



International  
Trauma Data Exchange

# DATA DICTIONARY

**RELEASE DATE**

AUGUST 2019

**VERSION**

2020-R1



## Table of Contents

|   |    |
|---|----|
| Table of Contents.....  | 1  |
| Revision History .....  | 8  |
| Preface .....   | 9  |
| ITDX Benefits.....  | 11 |
| ITDX Data Element Layers.....   | 13 |
| ITDX Data Dictionary Element List .....                                 | 15 |
| Demographics .....  | 15 |
| Injury Information.....   | 15 |
| Prehospital Information.....  | 16 |
| Emergency Department Information.....                                   | 17 |
| Hospital Procedure Information .....                                    | 18 |
| Diagnosis Information.....  | 18 |
| Injury Severity Information.....  | 18 |
| Outcome Information .....   | 18 |
| Financial Information.....  | 19 |
| Hospital Events.....  | 19 |
| Trauma Quality Improvement Program Measures for Processes of Care ..... | 19 |
| Surgeon Specific Reporting.....   | 20 |
| ITDX Record Control Information .....                                   | 20 |
| ITDX Explicit Negatives.....  | 21 |
| ITDX Explicit Timeliness.....   | 21 |
| ITDX Data Dictionary Extensions Summary .....                           | 22 |
| ITDX Data Dictionary Element Details.....                               | 25 |
| ITDX Data Element Details – Demographics .....                          | 26 |
| Patient's Home ZIP / Postal Code .....                                  | 27 |
| Patient's Home Country.....   | 28 |
| Patient's Home State .....  | 29 |
| Patient's Home County .....   | 30 |

|  |    |
|--|----|
| Patient's Home City.....                                 | 31 |
| Alternate Home Residence .....                           | 32 |
| Date of Birth.....                                       | 33 |
| Age .....  | 34 |
| Age Units.....   | 35 |
| Race.....  | 36 |
| Ethnicity .....  | 37 |
| Sex.....   | 38 |
| ITDX Data Element Details – Injury Information.....      | 39 |
| Injury Incident Date .....                               | 40 |
| Injury Incident Time .....                               | 41 |
| Work-Related .....                                       | 42 |
| Patient's Occupational Industry.....                     | 43 |
| Patient's Occupation.....                                | 45 |
| ICD-10 Primary External Cause Code .....                 | 47 |
| ICD-10 Place of Occurrence External Cause Code .....     | 48 |
| ICD-10 Additional External Cause Code .....              | 49 |
| Incident Location ZIP / Postal Code .....                | 50 |
| Incident Country .....                                   | 51 |
| Incident State .....                                     | 52 |
| Incident County.....                                     | 53 |
| Incident City .....                                      | 54 |
| Protective Devices.....                                  | 55 |
| Child Specific Restraint .....                           | 57 |
| Airbag Deployment .....                                  | 58 |
| Report of Physical Abuse .....                           | 59 |
| Investigation of Physical Abuse .....                    | 60 |
| Caregiver at Discharge .....                             | 61 |
| Trauma Type .....  | 62 |
| ITDX Data Element Details – Prehospital Information..... | 63 |
| EMS Dispatch Date.....                                   | 64 |

|   |    |
|---|----|
| EMS Dispatch Time .....   | 65 |
| EMS Unit Arrival Date at Scene or Transferring Facility .....     | 66 |
| EMS Unit Arrival Time at Scene or Transferring Facility .....     | 67 |
| EMS Unit Departure Date from Scene or Transferring Facility ..... | 68 |
| EMS Unit Departure Time from Scene or Transferring Facility ..... | 69 |
| Transport Mode .....  | 70 |
| Other Transport Mode.....   | 71 |
| Initial Field Systolic Blood Pressure .....                       | 72 |
| Initial Field Pulse Rate.....                                     | 73 |
| Initial Field Respiratory Rate.....                               | 74 |
| Initial Field Oxygen Saturation.....                              | 75 |
| Initial Field GCS - Eye.....                                      | 76 |
| Initial Field GCS - Verbal.....                                   | 77 |
| Initial Field GCS - Motor .....                                   | 78 |
| Initial Field GCS - Total .....                                   | 79 |
| Initial Field GCS 40 - Eye.....                                   | 80 |
| Initial Field GCS 40 - Verbal.....                                | 81 |
| Initial Field GCS 40 - Motor .....                                | 82 |
| Inter-Facility Transfer.....                                      | 83 |
| Trauma Center Criteria .....                                      | 84 |
| Vehicular, Pedestrian, Other Risk Injury .....                    | 86 |
| Prehospital Cardiac Arrest .....                                  | 88 |
| ITDX Data Element Details – Emergency Department Information..... | 89 |
| ED / Hospital Arrival Date .....                                  | 90 |
| ED / Hospital Arrival Time .....                                  | 91 |
| Initial ED / Hospital Systolic Blood Pressure .....               | 92 |
| Initial ED / Hospital Pulse Rate.....                             | 93 |
| Initial ED / Hospital Temperature .....                           | 94 |
| Initial ED / Hospital Respiratory Rate.....                       | 95 |
| Initial ED / Hospital Respiratory Assistance .....                | 96 |
| Initial ED / Hospital Oxygen Saturation.....                      | 97 |

