

**Release Date** 

October 2020

Version

2021 - R1





#### **Table of Contents**

Table of Contents	2
Revision History	9
ITDX Data Dictionary Element List	10
Demographics	10
Injury Information	10
Prehospital Information	11
Emergency Department Information	12
Hospital Procedure Information	13
Diagnosis Information	13
Injury Severity Information	13
Outcome Information	14
Financial Information	14
Hospital Events	14
Trauma Quality Improvement Program Measures for Processes of Care	14
Surgeon Specific Reporting	16
ITDX Record Control Information	16
ITDX Explicit Negatives	16
ITDX Explicit Timeliness	16
ITDX Data Dictionary Extensions Summary	17
ITDX Data Dictionary Element Details	20
Null Values	20
ITDX Data Element Details – Demographics	21
Patient's Home ZIP / Postal Code	22
Patient's Home Country	23
Patient's Home State	24
Patient's Home County	25
Patient's Home City	26
Alternate Home Residence	27
Date of Birth	28



	Age	29
	Age Units	30
	Race	31
	Ethnicity	32
	Sex	33
T	DX Data Element Details – Injury Information	34
	Injury Incident Date	35
	Injury Incident Time	36
	Work-Related	37
	Patient's Occupational Industry	38
	Patient's Occupation	40
	ICD-10 Primary External Cause Code	42
	ICD-10 Place of Occurrence External Cause Code	43
	ICD-10 Additional External Cause Code	44
	Incident Location ZIP / Postal Code	45
	Incident Country	46
	Incident State4	47
	Incident County4	48
	Incident City	49
	Protective Devices	50
	Child Specific Restraint	52
	Airbag Deployment	53
	Report of Physical Abuse	54
	Investigation of Physical Abuse	55
	Caregiver at Discharge	56
	Trauma Type	57
Т	DX Data Element Details – Prehospital Information	58
	EMS Dispatch Date	59
	EMS Dispatch Time	
	EMS Unit Arrival Date at Scene or Transferring Facility	61
		62



	EMS Unit Departure Date from Scene or Transferring Facility	63
	EMS Unit Departure Time from Scene or Transferring Facility	64
	Transport Mode	65
	Other Transport Mode	66
	EMS Patient Care Report Universally Unique Identifier (UUID)	67
	Initial Field Systolic Blood Pressure	68
	Initial Field Pulse Rate	69
	Initial Field Respiratory Rate	70
	Initial Field Oxygen Saturation	71
	Initial Field GCS - Eye	72
	Initial Field GCS - Verbal	73
	Initial Field GCS - Motor	74
	Initial Field GCS - Total	<b>7</b> 5
	Initial Field GCS 40 - Eye	76
	Initial Field GCS 40 - Verbal	77
	Initial Field GCS 40 - Motor	78
	Inter-Facility Transfer	79
	Trauma Center Criteria	80
	Vehicular, Pedestrian, Other Risk Injury	82
	Prehospital Cardiac Arrest	84
П	DX Data Element Details – Emergency Department Information	85
	Highest Activation	86
	Trauma Surgeon Arrival Date	87
	Trauma Surgeon Arrival Time	88
	ED / Hospital Arrival Date	89
	ED / Hospital Arrival Time	90
	Initial ED / Hospital Systolic Blood Pressure	91
	Initial ED / Hospital Pulse Rate	92
	Initial ED / Hospital Temperature	93
	Initial ED / Hospital Respiratory Rate	94
	Initial FD / Hospital Respiratory Assistance	95



Initial ED / Hospital Oxygen Saturation	96
Initial ED / Hospital Supplemental Oxygen	97
Initial ED / Hospital GCS - Eye	98
Initial ED / Hospital GCS - Verbal	99
Initial ED / Hospital GCS - Motor	100
Initial ED / Hospital GCS - Total	101
Initial ED / Hospital GCS Assessment Qualifiers	102
Initial ED / Hospital GCS 40 - Eye	103
Initial ED / Hospital GCS 40 - Verbal	104
Initial ED / Hospital GCS 40 - Motor	105
Initial ED / Hospital Height	106
Initial ED / Hospital Weight	107
Drug Screen	108
Alcohol Screen	110
Alcohol Screen Results	111
ED Discharge Disposition	112
Trauma Team Involvement	114
Signs of Life	115
ED Discharge Orders Written Date	116
ED Discharge Orders Written Time	117
ED Discharge Physical Date	118
ED Discharge Physical Time	119
ITDX Data Element Details – Hospital Procedure Information	120
ICD-10 Hospital Procedures	121
Hospital Procedure Start Date	122
Hospital Procedure Start Time	123
ITDX Data Element Details – Diagnosis Information	124
Comorbid Conditions	125
ICD-10 Injury Diagnoses	127
ITDX Data Element Details – Injury Severity Information	128
AIS Predot Code	129



	AIS Severity	130
	ISS Body Region	131
	AIS Version	132
	Locally Calculated ISS	133
ITI	DX Data Element Details – Outcome Information	134
	Total ICU Length of Stay	135
	Total Ventilator Days	136
	Hospital Discharge Orders Written Date	137
	Hospital Discharge Orders Written Time	138
	Hospital Physical Discharge Date	139
	Hospital Physical Discharge Time	140
	Hospital Discharge Disposition	141
ITI	DX Data Element Details – Financial Information	143
	Primary Method of Payment	144
ITI	DX Data Element Details – Hospital Complications	145
	Hospital Events	146
ITI	DX Data Element Details – Trauma Quality Improvement Program Measures for Processes of Care	148
	Highest GCS Total	149
	Highest GCS Motor	150
	GCS Assessment Qualifier Component of Highest GCS Total	151
	Highest GCS 40 - Motor	152
	Initial ED / Hospital Pupillary Response	153
	Midline Shift	154
	Cerebral Monitor	155
	Cerebral Monitor Date	156
	Cerebral Monitor Time	157
	Venous Thromboembolism Prophylaxis Type	158
	Venous Thromboembolism Prophylaxis Date	159
	Venous Thromboembolism Prophylaxis Time	160
	Packed Red Blood Cells (4 Hours)	161
	Whole Blood (4 Hours)	162



Transfusion Plasma (4 Hours)	163
Transfusion Platelets (4 Hours)	164
Cryoprecipitate (4 Hours)	165
Lowest ED / Hospital Systolic Blood Pressure	166
Angiography	167
Embolization Site	168
Angiography Date	169
Angiography Time	170
Surgery for Hemorrhage Control Type	171
Surgery for Hemorrhage Control Date	173
Surgery for Hemorrhage Control Time	174
Withdrawal of Life Supporting Treatment	175
Withdrawal of Life Supporting Treatment Date	176
Withdrawal of Life Supporting Treatment Time	177
Antibiotic Therapy	178
Antibiotic Therapy Date	179
Antibiotic Therapy Time	180
ITDX Data Element Details – Surgeon Specific Reporting	181
National Provider Identifier (NPI)	182
ITDX Data Element Details – ITDX Record Control Information	183
Last Modified Date Time	184
Patient Identifier	185
Facility Identifier	186
Record Linkage Type	187
Record Linkage State Identifier	188
Record Linkage Facility Identifier	189
Record Linkage Record Identifier	190
Record Linkage Global Key	191
Software Vendor	192
Software Product	193
Software Version	195



ITDX Data Element Details – ITDX Explicit Negatives	196
Explicit Negatives - Element Type	197
Explicit Negatives - Menu Value	198
Explicit Negative	199
ITDX Data Element Details – ITDX Explicit Timeliness	200
Explicit Timeliness - Element Type	201
Explicit Timeliness - Date	202
Explicit Timeliness - Time	203
Explicit Timeliness	204
Appendix A – Registry Best Practices	205
Appendix B – 2020->2021 Change Log	206
Acknowledgements	207



# **Revision History**

Revision	Author	Date	Status and Description
1	Caroline Israel	October 2020	Initial Draft of ITDX 2021 DD



#### **ITDX Data Dictionary Element List**

This table is a listing of all 2021 ITDX data elements, including their respective tag names in the XML file as well as their Technical Standard – NTDS field or ITDX extension field. For further details about the use of the ITDX extension fields, please review the ITDX Data Dictionary Extensions Summary section of this guide.

#### **Demographics**

Field Name	Tag Name	Technical Standard
Patient's Home ZIP / Postal Code	HomeZip	NTDS
Patient's Home Country	HomeCountry	NTDS
Patient's Home State	HomeState	NTDS
Patient's Home County	HomeCounty	NTDS
Patient's Home City	HomeCity	NTDS
Alternate Home Residence	HomeResidence	NTDS
Date of Birth	DateOfBirth	NTDS
Age	Age	NTDS
Age Units	AgeUnits	NTDS
Race	Race	NTDS
Ethnicity	Ethnicity	NTDS
Sex	Sex	NTDS

#### **Injury Information**

Field Name	Tag Name	Technical Standard
Injury Incident Date	IncidentDate	NTDS
Injury Incident Time	IncidentTime	NTDS
Work-Related	WorkRelated	NTDS
Patient's Occupational Industry	PatientsOccupationalIndustry	NTDS
Patient's Occupation	PatientsOccupation	NTDS
ICD-10 Primary External Cause	PrimaryECodelCD10	NTDS
Code		
ICD-10 Place of Occurrence	PlaceOfInjuryCode	NTDS
External Cause Code		
ICD-10 Additional External Cause	AdditionalECodelCD10	NTDS
Code		
Incident Location ZIP / Postal	InjuryZip	NTDS
Code		
Incident Country	IncidentCountry	NTDS



Incident State	IncidentState	NTDS
Incident County	IncidentCounty	NTDS
Incident City	IncidentCity	NTDS
Protective Devices	ProtectiveDevice	NTDS
Child Specific Restraint	ChildSpecificRestraint	NTDS
Airbag Deployment	AirbagDeployment	NTDS
Report of Physical Abuse	AbuseReport	ITDX
Investigation of Physical Abuse	AbuseInvestigation	ITDX
Caregiver at Discharge	CaregiverAtDischarge	ITDX
Тгаита Туре	TraumaType	ITDX

# **Prehospital Information**

Field Name	Tag Name	Technical Standard
EMS Dispatch Date	EmsNotifyDate	ITDX
EMS Dispatch Time	EmsNotifyTime	ITDX
EMS Unit Arrival Date at Scene	EmsArrivalDate	ITDX
or Transferring Facility		
EMS Unit Arrival Time at Scene	EmsArrivalTime	ITDX
or Transferring Facility		
EMS Unit Departure Date from	EmsLeftDate	ITDX
Scene or Transferring Facility		
EMS Unit Departure Time from	EmsLeftTime	ITDX
Scene or Transferring Facility		
Transport Mode	TransportMode	NTDS
Other Transport Mode	OtherTransportMode	NTDS
EMS Patient Care Report	See Record Linkage Record	ITDX
Universally Unique Identifier	Identifier in the Linkage Section	
(UUID)		
Initial Field Systolic Blood	EmsSbp	NTDS
Pressure		
Initial Field Pulse Rate	EmsPulseRate	NTDS
Initial Field Respiratory Rate	EmsRespiratoryRate	NTDS
Initial Field Oxygen Saturation	EmsPulseOximetry	NTDS
Initial Field GCS - Eye	EmsGcsEye	NTDS
Initial Field GCS - Verbal	EmsGcsVerbal	NTDS
Initial Field GCS - Motor	EmsGcsMotor	NTDS
Initial Field GCS - Total	EmsTotalGcs	NTDS
Initial Field GCS 40 - Eye	EmsGcs40Eye	NTDS
Initial Field GCS 40 - Verbal	EmsGcs40Verbal	NTDS
Initial Field GCS 40 - Motor	EmsGcs40Motor	NTDS
Inter-Facility Transfer	InterFacilityTransfer	NTDS
Trauma Center Criteria	TraumaCenterCriterion	NTDS



