	Methylprednisolone	Solu Medrol	
M260	Metoclopramide HCL	Metoclopramide	
M265	Metoprolol Tartrate	Betaloc/Lopresor/Metoprolol	
M270	Midazolam HCL	Versed	
M275	Morphine Sulphate	Morphine	
M280	Naloxone HCL	Narcan	
M285	Neostigmine Methylsulfate	NeostigmineProstigmin	
M290	Nifedipine	Adalat	
M295	Nitroglycerine SL Tab	Nitrostat	
M300	Nitroglycerine Spray	Nitro Pumpspray	
M305	Nitroglycerine IV	Nitroglycerine IV Pre-mix	
M310	Oxytocin	Oxytocin/Pitocin/Syntocinon	
M315	Pancuronium Bromide	Pancuronium Bromide	
M320	Pentastarch	Pentaspan	
M325	Phenytoin Sodium	Dilantin	
M330	Potassium Chloride	Potassium Chloride (KCL) Inj	
M335	Prednisone	Prednisone	
M340	Procainamide HCL	Procainamide (INJ)/Pronestyl	
M345	Prochlorperazine	Stemetil	
M350	Retaplase	Retavase	
M355	Rocuronium	Zemuron	
M360	Salbutamol	Ventolin Nebs	
M365	Sodium Bicarbonate	Sodium Bicarbonate 8.4%	
M370	Sodium Bicarbonate, Pediatric	Sodium Bicarbonate 4.2%	
M375	Streptokinase	Streptase	
M380	Succinylcholine Chloride	Quelicin/Succinylcholine	
M385	Tenecteplase	TNKase	
M390	Tetracaine HCL	Minims Tetracaine/Tetracaine/Pontocaine	
M395	Thiamin HCI	Betaxin/Vitamin B1	
M400	Vasopressin	Pressyn/Vasopressin	
M405	Vecuronium Bromide	Norcuron/Vecuronium Bromide Inj	
M410	Verapamil HCL	Isoptin	
M500	Nitrous Oxide	Entonox	
M510	Oxygen	Oxygen	
M520	Dextrose 5%	D <sub>5</sub> W	
M530	Ringers Lactate	Ringers Lactate	
M540	Normal Saline	Sodium Chloride, 0.9%	
M550	2/3; 1/3	Dextrose 3.3%/NaCl 0.3%	

APPENDIX A The following is the document produced by the stakeholders.				

# Benchmarking of Emergency Medical Services In Alberta

Consultation Paper February 28, 1999

#### Introduction

In April 1998, representatives from the Alberta Ambulance Operators Association (AAOA) and Emergency Health Services, Alberta Health, met to discuss the need for the objective identification, validation, and acceleration of the spread of best practices in Alberta emergency medical services.

Following this meeting a committee was struck to assist Alberta ambulance operators in establishing goals and performance measures. The committee is composed of representatives from the AAOA and Emergency Health Services, as well as the City of Edmonton Emergency Response Department and the City of Calgary Emergency Medical Services Department.

The goals of the committee are:

To establish a set of standardized definitions of performance measures to promote provincially and eventually nationally;

To identify common data elements:

To educate EMS stakeholders in the province on the purpose and benefits of benchmarking; To identify core data for analysis.

Initially, the focus of the committee will be on encouraging benchmarking of emergency medical services within Alberta; however, as a common set of definitions and data elements is promoted nationally, it will eventually become possible to benchmark ambulance services in Alberta with other services nationally and internationally.

During the preparation of this consultation paper the committee drew extensively on current research in the field of performance measurement and, more specifically, in EMS benchmarking. The purpose of this paper is to propose, and get feedback on, common definitions and data elements required to benchmark emergency medical services in Alberta.

Comments may be recorded separately or directly in this document. Please state clearly the definitions and/or data elements referred to.

Comments should be sent to the following address by March 31, 1999:

Emergency Health Services Branch Alberta Health 19<sup>th</sup> Floor, 10025 Jasper Avenue Edmonton AB T5J 2N3

### **EMS Definitions**

### **Advanced Cardiac Life Support:**

Attempts to restore spontaneous circulation with basic CPR plus advanced airway management and ventilation techniques (including intubation of the airway and the use of airway devices that pass the pharynx), as well as defibrillation and intravenous or endotracheal medications.

### **Advanced Life Support Level of Service:**

An ambulance meets the requirements necessary to provide ambulance services at the advanced life support level if it is staffed with at least one Emergency Medical Technologist-Paramedic and one Emergency Medical Technician-Ambulance and it is equipped with the equipment and supplies specified in the regulation. (Alberta Ambulance Services Act, Staff, Vehicle and Equipment Regulation.)

# **Advance Life Support Level of Care:**

An ALS level of care is said to have been delivered when a patient has been provided health services within the scope of practice of an Alberta Registered Emergency Medical Technologist-Paramedic, as defined in the Emergency Medical Technicians Regulation of the Alberta Health Disciplines Act. (In the future, the Health Disciplines Act will be replaced by the Health Professions Act.)

#### **Automated External Defibrillators:**

An automated external defibrillators a defibrillator that performs rhythm analysis of the patient's surface electrocardiogram. This rhythm analysis is dichotomous; either ventricular fibrillation / ventricular tachycardia or non-ventricular fibrillation. An automated external defibrillator provides information to the operator when it detects ventricular fibrillation or rapid ventricular tachycardia. This information is also dichotomous; either "shock" or "no shock indicated". ii

# **Basic Cardiac Life Support**

The attempt to restore effective circulation with (cardiopulmonary resuscitation, which is) external compression of the chest wall plus expired air inflation of the lungs. Rescuers can provide ventilation through airway adjuncts and face shields (and bag-valve-masks). Invasive techniques of airway maintenance such as intubation of the airway and airway devices that pass the pharynx are not included under this definition.<sup>iii</sup>

# **Basic Life Support Level of Service:**

An ambulance meets the requirements necessary to provide ambulance services at the basic life support level if it is staffed with at least one Emergency Medical Technician-Ambulance and one Emergency Medical Responder and it is equipped with the equipment and supplies specified in Schedule 2 of the regulation. (Ambulance Services Act, Staff, Vehicle and Equipment Regulation, Section 3.)

# **Basic Life Support Level of Care:**

A BLS level of care is said to have been delivered when a patient has been provided health services within the scope of practice of an Alberta Registered Emergency Medical Technician-Ambulance, as defined in the Emergency Medical Technicians Regulation of the Health Disciplines Act. (In the future, the Health Disciplines Act will be replaced by the Health Professions Act.)

### **Bystander CPR:**

An attempt to perform cardiopulmonary resuscitation (CPR) by someone who is not part of an organized emergency response system.<sup>iv</sup>

# **Cardiac Arrest:**

The cessation of cardiac mechanical activity, confirmed by the absence of a detectable pulse, unresponsiveness, and apnea (or agonal, gasping respirations).

# **Emergency Medical Dispatcher (EMD):**

A person formally trained in a recognized program to perform dispatching duties.

#### **Emergency Medical Responder (EMR):**

A person who is registered with the Alberta Pre-Hospital Professions Association under the Health Disciplines Act, Emergency Medical Technicians Regulation as being one who can bear the title of EMR and who, with the appropriate training and on-going medical audit, can perform the health services described in the regulation. (In the future, the Health Disciplines Act will be replaced by the Health Professions Act.)

# **Emergency Medical Technician-Ambulance (EMT-A):**

A person who is registered with the Alberta Pre-Hospital Professions Association under the Health Disciplines Act, Emergency Medical Technicians Regulation as being one who can bear the title of EMT-A and who, with the appropriate training and on-going medical audit, can perform the health services described in the regulation. (In the future, the Health Disciplines Act will be replaced by the Health

### Professions Act.)

### **Emergency Medical Technologist-Paramedic (EMT-P):**

A person who is registered with the Alberta Pre-Hospital Professions Association under the Health Disciplines Act, Emergency Medical Technicians Regulation as being one who can bear the title of EMT-P and who, with the appropriate training and on-going medical audit, can perform the health services described in the regulation. (In the future, the Health Disciplines Act will be replaced by the Health Professions Act.)

#### ICD-9-CM

The International Classification of Diseases, Ninth Revision, Clinical Modification. A classification system that groups related disease entities and procedures for the reporting of statistical information. The National Centre for Statistics developed the clinical modification of the ICD-9 for use in North America. Vi

#### Incident

An unplanned, undesired or unacceptable situation that could have or did result in injury, loss or detrimental circumstances. vii

### **Incident Investigation**

Eliciting of the facts surrounding an occurrence to determine root causes in order to initiate actions to prevent a re-occurrence. viii

#### **Medical Audit:**

An assessment by the medical director of the health services provided by a registered member of the designated health discipline of Emergency Medical Technicians and the protocols under which the registered member operates.<sup>ix</sup>

### **Medical Control:**

Orders within the registered member's scope of practice, that define patient management and are issued by the medical director or their designate. Medical control may take place prospectively through development of protocols, directly by oral or written orders or retrospectively by medical audits.<sup>x</sup>

#### **Medical Control Guidelines:**

A document containing Medical Protocols which provides guidelines for treatment options to EMRs, EMT-As and EMT-Ps. It is a form of prospective performance measurement by establishing standards of care prior to patient contact.<sup>xi</sup>

# **Medical Director:**

A physician who is designated by an employer to provide medical control to people registered as members of the designated health discipline of Emergency Medical Technicians.<sup>xii</sup>

# **Medical Priority Dispatch**

A patented system of determining the most appropriate response according to the answers from the caller to a set of pre-scripted questions. The system also includes pre-arrival instruction to empower the caller to help the patient while waiting for the ambulance to arrive. xill

# **Quality Assurance**

### **Document:**

Something written, printed, etc. that gives information or proof of some fact; any object used as evidence; to prove or support by means of documents. xiv

#### **Documentation:**

The use of documentary evidence; the documents used.xv

### Procedure:

A specified way to perform an activity. A procedure should normally specify the purpose and scope of an activity; what is to be done and by whom; where and how it must be done; what materials, equipment and documents shall be used; and how it must be controlled and recorded.<sup>xvi</sup>

### Quality:

The totality of characteristics of a product or service that bear on its ability to satisfy stated or implied needs. Quality is sometimes referred to as "fitness for use", "customer satisfaction", or "conformance to the requirements". XVIII

# **Quality Assurance:**

All the planned and systematic actions to be implemented and demonstrated to provide adequate confidence that the product or service will satisfy given requirements for quality. All that is done to be sure that quality control is what it should be.