|  |     |
|--|-----|
| Initial ED / Hospital Supplemental Oxygen .....                  | 98  |
| Initial ED / Hospital GCS - Eye .....                            | 99  |
| Initial ED / Hospital GCS - Verbal .....                         | 100 |
| Initial ED / Hospital GCS - Motor.....                           | 101 |
| Initial ED / Hospital GCS - Total.....                           | 102 |
| Initial ED / Hospital GCS Assessment Qualifiers.....             | 103 |
| Initial ED / Hospital GCS 40 - Eye .....                         | 104 |
| Initial ED / Hospital GCS 40 - Verbal.....                       | 105 |
| Initial ED / Hospital GCS 40 - Motor.....                        | 106 |
| Initial ED / Hospital Height.....                                | 107 |
| Initial ED / Hospital Weight.....                                | 108 |
| Drug Screen.....   | 109 |
| Alcohol Screen .....   | 111 |
| Alcohol Screen Results .....                                     | 112 |
| ED Discharge Disposition .....                                   | 113 |
| Trauma Team Involvement.....                                     | 115 |
| Signs of Life .....  | 116 |
| ED Discharge Orders Written Date .....                           | 117 |
| ED Discharge Orders Written Time .....                           | 118 |
| ED Discharge Physical Date.....                                  | 119 |
| ED Discharge Physical Time.....                                  | 120 |
| ITDX Data Element Details – Hospital Procedure Information ..... | 121 |
| ICD-10 Hospital Procedures .....                                 | 122 |
| Hospital Procedure Start Date .....                              | 123 |
| Hospital Procedure Start Time.....                               | 124 |
| ITDX Data Element Details – Diagnosis Information.....           | 125 |
| Comorbid Conditions .....  | 126 |
| ICD-10 Injury Diagnoses .....                                    | 128 |
| ITDX Data Element Details – Injury Severity Information .....    | 129 |
| AIS Predot Code .....  | 130 |
| AIS Severity .....   | 131 |

|   |     |
|---|-----|
| ISS Body Region.....  | 132 |
| AIS Version .....   | 133 |
| Locally Calculated ISS .....  | 134 |
| ITDX Data Element Details – Outcome Information .....   | 135 |
| Total ICU Length of Stay.....   | 136 |
| Total Ventilator Days .....   | 137 |
| Hospital Discharge Orders Written Date .....  | 138 |
| Hospital Discharge Orders Written Time .....  | 139 |
| Hospital Physical Discharge Date .....  | 140 |
| Hospital Physical Discharge Time.....   | 141 |
| Hospital Discharge Disposition .....  | 142 |
| ITDX Data Element Details – Financial Information .....   | 144 |
| Primary Method of Payment .....   | 145 |
| ITDX Data Element Details – Hospital Complications .....  | 146 |
| Hospital Events.....  | 147 |
| ITDX Data Element Details – Trauma Quality Improvement Program Measures for Processes of Care.. | 149 |
| Highest GCS Total.....  | 150 |
| Highest GCS Motor.....  | 151 |
| GCS Assessment Qualifier Component of Highest GCS Total .....                                   | 152 |
| Highest GCS 40 - Motor.....   | 153 |
| Initial ED / Hospital Pupillary Response .....  | 154 |
| Midline Shift.....  | 155 |
| Cerebral Monitor .....  | 156 |
| Cerebral Monitor Date.....  | 157 |
| Cerebral Monitor Time .....   | 158 |
| Venous Thromboembolism Prophylaxis Type .....   | 159 |
| Venous Thromboembolism Prophylaxis Date.....  | 160 |
| Venous Thromboembolism Prophylaxis Time .....   | 161 |
| Transfusion Blood (4 Hours) .....   | 162 |
| Whole Blood (4 Hours).....  | 163 |
| Transfusion Plasma (4 Hours) .....  | 164 |

|   |     |
|---|-----|
| Transfusion Platelets (4 Hours) .....                             | 165 |
| Cryoprecipitate (4 Hours).....                                    | 166 |
| Lowest ED / Hospital Systolic Blood Pressure.....                 | 167 |
| Angiography .....   | 168 |
| Embolization Site .....   | 169 |
| Angiography Date .....  | 170 |
| Angiography Time .....  | 171 |
| Surgery for Hemorrhage Control Type .....                         | 172 |
| Surgery for Hemorrhage Control Date.....                          | 174 |
| Surgery for Hemorrhage Control Time .....                         | 175 |
| Withdrawal of Life Supporting Treatment.....                      | 176 |
| Withdrawal of Life Supporting Treatment Date .....                | 177 |
| Withdrawal of Life Supporting Treatment Time.....                 | 178 |
| Antibiotic Therapy.....   | 179 |
| Antibiotic Therapy Date .....                                     | 180 |
| Antibiotic Therapy Time.....                                      | 181 |
| ITDX Data Element Details – Surgeon Specific Reporting.....       | 182 |
| National Provider Identifier (NPI) .....                          | 183 |
| ITDX Data Element Details – ITDX Record Control Information ..... | 184 |
| Last Modified Date Time.....                                      | 185 |
| Patient Identifier.....   | 186 |
| Facility Identifier .....   | 187 |
| Record Linkage Type .....   | 188 |
| Record Linkage State Identifier.....                              | 189 |
| Record Linkage Facility Identifier .....                          | 190 |
| Record Linkage Record Identifier.....                             | 191 |
| Record Linkage Global Key.....                                    | 192 |
| Software Vendor .....   | 193 |
| Software Product .....  | 194 |
| Software Version.....   | 196 |
| ITDX Data Element Details – ITDX Explicit Negatives.....          | 197 |

|   |     |
|---|-----|
| Explicit Negatives - Element Type .....                   | 198 |
| Explicit Negatives - Menu Value .....                     | 199 |
| Explicit Negative.....                                    | 200 |
| ITDX Data Element Details – ITDX Explicit Timeliness..... | 201 |
| Explicit Timeliness - Element Type.....                   | 202 |
| Explicit Timeliness - Date .....                          | 203 |
| Explicit Timeliness - Time .....                          | 204 |
| Explicit Timeliness.....                                  | 205 |
| Appendix A – Registry Best Practices.....                 | 206 |
| Appendix B – 2019->2020 Change Log .....                  | 207 |
| Acknowledgements.....                                     | 208 |