Vehicular, Pedestrian, Other Risk Injury	Vehicular Pedestrian Other	NTDS
Prehospital Cardiac Arrest	PrehospitalCardiacArrest	NTDS

# **Emergency Department Information**

Field Name	Tag Name	Technical Standard
Highest Activation	HighestTraumaActivation	ITDX
Trauma Surgeon Arrival Date	TraumaSurgeonHighestActivationArrivalDate	ITDX
Trauma Surgeon Arrival Time	TraumaSurgeonHighestActivationArrivalTime	ITDX
ED / Hospital Arrival Date	HospitalArrivalDate	NTDS
ED / Hospital Arrival Time	HospitalArrivalTime	NTDS
Initial ED / Hospital Systolic Blood Pressure	Sbp	NTDS
Initial ED / Hospital Pulse Rate	PulseRate	NTDS
Initial ED / Hospital Temperature	Temperature	NTDS
Initial ED / Hospital Respiratory Rate	RespiratoryRate	NTDS
Initial ED / Hospital Respiratory Assistance	RespiratoryAssistance	NTDS
Initial ED / Hospital Oxygen Saturation	PulseOximetry	NTDS
Initial ED / Hospital Supplemental Oxygen	SupplementalOxygen	NTDS
Initial ED / Hospital GCS - Eye	GcsEye	NTDS
Initial ED / Hospital GCS - Verbal	GcsVerbal	NTDS
Initial ED / Hospital GCS - Motor	GcsMotor	NTDS
Initial ED / Hospital GCS - Total	TotalGcs	NTDS
Initial ED / Hospital GCS Assessment Qualifiers	GcsQualifier	NTDS
Initial ED / Hospital GCS 40 - Eye	Gcs40Eye	NTDS
Initial ED / Hospital GCS 40 - Verbal	Gcs40Verbal	NTDS



Initial ED / Hospital GCS 40 - Motor	Gcs40Motor	NTDS
Initial ED / Hospital Height	Height	ITDX
Initial ED / Hospital	Weight	ITDX
Weight Drug Scroon	DrugScroon	NTDS
Drug Screen Alcohol Screen	DrugScreen AlcoholScreen	NTDS
Alcohol Screen Results	AlcoholScreenResult	NTDS
ED Discharge Disposition	EDDischargeDisposition	NTDS
Trauma Team	TraumaTeamInvolvement	ITDX
Involvement		
Signs of Life	DeathInED	ITDX
ED Discharge Orders	EDDischargeOrdersWrittenDate	ITDX
Written Date		
ED Discharge Orders	EDDischargeOrdersWrittenTime	ITDX
Written Time		
ED Discharge Physical	EDDischargePhysicalDate	ITDX
Date		
ED Discharge Physical	EDDischargePhysicalTime	ITDX
Time		

# **Hospital Procedure Information**

Field Name	Tag Name	Technical Standard
ICD-10 Hospital Procedures	HospitalProcedureICD10	NTDS
Hospital Procedure Start Date	HospitalProcedureStartDate	NTDS
Hospital Procedure Start Time	HospitalProcedureStartTime	NTDS

# **Diagnosis Information**

Field Name	Tag Name	Technical Standard
Comorbid Conditions	ComorbidCondition	ITDX
ICD-10 Injury Diagnoses	DiagnosisICD10	NTDS

# **Injury Severity Information**

Field Name	Tag Name	Technical Standard
AIS Predot Code	AisPredot	ITDX
AIS Severity	AisSeverity	ITDX



ISS Body Region	IssRegion	ITDX
AIS Version	AisVersion	NTDS
Locally Calculated ISS	IssCalculated	ITDX

#### **Outcome Information**

Field Name	Tag Name	Technical Standard
Total ICU Length of Stay	TotallcuLos	NTDS
Total Ventilator Days	TotalVentDays	NTDS
Hospital Discharge Orders Written Date	Hospital Discharge Orders Written Date	ITDX
Hospital Discharge Orders Written Time	HospitalDischargeOrdersWrittenTime	ITDX
Hospital Physical Discharge Date	HospitalPhysicalDischargeDate	ITDX
Hospital Physical Discharge Time	HospitalPhysicalDischargeTime	ITDX
Hospital Discharge Disposition	HospitalDischargeDisposition	NTDS

#### **Financial Information**

Field Name	Tag Name	Technical Standard
Primary Method of Payment	PrimaryMethodPayment	NTDS

## **Hospital Events**

Field Name	Tag Name	Technical Standard
Hospital Complications	HospitalComplication	ITDX

# **Trauma Quality Improvement Program Measures for Processes of Care**

(To be collected and transmitted by Level 1 and Level 2 TQIP® participating centers only.)

Field Name	Tag Name	Technical Standard
Highest GCS Total	TbiHighestTotalGcs	NTDS
Highest GCS Motor	TbiGcsMotor	NTDS



GCS Assessment Qualifier Component of Highest GCS Total	TbiGcsQualifier	NTDS
Highest GCS 40 - Motor	TbiGcs40Motor	NTDS
Initial ED / Hospital Pupillary Response	TbiPupillaryResponse	NTDS
Midline Shift	TbiMidlineShift	NTDS
Cerebral Monitor	TbiCerebralMonitor	NTDS
Cerebral Monitor Date	TbiCerebralMonitorDate	NTDS
Cerebral Monitor Time	TbiCerebralMonitorTime	NTDS
Venous Thromboembolism Prophylaxis Type	VteProphylaxisType	NTDS
Venous Thromboembolism Prophylaxis Date	VteProphylaxisDate	NTDS
Venous Thromboembolism Prophylaxis Time	VteProphylaxisTime	NTDS
Packed Red Blood Cells (4 Hours)	TransfusionBlood4Hours	ITDX
Whole Blood (4 Hours)	WholeBlood4Hours	ITDX
Transfusion Plasma (4 Hours)	TransfusionPlasma4Hours	ITDX
Transfusion Platelets (4 Hours)	TransfusionPlatelets4Hours	ITDX
Cryoprecipitate (4 Hours)	Cryoprecipitate4Hours	NTDS
Lowest ED / Hospital Systolic Blood Pressure	LowestSbp	NTDS
Angiography	Angiography	NTDS
Embolization Site	EmbolizationSite	NTDS
Angiography Date	AngiographyDate	NTDS
Angiography Time	AngiographyTime	NTDS
Surgery for Hemorrhage Control Type	HemorrhageControlSurgeryType	NTDS
Surgery for Hemorrhage Control Date	HemorrhageControlSurgeryDate	NTDS
Surgery for Hemorrhage Control Time	HemorrhageControlSurgeryTime	NTDS
Withdrawal of Life Supporting Treatment	WithdrawalOfLifeSupportingTreatment	NTDS
Withdrawal of Life Supporting Treatment Date	WithdrawalOfLifeSupportingTreatmentDate	NTDS
Withdrawal of Life Supporting Treatment Time	WithdrawalOfLifeSupportingTreatmentTime	NTDS
Antibiotic Therapy	AntibioticTherapy	NTDS
Antibiotic Therapy Date	AntibioticTherapyDate	NTDS
Antibiotic Therapy Time	AntibioticTherapyTime	NTDS



## **Surgeon Specific Reporting**

(Field(s) in this section are optional)

Field Name	Tag Name	Technical Standard
National Provider Identifier (NPI)	NationalProviderIdentifier	NTDS

#### **ITDX Record Control Information**

Field Name	Tag Name	Technical Standard
Last Modified Date Time	LastModifiedDateTime	ITDX
Patient Identifier	PatientId	ITDX
Facility Identifier	FacilityId	ITDX
Record Linkage Type	LinkageType	ITDX
Record Linkage State Identifier	LinkageStateId	ITDX
Record Linkage Facility Identifier	LinkageFacilityId	ITDX
Record Linkage Record Identifier	LinkageRecordId	ITDX
Record Linkage Global Key	LinkageGlobalKey	ITDX
Software Vendor	SoftwareVendor	ITDX
Software Product	SoftwareProduct	ITDX
Software Version	SoftwareVersion	ITDX

## **ITDX Explicit Negatives**

Field Name	Tag Name	Technical Standard
Explicit Negatives - Element Type	ElementKey	ITDX
Explicit Negatives - Menu Value	ValueKey	ITDX
Explicit Negative	ExplicitNegative	ITDX

## **ITDX Explicit Timeliness**

Field Name	Tag Name	Technical Standard
Explicit Timeliness - Element	TimelinessKey	ITDX
Туре		
Explicit Timeliness - Date	EtDate	ITDX
Explicit Timeliness - Time	EtTime	ITDX
Explicit Timeliness	EtTimely	ITDX



## **ITDX Data Dictionary Extensions Summary**

The extensions summary below is a subset of the full data element list, and its purpose is to describe the ITDX data fields that have been added or enhanced to support national, state, regional, and system registries and PI initiatives.

ITDX Extension Field Name	Rationale
Report of Physical Abuse	For data consistency and continuity of data collection, the
	report of physical abuse data element will be retained
	despite being retired from the NTDS data dictionary.
Investigation of Physical Abuse	For data consistency and continuity of data collection, the
	investigation of physical abuse data element will be
	retained despite being retired from the NTDS data
	dictionary.
Caregiver at Discharge	For data consistency and continuity of data collection, the
	caregiver at discharge data element will be retained despite
	being retired from the NTDS data dictionary.
Trauma Type	The addition of this data element allows for more precision
	in reporting related to injury type categorization. For
	example, typical machinery mappings are coded as "blunt",
	but many are actually penetrating. This field allows for
	improved data collection precision.
Initial ED / Hospital Height	To allow patient's height to be collected regardless of the
	timeliness in which it was collected.
Initial ED / Hospital Weight	To allow patient's weight to be collected regardless of the
	timeliness in which it was collected.
Trauma Team Involvement	Indicates if the trauma team was activated at any level,
	including a trauma consult. The goal is to identify if a
	member of the trauma team was involved in the care of the
	patient in any capacity.
Signs of Life	For data consistency and continuity of data collection, the
	signs of life data element will be retained despite being
	retired from the NTDS data dictionary.
ED Discharge Physical Date	Allows for the continuation of physical/actual ED discharge
	date to support consistency in the computation of patient
	ED length of stay (LOS). This data is still collected by many
	collaborative trauma registry systems.
ED Discharge Physical Time	Allows for the continuation of physical/actual ED discharge
	time to support consistency in the computation of patient
	ED length of stay (LOS). This data is still collected by many
	collaborative trauma registry systems.
ISS Body Region	This field existed in previous iterations of NTDS and has
	been removed in current versions. For continuity and data
	trending purposes, it is still collected by ITDX. This data is
	still collected by many collaborative trauma registry
	systems.