Within an organization, quality assurance serves as a tool to provide confidence to management (internal quality assurance). In contractual or other situations, quality assurance also serves to provide confidence to the customer or others (external quality assurance). XVIII

# **Quality Audit:**

A systematic and independent examination to determine whether quality activities and related results comply with planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve objectives.

The quality audit typically applies, but is not limited to a quality system or elements thereof, to processes, to products, or to services. Such audits are often called "quality system audit", "process quality audit", "product quality audit", or "service quality audit".

Quality audits are carried out by staff not having direct responsibility in the areas being audited but preferably, work in cooperation with the relevant personnel.

One purpose of a quality audit is to evaluate the need for improvement or corrective action. An audit should not be confused with surveillance or inspection activities performed for the purpose of process control or product acceptance.

Quality audits can be conducted for internal or external purposes.xix

# **Quality Control**

The operational techniques and activities that are used to fulfill requirements for quality. All that is done to be sure that the product is what it should be.

Quality control involves operational techniques and activities aimed both at monitoring a process and at eliminating causes of unsatisfactory performance at all stages of the organization's operation in order to result in economic effectiveness.<sup>xx</sup>

# **Quality Improvement**

The actions taken to increase the value to the customer by improving the effectiveness and efficiency of processes and activities throughout the organizational structure. xxi

#### Benchmarking Definitions

#### Benchmark:

A "best in class" comparator; a high level of performance that others achieve when undertaking a similar responsibility. A comparison of key performance indicators or measures of results. \*\*xiiii\*

#### Core Data:

Data without which analyses and comparisons would be difficult or meaningless. These data are generally easier to collect and in some systems are routinely collected. \*xiv\*

#### **Expectation:**

A desired result as set out in a goal, guideline, policy standard, target or benchmark.xxv

#### Goal:

A broad statement of a desired condition which is potentially attainable though not necessarily easily or within a short time frame. \*\*xxvi\*

## **Guideline:**

A recommendation developed to guide an individual or an organization undertaking an activity.xxvii

The amount and type of resources (staff, clients, money, supplies, material, buildings, etc.) used to deliver programs and services. xxviii

# Lateral Benchmarking:

Comparing the same key indicator for several organizations. xxix

#### Measure:

A quantitative tool to assess progress in meeting expectations. xxx

### Outcome:

A change in health status or health determinants of clients that can be attributed to a program or service. xxxi

#### **Outcome-Oriented Benchmarking:**

Measurement of the external effects of organizational performance. In the ambulance industry, outcomeoriented key indicators include cardiac survival rates, measures of customer satisfaction and measured effects on downstream health care costs. xxxiii

# **Output-Oriented Benchmarking:**

Measurement of the quantity, quality or cost to the provider of the products or services provided by the

organization. In the ambulance industry, output-oriented key indicators include fractile measures of response time reliability, measures of protocol compliance, clinical level of service and the provider's cost per patient served. \*\*xxxiii\*

# **Output:**

The results of processes that were completed, for example, average daily cost per client, average length of stay. xxxiv

#### Process:

The activities and tasks undertaken to achieve program or service objectives. xxxv

# **Process-Oriented Benchmarking:**

The key indicator, compared over time or across sites, to evaluate how well a production process is being performed. xxxvi

# Sequential Benchmarking:

Comparing the same key indicators over time for the same organization (i.e., trend analysis). xxxvii

## **Supplementary Data:**

Data that is more comprehensive and more specific than core data and should be reported whenever possible. These data permit more detailed comparisons and more precise analyses of outcomes. They are generally more difficult to collect and tend to be less precise than core data. \*\*xxxviii\*

# Target:

A specific statement of a desired level of or change in performance to be achieved usually within a given time period. xxxix

Demographic/Geographic Measures

#### City

Part 4, Division 2, Section 82 of the Municipal Government Act states that a city may be formed for an area in which (a) a majority of the buildings are on parcels of land smaller than 1850 square metres, and (b) there is a population of 10 000 or more.

#### Hamlet

Part 3, Division 6, Section 59(1) of the Municipal Government Act states that the council of a municipal district or specialized municipality may designate an unincorporated community described in subsection (2) that is within its boundaries to be a hamlet. Subsection (2) states that an unincorporated community may be designated a hamlet if: the community consists of 5 or more buildings used as dwellings and a majority of these dwellings are on parcels of land smaller than 1850 square metres; the community has a generally accepted boundary and name; and the community contains parcels of land that are used for non-residential purposes.

# **Municipal District**

Part 4, Division 2, Section 78 of the Municipal Government Act states that a municipal district may be formed for an area in which (a) a majority of the buildings used as dwellings are on parcels of land with an area of at least 1850 square metres, and (b) there is a population of **1000** or more.

# **Population Density:**

The number of persons per square kilometre.xl

### **Province/Territory:**

The major political divisions of Canada. From a statistical point of view, they are a basic unit for which data are tabulated and cross-classified. The ten provinces combined with the two territories cover the complete country. xli

### Rural Area:

Rural areas are sparsely populated lands lying outside urban areas. Taken together, urban and rural areas cover all of Canada. Within the rural areas of Canada population densities and living conditions can vary greatly. XIII

# **Standard Geographical Classification (SGC):**

Statistic Canada's official classification of geographic areas in Canada. The SGC provides unique numeric identification codes for three types of geographic areas. These are provinces and territories, census divisions and census subdivisions. The three geographic areas are hierarchically related.

#### Town

Part 4, Division 2, Section 81 of the Municipal Government Act states that a town may be formed for an area in which (a) a majority of the buildings are on parcels of land smaller than 1850 square metres, and (b) there is a population of 1000 or more.

### **Urban Area:**

Urban areas have minimum population concentrations of 1,000 and a population density of at least 400 per square kilometre, based on the previous census population counts. All territory outside urban areas is considered rural. Taken together, urban and rural areas cover all of Canada. xliv

#### Village

Part 4, Division 2, Section 80 of the Municipal Government Act states that a village may be formed for an area in which (a) a majority of the buildings are on parcels of land smaller than 1850 square metres, and (b) there is a population of **300** or more.

Administrative/Financial Measures

#### **Cost Per Call:**

Actual EMS operation net expenses (annual) divided by the EMS call volume for the same period of time. xIV

#### **EMS Call Volumes:**

The number of EMS calls received through EMS dispatch for a given period of time. (This number includes cancelled calls and calls for treatment but no transfers.)

### **Net Cost Per Capita:**

Actual EMS operation net expenses (annual) divided by population of the city/town/village(s) served. Net Budget:

Budgeted revenues less budgeted expenses as approved by City/Town/Village Council or Ambulance Board for a period of one year. xivii

#### Revenue:

Revenue received through the billing of ambulance services, which includes fees for transports and mileage, response fees, standby fees and air medevacs agreements (if applicable). \*\*Includes fees for transports and mileage, response fees, standby fees and air medevacs agreements (if applicable).

# **Unit Hour Utilization (UHU):**

A ratio describing the amount of time the EMS vehicle is in use compared to the time the vehicle is available.

The formula for calculating the UHU is as follows:

UHU = Total Unit Hours Available

Number of Calls Per Hour

Total Unit Hours = (Units x # hours) x # of days

Number of Calls Per Hour = Average number of calls per hour over same number of days used in Total Unit Hours calculation. \*\*Iiix\*\*

Time Intervals

(Refer to Figure 1 for a depiction of the Emergency Medical Services Time Interval Model.)

### **Call Response Interval:**

The period elapsed from the time the phone rings at the EMS dispatch centre to the time the EMS vehicle has stopped curb-side at the scene of the call.

# **Delivery Interval:**

The period elapsed from the time that the EMS vehicle has stopped at the hospital to the time that the patient is off of the EMS stretcher in the hospital.

# **Dispatch Interval:**

The period elapsed from the time the phone rings at the EMS dispatch centre to the time the EMS crew is pre-alerted.

# **EMS Activation Interval:**

The period elapsed from the time the phone rings at a public service answering point (PSAP), or directly at the dispatch centre, to the time when the EMS crew is pre-alerted.

### **EMS Call:**

The sum of all of the events that occur once the phone rings at the dispatch centre until the EMS vehicle is placed back in service.

### **EMS Vehicle Travel Interval:**

The period elapsed from the time the EMS vehicle is in-gear responding to a request for service to the time that the EMS vehicle is stopped curb-side at the scene of the call.

#### Interval:

The period elapsed between two points in time.

### **On-Scene Interval:**

The period elapsed from the time the EMS vehicle is stopped curb-side at the scene of the call to the time the EMS vehicle is in-gear departing the scene of a call.

#### **Out-of-Chute Interval:**

The period elapsed from the time the EMS crew is pre-alerted to the time that the EMS vehicle is in-gear responding to the request for service.

### **Out-of-Service Interval:**

The period elapsed from the time that the EMS crew is pre-alerted by dispatch to the time the EMS vehicle is placed back in service.

### **PSAP Screening Interval:**

The period elapsed from the time that the phone rings at a public service answering point to the time that the transfer-call rings at the EMS dispatch centre.

### **Recovery Interval:**

The period elapsed from the time that the patient is off of the EMS stretcher in the hospital to the time that the EMS vehicle is back in service.

# **Total Emergency Call:**

The sum of all of the events that occur once the phone rings at either a public service answering point, or directly at the dispatch centre, until the ambulance is placed back in service.

# **Total Emergency Medical Services Call:**

The sum of all of the events that occur once the phone rings directly at the dispatch centre, until the ambulance is placed back in service.

# **Total Pre-Hospital Assessment/Treatment Interval:**

The period elapsed from the time the EMS crew reaches the patient's side to the time the patient is off of the EMS stretcher in the receiving hospital.