## Revision History

| Revision | Author          | Date        | Status and Description        |
|----------|-----------------|-------------|-------------------------------|
| 1        | Michelle Brazel | August 2019 | Initial Draft of ITDX 2020 DD |

## Preface

The underlying format of the International Trauma Data Exchange (ITDX) has been used as the industry technical data standard since 2009. From 2009-2017, that vendor-defined technical standard was utilized for the National Trauma Data Bank (NTDB) and the National Trauma Data Standard (NTDS) data dictionary (under a different name). In 2017, the Trauma Vendor Alliance (TVA) was formed to maintain the technical standard for continued industry use. At that time, the vendor technical format was re-branded as the ITDX. For 2019 the American College of Surgeons (ACS) has released a new NTDS dictionary and will require a new NTDS XML technical format for ACS TQIP® and NTDB data submissions. The ITDX was developed as a tool to help quality programs and Performance Improvement (PI) processes of all types thrive and allow continued support and integration between local registries and national programs such as ACS TQIP®. ITDX achieves this by providing an additional set of clinical data points that allow the registry solutions (implemented at hospitals, states, regions, and health systems) to align with new national standards through the use of a converter. The national standards are designed to support specific quality improvement program objectives. As such, it is important for organizations like ACS to establish specific clinical and technical reporting guidelines for how data is submitted to its databases. That is a key role of the NTDS XML. The ITDX, in contrast, focuses on the technical transmission standards by which data should be collected in a trauma registry and exchanged between hospital, state, regional, and health system registries. Both standards are vitally important as they serve specific purposes with distinct goals.

So, is ITDX an alternative to NTDS? Absolutely not! ITDX and NTDS are both important standards that serve different purposes. The ITDX works *with* NTDS to connect registries to ACS's quality programs, while at the same time allowing the registries to go in their own directions and remain fully aligned with evolving national standards. The ITDX functions with NTDS much in the way a shock absorber functions in an automobile. The ITDX smooths out the clinical bumps in the road as national standards evolve and allows a smooth and continuous implementation of trauma registry systems. In many examples, the clinical data collection practices need not ever change when using ITDX. One of the ways the ITDX achieves this "magic" is by adding helper fields that allow existing data points to retain their operational definitions. By designing trauma registry systems in this fashion, local analysis and PI are enhanced, and registrar productivity is not impacted for existing data capture.

A concrete example of this continuity in data collection was in 2017 when the ACS modified its operational definition for hospital discharge date and time and ED discharge date and time to stipulate that it should now be the order date and time. NTDS achieved this for its purposes by simply providing a new definition to the existing data point. Since the NTDS is a "year by year" standard, this presented no problem and was an expedient mechanism for that purpose. However, the ITDX is a "continuous" standard, meaning that operational definitions must remain consistent over time. The ITDX preserves the original, highly used definition of the prior hospital and ED discharge dates and times by being the actual, physical departure. To meet this particular change of the NTDS, the ITDX simply enhanced its data set to include a new set of data points to transmit the order date and time in addition to the physical date and time. This allows trauma registrars and hospital, state, and system registries to continue to collect physical discharge dates and times as they always have and gives them additional

data points to collect the order date and time. Both data points provide important but different metrics on length of stay and resource utilization; for example, it is interesting to compare physical length of stay with ordered length of stay and to have each independently for analysis. When data is transmitted between state, regional, or health system registries, both sets of data are available as desired when using ITDX. But when the same data is prepared for submission to ACS, it is simply converted so the order date and time is placed in the proper fields.

Another example are elements as basic as height and weight. In ITDX, these data points are universally collected, allowing for important calculations such as Body Mass Index to be computed for all patients, then transmitted and aggregated at state and regional levels regardless of the time the information was collected. Most patients' heights and weights do not vary substantially after 24 hours of admission. However, the TVA recognizes that the timeliness of data capture in these areas is important information for benchmarking and risk-adjusted analysis across multiple facilities. Accordingly, the National Trauma Data Standard requires concealing of this data (by using an N/A value) if the information was collected more than 24 hours after admission. The ITDX achieves this requirement via the addition of fields that describe the timeliness of certain data points. We refer to this innovation as "explicit timeliness." This allows a technical area for trauma registry vendors to communicate the timeliness of data elements such as height and weight. In this manner, height and weight can always be collected at hospital, state, and regional system registries when using ITDX, yet is readily presentable to ACS with the required data concealment rules and compliance with ACS clinical standards. Though simple, the height and weight fields are a tremendous example of how ITDX and NTDS work together to allow for a full range of data collection, uninterrupted by ever-changing national requirements.

Each year, the TVA enhances the ITDX so that the exact technical and clinical requirements for ACS TQIP® and NTDB can be met. However, the ITDX does not merely adopt the clinical definitions "as is." There are many reasons for this which are explained throughout this manual, but ultimately, each extension that ITDX brings to the table does one or more of the following:

- Allows greater clinical data detail capture at local, regional, state, and health system levels.
- Allows the collection of data points on all patients without the burden or data loss associated with null value rules. (Data masking only occurs at the time of final data submission to ACS quality programs).
- Provides time-saving features that allow registrars to enter data in the most efficient manner possible and compile it into the final technical formats required for compliance.
- Allows states and their stakeholders to have full autonomy to implement data exchange solutions with zero dependency on ACS technical formats.
- Ensures data continuity and backwards compatibility (meaning that queries and reports are not "broken" by operational definition changes year to year).

For many of the same reasons and benefits ITDX provides a technical buffer, it can provide a cost buffer—especially to hospitals and health systems of all sizes. It is always less expensive, both in terms of labor and software systems, to minimize change and maximize continuity. The more national standards that can be addressed through a converter, the more an organization is insulated from potential cost impacts of evolving national standards. This is a key benefit of ITDX. Looking beyond national compliance, the benefits of ITDX are even greater by using it directly to exchange data.