Locally Calculated ISS	This field existed in previous iterations of NTDS and has been removed in current versions. For continuity and data trending purposes, it is still collected by ITDX. This data is still collected by many collaborative trauma registry systems.
Hospital Physical Discharge Date	Allows for the continuation of physical/actual hospital discharge date to support consistency in the computation of patient hospital length of stay (LOS). This data is still collected by many collaborative trauma registry systems.
Hospital Physical Discharge Time	Allows for the continuation of physical/actual hospital discharge time to support consistency in the computation of patient hospital length of stay (LOS). This data is still collected by many collaborative trauma registry systems.
Last Modified Date Time	Tracking field to allow for centralized deduplication of submitted records.
Patient Identifier	Tracking field to allow for centralized deduplication of submitted records.
Facility Identifier	Tracking field to allow for centralized deduplication of submitted records.
Record Linkage Type	Allows for the association of multiple standardized record linkages to a trauma patient record (such as EMS ePCR linkage, hospital interfacility transfer linkage, EMR linkage, Rehab linkage).
Record Linkage State Identifier	Allows for system-wide ID assignments/schemes to be correlated to individual trauma records to support linkages of many types with other state/system registries.
Record Linkage Facility Identifier	Identification of the organization ID providing a data source linked to the trauma registry record (e.g. an EMS agency ID or hospital ID number).
Record Linkage Record Identifier	Allows for the linking of the target record's unique identifier.
Record Linkage Global Key	To support industry-wide immutable globally unique identifiers (GUIDs) initiatives to help support unambiguous data linkage to other centralized registries from submitted trauma registry records.
Software Vendor	To assist central registries in interpreting nuances of data collection variations specific to a given vendor; and to have a way to categorize potential variations across sites that could indicate a product specific mapping or data collection issue in a given source system.
Software Product	To assist central registries in interpreting nuances of data collection variations specific to a given vendor's product; and to have a way to categorize potential variations across sites that could indicate a product specific mapping or data collection issue in a given source system.
Software Version	To assist central registries in interpreting nuances of data collection variations specific to a given vendor's product



	version; and to have a way to categorize potential variations across sites that could indicate a product specific mapping
	or data collection issue in a given source system.
Explicit Negatives - Element Type	Allows for the unlimited future expansion of the explicit negative innovation for items such as complications, comorbidities, etc. This allows the continued collection of positive only selections to streamline registrar data entry and provide critical continuity for analytics and reporting. This is achieved by allowing a separate explicit negatives list to capture only the rare events of unknown and not applicable selections. This data is stored separately from the affirmative responses. Collecting the information this way avoids having to enter "no" values for items such as comorbidities and complications on every record. The Element Type provides the name of the data point to which the explicit negative fields are associated, such as comorbidity or complications.
Explicit Negatives - Menu Value	Elements with multiple values, such as comorbidity and
,	complications, need a distinct menu value to which to associate the explicit negative value.
Explicit Negative	This is the explicit negative or null value to the associated element and menu value.
Explicit Timeliness - Element Type	Allows for unlimited ability to associate timeliness and/or specific times to an underlying data point. This allows the underlying data point to be captured irrespective of timeliness, so local and centralized registries can consistently have access to the data regardless of any national rules requiring limited reporting. Allows for continued collection of patients' height/weight regardless of the timeliness and therefore supports analytics and computation of measures such as BMI for all patients in hospital and state registries. The Element Type provides the data point or element group to which the explicit timeliness values are associated, such as height, weight, or initial hospital vitals.
Explicit Timeliness - Date	This is the explicit date associated with the element type data point or group.
Explicit Timeliness - Time	This is the explicit time associated with the element type data point or group.
Explicit Timeliness	This is the explicit timeliness grade (Yes/No) associated to the element type data point or group.



#### **ITDX Data Dictionary Element Details**

The pages below are descriptions of each data element in the ITDX data dictionary.

#### **Null Values**

#### **Definition**

The following values may be used in the ITDX data elements where appropriate. This is often technically referred to as the "BIU Value." The acceptable values are listed below:

- 1 Not Applicable
- 2 Unknown/Not Documented

#### <u>Additional Information</u>

- Not Applicable (NA): This null value code is appropriate if the data element was "Not Applicable" to the patient during the time of prehospital or hospitalization. For example, prehospital data elements would be "Not Applicable" if a patient arrives at the hospital via private vehicle.
- Unknown/Not Documented (UNK/NOT) This null value applies if the information for the data element is not known or knowable by the patient or family or if the data is not recorded in patient documentation by any health care provider. This value documents that information was attempted to be found but was unsuccessful. An example would be "Unknown/Not Documented" if the patient was discovered and no one knew the injury time. Another example would be if an EMS run sheet was not available, the scene vitals signs would be "Unknown/Not Documented."



# **ITDX Data Element Details – Demographics**



## Patient's Home ZIP / Postal Code

#### **Overview**

The patient's home ZIP/Postal code of primary residence.

NTDS Core	
Tag Name	HomeZip
Data Type	string
Tag Group	ItdxRecord
Tag Usage	Mandatory



# **Patient's Home Country**

# Overview

The country where the patient resides.

NTDS Core	
Tag Name	HomeCountry
Data Type	string
Tag Group	ItdxRecord
Tag Usage	Mandatory



#### **Patient's Home State**

## Overview

The state (territory, province, or District of Columbia) where the patient resides.

NTDS Core	
Tag Name	HomeState
Data Type	string
Tag Group	ItdxRecord
Tag Usage	Mandatory



# **Patient's Home County**

# Overview

The patient's county (or parish) of residence.

NTDS Core	
Tag Name	HomeCounty
Data Type	string
Tag Group	ItdxRecord
Tag Usage	Mandatory



# **Patient's Home City**

# Overview

The patient's city (or township, or village) of residence.

NTDS Core	
Tag Name	HomeCity
Data Type	string
Tag Group	ItdxRecord
Tag Usage	Mandatory



#### **Alternate Home Residence**

## Overview

Documentation of the type of patient without a home ZIP/Postal Code.

NTDS Core	
Tag Name	HomeResidence
Data Type	integer
Tag Group	HomeResidences (up to 3 times)
Tag Usage	Mandatory

Field Values	1. Homeless
	2. Undocumented Citizen
	3. Migrant Worker



#### **Date of Birth**

## Overview

The patient's birth date.

NTDS Core	
Tag Name	DateOfBirth
Data Type	date
Tag Group	ItdxRecord
Tag Usage	Mandatory



# Age

# Overview

The patient's age at the time of injury (best approximation).

NTDS Core	
Tag Name	Age
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory



# Age Units

# Overview

The units used to document the patient's age (Minutes, Hours, Days, Weeks, Months, Years).

NTDS Core	
Tag Name	AgeUnits
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values	1. Hours
	2. Days
	3. Months
	4. Years
	5. Minutes
	6. Weeks



#### Race

## Overview

The patient's race.

NTDS Core	
Tag Name	Race
Data Type	integer
Tag Group	Races (up to 6 times)
Tag Usage	Mandatory

Field Values	1. Asian
	2. Native Hawaiian or Other Pacific Islander
	3. Other Race
	4. American Indian
	5. Black or African American
	6. White



# **Ethnicity**

# Overview

The patient's ethnicity.

NTDS Core	
Tag Name	Ethnicity
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values	1. Hispanic or Latino
	2. Not Hispanic or Latino



#### Sex

# Overview

The patient's sex.

NTDS Core	
Tag Name	Sex
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values	1. Male
	2. Female
	3. Non-binary



# ITDX Data Element Details – Injury Information



# **Injury Incident Date**

# Overview

The date the injury occurred.

NTDS Core	
Tag Name	IncidentDate
Data Type	date
Tag Group	ItdxRecord
Tag Usage	Mandatory



# **Injury Incident Time**

# Overview

The time the injury occurred.

NTDS Core	
Tag Name	IncidentTime
Data Type	time
Tag Group	ItdxRecord
Tag Usage	Mandatory



#### **Work-Related**

### Overview

Indication of whether the injury occurred during paid employment.

NTDS Core	
Tag Name	WorkRelated
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values	1. Yes
	2. No



# **Patient's Occupational Industry**

## Overview

The occupational industry associated with the patient's work environment.

NTDS Core	
Tag Name	PatientsOccupationalIndustry
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values	1. Finance, Insurance, and Real Estate
	2. Manufacturing
	3. Retail Trade
	4. Transportation and Public Utilities
	5. Agriculture, Forestry, Fishing
	6. Professional and Business Services
	7. Education and Health Services
	8. Construction



9. Government
10. Natural Resources and Mining
11. Information Services
12. Wholesale Trade
13. Leisure and Hospitality
14. Other Services



# **Patient's Occupation**

## Overview

The occupation of the patient.

NTDS Core	
Tag Name	PatientsOccupation
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values	1. Business and Financial Operations Occupations
	2. Architecture and Engineering Occupations
	3. Community and Social Services Occupations
	4. Education, Training, and Library Occupations
	5. Healthcare Practitioners and Technical Occupations
	6. Protective Service Occupations
	7. Building and Grounds Cleaning and Maintenance
	8. Sales and Related Occupations



9. Farming, Fishing, and Forestry Occupations
10. Installation, Maintenance, and Repair Occupations
11. Transportation and Material Moving Occupations
12. Management Occupations
13. Computer and Mathematical Occupations
14. Life, Physical, and Social Science Occupations
15. Legal Occupations
16. Arts, Design, Entertainment, Sports, and Media
17. Healthcare Support Occupations
18. Food Preparation and Serving Related
19. Personal Care and Service Occupations
20. Office and Administrative Support Occupations
21. Construction and Extraction Occupations
22. Production Occupations
23. Military Specific Occupations



# **ICD-10 Primary External Cause Code**

### **Overview**

External cause code used to describe the mechanism (or external factor) that caused the injury event.

NTDS Core	
Tag Name	PrimaryECodelCD10
Data Type	string
Tag Group	ItdxRecord
Tag Usage	Mandatory



#### **ICD-10 Place of Occurrence External Cause Code**

#### **Overview**

Place of occurrence external cause code used to describe the place/site/location of the injury event (Y92.x).

NTDS Core	
Tag Name	PlaceOfInjuryCode
Data Type	string
Tag Group	ItdxRecord
Tag Usage	Mandatory



#### **ICD-10 Additional External Cause Code**

#### **Overview**

Additional External Cause Code used in conjunction with the Primary External Cause Code if multiple External Cause Codes are required to describe the injury event.

NTDS Core	
Tag Name	AdditionalECodelCD10
Data Type	string
Tag Group	AdditionalECodeICD10s (up to 2)
Tag Usage	Mandatory



# **Incident Location ZIP / Postal Code**

### Overview

The ZIP/Postal code of the incident location.

NTDS Core	
Tag Name	InjuryZip
Data Type	string
Tag Group	ItdxRecord
Tag Usage	Mandatory



# **Incident Country**

### **Overview**

The country where the patient was found or to which the unit responded (or best approximation).

NTDS Core	
Tag Name	IncidentCountry
Data Type	string
Tag Group	ItdxRecord
Tag Usage	Mandatory



#### **Incident State**

#### **Overview**

The state, territory, or province where the patient was found or to which the unit responded (or best approximation).

NTDS Core	
Tag Name	IncidentState
Data Type	string
Tag Group	ItdxRecord
Tag Usage	Mandatory



# **Incident County**

### **Overview**

The county or parish where the patient was found or to which the unit responded (or best approximation).