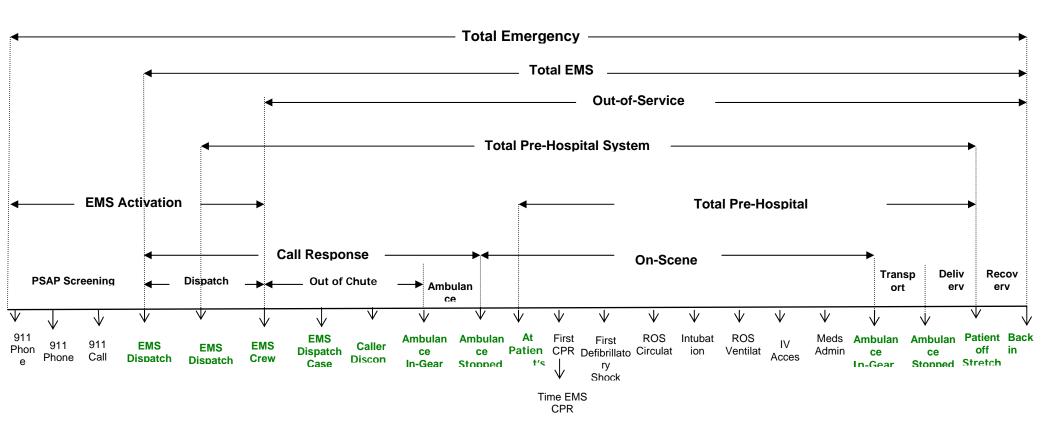
#### **Total Pre-Hospital System Interval:**

The period elapsed from the time EMS dispatch answers a phone call requesting emergency medical services to the time the patient is off of the EMS stretcher in a hospital.

#### **Transport Interval:**

The period elapsed from the time that the EMS vehicle is in-gear departing the scene of the call to the time that the EMS vehicle is stopped at the hospital.

Figure 1.
Emergency Medical Services Time Interval Model



• ROS: Return of spontaneous (I.e., return of spontaneous circulation.)

# **Uniform EMS Data Element Dictionary Format**

Each data element is presented using the following template. Sufficient detail about each data element has been included to justify its inclusion in the uniform data set. It is recognized that the lists that are included in this dictionary are imperfect, but definitions of these lists have been debated for many years without resolution. The lists included here were initially developed at the Uniform Pre-Hospital EMS Data Conference in 1993 and have been modified to reflect Canadian information processing standards. Those data elements that were not relevant to the delivery of emergency medical services in Alberta were not included in this dictionary, as a result the element numbers may not be sequential.

Space is provided after each data element for your comments. Additional comments may be attached on a separate sheet; please indicate the number and name of the corresponding data element.

#

Name of Data Element:	Name
Priority:	Essential or desirable
Definition:	Short definition of data element
Data Items:	Defined data elements - alternative descriptions of the data
	element values or attributes.

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

Comments:

# **Uniform EMS Data Element Dictionary**

1.

Name of Data Element:	Incident Address
Hame of Data Licinett.	modern Address
Priority:	Essential
Definition:	Address (or best approximation) where patient was found, or, if no patient, address to which unit responded.

**Discussion and Justification:** Provides location of incident, which can be used to determine the appropriate allocation of EMS resources for specific areas. Contains the street address or post office box number, followed by the apartment number or internal building number.

### Comments:

2.

Name of Data Element:	Incident City	
Priority:	Essential	
Definition:	City, town, village or hamlet (if applicable) where patient was found or to which unit responded (or best approximation)	
Data Items: Standard Geographic Classification Code		

**Discussion and Justification:** Provides city or other urban area location of incident, which can be used to determine the appropriate allocation 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.

### Comments:

Name of Data Element:	Incident Municipal District
Priority:	Essential
Definition:	Municipal district, or best approximation, where patient was found or to which unit responded (if applicable)
Data Items: Standard Geographic Classification Code	

**Discussion and Justification:** Provides municipal district or other rural area 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 county, or to hospitals within the same county. Field may be used for local county reports, permitting local understanding of the impact of EMS. Can link data file with census data to determine effects of population density, socioeconomic information, etc. on need for EMS and evaluations of EMS outcome.

#### Comments:

4.

Name of Data Element:	Incident Province
Priority:	Essential
Definition:	Province, territory, or State, where patient was found or to which unit responded
Data Items: Standard Geographic Classification Code	

**Discussion and Justification:** Provides a means of aggregating EMS incidents by province, which allows reports to provincial legislatures concerning province-wide EMS activities. Can be used to assess province-wide resource requirements for EMS operations. Important where patients are transported across provincial borders.

Name of Data Element:	Location Type
Priority:	Essential
Definition:	Type of location of incident

#### **Data Items**

849.0Home / Residence849.6 Public Building

849.1Farm 849.7 Residential Institution

849.2Mine or quarry 849.E Educational Institution

849.3Industrial place and premises 849.8 Other specified location 849.4Place for recreation or sport 849.9 Unspecified location

849.5Street or highway 849.U Unknown

**Discussion and Justification:** Location type data items are coded in terms of the (ICD-91) E849 place of occurrence codes. This location refers to the location where the injury occurred, <u>not</u> necessarily the origin of the transport.

Location type of the incident is important for epidemiologists as well as EMS planners deciding where to allocate EMS resources.

The categories in this dictionary are from ICD-9 and are E849 place of occurrence codes, with the exceptions that a category for educational institutions has been added, and an unknown category is provided. The unknown category is provided so that inaccurate data is not entered into this field.

### Home / Residence (E Code 849.0)

Includes apartment, boarding house, farm house, home premises, residential house, non-institutional place of residence, private driveway, private garage, private garden, private home, private walkway, swimming pool within private house or garden, and yard of home. Excludes home under construction but not occupied, or institutional place of residence.

### Farm (E Code 849.1)

Includes farm buildings and land under cultivation. Excludes farm house and home premises of farm.

### Mine or quarry (E Code 849.2)

Includes gravel pit, sand pit, or tunnel under construction.

### Industrial place and premises (E Code 849.3)

Includes building under construction, dockyard, dry dock, factory building or premises, garage (place of work), industrial yard, loading platform in factory or store, industrial plant, railway yard, shop (place of work), warehouse, and workhouse.

### Place for recreation or sport (E Code 849.4)

Includes amusement park, baseball field, basketball court, beach resort, cricket ground, football field, golf course, gymnasium, hockey field, holiday camps, ice palace, lake resort, mountain resort, playgrounds including school playground, public parks, racecourses, resorts of all types, riding school, rifle range, seashore resorts, skating rink, sports ground, sports palace, stadium, public swimming pool, tennis court, vacation resort. Excludes occurrences in private house, private garden, private swimming pool, private vard.

<sup>1</sup> The International Classification of Diseases, Ninth Revision. A classification system that groups related disease entities and procedures for the reporting of statistical information.

Street or highway (E Code 849.5) Includes all public roadways.

### Public building (E Code 849.6)

Includes any building used by the general public, including airport, bank, cafe, casino, church, cinema, clubhouse, courthouse, dance hall, parking garage, hotel, market, movie theater, music hall, nightclub, office, office building, opera house, post office, public hall, broadcasting station, restaurant, commercial shop, bus or railway station, store, or theater. Excludes home garage or industrial building or workplace. Also excludes public, and private schools, which varies from the ICD-9 definition.

### Residential institution (E Code 849.7)

Children's home, dormitory, hospital, jail, home for elderly, orphanage, prison, reform school.

### Educational institution (E Code 849.E)

Includes public and private schools. Excludes playground, gymnasium, and other recreational locations within educational institutions, which should be coded as place for recreation or sport.

### Other specified location (E Code 849.8)

Includes beaches, canal, caravan site, derelict house, desert, dock, forest, harbor, hill, lake, mountain, parking lot, parking place, pond or natural pool, prairie, railway line, reservoir, river, sea, seashore, stream, swamp, trailer court, and woods. Excludes resorts.

### Unspecified location (E Code 849.9)

Includes any location not included in the above classification.

### Unknown (E Code 849.U)

To be used when the location of incident is not known.

8

Name of Data Element:	Date Incident Reported
Priority:	Essential
Definition:	Date the call is first received by a public safety answering point (PSAP) or other designated entity.
Data Item:	YYYYMMDD.

**Discussion and Justification:** Used in conjunction with "Time Incident Reported" to assess the duration between onset of a medical emergency and receipt of a request for EMS response, as well as to assess the duration of time required to mobilize the response and provide the patient definitive care. The data element is also used to help EMS planners allocate resources by day of week and season of year.

# Comments:

9

Name of Data Element:	Time Incident Reported
Priority:	Essential
Definition:	Time call is first answered by Public Safety Answering Point (PSAP) or other designated entity.
Data Item:	ННММ.

**Discussion and Justification:** HH ranges from 00 to 23; MM ranges from 00 to 59. When available, the time should be the connect time to the PSAP.

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.

Name of Data Element:	Time Dispatch Notified
Priority:	Essential
Definition:	Time the phone is answered by EMS dispatch.
Data Item:	ННММ.

**Discussion and Justification:** HH ranges from 00 to 23; MM ranges from 00 to 59. Provides the start point of the dispatch component of the EMS response. This data element allows managers to assess delays between the time of incident report and the notification of EMS dispatchers.

# Comments:

11.

Name of Data Flamout	Data Unit Natified
Name of Data Element:	Date Unit Notified
Priority:	Essential
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Definition:	Date response unit is notified by EMS dispatch.
Data Item:	YYYYMMDD.

**Discussion and Justification:** Permits planning of EMS resources by day of week or season of year. Also permits assessment of EMS responsivity. The data element will be of use particularly when the incident is reported immediately prior to midnight, and the response unit is notified after midnight.

Name of Data Element:	Time Unit Notified
Priority:	Essential
Definition:	Time response unit or aircraft is notified by EMS dispatch
Data Item:	ННММ.

**Discussion and Justification:** HH ranges from 00 to 23; MM ranges from 00 to 59. 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.

#### Comments:

13.

Name of Data Element:	Time Unit Responding
Priority:	Essential
Definition:	Time that the response unit or aircraft begins physical motion.
Data Item:	HHMM.

**Discussion and Justification:** HH ranges from 00 to 23; MM ranges from 00 to 59. 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.

Name of Data Element:	Time arrival at scene
Priority:	Essential
Definition:	Time response unit or aircraft stops physical motion at scene (last place that the unit or vehicle stops prior to assessing the patient).
Data Item:	ННММ.