## ITDX Benefits

**What is ITDX?** - A free data standard that provides 100% harmonization with ACS clinical requirements. Beginning in 2019, ITDX was included in all Windows and web-based trauma registry products of leading hospital trauma registry vendors such as Clinical Data Management (CDM), Digital Innovation (DI), and Lancet Technology.

As illustrated below and summarized on the following page ITDX provides benefits to hospitals, regions, health systems, and states.



**Benefits to Hospitals** - The ITDX allows registrars to maintain current data entry practices for fields such as Height and Weight, Physical ED and Hospital Discharge Date/Time, Complications, and Comorbidities. Registrars need only complete a small number of additional "helper fields" that are carefully designed to



provide a 100% lossless conversion for ACS TQIP® and NTDB data submission. This provides the best of all worlds - efficient data entry practices while meeting national and state compliance initiatives.

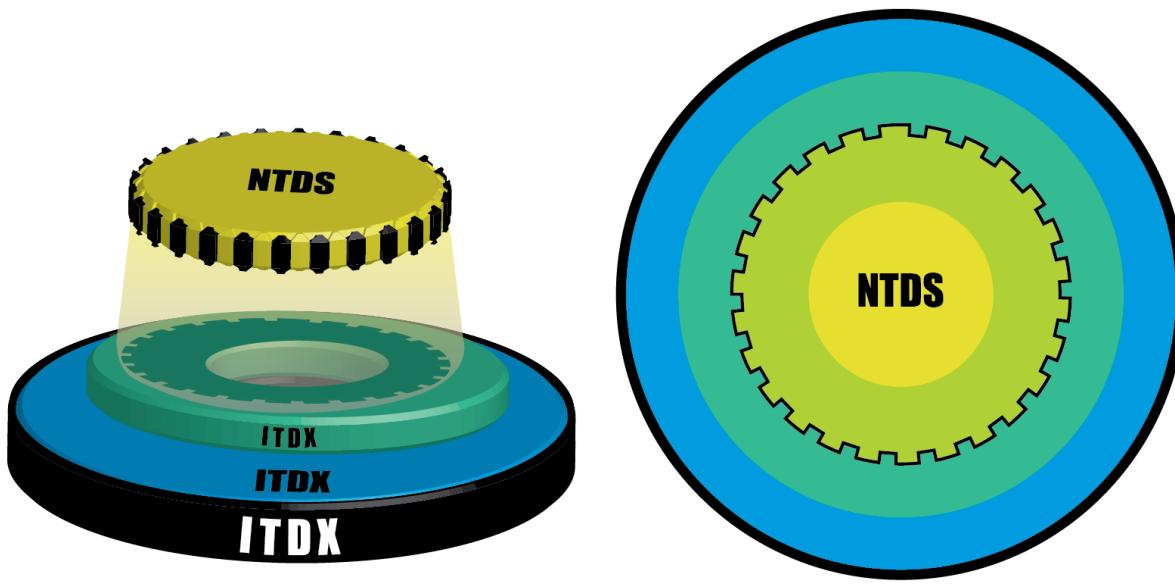
**Benefits to Regions and Health Systems** - The ITDX establishes a "common language" for regional trauma care systems and health care systems that can be supported by all member facilities, going above and beyond national data standard definitions and providing efficient and well-designed clinical and technical data definitions for a higher degree of analysis, system-wide performance improvement, and resource utilization/performance.

**Benefits to States** - Because the ITDX is already inside the majority of trauma registry applications that upload data to state systems, a state's adoption of ITDX eliminates multiple mapping and implementation steps for data submission to the state, saving both time and money. The integration of ITDX as the foundation for a state data dictionary ensures the state will remain 100% harmonized with ACS clinical definitions without creating a dependency on ACS technical standards. Moreover, the ITDX provides extensions so state databases can retain longitudinal data consistency across years and avoid masking the collection of useful data points.

## ITDX Data Element Layers

The ITDX National Data Standard is based on an innovative approach that builds upon and extends beyond the meaning and functionality of standard data definitions. ITDX utilizes a tiered methodology as depicted by the colored key in the following diagram. We refer to this enhanced data specificity as "Clinical High-Def".

### Clinical High-Def Data Layers *for National Compliance with ITDX Inside*



- NTDS Aligned Fields
- ITDX NTDS Continuity Fields
- ITDX NTDS Harmonization Extensions
- ITDX Industry Wide Extensions

Copyright © 2018 Trauma Vendor Alliance. All Rights Reserved.

ITDX is comprised of multiple layers that serve different purposes:

1. At the core of ITDX is the priority to always remain 100% harmonized with NTDS clinical requirements, referred to as **NTDS Aligned Fields** (yellow ring).
2. ITDX also provides a mechanism to maintain certain data points for which definitions have changed or been modified over time, allowing for the ability to retain all prior and new definitions. These are referred to as **ITDX NTDS Continuity Fields** (lime green ring). This is critical for consistency in data collection, reporting, and analysis and provides a higher degree of backwards compatibility. A primary example of this is maintaining flexibility to collect both ED



and Hospital Discharge Dates and Times as they apply to the order discharge date/time and physical discharge date/time fields.

3. **ITDX NTDS Harmonization Extensions** are "helper fields" that provide information to ITDX to remain 100% harmonized with the NTDS year-specific clinical requirements (green-blue ring). These extensions allow data to be collected regardless of timeliness (ex. Vital Signs) but provide the information required to ensure proper conversion to the NTDS data definitions.
4. **ITDX Industry Wide Extensions** are standard field additions that allow for consistency of definitions on a national basis across multiple state and health system databases (blue ring). While these data points are outside the scope of national compliance, they provide important infrastructure to drive future initiatives that support local performance improvement, systems evaluation, and PI collaboratives.