NTDS Core	
Tag Name	IncidentCounty
Data Type	string
Tag Group	ItdxRecord
Tag Usage	Mandatory



# **Incident City**

## Overview

The city or township where the patient was found or to which the unit responded.

NTDS Core	
Tag Name	IncidentCity
Data Type	string
Tag Group	ItdxRecord
Tag Usage	Mandatory



#### **Protective Devices**

### Overview

Protective devices (safety equipment) in use or worn by the patient at the time of the injury.

NTDS Core	
Tag Name	ProtectiveDevice
Data Type	integer
Tag Group	ProtectiveDevices (up to 10 times)
Tag Usage	Mandatory

Field Values	1. None
	2. Lap Belt
	3. Personal Floatation Device
	4. Protective Non-Clothing Gear (E.g. Shin Guard)
	5. Eye Protection
	6. Child Restraint (Booster Seat or Child Car Seat)
	7. Helmet (E.g. Bicycle, Skiing, Motorcycle)
	8. Airbag Present



- 9. Protective Clothing (E.g. Padded Leather Pants)
- 10. Shoulder Belt
- 11. Other



# **Child Specific Restraint**

### Overview

Protective child restraint devices used by patient at the time of injury.

NTDS Core	
Tag Name	ChildSpecificRestraint
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values	1. Child Car Seat
	2. Infant Car Seat
	3. Child Booster Seat



# **Airbag Deployment**

## Overview

Indication of airbag deployment during a motor vehicle crash.

NTDS Core	
Tag Name	AirbagDeployment
Data Type	integer
Tag Group	AirbagDeployments (up to 4 times)
Tag Usage	Mandatory

Field Values	1. Airbag Not Deployed
	2. Airbag Deployed Front
	3. Airbag Deployed Side
	4. Airbag Deployed Other (Knee, Air Belt, Curtain, Etc.)



# **Report of Physical Abuse**

## Overview

A report of suspected physical abuse was made to law enforcement and/or protective services.

ITDX Extension	
Extension Rationale	While this data element is no longer collected nationally, for continuity of data collection this field can optionally still be collected.
Tag Name	AbuseReport
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Optional

Field Values	1. Yes
	2. No



# **Investigation of Physical Abuse**

### Overview

An investigation by law enforcement and/or protective services was initiated because of the suspected physical abuse.

ITDX Extension	
Extension Rationale	While this data element is no longer collected nationally, for continuity of data collection this field can optionally still be collected.
Tag Name	AbuseInvestigation
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Optional

Field Values	1. Yes
	2. No



# **Caregiver at Discharge**

### Overview

The patient was discharged to a caregiver different than the caregiver at admission due to suspected physical abuse.

ITDX Extension	
Extension Rationale	While this data element is no longer collected nationally, for continuity of data collection this field can optionally still be collected.
Tag Name	CaregiverAtDischarge
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Optional

Field Values	1. Yes
	2. No



# Trauma Type

## Overview

The primary source of the trauma injury sustained by the patient.

ITDX Extension	
Extension Rationale	Allows for more precise accuracy in reporting this data element. For example, typical machinery mappings are coded as "blunt", but many are penetrating. This field allows for this data collection precision.
Tag Name	TraumaType
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values	1. Blunt
	2. Penetrating
	3. Burn
	4. Other



## ITDX Data Element Details – Prehospital Information



### **EMS Dispatch Date**

### Overview

The date the unit transporting to your hospital was notified by dispatch.

NTDS Core	
Tag Name	EmsNotifyDate
Data Type	date
Tag Group	ItdxRecord
Tag Usage	Mandatory



# **EMS Dispatch Time**

### Overview

The time the unit transporting to your hospital was notified by dispatch.

NTDS Core	
Tag Name	EmsNotifyTime
Data Type	time
Tag Group	ItdxRecord
Tag Usage	Mandatory



## **EMS Unit Arrival Date at Scene or Transferring Facility**

### **Overview**

The date the unit transporting to your hospital arrived on the scene/transferring facility.

NTDS Core	
Tag Name	EmsArrivalDate
Data Type	date
Tag Group	ItdxRecord
Tag Usage	Mandatory



## **EMS Unit Arrival Time at Scene or Transferring Facility**

### **Overview**

The time the unit transporting to your hospital arrived on the scene/transferring facility.

NTDS Core	
Tag Name	EmsArrivalTime
Data Type	time
Tag Group	ItdxRecord
Tag Usage	Mandatory



## **EMS Unit Departure Date from Scene or Transferring Facility**

### Overview

The date the unit transporting to your hospital left the scene/transferring facility.

NTDS Core	
Tag Name	EmsLeftDate
Data Type	Date
Tag Group	ItdxRecord
Tag Usage	Mandatory



## **EMS Unit Departure Time from Scene or Transferring Facility**

### Overview

The time the unit transporting to your hospital left the scene/transferring facility.

NTDS Core	
Tag Name	EmsLeftTime
Data Type	Time
Tag Group	ItdxRecord
Tag Usage	Mandatory



# **Transport Mode**

## Overview

The mode of transport delivering the patient to your hospital.

NTDS Core	
Tag Name	TransportMode
Data Type	Integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values	1. Ground Ambulance
	2. Helicopter Ambulance
	3. Fixed-Wing Ambulance
	4. Private/Public Vehicle/Walk-In
	5. Police
	6. Other



### **Other Transport Mode**

### Overview

All other modes of transport used during patient care event (prior to arrival at your hospital), except the mode delivering the patient to the hospital.

NTDS Core	
Tag Name	OtherTransportMode
Data Type	Integer
Tag Group	OtherTransportModes (up to 5 times)
Tag Usage	Mandatory

Field Values	1. Ground Ambulance
	2. Helicopter Ambulance
	3. Fixed-Wing Ambulance
	4. Private/Public Vehicle/Walk-In
	5. Police
	6. Other



### **EMS Patient Care Report Universally Unique Identifier (UUID)**

#### **Overview**

The ITDX has allowed for the collection of record identifiers such as an EMS UUID. This is done using the group of data elements (tags) named "RecordLinkages". An EMS UUID will have a "LinkageType" with a value of "1" for Prehospital, with the UUID in the element "LinkageGlobalKey".

ITDX Extension	
Tag Name	LinkageRecordId
Data Type	string
Tag Group	RecordLinkages (up to 10 times)
Tag Usage	Optional



## **Initial Field Systolic Blood Pressure**

#### **Overview**

First recorded systolic blood pressure measured at the scene of injury.

NTDS Core	
Tag Name	EmsSbp
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory



#### **Initial Field Pulse Rate**

#### **Overview**

First recorded pulse measured at the scene of injury (palpated or auscultated), expressed as a number per minute.

NTDS Core	
Tag Name	EmsPulseRate
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory



### **Initial Field Respiratory Rate**

### Overview

First recorded respiratory rate measured at the scene of injury (expressed as a number per minute).

NTDS Core	
Tag Name	EmsRespiratoryRate
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory



# **Initial Field Oxygen Saturation**

### Overview

First recorded oxygen saturation measured at the scene of injury (expressed as a percentage).

NTDS Core	
Tag Name	EmsPulseOximetry
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory



# **Initial Field GCS - Eye**

### **Overview**

First recorded Glasgow Coma Score (Eye) measured at the scene of injury.

NTDS Core	
Tag Name	EmsGcsEye
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values	1. No Eye Movement When Assessed
	2. Open Eyes in Response to Painful Stimulation
	3. Opens Eyes in Response to Verbal Stimulation
	4. Opens Eyes Spontaneously



#### **Initial Field GCS - Verbal**

### **Overview**

First recorded Glasgow Coma Score (Verbal) measured at the scene of injury.

NTDS Core	
Tag Name	EmsGcsVerbal
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values Pediatric (<= 2 years)	1. No Vocal Response
	2. Inconsolable, Agitated
	3. Inconsistently Consolable, Moaning
	4. Cries but is Consolable, Inappropriate Interactions
	5. Smiles, Oriented to Sounds, Follows Objects, Interacts
Adult	1. No Verbal Response
	2. Incomprehensible Sounds
	3. Inappropriate Words
	4. Confused
	5. Oriented



#### **Initial Field GCS - Motor**

### **Overview**

First recorded Glasgow Coma Score (Motor) measured at the scene of injury.

NTDS Core	
Tag Name	EmsGcsMotor
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values Pediatric (<= 2 years)	1. No Motor Response
	2. Extension to Pain
	3. Flexion to Pain
	4. Withdrawal from Pain
	5. Localizing Pain
	6. Appropriate Response to Stimulation
Adult	1. No Motor Response
	2. Extension to Pain
	3. Flexion to Pain
	4. Withdrawal from Pain
	5. Localizing Pain
	6. Obeys Commands



#### **Initial Field GCS - Total**

### **Overview**

First recorded Glasgow Coma Score (Total) measured at the scene of injury.

NTDS Core	
Tag Name	EmsTotalGcs
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory



# Initial Field GCS 40 - Eye

### **Overview**

First recorded Glasgow Coma Score 40 (Eye) measured at the scene of injury.

NTDS Core	
Tag Name	EmsGcs40Eye
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values Pediatric < 5 years	1. None
	2. To Pain
	3. To Sounds
	4. Spontaneous
	0. Not Testable
Adult	1. None
	2. To Pressure
	3. To Sounds
	4. Spontaneous
	0. Not Testable



### Initial Field GCS 40 - Verbal

### **Overview**

First recorded Glasgow Coma Score 40 (Verbal) measured at the scene of injury.

NTDS Core	
Tag Name	EmsGcs40Verbal
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values Pediatric < 5 years	1. None
	2. Cries
	3. Vocal Sounds
	4. Words
	5. Talks Normally
	0. Not Testable
Adult	1. None
	2. Sounds
	3. Words
	4. Confused
	5. Oriented
	0. Not Testable



#### **Initial Field GCS 40 - Motor**

#### **Overview**

First recorded Glasgow Coma Score 40 (Motor) measured at the scene of injury.

NTDS Core	
Tag Name	EmsGcs40Motor
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values Pediatric < 5 years	1. None
	2. Extension to Pain
	3. Flexion to Pain
	4. Localizes Pain
	5. Obeys Commands
	0. Not Testable
Adult	1. None
	2. Extension
	3. Abnormal Flexion
	4. Normal Flexion
	5. Localizing
	6. Obeys Commands
·	0. Not Testable



# **Inter-Facility Transfer**

### Overview

Was the patient transferred to your facility from another acute care facility?

NTDS Core	
Tag Name	InterFacilityTransfer
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values	1. Yes
	2. No



#### **Trauma Center Criteria**

#### **Overview**

Physiologic and anatomic EMS trauma triage criteria for transport to a trauma center as defined by the Centers for Disease Control and Prevention and the American College of Surgeons-Committee on Trauma. This information must be found on the scene of injury EMS Run Report.