**Discussion and Justification:** HH ranges from 00 to 23; MM ranges from 00 to 59. 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.

#### Comments:

#### 15.

Name of Data Element:	Time of arrival at patient
Priority:	Desirable
Definition:	Time response personnel establish direct contact with patient.
Data Item:	HHMM.

**Discussion and Justification:** HH ranges from 00 to 23; MM ranges from 00 to 59. 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. Also important as <u>patients'</u> perception of EMS response interval is from the time call requesting service was made to the time when EMS personnel arrive at their side to deliver care.

Name of Data Element:	Time Unit Left Scene
Priority:	Essential
Definition:	Time when the response unit begins physical motion from scene.
Data Item:	ННММ

**Discussion and Justification:** HH ranges from 00 to 23; MM ranges from 00 to 59. Permits calculation of scene time by subtracting the time of arrival at scene from the time unit left scene.

### Comments:

# 17.

••	
Name of Data Element:	Time Arrival at Destination
Priority:	Essential
Definition:	Time when patient arrives at destination or transfer point.
Data Item:	ННММ

**Discussion and Justification:** HH ranges from 00 to 23; MM ranges from 00 to 59. 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 responding unit is the time of arrival or patient contact (or both) for the second agency.

Name of Data Element:	Time back in service
Priority:	Essential
Definition:	Time response unit back in service and available for response.
Data Item:	ННММ

**Discussion and Justification:** HH ranges from 00 to 23; MM ranges from 00 to 59. Allows planning of EMS resources. Permits assessment of the delay between arrival at destination and availability of the response unit.

**Note:** The relationship between various time periods may be demonstrated through the use of a chart as follows:

Incident onset Time/date

Incident reported Time/date
Dispatch notified Time
Unit notified Time/date
Unit responding Time
Arrival at scene Time

Arrival at patient Time

Unit left scene Time

Arrival at destination Time Return to service Time

Name	e of Data Element:	Type of Response
Prior	ity:	Essential
Defir	lition:	The use of lights and sirens en route to scene.
	Data Items:	
01	Non-emergent, no lights or sirens	
02		
03	Initial non-emergent, upgraded to lights or sirens	
04	D4 Emergent, with lights or sirens	
88	Not applicable	

**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.

### Comments:

20.

Nam	e of Data Element:	Service type	
Prior	rity:	Essential	
Defir	nition:	Type of service requested.	
	Data Items:		
01	Scene		
02	Unscheduled Inter-facility Transfer		
03	Scheduled Inter-facility Transfer		
04	Standby		
05	Rendezvous		
88	Not Applicable		
99	Unknown		

**Discussion and Justification:** Used to categorize the types of service that are required, and allows planning of EMS resource allocation.

#### Scene

Refers to direct response to scene of incident or injury, such as roadway, etc. This location should be the location indicated in Data Elements 1-5 in this document. This code should not be used by the second unit which receives the transfer of a patient from another EMS responder prior to arrival at a medical

facility or final destination which is coded as a rendezvous.

### Unscheduled Inter-facility Transfer

Refers to transfers of patients from one facility to another facility. This code should not be used for planned, scheduled transfers, which are coded separately. This code should not be used by the second unit involved in the transfer of a patient from one EMS responder to another responder during an unscheduled inter-facility transfer, which is also coded as a rendezvous.

#### Scheduled Transfer

Refers to transfers of patients from one facility to another facility, as defined above for *inter-facility*. However, this code is chosen when the transfer is scheduled in advance, such as a planned morning transfer of a patient from one hospital to another.

# Standby

Refers to situation in which EMS response unit is requested to arrive at a scene and be available, such as at a football stadium. If an incident occurs during the *standby*, the service requested becomes *scene*.

#### Rendezvous

Refers to situation in which a second EMS unit receives transfer of patient from first EMS unit before arrival at a medical facility. Can be used when two units meet to complete the initial scene response or during an unscheduled inter-facility transfer.

Name of Data Element:	Incident Number
Priority:	Essential
Definition:	Unique number for each incident reported to dispatch.

**Discussion and Justification:** This number should be a unique identifying number for the incident assigned by the local EMS dispatch.

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. In some cases incident number, patient care number, or response number may be the same.

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.

### Comments:

### 22.

Name of Data Element:	Response Number
Priority:	Essential
Definition:	Unique number for each individual response by a response unit to an incident.

**Discussion and Justification:** This is the unique number within an individual response unit's records that identifies its runs. This number should be unique for an incident within a single EMS response unit. Useful for linking to other health files. Same purposes as incident number.

In some cases incident number, patient care number, or response number may be the same. In other instances, this response number may be a component of the incident number. For example, an incident number might be constructed from a responder license number combined with the response number.

#### Comments:

### 23.

Name of Data Element:	Patient care record number
Priority:	Essential
Definition:	Unique number for each patient care record (PCR).

**Discussion and Justification:** Unique number for a patient care record. Provides a specific key to a specific record. This record number, if unique within a province or region of interest, will fulfill all the requirements for linkage which have been described under incident number. In some cases incident number, patient care record number, or response number may be the same.

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

### Comments:

# 24.

Name of Data Flaments	Llait Niveshau
Name of Data Element:	Unit Number
Priority:	Essential
Definition:	The Alberta Health assigned unit number of the vehicle responding to the incident.

**Discussion and Justification:** Identifies the Alberta Health assigned unit number of the vehicle responding the incident. Can be used to construct reports which are specific to agencies or units. Particularly valuable for local reporting. This number may also be of value in the automatic construction of PCR numbers or incident numbers.

Name	of Data Element:	Vehicle type
Priori	ty:	Essential
Defini	tion:	Type of vehicle that responded to incident.
	Data Items:	
01	Ground	
02	Rotary wing	
03	Fixed wing	
04	Other	
05	None	

**Discussion and Justification:** Allows EMS managers and planners to break out EMS responses by the major categories of responding vehicles. While there are clearly numerous other possible vehicles, such as bicycle, water craft, skis, sleds, etc., the categories provided here are the major vehicle types which will be of interest at regional and provincial levels. For individual data systems in which there is more specific interest in other vehicles, additional categories may certainly be added. For purposes of exporting data to a common data set, these additional categories should be collapsed into the category *Other*.

#### Comments:

26.

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Name of Data Element:	Primary Attendant
Priority:	Essential
Definition:	Attendant primarily responsible for providing care to the patient.
Data Item:	Professional registration number

**Discussion and Justification:** Necessary to identify specific crew members participating in an EMS response. Allows local EMS managers to construct experience reports, monitor care rendered by specific providers, and plan educational programs. The attendant's professional registration number also allows for the assessment of the level of care that was available on the EMS responder team. By combining this information with vehicle type, there is maximum flexibility in describing the type of service that was provided

Reports of value may include descriptions of therapies according to level of provider, adherence to protocols that are written differently for various levels of provider, etc.

Name of Data Element:	Driving Attendant
Priority:	Essential
Definition:	Attendant primarily responsible for driving the EMS vehicle.
Data Item:	Professional registration number

**Discussion and Justification:** Necessary to identify specific crew members participating in an EMS response. Allows local EMS managers to construct experience reports, monitor care rendered by specific providers, and plan educational programs. The attendant's professional registration number also allows for the assessment of the level of care that was available on the EMS responder team. By combining this information with vehicle type, there is maximum flexibility in describing the type of service that was provided

Reports of value may include descriptions of therapies according to level of provider, adherence to protocols that are written differently for various levels of provider, etc.

#### Comments:

#### 28.

Name of Data Element:	Secondary Attendant
Priority:	Essential
Definition:	Additional crew member or student or observer.
Data Item:	Professional registration number

**Discussion and Justification:** Necessary to identify specific crew members participating in an EMS response. Allows local EMS managers to construct experience reports, monitor care rendered by specific providers, and plan educational programs. The attendant's professional registration number also allows for the assessment of the level of care that was available on the EMS responder team. By combining this information with vehicle type, there is maximum flexibility in describing the type of service that was provided

Reports of value may include descriptions of therapies according to level of provider, adherence to protocols that are written differently for various levels of provider, etc.

### Comments:

32.

Name of Data Element:	Patient Name
Priority:	Essential

Definition:	Patient name.
Data Item:	Free text entry, "not applicable" or "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. 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.

**Note:** "Not applicable" is used when there is no patient, such as when the responding team cannot find the patient, or when the responding team is on standby.

#### Comments:

33.

Name of Data Element:	Patient Address
Name of Data Liement.	r diletit Address
Priority:	Desirable
Definition:	Patient's residential address.
Data Item:	Free text entry, "not applicable", "unknown" or "none"

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

Name of Data Element:	City of Residence
Priority:	Desirable
Definition:	Patient city, town, village or hamlet of residence (if applicable)
Data Items: Standard Geographic Classification	

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

# Comments:

### 35.

Name of Data Element:	Municipal District of Residence
Priority:	Desirable
Definition:	Municipal district where patient resides (if applicable).
Data Items: Standard Geographic Classification	

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

Name of Data Element:	Province of Residence
Priority:	Desirable
Definition:	Province, territory, or State, where patient resides.
Data Items: Standard Geographic Classification	

**Discussion and Justification:** Provides a means of aggregating EMS incidents by province, which allows reports to provincial legislatures concerning province-wide EMS activities. Can be used to assess province-wide resource requirements for EMS operations.

# Comments:

37.

Name of Data Element:	Postal Code of Residence
Priority:	Desirable
Definition:	Postal Code of patient's residence

**Discussion and Justification:** Useful for determining the political entity responsible for potential public health interventions, payment for services, etc. City/township/county could be derived from Postal Code.

# Comments:

38.

Name of Data Element:	Telephone Number
Priority:	Desirable
Definition:	Patient's primary 10 digit telephone number

**Discussion and Justification:** Permits follow-up with patient and facilitates billing.

Name of Data Element:	Personal Health Number
Priority:	Essential
Definition:	Patient's personal health number

**Discussion and Justification:** Could provide valuable linkage data element, i.e., to track patient outcome. It is recognized that this field may be very difficult for field responders to obtain. "Unknown" should be coded when the responder does not know the personal health number, while "not applicable" is coded when there is no patient, when the patient is known to not have a personal health number, or for out-of-country residents.