ITDX is advancing the technical foundation for the trauma industry through this layered model - paving the way for the future. ITDX provides a path to efficiently implement state, regional, and system data collection initiatives that always remains aligned clinically with NTDS but can easily expand to meet local needs and PI objectives that cannot be supported by national standards alone. The ability to help impact patient care, outcomes, and analytics is perhaps the most exciting influence that ITDX has to offer.

**Disclaimer:** The ITDX is a technical data submission format. Transmission policies of data, including whether such transmissions are in the ITDX technical format or any other technical format, are outside the scope of this document. Users must fully comply with the laws and regulations applicable under all appropriate jurisdictions, including those inside or outside of the United States.

## ITDX Data Dictionary Element List

This table is a listing of all 2020 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 Code             | PrimaryECodeICD10            | NTDS               |
| ICD-10 Place of Occurrence External Cause Code | PlaceOfInjuryCode            | NTDS               |
| ICD-10 Additional External Cause Code          | AdditionalECodeICD10         | NTDS               |
| Incident Location ZIP / Postal Code            | InjuryZip                    | NTDS               |
| 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 |
| <i>Report of Physical Abuse</i>        | AbuseReport            | ITDX |
| <i>Investigation of Physical Abuse</i> | AbuseInvestigation     | ITDX |
| <i>Caregiver at Discharge</i>          | CaregiverAtDischarge   | ITDX |
| <i>Trauma Type</i>                     | TraumaType             | ITDX |

## Prehospital Information

| Field Name  | Tag Name                 | Technical Standard |
|---|--------------------------|--------------------|
| EMS Dispatch Date   | EmsNotifyDate            | NTDS               |
| EMS Dispatch Time   | EmsNotifyTime            | NTDS               |
| EMS Unit Arrival Date at Scene or Transferring Facility     | EmsArrivalDate           | NTDS               |
| EMS Unit Arrival Time at Scene or Transferring Facility     | EmsArrivalTime           | NTDS               |
| EMS Unit Departure Date from Scene or Transferring Facility | EmsLeftDate              | NTDS               |
| EMS Unit Departure Time from Scene or Transferring Facility | EmsLeftTime              | NTDS               |
| Transport Mode  | TransportMode            | NTDS               |
| Other Transport Mode  | OtherTransportMode       | NTDS               |
| Initial Field Systolic Blood Pressure                       | EmsSbp                   | NTDS               |
| 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                    | VehicularPedestrianOther | NTDS               |
| Prehospital Cardiac Arrest                                  | PrehospitalCardiacArrest | NTDS               |

## Emergency Department Information

| Field Name                                      | Tag Name                     | Technical Standard |
|---|------------------------------|--------------------|
| 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               |
| <i>Initial ED / Hospital Height</i>             | Height                       | ITDX               |
| <i>Initial ED / Hospital Weight</i>             | Weight                       | ITDX               |
| Drug Screen                                     | DrugScreen                   | NTDS               |
| Alcohol Screen                                  | AlcoholScreen                | NTDS               |
| Alcohol Screen Results                          | AlcoholScreenResult          | NTDS               |
| ED Discharge Disposition                        | EDDischargeDisposition       | NTDS               |
| <i>Trauma Team Involvement</i>                  | TraumaTeamInvolvement        | ITDX               |
| <i>Signs of Life</i>                            | DeathInED                    | ITDX               |
| ED Discharge Orders Written Date                | EDDischargeOrdersWrittenDate | NTDS               |
| ED Discharge Orders Written Time                | EDDischargeOrdersWrittenTime | NTDS               |
| <i>ED Discharge Physical Date</i>               | EDDischargePhysicalDate      | ITDX               |
| <i>ED Discharge Physical Time</i>               | EDDischargePhysicalTime      | ITDX               |

## 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 | NTDS               |
| ICD-10 Injury Diagnoses | DiagnosisICD10    | NTDS               |

## Injury Severity Information

| Field Name                    | Tag Name      | Technical Standard |
|-------------------------------|---------------|--------------------|
| AIS Predot Code               | AisPredot     | NTDS               |
| AIS Severity                  | AisSeverity   | NTDS               |
| <i>ISS Body Region</i>        | IssRegion     | ITDX               |
| AIS Version                   | AisVersion    | NTDS               |
| <i>Locally Calculated ISS</i> | IssCalculated | ITDX               |

## Outcome Information

| Field Name                              | Tag Name                           | Technical Standard |
|---|------------------------------------|--------------------|
| Total ICU Length of Stay                | TotalIcuLos                        | NTDS               |
| Total Ventilator Days                   | TotalVentDays                      | NTDS               |
| Hospital Discharge Orders Written Date  | HospitalDischargeOrdersWrittenDate | NTDS               |
| Hospital Discharge Orders Written Time  | HospitalDischargeOrdersWrittenTime | NTDS               |
| <i>Hospital Physical Discharge Date</i> | HospitalPhysicalDischargeDate      | ITDX               |
| <i>Hospital Physical Discharge Time</i> | 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 | NTDS               |

## 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  | NTDS               |
| Whole Blood (4 Hours)                                   | WholeBlood4Hours        | NTDS               |
| Transfusion Plasma (4 Hours)                            | TransfusionPlasma4Hours | NTDS               |

|  |   |      |
|--|---|------|
| Transfusion Platelets (4 Hours)              | TransfusionPlatelets4Hours              | NTDS |
| 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            | LastModifiedDate  | 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               |

|   |                  |      |
|---|------------------|------|
| <i>Record Linkage Record Identifier</i> | LinkageRecordId  | ITDX |
| <i>Record Linkage Global Key</i>        | LinkageGlobalKey | ITDX |
| <i>Software Vendor</i>                  | SoftwareVendor   | ITDX |
| <i>Software Product</i>                 | SoftwareProduct  | ITDX |
| <i>Software Version</i>                 | SoftwareVersion  | ITDX |