NTDS Core	
Tag Name	TraumaCenterCriterion
Data Type	integer
Tag Group	TraumaCenterCriteria (up to 11 times)
Tag Usage	Mandatory

Field Values	1. Glasgow Coma Score <= 13
	2. Systolic Blood Pressure < 90 mmHg
	3. Respiratory Rate < 10 or > 29 Breaths per Minute (< 20 in Infants Aged < 1 Year) or Need for Ventilatory Support
	4. All Penetrating Injuries to Head, Neck, Torso and Extremities Proximal to Elbow or Knee
	5. Chest Wall Instability or Deformity (E.g. Flail Chest)



- 6. Two or More Proximal Long Bone Fractures
  7. Crushed, Degloved, Mangled, or Pulseless Extremity
  8. Amputation Proximal to Wrist or Ankle
  9. Pelvic Fracture
  10. Open or Depressed Skull Fracture
- 11. Paralysis



### Vehicular, Pedestrian, Other Risk Injury

#### **Overview**

EMS trauma triage mechanism of injury criteria for transport to a trauma center as defined by the Centers for Disease Control and Prevention and the American College of Surgeons-Committee on Trauma. This information must be found on the scene of injury EMS Run Report.

NTDS Core	
Tag Name	Vehicular Pedestrian Other
Data Type	integer
Tag Group	VehicularPedestrianOthers (up to 14 times)
Tag Usage	Mandatory

Field Values	1. Fall Adults: > 20 ft. (One Story is Equal to 10 ft.)
	2. Fall Children: > 10 ft. or 2-3 Times the Height of the Child
	3. Crash Intrusion, Including Roof: > 12 in. Occupant Site; > 18 in. Any Site
	4. Crash Ejection (Partial or Complete) from Automobile
	5. Crash Death in Same Passenger Compartment
	6. Crash Vehicle Telemetry Data (AACN) Consistent with High Risk Injury
	7. Auto v. Pedestrian/Bicyclist Thrown, Run Over, or > 20 mph Impact



- 8. Motorcycle Crash > 20 mph
- 9. For Adults > 65; SBP < 110
- 10. Patients on Anticoagulants and Bleeding Disorders
- 11. Pregnancy > 20 weeks
- 12. EMS Provider Judgment
- 13. Burns
- 14. Burns with Trauma



# **Prehospital Cardiac Arrest**

### Overview

Indication of whether patient experienced cardiac arrest prior to ED/Hospital arrival.

NTDS Core	
Tag Name	PrehospitalCardiacArrest
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values	1. Yes
	2. No



# ITDX Data Element Details – Emergency Department Information



# **Highest Activation**

### **Overview**

Patient received highest level of trauma activation at your hospital.

NTDS Core	
Tag Name	HighestTraumaActivation
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values	1. Yes
	2. No



### **Trauma Surgeon Arrival Date**

### **Overview**

For the highest activation: the date the first trauma surgeon arrived at the patient's bedside.

NTDS Core	
Tag Name	TraumaSurgeonHighestActivationArrivalDate
Data Type	date
Tag Group	ItdxRecord
Tag Usage	Mandatory



### **Trauma Surgeon Arrival Time**

### **Overview**

For the highest activation: the time the first trauma surgeon arrived at the patient's bedside.

NTDS Core	
Tag Name	TraumaSurgeonHighestActivationArrivalTime
Data Type	time
Tag Group	ItdxRecord
Tag Usage	Mandatory



# **ED / Hospital Arrival Date**

### Overview

The date the patient arrived to the ED/hospital.

NTDS Core	
Tag Name	HospitalArrivalDate
Data Type	date
Tag Group	ItdxRecord
Tag Usage	Mandatory



# **ED / Hospital Arrival Time**

### Overview

The time the patient arrived to the ED/hospital.

NTDS Core	
Tag Name	HospitalArrivalTime
Data Type	time
Tag Group	ItdxRecord
Tag Usage	Mandatory



### Initial ED / Hospital Systolic Blood Pressure

### **Overview**

First recorded systolic blood pressure in the ED/hospital within 30 minutes or less of ED/hospital arrival.

NTDS Core	
Tag Name	Sbp
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory



### **Initial ED / Hospital Pulse Rate**

### **Overview**

First recorded pulse in the ED/hospital (palpated or auscultated) within 30 minutes or less of ED/hospital arrival (expressed as a number per minute).

NTDS Core	
Tag Name	PulseRate
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory



### **Initial ED / Hospital Temperature**

### Overview

First recorded temperature (in degrees Celsius [Centigrade]) in the ED/hospital within 30 minutes or less of ED/hospital arrival.

NTDS Core	
Tag Name	Temperature
Data Type	decimal
Tag Group	ItdxRecord
Tag Usage	Mandatory



### Initial ED / Hospital Respiratory Rate

### Overview

First recorded respiratory rate in the ED/hospital within 30 minutes or less of ED/hospital arrival (expressed as a number per minute).

NTDS Core	
Tag Name	RespiratoryRate
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory



### **Initial ED / Hospital Respiratory Assistance**

### Overview

Determination of respiratory assistance associated with the initial ED/hospital respiratory rate within 30 minutes or less of ED/hospital arrival.

NTDS Core	
Tag Name	RespiratoryAssistance
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values	1. Unassisted Respiratory Rate
	2. Assisted Respiratory Rate



### **Initial ED / Hospital Oxygen Saturation**

### **Overview**

First recorded oxygen saturation in the ED/hospital within 30 minutes or less of ED/hospital arrival (expressed as a percentage).

NTDS Core	
Tag Name	PulseOximetry
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory



### Initial ED / Hospital Supplemental Oxygen

#### **Overview**

Determination of the presence of supplemental oxygen during assessment of initial ED/hospital oxygen saturation level within 30 minutes or less of ED/hospital arrival.

NTDS Core	
Tag Name	SupplementalOxygen
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values	1. No Supplemental Oxygen
	2. Supplemental Oxygen



# Initial ED / Hospital GCS - Eye

### Overview

First recorded Glasgow Coma Score (Eye) in the ED/hospital within 30 minutes or less of ED/hospital arrival.

NTDS Core	
Tag Name	GcsEye
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values	1. No Eye Movement When Assessed
	2. Open Eyes in Response to Painful Stimulation
	3. Opens Eyes in Response to Verbal Stimulation
	4. Opens Eyes Spontaneously



### Initial ED / Hospital GCS - Verbal

### **Overview**

First recorded Glasgow Coma Score (Verbal) within 30 minutes or less of ED/hospital arrival.

NTDS Core	
Tag Name	GcsVerbal
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values Pediatric (<= 2 years)	1. No Vocal Response
	2. Inconsolable, Agitated
	3. Inconsistently Consolable, Moaning
	4. Cries but is Consolable, Inappropriate Interactions
	5. Smiles, Oriented to Sounds, Follows Objects, Interacts
Adult	1. No Verbal Response
	2. Incomprehensible Sounds
	3. Inappropriate Words
	4. Confused
	5. Oriented



### Initial ED / Hospital GCS - Motor

### Overview

First recorded Glasgow Coma Score (Motor) within 30 minutes or less of ED/hospital arrival.

NTDS Core	
Tag Name	GcsMotor
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values Pediatric (<= 2 years)	1. No Motor Response
	2. Extension to Pain
	3. Flexion to Pain
	4. Withdrawal from Pain
	5. Localizing Pain
	6. Appropriate Response to Stimulation
Adult	1. No Motor Response
	2. Extension to Pain
	3. Flexion to Pain
	4. Withdrawal from Pain
	5. Localizing Pain
	6. Obeys Commands



### **Initial ED / Hospital GCS - Total**

### **Overview**

First recorded Glasgow Coma Score (Total) within 30 minutes or less of ED/hospital arrival.

NTDS Core	
Tag Name	TotalGcs
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory



### **Initial ED / Hospital GCS Assessment Qualifiers**

### Overview

Documentation of factors potentially affecting the first assessment of GCS within 30 minutes or less of ED/hospital arrival.

NTDS Core	
Tag Name	GcsQualifier
Data Type	integer
Tag Group	GcsQualifiers (up to 3 times)
Tag Usage	Mandatory

Field Values	1. Patient Chemically Sedated or Paralyzed	
	2. Obstruction to the Patient's Eye	
	3. Patient Intubated	
	4. Valid GCS: Patient Not Sedated, Not Intubated, and Did Not Have Obstruction to Eye	



# Initial ED / Hospital GCS 40 - Eye

### Overview

First recorded Glasgow Coma Score 40 (Eye) in the ED/hospital within 30 minutes or less of ED/hospital arrival.

NTDS Core	
Tag Name	Gcs40Eye
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values Pediatric < 5 years	1. None
	2. To Pain
	3. To Sounds
	4. Spontaneous
	0. Not Testable
Adult	1. None
	2. To Pressure
	3. To Sounds
	4. Spontaneous
	0. Not Testable



# Initial ED / Hospital GCS 40 - Verbal

### Overview

First recorded Glasgow Coma Score at 40 (Verbal Response) within 30 minutes or less of ED/hospital arrival.

NTDS Core	
Tag Name	Gcs40Verbal
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values Pediatric < 5 years	1. None
	2. Cries
	3. Vocal Sounds
	4. Words
	5. Talks Normally
	0. Not Testable
Adult	1. None
	2. Sounds
	3. Words
	4. Confused
	5. Oriented
	0. Not Testable



### Initial ED / Hospital GCS 40 - Motor

### Overview

First recorded Glasgow Coma Score at 40 (Best Motor Response) within 30 minutes or less of ED/hospital arrival.

NTDS Core	
Tag Name	Gcs40Motor
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values Pediatric < 5 years	1. None
	2. Extension to Pain
	3. Flexion to Pain
	4. Localizes Pain
	5. Obeys Commands
	0. Not Testable
Adult	1. None
	2. Extension
	3. Abnormal Flexion
	4. Normal Flexion
	5. Localizing
	6. Obeys Commands
	0. Not Testable



# Initial ED / Hospital Height

### Overview

First recorded height upon ED/hospital arrival.

ITDX Extension	
<b>Extension Rationale</b>	To allow patient's height to be collected regardless of the time it was collected.
Tag Name	Height
Data Type	decimal
Tag Group	ItdxRecord
Tag Usage	Mandatory



# **Initial ED / Hospital Weight**

### Overview

First recorded, measured or estimated baseline weight upon ED/Hospital arrival.

ITDX Extension	
Extension Rationale	To allow patient's weight to be collected regardless of the time it was collected.
Tag Name	Weight
Data Type	decimal
Tag Group	ItdxRecord
Tag Usage	Mandatory



### **Drug Screen**

### Overview

First recorded positive drug screen results within 24 hours after first hospital encounter (select all that apply).

NTDS Core	
Tag Name	DrugScreen
Data Type	integer
Tag Group	DrugScreens (up to 15 times)
Tag Usage	Mandatory

Field Values	1. AMP (Amphetamine)
	2. BAR (Barbiturate)
	3. BZO (Benzodiazepines)
	4. COC (Cocaine)
	5. mAMP (Methamphetamine)
	6. MDMA (Ecstasy)
	7. MTD (Methadone)



8. OPI (Opioid)
9. OXY (Oxycodone)
10. PCP (Phencyclidine)
11. TCA (Tricyclic Antidepressant)
12. THC (Cannabinoid)
13. Other
14. None
15. Not Tested



#### **Alcohol Screen**

#### **Overview**

A blood alcohol concentration (BAC) test was performed on the patient within 24 hours after first hospital encounter.

NTDS Core	
Tag Name	AlcoholScreen
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values	1. Yes
	2. No



#### **Alcohol Screen Results**

#### **Overview**

First recorded blood alcohol concentration (BAC) results within 24 hours after first hospital encounter.