### Comments:

40.

Name of Data Element:	Date of Birth
Name of Data Liement.	Date of Birtin
Priority:	Essential
Definition:	Patient's date of birth.
Data Item:	YYYYMMDD

**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.

#### Comments:

41.

Name of Data Element:	Age
Priority:	Desirable
Definition:	Patient's age or best approximation

**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. For infants two years of age or younger, age may be expressed in months rather than years.

### Comments:

42.

Name of Data Element:	Gender
Priority:	Essential
Definition:	Gender of patient.
	Gender of patient.
Data Items:	
<b>M</b> ale	
Female	
<b>U</b> nknown	

**Discussion and Justification:** Valuable for linkage to other files, and permits reporting of epidemiological information by gender.

# Comments:

# 43.

Name of Data Element:	Population	Group
Priority:	Essential	
Definition:	Refers to t	he population group to which the patient belongs.
Data Items:		
White		South East Asian (e.g., Cambodian, Indonesian,
Chinese		Laotian, Vietnamese)
Aboriginal (e.g., North American Indian, Metis or		Latin American
Inuit)		Japanese
Black (e.g., African, Hatian, Jamaican, Somali)		Korean
South Asian (e.g., East Indian, Pakistani, Punjabi,		Other
Sri Lankan)		88 Not Applicable
Arab/West Asian (e.g., Armenian, Egyptian,		99 Unknown
Iranian, Lebanese, Moroccan)		
Filipino		

**Discussion and Justification:** Useful for epidemiological studies.

Name of Data Element:	Destination / Transferred To
Priority:	Essential
Definition:	Health Care Facility or Prehospital Unit/Home that received patient from EMS responder providing this record.
Data Items: 01 Home 02 Police/jail 06 Hospital 03 Medical Office/clinic 07 Morgue	05 Other EMS responder (air)
04 Other EMS responder (ground)	88 Not applicable

**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. 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.

The province 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.

Name of Data Element:	Destination Determination
Priority:	Essential
Definition:	Reason a transport destination was selected.

### Data Items:

01 Closest Facility (none below) 06 Protocol

02 Patient/Family Choice 07 Specialty Resource Center

03 Patient Physician Choice 08 On-line Medical Direction

04 Managed Care 09 Diversion

05 Law Enforcement Choice 10 Other 88 Not Applicable 99 Unknown

**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.

### Comments:

# 46.

Nam	ne of Data Element:	Type of transport from scene
Prior	rity:	Essential
Defir	nition:	Use of lights and/or sirens from the scene.
	Data Items:	
01	Non-emergent, no lights or sirens	
02		
03	Initial non-emergent, upgraded to lights or sirens	
04	Emergent, with lights or sirens	
88	Not applicable	

**Discussion and Justification:** Allows 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.

ame of Data Element: Incid	ent / Patient Disposition
iority: Esse	ntial
efinition: End	result of EMS response.
•	

#### Data Items:

01 Treated, transported by EMS 06 Patient refused care

02 Treated, transferred care 07 Dead at scene

03 Treated, transported by private vehicle 08 Cancelled

04 Treated and released

88 Not Applicable

99 Unknown

05 No treatment required 00 No patient found

**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 nor transport. Reports generated from this data element may be of use in coordinating the dispatch and responder functions as well.

#### Note:

# 01 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.

### 02 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.

# 03 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.

#### 04 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 himself or others to the facility providing further care

### 05 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.

#### 06 Patient refused care

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.

### 07 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.

#### 08 Cancelled

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

# 88 Not Applicable

This code is used when a disposition is not applicable. For instance, if the unit is on standby and no incident occurs, then this data element is not applicable. In this instance, the data element call "Service Type" will have been coded as standby. For all standby records, this data element should be coded as not applicable.

# 00 No patient found

If not cancelled, but no patient can be found by the responder, this is coded as not applicable.

Name of Data Element:	Chief complaint
Priority:	Desirable
Definition:	Statement of problem by patient or other person.

**Discussion and Justification:** May be useful, particularly with sophisticated text searching algorithms, for analysis of certain types of EMS incidents. Difficulties of categorization and interpretation were the primary reasons for labeling this item as desirable rather than essential. May also be of use in correlating the perception of patients who utilize the EMS system with the objective outcome of the run. This information could be of use in directing public educational efforts concerning health or EMS use.

("Unknown" should be used when this information cannot be obtained (for instance, a comatose patient, or a patient injured without witnesses). If there is no patient, such as in a standby call, this should be coded as not applicable.)

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**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. 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.

### Note:

Motor vehicle traffic accident E81x.x

This includes any motor vehicle accident occurring on a public roadway or highway.

Pedestrian traffic accident

E814.x

Motor vehicle accidents in which the patient was a pedestrian struck by a motor vehicle of any type. Includes individuals on skates, in baby carriages, in wheelchairs, on skateboards, skiers, etc.

Motor vehicle non-traffic accident

E82x.x

This includes any motor vehicle accident occurring entirely off public roadways or highways. For instance, an accident involving an all terrain vehicle (ATV) in an off-road location would be a non-traffic accident.

Bicycle accident

E826.x

Includes any pedal cycle accident. Pedal cycle is defined to include bicycles, tricycles, and excludes any motorized cycles.

Water transport accident

E83x.x

Includes all accidents related to watercraft. Excludes drowning and submersion accidents unless they are related to watercraft use. Thus, if a person falls out of a boat and drowns, it should be coded within this category. If a person drowns in a swimming pool or bathtub, it should be coded as E910.x (see below).

Aircraft related accident

E84x.x

Includes spacecraft.

Accidental drug poisoning

E85x.x

Includes accidental poisoning by drugs, medicinal substances, or biological products. Extensive codes are available if an agency wishes to collect specific information.

Accidental chemical poisoning E86x.x

Includes accidental poisoning by solid or liquid substances, gases, and vapors, which are not included under accidental drug poisoning.

Accidental falls

E88x.x

Excludes falls which occur in the context of other external causes of injury, such as fires, falling off boats, or falling in accidents involving machinery.

Fire and flames

E89x.x

Includes burning by fire, asphyxia or poisoning from conflagration or ignition, and fires secondary to explosions. Excludes injuries related to machinery in operation, vehicle accidents, and arson.

Smoke inhalation

E89x.2

Includes smoke and fume inhalation from conflagration. The numeric code includes an option to indicate the site of the fire (3rd digit).

Excessive heat

E900.x

Includes thermal injuries related to weather or heat produced by man, such as in a boiler room or factory. Excludes heat injury from conflagration.

Excessive cold

E901.x

Includes cold injury due to weather exposure, or cold produced by man, such as in a freezer.

Venomous stings (plants, animals)

E905.x

Includes bites and stings from venomous snakes, lizards, spiders, scorpion, insects, marine life, or plants.

Bites

E906.x

Includes animal bites, including non-venomous snakes and lizards. Sub codes are available to include dog, cat, rat, and other specific bites.

Lightning E907.x

Excludes falling of an object secondary to lightning, and also excludes injuries from fire secondary to lightning.

Drowning E910.x

Accidental drowning not related to watercraft use. Includes swimming accidents, bathtubs, etc.

Mechanical suffocation E913.x

Includes suffocation in bed or cradle (crib death), closed space suffocation, plastic bag asphyxia, accidental hanging, etc.

Machinery accidents E919.x

Includes all machinery accidents except when machinery is not in operation. Excludes electrocution.

Electrocution (non-lightning) E925.x

Includes accidents related to electric current from exposed wire, faulty appliance, high voltage cable, live rail, or open electric socket. Excludes lightning, which is coded as E907.x.

Radiation exposure E926.x Excludes complications of radiation therapy.

Firearm injury (accidental) E985.x

Firearm assault E965.x

Firearm self inflicted (intentional) E955.x

These codes refer to firearm injuries, which are sub coded by the final digit into handguns (.0), shotguns (0.1), hunting rifle (0.2) and others. If the EMS responder knows that an intentional assault was involved, or knows that the injury was intentionally self inflicted, then the E code should be entered to indicate this (E965.x or E955.x). In most instances, the EMS provider will not be able to easily assess this issue, and then the code should be entered as accidental (E985.x).

Stabbing assault E966.x

Includes cuts, punctures, or stabs of any part of the body.

Child battering E967.x

Includes all forms of child battering and non-accidental injury to children. This code should be entered in all instances in which there is sufficient suspicion by the EMS responder that the responder would be required by law to report the case to authorities as a suspected case of child abuse.

Not applicable E000.0

This code is not an official E code, and should be entered in any case where an external injury code is not applicable, such as when a patient suffers from chest pain or fever. In nearly all instances where an injury has occurred, this data element should be filled in with a valid E code, not a not applicable designation.

Unknown E000.1

This code is provided primarily for situations in which the data is being entered at a time when the information cannot be accurately reconstructed from the run record. This should be a rare entry.

00.	
Name of Data Element:	Provider Impression
	·
Priority:	Essential
Definition:	Provider's clinical impression which led to the management given to the patient (treatments, medications, procedures).
Data Items:	
789.00 Abdominal pain / problems	
519.80 Airway obstruction	
995.30 Allergic reaction	
780.09 Altered level of consciousness	
312.90 Behavioral / psychiatric disorde	r
427.50 Cardiac arrest	
427.90 Cardiac rhythm disturbance	
786.50 Chest pain / discomfort	
250.90 Diabetic symptoms (hypoglycer	mia)
994.80 Electrocution	
780.60 Hyperthermia	
780.90 Hypothermia	
785.59 Hypovolemia / shock	
987.90 Inhalation injury (toxic gas) 798.99 Obvious death	
977.90 Poisoning / drug ingestion	
659.90 Pregnancy / OB delivery	
799.10 Respiratory arrest	
786.09 Respiratory distress	
780.30 Seizure	
959.90 Sexual assault / rape	
987.90 Smoke inhalation	
989.50 Stings / venomous bites	
436.00 Stroke / CVA	
780.20 Syncope / fainting	
959.90 Traumatic injury	
623.80 Vaginal hemorrhage	
000.88 Not applicable	
000.99 Unknown	

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

It is obvious that this list is incomplete. It is also recognized that different agencies, which have different assessment driven protocols, will wish to have lists corresponding to the authority of their own responders. The list above is provided in order that consistent coding of at least the above items be achieved.