## ITDX Explicit Negatives

| Field Name                               | Tag Name         | Technical Standard |
|--|------------------|--------------------|
| <i>Explicit Negatives - Element Type</i> | ElementKey       | ITDX               |
| <i>Explicit Negatives - Menu Value</i>   | ValueKey         | ITDX               |
| <i>Explicit Negative</i>                 | ExplicitNegative | ITDX               |

## ITDX Explicit Timeliness

| Field Name                                | Tag Name      | Technical Standard |
|---|---------------|--------------------|
| <i>Explicit Timeliness - Element Type</i> | TimelinessKey | ITDX               |
| <i>Explicit Timeliness - Date</i>         | EtDate        | ITDX               |
| <i>Explicit Timeliness - Time</i>         | EtTime        | ITDX               |
| <i>Explicit Timeliness</i>                | 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   |
|--|---|
| <i>Report of Physical Abuse</i>        | 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.   |
| <i>Investigation of Physical Abuse</i> | 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.  |
| <i>Caregiver at Discharge</i>          | 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.   |
| <i>Trauma Type</i>                     | 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.  |
| <i>Initial ED / Hospital Height</i>    | To allow patient's height to be collected regardless of the timeliness in which it was collected.   |
| <i>Initial ED / Hospital Weight</i>    | To allow patient's weight to be collected regardless of the timeliness in which it was collected.   |
| <i>Trauma Team Involvement</i>         | 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. This field is intended to help determine inclusion criteria based on the expanded national inclusion definition. |
| <i>Signs of Life</i>                   | 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.  |
| <i>ED Discharge Physical Date</i>      | 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.  |
| <i>ED Discharge Physical Time</i>      | 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.  |
| <i>ISS Body Region</i>                 | 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.  |
| <i>Locally Calculated ISS</i>             | 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.                                  |
| <i>Hospital Physical Discharge Date</i>   | 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.   |
| <i>Hospital Physical Discharge Time</i>   | 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.   |
| <i>Last Modified Date Time</i>            | Tracking field to allow for centralized deduplication of submitted records.  |
| <i>Patient Identifier</i>                 | Tracking field to allow for centralized deduplication of submitted records.  |
| <i>Facility Identifier</i>                | Tracking field to allow for centralized deduplication of submitted records.  |
| <i>Record Linkage Type</i>                | 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).  |
| <i>Record Linkage State Identifier</i>    | 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.  |
| <i>Record Linkage Facility Identifier</i> | 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).  |
| <i>Record Linkage Record Identifier</i>   | Allows for the linking of the target record's unique identifier.   |
| <i>Record Linkage Global Key</i>          | 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.  |
| <i>Software Vendor</i>                    | 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. |
| <i>Software Product</i>                   | 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.   |
| <i>Software Version</i>                   | 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.  |
| <i>Explicit Negatives - Element Type</i>  | 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. |
| <i>Explicit Negatives - Menu Value</i>    | Elements with multiple values, such as comorbidity and complications, need a distinct menu value to which to associate the explicit negative value.   |
| <i>Explicit Negative</i>                  | This is the explicit negative or null value to the associated element and menu value.   |
| <i>Explicit Timeliness - Element Type</i> | 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.   |
| <i>Explicit Timeliness - Date</i>         | This is the explicit date associated with the element type data point or group.   |
| <i>Explicit Timeliness - Time</i>         | This is the explicit time associated with the element type data point or group.   |
| <i>Explicit Timeliness</i>                | 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

#### *Additional Information*

- 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 | ltdxRecord |
| 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 |



## 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 | ItidxRecord  |
| 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  | PrimaryECodeICD10 |
| 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  | AdditionalECodeICD10            |
| 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           | ItidxRecord  |
| 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           | ltdxRecord   |
| 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           | ItidxRecord  |
| 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 | ItidxRecord   |
| 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                          |

## 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<br>2. Inconsolable, Agitated<br>3. Inconsistently Consolable, Moaning<br>4. Cries but is Consolable, Inappropriate Interactions<br>5. Smiles, Oriented to Sounds, Follows Objects, Interacts |
| Adult                               | 1. No Verbal Response<br>2. Incomprehensible Sounds<br>3. Inappropriate Words<br>4. Confused<br>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 | ItidxRecord |
| Tag Usage | Mandatory   |

|                                     |   |
|-------------------------------------|---|
| Field Values Pediatric (<= 2 years) | 1. No Motor Response<br>2. Extension to Pain<br>3. Flexion to Pain<br>4. Withdrawal from Pain<br>5. Localizing Pain<br>6. Appropriate Response to Stimulation |
| Adult                               | 1. No Motor Response<br>2. Extension to Pain<br>3. Flexion to Pain<br>4. Withdrawal from Pain<br>5. Localizing Pain<br>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 | ItidxRecord |
| 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<br>2. To Pain<br>3. To Sounds<br>4. Spontaneous<br>0. Not Testable     |
| Adult                            | 1. None<br>2. To Pressure<br>3. To Sounds<br>4. Spontaneous<br>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 | ItidxRecord    |
| Tag Usage | Mandatory      |

---

|                                  |  |
|----------------------------------|--|
| Field Values Pediatric < 5 years | 1. None<br>2. Cries<br>3. Vocal Sounds<br>4. Words<br>5. Talks Normally<br>0. Not Testable |
| Adult                            | 1. None<br>2. Sounds<br>3. Words<br>4. Confused<br>5. Oriented<br>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 | ltdxRecord    |
| Tag Usage | Mandatory     |