NTDS Core	
Tag Name	AlcoholScreenResult
Data Type	decimal
Tag Group	ItdxRecord
Tag Usage	Mandatory



### **ED Discharge Disposition**

### Overview

The disposition of the patient at the time of discharge from the ED.

NTDS Core	
Tag Name	EDDischargeDisposition
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values	1. Floor Bed (General Admission, Non-Specialty Unit Bed)
	2. Observation Unit (Unit That Provides < 24 Hour Stays)
	3. Telemetry/Step-Down Unit (Less Acuity than ICU)
	4. Home with Services
	5. Deceased/Expired
	6. Other (Jail, Institutional Care, Mental Health, Etc.)
	7. Operating Room
	8. Intensive Care Unit (ICU)



- 9. Home Without Services
- 10. Left Against Medical Advice
- 11. Transferred to Another Hospital



#### **Trauma Team Involvement**

#### Overview

Indicates if the trauma team was activated at any level including a trauma consult. The goal is to identify if a member of the trauma team was involved in the care of the patient in any capacity.

ITDX Extension	
Extension Rationale	This is a helper field which could be used in determining inclusion criteria for the patient record.
Tag Name	TraumaTeamInvolvement
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Optional

Field Values	1. Yes
	2. No



# Signs of Life

### Overview

Indication of whether patient arrived at ED/Hospital with signs of life.

ITDX Extension	
Extension Rationale	While this data element is no longer collected nationally, for continuity of data collection, this field can optionally still be collected.
Tag Name	DeathInED
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Optional

Field Values	1. Arrived with NO Signs of Life
	2. Arrived with Signs of Life



# **ED Discharge Orders Written Date**

### Overview

The date the order was written for the patient to be discharged from the ED.

NTDS Core	
Tag Name	EDDischargeOrdersWrittenDate
Data Type	date
Tag Group	ItdxRecord
Tag Usage	Mandatory



# **ED Discharge Orders Written Time**

### Overview

The time the order was written for the patient to be discharged from the ED.

NTDS Core	
Tag Name	EDDischargeOrdersWrittenTime
Data Type	time
Tag Group	ItdxRecord
Tag Usage	Mandatory



# **ED Discharge Physical Date**

### Overview

The date the patient was physically discharged from the ED.

ITDX Extension	
Extension Rationale	Allows collection of both physical/actual ED discharge date to support computation of the actual length of stay (LOS) for continuity and analytic purposes. This data is still collected by many collaborative trauma registry systems.
Tag Name	EDDischargePhysicalDate
Data Type	date
Tag Group	ItdxRecord
Tag Usage	Mandatory



# **ED Discharge Physical Time**

### Overview

The time the patient was physically discharged from the ED.

ITDX Extension	
Extension Rationale	Allows collection of both physical/actual ED discharge time to support computation of the actual length of stay (LOS) for continuity and analytic purposes. This data is still collected by many collaborative trauma registry systems.
Tag Name	EDDischargePhysicalTime
Data Type	time
Tag Group	ItdxRecord
Tag Usage	Mandatory



# ITDX Data Element Details – Hospital Procedure Information



### **ICD-10 Hospital Procedures**

#### **Overview**

Operative and selected non-operative procedures conducted during hospital stay. Operative and selected non-operative procedures are those that were essential to the diagnosis, stabilization, or treatment of the patient's specific injuries or complications.

NTDS Core	
Tag Name	HospitalProcedureICD10
Data Type	string
Tag Group	ItdxRecord
Tag Usage	Mandatory



# **Hospital Procedure Start Date**

### Overview

The date operative and selected non-operative procedures were performed.

NTDS Core	
Tag Name	HospitalProcedureStartDate
Data Type	date
Tag Group	HospitalProcedures (up to 200 times)
Tag Usage	Mandatory



# **Hospital Procedure Start Time**

### Overview

The time operative and selected non-operative procedures were performed.

NTDS Core	
Tag Name	HospitalProcedureStartTime
Data Type	time
Tag Group	HospitalProcedures (up to 200 times)
Tag Usage	Mandatory



### ITDX Data Element Details – Diagnosis Information



#### **Comorbid Conditions**

### **Overview**

Pre-existing comorbid factors.

NTDS Core	
Tag Name	ComorbidCondition
Data Type	integer
Tag Group	ComorbidConditions (up to 27 times)
Tag Usage	Mandatory

Field Values	1. Other
	2. Alcohol Use Disorder
	4. Bleeding Disorder
	5. Currently Receiving Chemotherapy for Cancer
	6. Congenital Anomalies
	7. Congestive Heart Failure
	8. Current Smoker
	9. Chronic Renal Failure
	10. Cerebrovascular Accident (CVA)
	11. Diabetes Mellitus



12. Disseminated Cancer
13. Advanced Directive Limiting Care
15. Functionally Dependent Health Status
19. Hypertension
23. Chronic Obstructive Pulmonary Disease (COPD)
24. Steroid Use
25. Cirrhosis
26. Dementia
30. Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder (ADD/ADHD)
31. Anticoagulant Therapy
32. Angina Pectoris
33. Mental/Personality Disorder
34. Myocardial Infarction (MI)
35. Peripheral Arterial Disease (PAD)
36. Substance Use Disorder
37. Prematurity
38. Pregnancy



# **ICD-10 Injury Diagnoses**

### Overview

Diagnoses related to all identified injuries.

NTDS Core	
Tag Name	DiagnosisICD10
Data Type	string
Tag Group	ItdxRecord (up to 50 times)
Tag Usage	Mandatory



# ITDX Data Element Details – Injury Severity Information



### **AIS Predot Code**

### **Overview**

The Abbreviated Injury Scale (AIS) pre-dot codes that reflect the patient's injuries.

NTDS Core	
Tag Name	AisPredot
Data Type	string
Tag Group	AisCodes (up to 50 times)
Tag Usage	Mandatory



# **AIS Severity**

### **Overview**

The Abbreviated Injury Scale (AIS) severity codes that reflect the patient's injuries.

NTDS Core	
Tag Name	AisSeverity
Data Type	integer
Tag Group	AisCodes (up to 50 times)
Tag Usage	Mandatory

Field Values	1. Minor Injury
	2. Moderate Injury
	3. Serious Injury
	4. Severe Injury
	5. Critical Injury
	6. Maximum Injury, Virtually Unsurvivable
	9. Not Possible to Assign



# **ISS Body Region**

### Overview

The Injury Severity Score (ISS) body region codes that reflect the patient's injuries.

ITDX Extension	
Extension Rationale	This field existed in the previous iterations of NTDS and has been removed in current versions, but for continuity and data trending purposes, it is still collected by ITDX. This data is still collected by many collaborative trauma registry systems.
Tag Name	IssRegion
Data Type	integer
Tag Group	AisCodes (up to 50 times)
Tag Usage	Mandatory

Field Values	1. Head or Neck
	2. Face
	3. Chest
	4. Abdominal or Pelvic Contents
	5. Extremities or Pelvic Girdle
	6. External



#### **AIS Version**

### **Overview**

The software (and version) used to calculate Abbreviated Injury Scale (AIS) severity codes.

NTDS Core	
Tag Name	AisVersion
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values	6. AIS 05, Update 08
	16. AIS 2015



# **Locally Calculated ISS**

### Overview

The Injury Severity Score (ISS) that reflects the patient's injuries.

ITDX Extension	
Extension Rationale	This field existed in the previous iterations of NTDS and has been removed in current versions, but for continuity and data trending purposes, it is still collected by ITDX. This data is still collected by many collaborative trauma registry systems.
Tag Name	IssCalculated
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Optional



#### **ITDX Data Element Details – Outcome Information**



# **Total ICU Length of Stay**

### Overview

The cumulative amount of time spent in the ICU. Each partial or full day should be measured as one calendar day.

NTDS Core	
Tag Name	TotallcuLos
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory



# **Total Ventilator Days**

### Overview

The cumulative amount of time spent on the ventilator. Each partial or full day should be measured as one calendar day.

NTDS Core	
Tag Name	TotalVentDays
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory



### **Hospital Discharge Orders Written Date**

### Overview

The date the order was written for the patient to be discharged from the hospital.

NTDS Core	
Tag Name	Hospital Discharge Orders Written Date
Data Type	date
Tag Group	ItdxRecord
Tag Usage	Mandatory



### **Hospital Discharge Orders Written Time**

### Overview

The time the order was written for the patient to be discharged from the hospital.

NTDS Core	
Tag Name	HospitalDischargeOrdersWrittenTime
Data Type	time
Tag Group	ItdxRecord
Tag Usage	Mandatory



### **Hospital Physical Discharge Date**

### Overview

The date the patient was physically discharged from the hospital.

ITDX Extension	
Extension Rationale	Allows collection of both physical/actual hospital discharge date to support computation of the actual length of stay (LOS) for continuity and analytic purposes. This data is still collected by many collaborative trauma registry systems.
Tag Name	HospitalPhysicalDischargeDate
Data Type	date
Tag Group	ItdxRecord
Tag Usage	Mandatory



### **Hospital Physical Discharge Time**

### Overview

The time the patient was physically discharged from the hospital.

ITDX Extension	
Extension Rationale	Allows collection of both physical/actual hospital discharge time to support computation of the actual length of stay (LOS) for continuity and analytic purposes. This data is still collected by many collaborative trauma registry systems.
Tag Name	HospitalPhysicalDischargeTime
Data Type	time
Tag Group	ItdxRecord
Tag Usage	Mandatory



### **Hospital Discharge Disposition**

### Overview

The disposition of the patient when discharged from the hospital.

NTDS Core	
Tag Name	HospitalDischargeDisposition
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values	1. Discharged/Transferred to a Short-Term General Hospital for Inpatient Care
	2. Discharged/Transferred to an Intermediate Care Facility (ICF)
	3. Discharged/Transferred to Home Under Care of Organized Home Health Service
	4. Left Against Medical Advice or Discontinued Care
	5. Deceased/Expired
	6. Discharged to Home or Self-Care (Routine Discharge)
	7. Discharged/Transferred to Skilled Nursing Facility (SNF)



- 8. Discharged/Transferred to Hospice Care
- 10. Discharged/Transferred to Court/Law Enforcement
- 11. Discharged/Transferred to Inpatient Rehab or Designated Unit
- 12. Discharged/Transferred to Long Term Care Hospital (LTCH)
- 13. Discharged/Transferred to a Psychiatric Hospital or Psychiatric Distinct Part Unit of a Hospital
- 14. Discharged/Transferred to Another Type of Institution Not Defined Elsewhere



#### **ITDX Data Element Details – Financial Information**



# **Primary Method of Payment**

### Overview

Primary source of payment for hospital care.

NTDS Core	
Tag Name	PrimaryMethodPayment
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Mandatory

Field Values	1. Medicaid
	2. Not Billed (For Any Reason)
	3. Self-Pay
	4. Private/Commercial Insurance
	6. Medicare
	7. Other Government
	10. Other



## ITDX Data Element Details – Hospital Complications



# **Hospital Events**

## **Overview**

Any medical complication that occurred during the patient's stay at your hospital.