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.

Note: The list provided here is not all-inclusive, but the definitions are described in more detail below.

Abdominal pain / problems

789.00

Includes acute abdomen, painful abdomen, cramps, etc. Does not include abdominal trauma.

Airway obstruction

519.80

Includes choking, swelling of neck, croup, epiglottitis, foreign body in airway, etc.

Allergic reaction

995.30

Includes reactions to drugs, plants, insects, etc. Category includes hives, urticaria, wheezing and so forth when suspected of being related to allergy.

Altered level of consciousness

780.09

Refers to patients with any alteration of consciousness, including patients who appear to be substance abusers or under the influence of drugs or alcohol.

Behavioral / psychiatric disorder

312.90

Includes all situations in which a behavioral or psychiatric problem was considered the major problem for the EMS responder.

Cardiac arrest

427.50

All instances in which cardiac arrest occurred, and either death was pronounced immediately, or external cardiac massage was instituted.

Cardiac rhythm disturbance

427.90

Includes any rhythm disturbance which was noted on physical examination or with a cardiac monitor, when the rhythm was the major clinical reason for care rendered by the EMS responder.

Chest pain / discomfort

786.50

Includes patients with complaint of chest pain, including pain felt related to heart disease, upset stomach, or muscle pain in the chest wall. If an agency has different protocols for different types of chest pain, then this code should be separated out according to the types of protocols.

Diabetic symptoms (hypoglycemia)

250.90

Relates to patients with symptoms relatable to diabetes, generally when there is a history of diabetes in the patient. The major symptom is hypoglycemia, but in circumstances where diabetes is known to exist, this category can include ketoacidosis, as well as other complications of diabetes.

Electrocution

994 80

Instances of electrocution. Please note that the proper E code should be entered in the Cause of Injury data element.

Hyperthermia

780.60

When hyperthermia is the major clinical assessment driving EMS responder care.

Hypothermia

780.90

Usually relates to environmental hypothermia, such as following submersion in cold water, avalanches, or other environmental exposure situations.

Hypovolemia / shock

785.59

Patients with clinical shock, usually felt to be hypovolemic. All patients considered to have shock by EMS responders should be coded with this code, as it is relatively difficult to identify other less common forms of shock outside the hospital setting.

Inhalation injury (toxic gas)

987.90

Excludes smoke inhalation.

Obvious death

798.99

Patients who were dead at the scene; no therapy was undertaken.

Poisoning / drug ingestion

977.90

Includes drug ingestions which are inappropriate drugs or overdoses, as well as poisonings from chemicals. Toxic gases should be coded as inhalation injury (987.90). Venomous bites or stings should be coded as 989.50 (see below).

Pregnancy / OB delivery

659.90

Includes all aspects of obstetric care rendered in the prehospital setting. This ICD code is the closest approximation for such a general category, and agencies may wish to break down this category more explicitly.

Respiratory arrest

799.10

Instances in which the patient stops breathing. These patients always require ventilatory support on at least a temporary basis.

Respiratory distress

786.09

Includes patients with respiratory distress who continue to have spontaneous breathing and never suffer respiratory arrest. These patients may require ventilatory support.

Seizure

780.30

Includes major and minor motor seizures.

Sexual assault / rape

959.90

Refers to suspected sexual assault / rape. The code refers to unspecified traumatic injury, but the Cause of Injury code should resolve this adequately.

Smoke inhalation

987.90

Smoke inhalation encountered in conflagration setting. The Cause of Injury code should include the proper E code.

Stings / venomous bites

989.50

Includes poisonous snakes, insects, bees, wasps, ants, etc. If an allergic reaction occurs and predominates the clinical situation, then the clinical assessment should be coded as an allergic reaction rather than a sting or bite, since the E code in the Cause of Injury data element will further clarify the cause.

Stroke / CVA

436.00

Cardiovascular accidents, strokes, TIA.

Syncope / fainting

780.20

Fainting is the major clinical assessment, even though the patient may be fully awake at the time of EMS evaluation.

Traumatic injury

959.90

All patients in whom traumatic injury is the major reason for the EMS action. Further details should be provided in the injury description matrix described later in this data dictionary.

Vaginal hemorrhage

623.80

Refers to abnormal vaginal bleeding in sufficient amount to have driven the EMS response. When pregnancy is involved, vaginal hemorrhage should be coded when the hemorrhage itself was the major concern to the EMS responder. When childbirth or other obstetric issues are more important, then this data element should be coded as 659.90.

Not applicable 000.88

Use this code when there is no patient.

Unknown 000.99

Use this code when there is not enough information on the run sheet to determine the clinical impression of the EMS responder. This should be a very rarely used code.

#### Comments:

#### 51.

Name of Data Element:	Pre-existing Condition
Priority:	Essential
Definition:	Pre-existing medical conditions known or reported to the provider.

Data Items:

493.90 Asthma 585.00 Chronic Renal Failure 250.00 Diabetes 239.90 Cancer 011.90 Tuberculosis 401.90 Hypertension

492.80 Emphysema 312.90 Psychiatric problems 518.81 Chronic respiratory failure 780.30 Seizure disorder V44.00 Tracheotomy

**Discussion and Justification:** Multiple entries should be possible. Pre-existing conditions may affect the protocols followed by EMS responders. The data element is intended to capture information as understood by EMS providers at the scene, not as defined later in the medical record of the hospital. Thus, if the EMS responder finds out that a patient has several pre-existing conditions after he or she arrives at the hospital, those conditions should not be coded in this data element. It is clear that the list provided here may not include other important conditions. Other conditions should be added as desired, but it is hoped that the above conditions will be included in all data sets.

In the future, it may be possible to use ICD9 codes for this field. However, some of the items on the list are not diagnoses per se, yet would significantly alter the approach of the EMS responder. This data element will clearly need refinement after there is more experience with its collection and interpretation.

Name of Data Element:		Signs and Symptoms Present
Priority:		Essential
Definition:		Signs and symptoms reported to or observed by provider.
Data Items:		
789.00 Abdominal pain 401.90	Hyperte	ension
724.50 Back pain	780.90	Hypothermia
578.10 Bloody stools	787.00	Nausea
786.09 Breathing difficulty	344.90	Paralysis
427.50 Cardioresp. arrest	785.10	Palpitations
786.50 Chest pain	659.90	Pregnancy/childbirth/miscarriage
933.10 Choking	780.30	Seizures/convulsions
558.90 Diarrhea	780.20	Syncope
780.40 Dizziness	780.09	Unresponsive/unconscious
388.70 Ear pain	623.80	Vaginal bleeding
379.91 Eye pain	787.00	Vomiting
780.60 Fever/Hyperthermia	780.70	Weakness (malaise)
784.00 Headache		

**Discussion and Justification:** Multiple entries should be possible. 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.

Lower extremities or bony pelvis

J Body region unspecified

53.

Name of Bata Flamout	Librar Branchista
Name of Data Element:	Injury Description
Priority:	Essential
Definition:	Clinical description of injury type and body site.
Data Items: Body Sites Injury Types	
A External (including burns) B Head only (excluding neck,	
cervical spine and ear)	3 Blunt injury
C Face (including ear) 4 Lac	• •
D Neck 5 Dislocation/	
E Thorax (excluding thoracic spine)	6 Puncture/stab
F Abdomen (excluding lumbar spine	e) 7 Gunshot
G Spine 8 Amputation	
H Upper extremities 9 Cru	sh

**Discussion and Justification:** Intended to permit the detailed listing of all injuries sustained by a patient, coded according to injury type and body site of the injury. Multiple entries will be possible. Each injury should be designated by body site and injury type. The most severe five injuries should be recorded. The body sites included as Data Items are consistent with body areas used to calculate the Injury Severity Score (ISS). This list is slightly expanded from the usual ISS, but is easily collapsed if necessary.

10 Burn

This is a crucial data element that 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. 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.

Nam	e of Data Element:	Injury intent
Prior	rity:	Desirable
Defir	nition:	Intent of individual inflicting injury
	Data Items:	
1	Intentional, self	
2	Intentional, other	
3	Unintentional	
8	Not applicable	
9	Unknown	

**Discussion and Justification:** Intended to help injury surveillance specialists who are interested in homicide and suicides, inflicted child injuries, etc. This information may also be of use in suicide or spousal/child abuse prevention programs. The EMS provider may be in a unique situation to assess this issue which would then be of enormous value to the medical personnel caring for the patient. However, it is clear that the EMS provider will often not be able to assess this question.

Drug or alcohol abuse is impossible to code with this data element unless involved in a suicide attempt. For instance, if an EMS responder transports an intoxicated patient to a hospital with no other injuries, this data element would be coded as not applicable.

If the data element is collected, the EMS provider should indicate that an event is intentional if he or she has any suspicion of such. The data element is not intended to carry legal significance, but rather is intended to assist researchers in identifying possible cases of intentional injury for further study. If a firearm or stabbing is involved, this data element is redundant with proper coding of the external cause of injury, which permits coding for intentional injury on self or others.

Name of Data Element:	Safety Equipment
Priority:	Essential
Definition:	Safety equipment in use by patient at time of injury.

### Data Items:

01 None used 10 Helmet

02 Shoulder belt only 11 Eye protection

03 Lap belt only
04 Shoulder and lap belt
12 Protective clothing
13 Personal flotation device

05 Child safety seat 14 Protective clothing/gear

06 Airbag deployed, no lap belt 88 Not applicable07 Airbag deployed, lap belt used99 Unknown

08 Airbag deployed, lap and shoulder used 09 Airbag deployed, child safety seat used

**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.

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. If the data element is not applicable, then this should be coded as such. Finally, if the EMS provider has no information about safety device use and cannot obtain such information from the patient or witnesses, then the data element should be coded as unknown.

Name of Data Element:		Factors Affecting EMS Delivery of Care		
Priority:		Desirable		
Definition:		Special circumstances affecting the EMS response or delivery of care.		
01 02 03 04 09 88	Data Items: Adverse weather Adverse road conditions06 Vehicle problems Unsafe scene 08 Other Not applicable	05 Language barrier Prolonged extrication (>20 min) 07 Hazardous material Crowd Control		

**Discussion and Justification:** For systems planners who are evaluating response times, this data element provides explanations for delays encountered in the system. For instance, the time to scene is expected to be prolonged if there was a blizzard, or if gunfire prevented EMS responders from patient access. If there was no problem with EMS delivery, this data element would be coded as not applicable.