---

|                                  |  |
|----------------------------------|--|
| Field Values Pediatric < 5 years | 1. None<br>2. Extension to Pain<br>3. Flexion to Pain<br>4. Localizes Pain<br>5. Obeys Commands<br>0. Not Testable           |
| Adult                            | 1. None<br>2. Extension<br>3. Abnormal Flexion<br>4. Normal Flexion<br>5. Localizing<br>6. Obeys Commands<br>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  | VehicularPedestrianOther                   |
| Data Type | integer                                    |
| Tag Group | VehicularPedestrianOthers (up to 14 times) |
| Tag Usage | Mandatory                                  |

---

|              |  |
|--------------|--|
| Field Values | <ol style="list-style-type: none"><li>1. Fall Adults: &gt; 20 ft. (One Story is Equal to 10 ft.)</li><li>2. Fall Children: &gt; 10 ft. or 2-3 Times the Height of the Child</li><li>3. Crash Intrusion, Including Roof: &gt; 12 in. Occupant Site; &gt; 18 in. Any Site</li><li>4. Crash Ejection (Partial or Complete) from Automobile</li><li>5. Crash Death in Same Passenger Compartment</li><li>6. Crash Vehicle Telemetry Data (AACN) Consistent with High Risk Injury</li></ol> |
|--------------|--|

---

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

## ED / Hospital Arrival Date

### Overview

The date the patient arrived to the ED/hospital.

---

| NTDS Core |                     |
|-----------|---------------------|
| Tag Name  | HospitalArrivalDate |
| Data Type | date                |
| Tag Group | ItidxRecord         |
| 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<br>2. Inconsolable, Agitated<br>3. Inconsistently Consolable, Moaning<br>4. Cries but is Consolable, Inappropriate Interactions<br>5. Smiles, Oriented to Sounds, Follows Objects, Interacts |
| Adult                               | 1. No Verbal Response<br>2. Incomprehensible Sounds<br>3. Inappropriate Words<br>4. Confused<br>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<br>2. Extension to Pain<br>3. Flexion to Pain<br>4. Withdrawal from Pain<br>5. Localizing Pain<br>6. Appropriate Response to Stimulation |
| Adult                               | 1. No Motor Response<br>2. Extension to Pain<br>3. Flexion to Pain<br>4. Withdrawal from Pain<br>5. Localizing Pain<br>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 | <ol style="list-style-type: none"><li>1. Patient Chemically Sedated or Paralyzed</li><li>2. Obstruction to the Patient's Eye</li><li>3. Patient Intubated</li><li>4. Valid GCS: Patient Not Sedated, Not Intubated, and Did Not Have Obstruction to Eye</li></ol> |
|--------------|---|

## 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<br>2. To Pain<br>3. To Sounds<br>4. Spontaneous<br>0. Not Testable     |
| Adult                            | 1. None<br>2. To Pressure<br>3. To Sounds<br>4. Spontaneous<br>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<br>2. Cries<br>3. Vocal Sounds<br>4. Words<br>5. Talks Normally<br>0. Not Testable |
| Adult                            | 1. None<br>2. Sounds<br>3. Words<br>4. Confused<br>5. Oriented<br>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 | ltdxRecord |
| Tag Usage | Mandatory  |

|                                  |  |
|----------------------------------|--|
| Field Values Pediatric < 5 years | 1. None<br>2. Extension to Pain<br>3. Flexion to Pain<br>4. Localizes Pain<br>5. Obeys Commands<br>0. Not Testable           |
| Adult                            | 1. None<br>2. Extension<br>3. Abnormal Flexion<br>4. Normal Flexion<br>5. Localizing<br>6. Obeys Commands<br>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. |
| <b>Tag Name</b>            | Height   |
| <b>Data Type</b>           | decimal  |
| <b>Tag Group</b>           | ItidxRecord  |
| <b>Tag Usage</b>           | Mandatory  |

---

## Initial ED / Hospital Weight

### Overview

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

| ITDX Extension             |  |
|----------------------------|--|
| <b>Extension Rationale</b> | To allow patient's weight to be collected regardless of the time it was collected. |
| <b>Tag Name</b>            | Weight   |
| <b>Data Type</b>           | decimal  |
| <b>Tag Group</b>           | ItidxRecord  |
| <b>Tag Usage</b>           | 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)<br>2. BAR (Barbiturate)<br>3. BZO (Benzodiazepines)<br>4. COC (Cocaine)<br>5. mAMP (Methamphetamine)<br>6. MDMA (Ecstasy)<br>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 | ltdxRecord             |
| 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 may be used in determining inclusion criteria for the patient record. |
| Tag Name            | TraumaTeamInvolvement  |
| Data Type           | integer  |
| Tag Group           | ItidxRecord  |
| 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           | ItidxRecord   |
| Tag Usage           | Optional  |

---

|              |  |
|--------------|--|
| Field Values | <ol style="list-style-type: none"><li>1. Arrived with NO Signs of Life</li><li>2. Arrived with Signs of Life</li></ol> |
|--------------|--|

## 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             |   |
|----------------------------|---|
| <b>Extension Rationale</b> | 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. |
| <b>Tag Name</b>            | EDDischargePhysicalDate   |
| <b>Data Type</b>           | date  |
| <b>Tag Group</b>           | ItidxRecord   |
| <b>Tag Usage</b>           | Mandatory   |

## ED Discharge Physical Time

### Overview

The time the patient was physically discharged from the ED.