NTDS Core	
Tag Name	HospitalComplication
Data Type	integer
Tag Group	HospitalComplications (up to 22 times)
Tag Usage	Mandatory

Field Values	1. Other
	4. Acute Kidney Injury
	5. Acute Respiratory Distress Syndrome (ARDS)
	8. Cardiac Arrest with CPR
	12. Deep Surgical Site Infection
	14. Deep Vein Thrombosis (DVT)
	15. Extremity Compartment Syndrome
	18. Myocardial Infarction
	19. Organ/Space Surgical Site Infection
	21. Pulmonary Embolism



22. Stroke / CVA
25. Unplanned Intubation
29. Osteomyelitis
31. Unplanned Admission to the ICU
32. Severe Sepsis
33. Catheter-Associated Urinary Tract Infection (CAUTI)
34. Central Line-Associated Bloodstream Infection (CLABSI)
35. Ventilator-Associated Pneumonia (VAP)
36. Alcohol Withdrawal Syndrome
37. Pressure Ulcer
38. Superficial Incisional Surgical Site Infection
39. Delirium
40. Unplanned Visit to the Operating Room



# ITDX Data Element Details – Trauma Quality Improvement Program Measures for Processes of Care



# **Highest GCS Total**

## Overview

Highest total GCS within 24 hours of ED/Hospital arrival.

NTDS Core	
Tag Name	TbiHighestTotalGcs
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Optional



# **Highest GCS Motor**

## Overview

Highest motor GCS within 24 hours of ED/Hospital arrival.

NTDS Core	
Tag Name	TbiGcsMotor
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Optional

Field Values Pediatric (<= 2 years)	1. No Motor Response
	2. Extension to Pain
	3. Flexion to Pain
	4. Withdrawal from Pain
	5. Localizing Pain
	6. Appropriate Response to Stimulation
Adult	1. No Motor Response
	2. Extension to Pain
	3. Flexion to Pain
	4. Withdrawal from Pain
	5. Localizing Pain
·	6. Obeys Commands



## **GCS Assessment Qualifier Component of Highest GCS Total**

## Overview

Documentation of factors potentially affecting the highest GCS within 24 hours of ED/hospital arrival.

NTDS Core	
Tag Name	TbiGcsQualifier
Data Type	integer
Tag Group	TbiGcsQualifiers (up to 3 times)
Tag Usage	Optional

Field Values	Patient Chemically Sedated or Paralyzed
	2. Obstruction to the Patient's Eye
	3. Patient Intubated
	4. Valid GCS: Patient Was Not Sedated, Not Intubated, and Did Not Have Obstruction to the Eye



# Highest GCS 40 - Motor

## Overview

Highest GCS 40 motor on calendar day after ED/Hospital arrival.

NTDS Core	
Tag Name	TbiGcs40Motor
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Optional

Field Values Pediatric < 5 years	1. None
	2. Extension to Pain
	3. Flexion to Pain
	4. Localizes Pain
	5. Obeys commands
	0. Not Testable
Adult	1. None
	2. Extension
	3. Abnormal flexion
	4. Normal flexion
	5. Localizing
	6. Obeys commands
	0. Not Testable



## Initial ED / Hospital Pupillary Response

## Overview

Physiological response of the pupil size within 30 minutes or less of ED/hospital arrival.

NTDS Core	
Tag Name	TbiPupillaryResponse
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Optional

Field Values	1. Both Reactive
	2. One Reactive
	3. Neither Reactive



#### **Midline Shift**

## Overview

> 5mm shift of the brain past its center line within 24 hours after time of injury

NTDS Core	
Tag Name	TbiMidlineShift
Data Type	Integer
Tag Group	ItdxRecord
Tag Usage	Optional

Field Values	1. Yes
	2. No
	3. Not Imaged (E.g. CT Scan, MRI)



#### **Cerebral Monitor**

#### **Overview**

Indicate all cerebral monitors that were placed, including any of the following: ventriculostomy, subarachnoid bolt, camino bolt, external ventricular drain (EVD), licox monitor, jugular venous bulb.

NTDS Core	
Tag Name	TbiCerebralMonitor
Data Type	integer
Tag Group	TbiCerebralMonitors (up to 4 times)
Tag Usage	Optional

Field Values	Intraventricular Drain/Catheter (E.g. Ventriculostomy, External Ventricular Drain)
	2. Intraparenchymal Pressure Monitor (E.g. Camino Bolt, Subarachnoid Bolt, Intraparenchymal Catheter)
	3. Intraparenchymal Oxygen Monitor (E.g. Licox)
	4. Jugular Venous Bulb
	5. None



#### **Cerebral Monitor Date**

## Overview

Date of first cerebral monitor placement.

NTDS Core	
Tag Name	TbiCerebralMonitorDate
Data Type	date
Tag Group	ItdxRecord
Tag Usage	Optional



#### **Cerebral Monitor Time**

## Overview

Time of first cerebral monitor placement.

NTDS Core	
Tag Name	TbiCerebralMonitorTime
Data Type	time
Tag Group	ItdxRecord
Tag Usage	Optional



## **Venous Thromboembolism Prophylaxis Type**

## Overview

Type of first dose of VTE prophylaxis administered to patient at your hospital.

NTDS Core	
Tag Name	VteProphylaxisType
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Optional

Field Values	5. None
	6. LMWH (Dalteparin, Enoxaparin, Etc.)
	7. Direct Thrombin Inhibitor (Dabigatran, Etc.)
	8. Xa Inhibitor (Rivaroxaban, Etc.)
	10. Other
	11. Unfractionated Heparin (UH)



## **Venous Thromboembolism Prophylaxis Date**

## **Overview**

Date of administration to patient of first prophylactic dose of heparin or other anticoagulants at your hospital.

NTDS Core	
Tag Name	VteProphylaxisDate
Data Type	date
Tag Group	ItdxRecord
Tag Usage	Optional



## **Venous Thromboembolism Prophylaxis Time**

#### **Overview**

Time of administration to patient of first prophylactic dose of heparin or other anticoagulants at your hospital.

NTDS Core	
Tag Name	VteProphylaxisTime
Data Type	time
Tag Group	ItdxRecord
Tag Usage	Optional



# **Packed Red Blood Cells (4 Hours)**

## **Overview**

Volume of packed red blood cells transfused (units or CCs) within first 4 hours after ED/hospital arrival.

NTDS Core	
Tag Name	TransfusionBlood4Hours
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Optional



## Whole Blood (4 Hours)

#### **Overview**

Refers to amount of transfused whole blood (CCs [mLs]) within first 4 hours after arrival to your hospital.

NTDS Core	
Tag Name	WholeBlood4Hours
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Optional



## **Transfusion Plasma (4 Hours)**

#### **Overview**

Volume of fresh, frozen, or thawed plasma (CCs [mLs]) transfused within first 4 hours after ED/hospital arrival.

NTDS Core	
Tag Name	TransfusionPlasma4Hours
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Optional



## **Transfusion Platelets (4 Hours)**

## Overview

Volume of platelets (CCs [mLs]) transfused within first 4 hours after ED/hospital arrival.

NTDS Core	
Tag Name	TransfusionPlatelets4Hours
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Optional



## **Cryoprecipitate (4 Hours)**

#### Overview

Volume of solution enriched with clotting factors transfused (CCs [mLs]) within first 4 hours after ED/hospital arrival.

NTDS Core	
Tag Name	Cryoprecipitate4Hours
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Optional



## **Lowest ED / Hospital Systolic Blood Pressure**

## **Overview**

Lowest sustained (>5 min) systolic blood pressure measured within the first hour of ED/hospital arrival.

NTDS Core	
Tag Name	LowestSbp
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Optional



# **Angiography**

## Overview

First interventional angiogram with or without embolization within first 24 hours of ED/Hospital arrival.

NTDS Core	
Tag Name	Angiography
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Optional

Field Values	1. None
	2. Angiogram Only
	3. Angiogram with Embolization
	4. Angiogram with Stenting



#### **Embolization Site**

## Overview

Organ / site of embolization for hemorrhage control.

NTDS Core	
Tag Name	EmbolizationSite
Data Type	integer
Tag Group	EmbolizationSites (up to 7 times)
Tag Usage	Optional

Field Values	1. Liver
	2. Spleen
	3. Kidneys
	4. Pelvic (Iliac, Gluteal, Obturator)
	5. Retroperitoneum (Lumbar, Sacral)
	6. Peripheral Vascular (Neck, Extremities)
	8. Other



## **Angiography Date**

## Overview

Date the first angiogram with or without embolization was performed.

NTDS Core	
Tag Name	AngiographyDate
Data Type	date
Tag Group	ItdxRecord
Tag Usage	Optional



## **Angiography Time**

## Overview

Time the first angiogram with or without embolization was performed.

NTDS Core	
Tag Name	AngiographyTime
Data Type	time
Tag Group	ItdxRecord
Tag Usage	Optional



## **Surgery for Hemorrhage Control Type**

## Overview

First type of surgery for hemorrhage control within the first 24 hours of ED/hospital arrival.

NTDS Core	
Tag Name	HemorrhageControlSurgeryType
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Optional

Field Values	1. None
	2. Laparotomy
	3. Thoracotomy
	4. Sternotomy
	5. Extremity
	6. Neck
	7. Mangled Extremity/Traumatic Amputation
	8. Other Skin/Soft Tissue (E.g. Scalp Laceration)



9. Extraperitoneal Pelvic Packing



## **Surgery for Hemorrhage Control Date**

## Overview

Date of first surgery for hemorrhage control within first 24 hours of ED/hospital arrival.

NTDS Core	
Tag Name	HemorrhageControlSurgeryDate
Data Type	date
Tag Group	ItdxRecord
Tag Usage	Optional



## **Surgery for Hemorrhage Control Time**

## Overview

Time of first surgery for hemorrhage control within first 24 hours of ED/hospital arrival.

NTDS Core	
Tag Name	HemorrhageControlSurgeryTime
Data Type	time
Tag Group	ItdxRecord
Tag Usage	Optional



# **Withdrawal of Life Supporting Treatment**

#### **Overview**

Treatment was withdrawn based on a decision to either remove or withhold further life supporting intervention. This decision must be documented in the medical record and is often, but not always, associated with a discussion with the legal next of kin.

NTDS Core	
Tag Name	WithdrawalOfLifeSupportingTreatment
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Optional

Field Values	1. Yes
	2. No



# Withdrawal of Life Supporting Treatment Date

## Overview

The date treatment was withdrawn.

NTDS Core	
Tag Name	WithdrawalOfLifeSupportingTreatmentDate
Data Type	date
Tag Group	ItdxRecord
Tag Usage	Optional



# **Withdrawal of Life Supporting Treatment Time**

## Overview

The time treatment was withdrawn.

NTDS Core	
Tag Name	WithdrawalOfLifeSupportingTreatmentTime
Data Type	time
Tag Group	ItdxRecord
Tag Usage	Optional



# **Antibiotic Therapy**

## Overview

Intravenous antibiotic therapy was administered to the patient within 24 hours after first hospital encounter.

NTDS Core	
Tag Name	AntibioticTherapy
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Optional

Field Values	1. Yes
	2. No



# **Antibiotic Therapy Date**

## Overview

The date of first recorded intravenous antibiotic therapy administered to the patient within 24 hours after first hospital encounter.

NTDS Core	
Tag Name	AntibioticTherapyDate
Data Type	date
Tag Group	ItdxRecord
Tag Usage	Optional



# **Antibiotic Therapy Time**

## Overview

The time of first recorded intravenous antibiotic therapy administered to the patient within 24 hours after first hospital encounter.