The list provided is intentionally small, as it is expected that agencies that collect this data element will have very specific issues to address. Their data should, however, be collapsible to the above list.

Unsafe scene includes presence of gunfire, instances in which police prevented access because of safety concerns, etc. Vehicle problems includes problems with the EMS responder vehicle itself, not with other vehicles which might have obstructed traffic.

Extrication has been moved into this data elements because extrication is not a patient treatment and relates less to the medical care of the patient than to the environment in which EMS responders must work.

Name of Data Element:		Alcohol / Drug Use		
Priority:		Essential		
Defin	ition:	Suspected alcohol or drug use by patient.		
	Data Items:			
01	Alcohol, yes			
02	Drugs, yes			
03	Alcohol/Drugs, yes			
04	No			
88	Not applicable			
99	Unknown			

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

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

## Comments:

# 58

00.			
Name of Data Element:	Time of First CPR		
Priority:	Desirable		
Definition:	Best estimate of time of first CPR.		
Data Item:	ННММ.		

**Discussion and Justification:** HH ranges from 00 to 23; MM ranges from 00 to 59. Permits assessment of the duration of cardiopulmonary resuscitation prior to arrival of EMS responder. Useful for research purposes and for planning public education concerning CPR.

Name of Data Element:		Provider of First CPR			
Priority:		Desirable			
Defini	ition:	Person who performed first CPR on patient.			
	Data Items:				
01	Bystander				
02	EMS responder				
88	Not applicable				
99	Unknown				

**Discussion and Justification:** Useful for assessing the quality of CPR rendered by initial responders to a cardiorespiratory arrest, for planning public educational efforts, etc.

## Comments:

# 60.

Name of Data Element:	Time CPR Discontinued			
Priority:	Desirable			
Definition:	Time at which medical control or responding EMS unit terminated resuscitation efforts (chest compressions and CPR) in the field.			
Data Item:	ННММ			

**Discussion and Justification:** HH ranges from 00 to 23; MM ranges from 00 to 59. Provides information concerning the duration of CPR in the field in cases in which the patient was pronounced dead in the field. This data element is not recorded if CPR was never administered

Name of Data Element:	Time of Witnessed Cardiac Arrest		
Priority: Desirable			
Definition:	Time of witnessed cardiac arrest.		
Data Item:	ННММ		

**Discussion and Justification:** HH ranges from 00 to 23; MM ranges from 00 to 59. Allows assessment of actual total arrest time in patients with cardiac arrest. This information is valuable for researchers and educators concerned with CPR training. This data element is not recorded if CPR was never administered.

# **Comments:**

# 62.

Name of Data Element:		Witness of Cardiac Arrest		
Priority:		Desirable		
Definition:		Person who witnessed the cardiac arrest.		
	Data Items:			
01	Bystander			
02	EMS Responder			
88	Not Applicable			
99	Unknown			

**Discussion and Justification:** Provides information concerning the incidence of witnessed cardiac arrest prior to or during EMS responses.

Name of Data Element:	Time of First Defibrillatory Shock		
Priority: Desirable			
<b>Definition:</b> Time of first defibrillatory shock.			
Data Item:	ННММ		

**Discussion and Justification:** HH ranges from 00 to 23; MM ranges from 00 to 59. Allows assessment of the time required between onset of cardiac arrest and provision of defibrillation in instances of ventricular fibrillation. Provides information about the rapidity with which the EMS responder correctly diagnoses the rhythm and takes action.

## Comments:

## 64.

OT.				
Name of Data Element:		Return of Spontaneous Circulation		
Priority:		Desirable		
Definition:		Whether a palpable pulse or blood pressure was restored following cardiac arrest and resuscitation in the field.		
01 02 88	Data Items: Yes No Not applicable			

**Discussion and Justification:** Outcome of cardiac resuscitation in the field. If the patient remains in cardiac arrest throughout the incident and continues to receive CPR until reaching the emergency department, this data element should be coded as no, even if the patient was subsequently resuscitated in the emergency department. If no cardiac arrest ever occurred, this data element is not applicable and should be coded as such.

Name of Data Element:	Pulse Rate			
Priority:	Essential			
Definition:	Patient's palpated or auscultated pulse rate expressed in number per minute.			
Data Items: {pulse rate} 888 Not Obtained	999 Unknown			

**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 electromechanical dissociation. In this instance, the correct value of this data element is '000'.

Name of Data Element:		Initial Cardiac Rhythm			
Priority:		Desirable			
Definition:		Initial monitored cardiac rhythm as interpreted by EMS personnel.			
Data Items:					
01 Sinus rhythm		06	Narrow complex tachycardia		
02 Other rhythm from	60-100	07	Wide complex tachycardia		
(not otherwise listed)	08 Vei	Ventricular fibrillation			
03 Paced rhythm	09	Asys	tole		
04 Bradycardia		10	Pulseless electrical activity		
05 Extrasystoles		88	Not Applicable		
99 Unknown					

**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 that can then be combined. For the examples of heart block mentioned, those would all collapse into a wide or narrow complex tachycardia (if the rate is > 100), other rhythm between 60 and 100, or bradycardia, if heart rate < 60.

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

Name of Data Element:		Rhythm at Destination			
Priority:		Desirable			
Definition:		Monit	Monitored cardiac rhythm upon arrival at destination.		
	Data Items:				
01	Sinus rhythm		06	Narrow complex tachycardia	
02	Other rhythm from 60-100		07	Wide complex tachycardia	
(not	otherwise listed) 08	Ventricular fibrillation			
03	Paced rhythm	09	Asyst	ole	
04	Bradycardia		10	Pulseless electrical activity	
05	Extrasystoles		88	Not Applicable	
99	Unknown				

**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.

## Comments:

# 68.

00.			
Name of Data Element:	Respiratory Rate		
Priority:	Essential		
Definition:	Unassisted patient respiratory rate expressed as number per minute.		
Data Items: {respiratory rate} 888 Not Obtained 999 Unknown			

**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'.

Name of Data Element:		Respiratory Effort
Dric	wi4	Decirable*
Prio	rity:	Desirable*
Definition:		Patient respiratory effort.
	Data Itama	
_	Data Items:	
0	Normal	
1	Increased, not labored	
2	Increased and labored, or, decreased and fatigued	
3	Absent	
9	Not assessed	

<sup>\*</sup> This field is <u>essential</u> for children. For purposes of the uniform data definition, children are defined as 18 years or younger.

**Discussion and Justification:** Respiratory effort is an integral component of pediatric emergency assessment, and is a major part of curricula dealing with pediatric emergencies. Respiratory effort is also potentially valuable in assessing adult patients.

## **Comments:**

# 70.

Name of Data Element: Systolic Blood Pressure	
Priority:	Essential
Definition:	Patient's systolic blood pressure
Data Items:	
{systolic blood pressure} 888 Not Obtained	
888 Not Obtained 999 Unknown	

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

Name of Data Element:	Diastolic Blood Pressure	
Priority:	Essential	
Definition:	Patient's diastolic blood pressure	
Data Items:		
{diastolic blood pressure}		
888 Not Obtained 99 Unknown		

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

## Comments:

# 72.

Name of Data Element:		Skin Perfusion
Priority: Desirable*		Desirable*
Definition:		Patient skin perfusion, expressed as normal or decreased.
	Data Items:	
1	Normal	
2	Decreased	
3	Not assessed	

<sup>\*</sup> This field is <u>essential</u> for children. For purposes of the uniform data definition, children are defined as 18 years or younger.

**Discussion and Justification:** Normal is defined as warm, pink, and with a capillary refill time of 2 or less seconds. Decreased is defined as cool, pale, mottled, dusky, and with a capillary refill time of greater than 2 seconds.

If the patient is hypothermic or febrile, this may affect skin perfusion. However, the skin perfusion should be scored consistently as defined above.

<u>v.</u>			
Name of Data Element:		Glasgow Eye Opening Component	
Prio	rity:	Essential	
Defi	nition:	Patient's eye opening component of the Glasgow coma scale.	
	Data Items:		
1	None		
2	Opens eyes in response to painful stimulation		
3	Opens eyes in response to verbal stimulation		
4	Opens eyes spontaneously		
9	Unknown		

**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.

Name of Data Element:	Glasgow Verbal Component		
Nume of Bata Element.	Clasgow verbai component		
Priority:	Essential		
Definition:	Patient's verbal component of the Glasgow coma scale		
Dominion.	T allone volbar component of the Gladgew coma coale		
Code:	Numeric entry.		

## Data Items:

For patients >5years:

- 1 None
- 2 Non-specific sounds
- 3 Inappropriate words
- 4 Confused conversation or speech
- 5 Oriented and appropriate speech
- 9 Unknown

For patients 2-5 years:

- 1 None
- 2 Grunts
- 3 Cries and/or screams
- 4 Inappropriate words
- 5 Appropriate words
- 9 Not assessed

For patients 0-23 months:

- 1 None
- 2 Persistent cry, grunting
- 3 Inappropriate cry
- 4 Cries, inconsolable
- 5 Smiles, coos, cries appropriately
- 9 Not assessed

**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.

Name of Data Element:	Glasgow Motor Component		
Priority:	Essential		
Definition:	Patient's motor component of the Glasgow coma scale.		

# Data Items:

For 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 with appropriate motor response
- 9 Unknown

# For patients up to 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
- 9 Not assessed

**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.

Name of Data Element:	Glasgow Coma Score (Total)	
Priority:	Desirable	
Definition:	Patient's total Glasgow coma scale score. (The sum of the eye opening, verbal and motor response components.)	

**Discussion and Justification:** The range of the score is 3 to 15. Important component of several triage scoring systems. Provides information about severity of neurologic disorder. The intent is that an electronic information system would calculate this total.

## Comments:

## 77.

Name of Data Element:	Revised Trauma Score	
Priority:	Desirable	
Definition:	Patient's revised trauma score.	

**Discussion and Justification:** One example of a triage scoring system which may be used to categorize injured patients in an EMS system. This data element is considered desirable, but the intention is that local agencies use scoring systems which are applicable to their own purposes. Most of these scoring systems should be calculable from other data elements which are included as core elements of the uniform data set.

**Note:** The revised trauma score may be calculated from other data elements. It is the sum of a respiratory rate component, systolic blood pressure component, and a neurologic component.

# Respiratory Rate Component

- 4 10 29 per minute
- 3 >29 per minute
- 2 6 9 per minute
- 1 1 5 per minute
- 0 None spontaneous

# Systolic Blood Pressure Component

- 4 >89 mm Hg
- 3 76 89 mm Hg
- 2 50 75 mm Hg
- 1 1 49 mm Hg

#### 0 No pulse

- Neurologic Component

  Glasgow coma score 13 15

  Glasgow coma score 9 12

  Glasgow coma score 6 8

  Glasgow coma score 4 5

  Glasgow coma score 3

70.			
Name	of Data Element:	Procedure	or Treatment Name
Priorit	y:	Essential	
Definit	ion:	Identification	on of procedure attempted or performed on patient.
	Data Items:		38.93 Intravenous catheter
96.70	Assisted ventilation (positive pr	essure)	41.92 Intraosseous catheter
93.59	Backboard	,	99.29 Intravenous fluids
39.98	Bleeding controlled		93.58MAST (military antishock trousers)
93.57	Burn care		96.01Nasopharyngeal airway insertion
99.60	Cardiopulmonary resuscitation		96.05 Nasogastric tube insertion
93.52	Cervical immobilization		73.59Obstetrical care (delivery)
31.10	Cricothyrotomy		96.02Oropharyngeal airway insertion
89.51	ECG monitoring		93.96 Oxygen by mask
96.04	Endotracheal intubation		93.96 Oxygen by cannula
99.63	External cardiac massage		93.54 Splint of extremity
99.62	External defibrillation (includes	auto)	93.54 Traction splint

**Discussion and Justification:** Multiple entries should be possible. Intended to provide ambulance service 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. The procedures listed above and detailed below are not a restrictive list, nor is it expected that every agency will permit its providers to carry out all of these procedures. These lists are intended as samples, while the coding scheme should remain consistent. The coding system used above is the ICD-9 Procedure Classification (p codes).

Name of Data Element:	Procedure Attempts		
Priority:	Desirable		
•			
Definition:	Total number of attempts for each procedure attempted, regardless of success.		

**Discussion and Justification:** For procedures that are performed on the patient, this field indicates the number of attempts required. In most instances, this number will be 1. Local EMS managers may use this number to analyze attendant field competency or to identify additional training needs. This data element also permits educators to know whether certain procedures are posing particular technical problems in the field.

Name of Data Element:	Medication Name
Priority:	Essential
Definition:	Medication name.

## **Data Items:**

Acetaminophen Ipecac
Adenosine Isoproterenol
Albuterol Lidocaine
Amyl nitrate Lorazepam
Aspirin Magnesium sulfate
Atropine Mannitol

Bretylium tosylate Meperidine Bumetanide Metaproterenol

Calcium chloride Methylprednisolone
Calcium gluconate Metoclopramide
Charcoal, activated Morphine
Dexamethasone Naloxone

Dextrose and water (50%) Nifedipine

Diazepam Nitroglycerin

Diphenhydramine Procainamide
Dopamine Sodium bicarbonate
Epinephrine Succinylcholine
Furosemide Terbutaline
Glucagon Thiamine

Heparin Verapamil

**Discussion and Justification:** 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 that are carried by the response vehicles, and this list should be used for the data collection efforts of the agency. The drugs listed above and detailed below are not a restrictive list, nor is it expected that every agency will permit its providers to use all these drugs. Emergency Health Services is currently developing a more comprehensive list of medications that may be grouped by type.

Name	of Data Element:	Treatment Authorization
Priori	ty:	Desirable
Defin	ition:	Indicates the type, if any, of treatment authorization.
	Data Items	
01	Protocol (Standing Orders)	
02	On-Line (Radio Telephone)	
03	On-Scene /	
04	Written Orders (Patient Specific	c)
88	Not Applicable `	
99	Unknown	

**Discussion and Justification:** Enables managers of EMS systems to determine the authorization type used for emergency medical care provided on specific EMS runs. This data may be of used for determining legal accountability and for auditing the supervision of EMS systems.

### Note:

Following is a more detailed explanation of the Data Items that define Treatment Authorization:

## Protocol (Standing Orders)

Pre-established physician authorized procedures or guidelines for medical care of a specified clinical situation, based on patient presentation. Also known as standing orders. The pre-establishment of protocols is the responsibility of a physician having responsibility for medical direction of an EMS system.

## On-line (Radio Telephone)

Immediate physician orders to EMS provider through direct telecommunications such as radio or telephone. Also known as *on-line medical direction*.

## On-Scene

Immediate orders to an EMS provider by a physician at the scene of the medical emergency who has officially assumed responsibility for the management of the prehospital care of the patient.

# Written Orders (Patient Specific)

Written orders by a physician having on-going or continuing responsibility for the medical care of the patient, to an EMS provider regarding the prehospital care of the patient. The orders must accompany the patient, must be in writing, and must be signed by the responsible physician. Also known as advanced medical directions. An example is "Do Not Resuscitate" orders.

# Not Applicable

Citation of authorization is not applicable or indicated, such as in cases where no medical treatments are provided, or no treatments requiring explicit physician authorization are administered.

### Unknown

Applicable authorization for treatment not recorded or not known by the EMS provider, such as cases where prehospital skills and treatments are applied by an EMS provider based on his training and experience, without knowledge of the existence of applicable protocols. This is a default data entry, to be used when none of the other above Data Items are recorded.

## References

Cummins RO et al.: "Recommended Guidelines for Uniform Reporting of Data from Out-of-Hospital Cardiac Arrest: The Ustein Style". *Annals of Emergency Medicine*, August 1991:20:861-874.

ISO 9000-1:94. Quality Management and Quality Assurance Standards – Part 1: Guidelines for Selection and Use. Canadian Standards Association, ON, Canada.

Spaite DW et al.: "Emergency Medical Service Systems Research: Problems of the Past, Challenges of the Future". *Annals of Emergency Medicine*, August 1995:26:146-152.

Spaite DW et al.: "Prospective Validation of a New Model for Evaluating Emergency Medical Service Systems by In-Field Observation of Specific Time Intervals in Pre-Hospital Care". *Annals of Emergency Medicine*, April 1993:22:638-645.

Standards & Measures Branch: Achieving Accountability in Alberta's Health System. Alberta Health, November 1998.

Statistics Canada: 1996 Census Dictionary. Ministry of Industry, Catalogue no. 92-351-XPE, February 1997.

Statutes of Alberta, Ambulance Services Act. 1990, Chapter A-40.5. Proclaimed March 1, 1994. Statutes of Alberta, Health Disciplines Act. Revised 1980, Chapter H-3.5 with amendments in force as of July 8, 1992 not including unproclaimed amendments. Consolidated October 27, 1992.

Statutes of Alberta, Municipal Government Act. 1994, Chapter M-26.1 with amendments in force as of July 15, 1996. Consolidated July 17, 1996.

Stout JL: "Capture the Competitive Edge: How Benchmarking Can Improve Your Ambulance Service". *JEMS*, September & October 1997:51-65.

# **Endnotes**

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<sup>1</sup> RO Cummins et al., "Recommended Guidelines for Uniform Reporting of Data from Out of Hospital
Cardiac Arrest: The Ustein Style", Annals of Emergency Medicine, August 1991, pp. 862.
" Ibid., p. 863.
iii Ibid., p. 862.
iv Ibid.
<sup>v</sup> Ibid.
  Central Office on ICD-9-CM, website: http://icd-9-cm.org
vii City of Calgary Emergency Medical Services Department, EMS Definitions, p. 5.
ix Emergency Medical Technicians Regulation, Heath Disciplines Act, Statutes of Alberta, Alberta
Regulation 48/93. Section 1(h), p.2.
x Ibid., Section 1(i), p.2.
xi City of Calgary Emergency Medical Services Department, p. 6.
xii Emergency Medical Technicians Regulation, Section 1(j), p. 3.
xiii City of Calgary Emergency Medical Services Department, p. 7.
<sup>xiv</sup> All Canadian Training Institute Inc., ISO 9000:94, July 1995, p. 120.
xv Ibid.
<sup>xvi</sup> Ibid., p. 123.
xvii Ibid., p. 125.
xviii Ibid.
xix Ibid., pp. 125-126.
<sup>xx</sup> Ibid., p. 127.
xxi Ibid., p. 128.
xxii Standards & Measures Branch, Achieving Accountability in Alberta's Health System, Alberta Health,
November 1998, p. 17.
xxiii JL Stout, "Capture the Competitive Edge: How Benchmarking Can Improve Your Ambulance Service",
JEMS, September 1997, p. 53. xxiv Cummins et al., p. 864.
xxv Standards & Measures Branch, p.17.
xxvi Ibid.
xxvii Ibid.
xxviii Ibid., p. 18.
xxix Stout, p. 53.
xxx Standards & Measures Branch, p.17.
xxxi Ibid., p. 18.
xxxii Stout, p. 54.
xxxiii Ibid.
xxxiv Standards & Measures Branch, p.18.
xxxv Ibid.
xxxvi Stout, p. 54.
xxxvii lbid., p. 53.
xxxviii Cummins et al., p. 864.
xxxix Standards & Measures Branch, p.17.
xl Statistics Canada, 1996 Census Dictionary, Ministry of Industry, February 1997, p. 218.
<sup>xli</sup> Ibid., p. 220.
xlii Ibid., p. 224.
xliii Ibid., p. 225.
xliv Ibid., p. 227.
xiv City of Calgary Emergency Medical Services Department, p. 3.
xlvi İbid., p. 7.
xlvii Ibid.
xlviii Ibid.
xlix Ibid., p. 8.
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DW Spaite, et al., "Prospective Validation of a New Model for Evaluating Emergency Medical Service Systems by In-Field Observation of Specific Time Intervals in Pre-Hospital Care", Annals of Emergency Medicine, April 1993, p.639.