NTDS Core	
Tag Name	AntibioticTherapyTime
Data Type	time
Tag Group	ItdxRecord
Tag Usage	Optional



# ITDX Data Element Details – Surgeon Specific Reporting



# **National Provider Identifier (NPI)**

### **Overview**

The National Provider Identifier (NPI) of the admitting surgeon.

NTDS Core	
Tag Name	NationalProviderIdentifier
Data Type	string
Tag Group	ItdxRecord
Tag Usage	Optional



#### ITDX Data Element Details – ITDX Record Control Information



#### **Last Modified Date Time**

### **Overview**

The date/time that the ITDX source record was last modified in its Trauma Registry.

ITDX Extension	
Extension Rationale	Tracking field to allow for centralized deduplication of submitted records.
Tag Name	LastModifiedDateTime
Data Type	datetime
Tag Group	ItdxRecord
Tag Usage	Mandatory



#### **Patient Identifier**

### Overview

An identifier in the Trauma Registry that uniquely identifies the record - usually Trauma Number.

ITDX Extension	
<b>Extension Rationale</b>	Tracking field to allow for centralized deduplication of submitted records.
Tag Name	PatientId
Data Type	string
Tag Group	ItdxRecord
Tag Usage	Mandatory



# **Facility Identifier**

#### **Overview**

An identifier in the Trauma Registry that uniquely identifies the trauma facility based on the intended recipient of the data; typically, the facility id assigned by the target repository – e.g. NTDB ID for NTDB (TQIP®) submissions or the Trauma Cloud ID for submissions to the ASN Trauma Data Pool<sup>TM</sup>.

ITDX Extension	
<b>Extension Rationale</b>	Tracking field to allow for centralized deduplication of submitted records.
Tag Name	FacilityId
Data Type	string
Tag Group	ItdxRecord
Tag Usage	Mandatory



# **Record Linkage Type**

### Overview

The type of record referenced in the linked record; for example, Prehospital.

ITDX Extension	
Extension Rationale	Allows for the association of multiple standardized record linkages to a trauma patient record (such as EMS ePCR linkage, hospital interfacility transfer linkage, EMR linkage, Rehab linkage).
Tag Name	LinkageType
Data Type	integer
Tag Group	RecordLinkages (up to 10 times)
Tag Usage	Optional



# **Record Linkage State Identifier**

# Overview

NEMSIS v3 State ID for EMS linkage.

ITDX Extension	
Extension Rationale	Allows for system-wide ID assignments/schemes to be correlated to individual trauma records to support linkages of many types with other state/system registries.
Tag Name	LinkageStateId
Data Type	string
Tag Group	RecordLinkages (up to 10 times)
Tag Usage	Optional



# **Record Linkage Facility Identifier**

### Overview

NEMSIS v3 Agency Number for EMS linkage.

ITDX Extension	
Extension Rationale	Identification of the organization ID providing a data source linked to the trauma registry record (e.g. an EMS agency ID or hospital ID number).
Tag Name	LinkageFacilityId
Data Type	string
Tag Group	RecordLinkages (up to 10 times)
Tag Usage	Optional



# **Record Linkage Record Identifier**

### Overview

NEMSIS v3 Patient Care Report number for EMS linkage.

ITDX Extension	
Extension Rationale	Allows for the linking of the target record's unique identifier.
Tag Name	LinkageRecordId
Data Type	string
Tag Group	RecordLinkages (up to 10 times)
Tag Usage	Optional



#### **Record Linkage Global Key**

#### Overview

GUID or UUID which represents the document or recording being referenced. The ITDX has allowed for the collection of record identifiers such as an EMS UUID. This is done using the group of data elements (tags) named "RecordLinkages". An EMS UUID will have a "LinkageType" with a value of "1" for Prehospital, with the UUID in the element "LinkageGlobalKey".

ITDX Extension	
Extension Rationale	To support industry-wide immutable globally unique identifiers (GUIDs) initiatives to help support unambiguous data linkage to other centralized registries from submitted trauma registry records.
Tag Name	LinkageGlobalKey
Data Type	string
Tag Group	RecordLinkages (up to 10 times)
Tag Usage	Optional



#### **Software Vendor**

### Overview

Name of the software vendor providing the system in which the record was created.

ITDX Extension	
Extension Rationale	To assist central registries in interpreting nuances of data collection variations specific to a given vendor; and to have a way to categorize potential variations across sites that could indicate a product specific mapping or data collection issue in a given source system.
Tag Name	SoftwareVendor
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Optional

Field Values	0. Other
	1. Clinical Data Management
	2. Digital Innovation
	3. Image Trend
	4. Lancet Technology



# **Software Product**

### Overview

Name of the software product in which the record was created.

ITDX Extension	
Extension Rationale	To assist central registries in interpreting nuances of data collection variations specific to a given vendor's product; and to have a way to categorize potential variations across sites that could indicate a product specific mapping or data collection issue in a given source system.
Tag Name	SoftwareProduct
Data Type	integer
Tag Group	ItdxRecord
Tag Usage	Optional

Field Values	0. Other Vendor Product
	101. TraumaBase
	102. eTraumaBase
	201. V5
	202. CV4/CVW



03. NTRACS
04. Web Collector
01. Patient Registry
01. Trauma One
02. Trauma One Web
03. TEMIS



#### **Software Version**

### Overview

Overview

Version number of the software product in which the record was created.

ITDX Extension	
Extension Rationale	To assist central registries in interpreting nuances of data collection variations specific to a given vendor's product version; and to have a way to categorize potential variations across sites that could indicate a product specific mapping or data collection issue in a given source system.
Tag Name	SoftwareVersion
Data Type	string
Tag Group	ItdxRecord
Tag Usage	Optional



# ITDX Data Element Details – ITDX Explicit Negatives



### **Explicit Negatives - Element Type**

### Overview

The element type for which this explicit negative is being defined (e.g. complication, comorbidity).

ITDX Extension	
Extension Rationale	Allows for the unlimited future expansion of the explicit negative innovation for items such as complications, comorbidities, etc. This allows the continued collection of positive only selections to streamline registrar data entry and provide critical continuity for analytics and reporting. This is achieved by allowing a separate explicit negatives list to capture only the rare events of unknown and not applicable selections. This data is stored separately from the affirmative responses. Collecting the information this way avoids having to enter "no" values for items such as comorbidities and complications on every record. The Element Type provides the name of the data point to which the explicit negative fields are associated, such as comorbidity or complications.
Tag Name	ElementKey
Data Type	integer
Tag Group	ExplicitNegatives (up to 50 times)
Tag Usage	Optional

Field Values	1. Hospital Events
	2. Pre-existing Conditions



# **Explicit Negatives - Menu Value**

### Overview

The menu value for the element defined in the ElementKey.

ITDX Extension	
Extension Rationale	Elements with multiple values, such as comorbidity and complications, need a distinct menu value to which to associate the explicit negative value. These correspond to the menu value in the specific field. E.g. hospital events are based on the values in the hospital events list.
Tag Name	ValueKey
Data Type	integer
Tag Group	ExplicitNegatives (up to 50 times)
Tag Usage	Optional



# **Explicit Negative**

# Overview

The explicit menu value for the selected menu value. Usually one of No, N/A or Unknown.

ITDX Extension	
Extension Rationale	This is the explicit negative or null value to the associated element and menu value.
Tag Name	ExplicitNegative
Data Type	integer
Tag Group	ExplicitNegatives (up to 50 times)
Tag Usage	Optional

Field Values	2. No
--------------	-------



# ITDX Data Element Details – ITDX Explicit Timeliness



# **Explicit Timeliness - Element Type**

### **Overview**

The element type for which this explicit timeliness information is being defined (for example, height and weight).

ITDX Extension	
Extension Rationale	Allows for unlimited ability to associate timeliness and/or specific times to an underlying data point. This allows the underlying data point to be captured irrespective of timeliness, so local and centralized registries can consistently have access to the data regardless of any national rules requiring limited reporting. Allows for continued collection of patients' height/weight regardless of the timeliness and therefore supports analytics and computation of measures such as BMI for all patients in hospital and state registries. The Element Type provides the data point or element group to which the explicit timeliness values are associated, such as height, weight, or initial hospital vitals.
Tag Name	TimelinessKey
Data Type	integer
Tag Group	ExplicitTimeliness (up to 30 times)
Tag Usage	Optional

Field Values	1. Height
	2. Weight
	3. Initial Prehospital Vitals
	4. Initial ED Vitals



# **Explicit Timeliness - Date**

# Overview

The date the timeliness element was recorded.

ITDX Extension	
Extension Rationale	This is the explicit date associated with the element type data point or group.
Tag Name	EtDate
Data Type	date
Tag Group	ExplicitTimeliness (up to 30 times)
Tag Usage	Optional



# **Explicit Timeliness - Time**

# Overview

The time the timeliness element was recorded.

ITDX Extension	
Extension Rationale	This is the explicit time associated with the element type data point or group.
Tag Name	EtTime
Data Type	time
Tag Group	ExplicitTimeliness (up to 30 times)
Tag Usage	Optional



# **Explicit Timeliness**

### Overview

The explicit negative value for the selected timeliness element, usually one of: Yes, No, N/A or Unknown.

ITDX Extension	
Extension Rationale	This is the explicit timeliness grade (Yes/No) associated to the element type data point or group. Fields which have a corresponding explicit timeliness field are considered timely unless this field is explicitly answered as "No".
Tag Name	EtTimely
Data Type	integer
Tag Group	ExplicitTimeliness (up to 30 times)
Tag Usage	Optional

Field Values	2. No
--------------	-------



#### **Appendix A – Registry Best Practices**

#### **Explicit Timeliness**

The ITDX data standard does not require the use of the explicit timeliness fields; rather, they are designed to allow flexibility around data collection. Vital signs and other questions for which the timeliness questions apply should be considered timely unless the dates/times indicate that the information was not timely or the explicit timeliness fields are answered as "No". For example, if the height and/or weight is provided without any explicit timeliness designation, the value is to be considered timely.

#### **Explicit Negatives**

The ITDX data standard does not require the use of the explicit negative fields; rather, they are designed to allow flexibility around data collection. If Comorbidities and Hospital Events are not explicitly selected or answered with an explicit negative of "No" the assumption is that the comorbidity or hospital event did not occur and therefore a "No" will be transmitted. Explicit Negatives can also be used to indicate "Unknown" or "Not Applicable" for any Comorbidity or Hospital Event if needed and when required.



#### Appendix B - 2020->2021 Change Log

#### New Data Elements:

- Highest Activation (NTDS)
- Trauma Surgeon Arrival Date (NTDS)
- Trauma Surgeon Arrival Time (NTDS)
- UUID (NTDS)

#### **Other Changes:**

- Sex (NTDS)
  - o Added 3. Non-binary
- UUID
  - o NTDS added this element to their data dictionary but it is already a part of ITDX.



#### **Acknowledgements**

We would like to thank all the people involved in developing this protocol and for the efforts that went into producing this data dictionary:



John Bennett

Leon Bowman

**Kristine Crowe** 

Caroline Israel

Allen Johnson

Sean Leung

James Pou

**Jody Summers** 

**Rob Tewey** 

Matt Walker

Kathleen Yetter

We'd also like to thank the many additional individuals and organizations who have participated in ITDX workgroup calls.