| ITDX Extension             |   |
|----------------------------|---|
| <b>Extension Rationale</b> | 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. |
| <b>Tag Name</b>            | EDDischargePhysicalTime   |
| <b>Data Type</b>           | time  |
| <b>Tag Group</b>           | ItidxRecord   |
| <b>Tag Usage</b>           | 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             |   |
|----------------------------|---|
| <b>Extension Rationale</b> | 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. |
| <b>Tag Name</b>            | IssRegion   |
| <b>Data Type</b>           | integer   |
| <b>Tag Group</b>           | AisCodes (up to 50 times)   |
| <b>Tag Usage</b>           | Mandatory   |

|                     |                                 |
|---------------------|---------------------------------|
| <b>Field Values</b> | 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 | ItidxRecord |
| 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             |   |
|----------------------------|---|
| <b>Extension Rationale</b> | 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. |
| <b>Tag Name</b>            | IssCalculated   |
| <b>Data Type</b>           | integer   |
| <b>Tag Group</b>           | ItidxRecord   |
| <b>Tag Usage</b>           | 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  | TotalICULos |
| 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 | ltdxRecord    |
| 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  | HospitalDischargeOrdersWrittenDate |
| 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             |   |
|----------------------------|---|
| <b>Extension Rationale</b> | 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. |
| <b>Tag Name</b>            | HospitalPhysicalDischargeDate   |
| <b>Data Type</b>           | date  |
| <b>Tag Group</b>           | ItidxRecord   |
| <b>Tag Usage</b>           | Mandatory   |

---

## Hospital Physical Discharge Time

### Overview

The time the patient was physically discharged from the hospital.

---

| ITDX Extension             |   |
|----------------------------|---|
| <b>Extension Rationale</b> | 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. |
| <b>Tag Name</b>            | HospitalPhysicalDischargeTime   |
| <b>Data Type</b>           | time  |
| <b>Tag Group</b>           | ItidxRecord   |
| <b>Tag Usage</b>           | 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 | <ol style="list-style-type: none"><li>1. Discharged/Transferred to a Short-Term General Hospital for Inpatient Care</li><li>2. Discharged/Transferred to an Intermediate Care Facility (ICF)</li><li>3. Discharged/Transferred to Home Under Care of Organized Home Health Service</li><li>4. Left Against Medical Advice or Discontinued Care</li><li>5. Deceased/Expired</li><li>6. Discharged to Home or Self-Care (Routine Discharge)</li><li>7. Discharged/Transferred to Skilled Nursing Facility (SNF)</li></ol> |
|--------------|---|

- 
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 | ItidxRecord          |
| 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 | ItidxRecord        |
| 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<br>2. Extension to Pain<br>3. Flexion to Pain<br>4. Withdrawal from Pain<br>5. Localizing Pain<br>6. Appropriate Response to Stimulation |
| Adult                               | 1. No Motor Response<br>2. Extension to Pain<br>3. Flexion to Pain<br>4. Withdrawal from Pain<br>5. Localizing Pain<br>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 | 1. 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 | ltdxRecord    |
| Tag Usage | Optional      |

---

|                                  |  |
|----------------------------------|--|
| Field Values Pediatric < 5 years | 1. None<br>2. Extension to Pain<br>3. Flexion to Pain<br>4. Localizes Pain<br>5. Obeys commands<br>0. Not Testable           |
| Adult                            | 1. None<br>2. Extension<br>3. Abnormal flexion<br>4. Normal flexion<br>5. Localizing<br>6. Obeys commands<br>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 | <ol style="list-style-type: none"><li>1. Intraventricular Drain/Catheter (E.g. Ventriculostomy, External Ventricular Drain)</li><li>2. Intraparenchymal Pressure Monitor (E.g. Camino Bolt, Subarachnoid Bolt, Intraparenchymal Catheter)</li><li>3. Intraparenchymal Oxygen Monitor (E.g. Licox)</li><li>4. Jugular Venous Bulb</li><li>5. None</li></ol> |
|--------------|--|

## 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        |                  |
|------------------|------------------|
| <b>Tag Name</b>  | WholeBlood4Hours |
| <b>Data Type</b> | integer          |
| <b>Tag Group</b> | ltdxRecord       |
| <b>Tag Usage</b> | Optional         |

---

## Transfusion Plasma (4 Hours)

### Overview

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

---

| NTDS Core |                         |
|-----------|-------------------------|
| Tag Name  | TransfusionPlasma4Hours |
| Data Type | integer                 |
| Tag Group | ltdxRecord              |
| Tag Usage | Optional                |

---

## Transfusion Platelets (4 Hours)

### Overview

Volume of platelets (units or CCs) 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 (units or CCs) 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 | ltdxRecord  |
| 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 | ItidxRecord                |
| 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           | ItidxRecord   |
| Tag Usage           | Mandatory   |

---

## Patient Identifier

### Overview

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

---

| ITDX Extension      |   |
|---------------------|---|
| Extension Rationale | Tracking field to allow for centralized deduplication of submitted records. |
| Tag Name            | PatientId   |
| Data Type           | string  |
| Tag Group           | ItidxRecord   |
| 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™.

---

| ITDX Extension      |   |
|---------------------|---|
| Extension Rationale | Tracking field to allow for centralized deduplication of submitted records. |
| Tag Name            | FacilityId  |
| Data Type           | string  |
| Tag Group           | ItidxRecord   |
| 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             |   |
|----------------------------|---|
| <b>Extension Rationale</b> | 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. |
| <b>Tag Name</b>            | LinkageStateId  |
| <b>Data Type</b>           | string  |
| <b>Tag Group</b>           | RecordLinkages (up to 10 times)   |
| <b>Tag Usage</b>           | Optional  |

---

## Record Linkage Facility Identifier

### Overview

NEMSIS v3 Agency Number for EMS linkage.

| ITDX Extension             |   |
|----------------------------|---|
| <b>Extension Rationale</b> | 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). |
| <b>Tag Name</b>            | LinkageFacilityId   |
| <b>Data Type</b>           | string  |
| <b>Tag Group</b>           | RecordLinkages (up to 10 times)   |
| <b>Tag Usage</b>           | Optional  |

## Record Linkage Record Identifier

### Overview

NEMSIS v3 Patient Care Report number for EMS linkage.

---

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

---

## Record Linkage Global Key

### Overview

GUID or UUID which represents the document or recording being referenced.

---

| ITDX Extension             |   |
|----------------------------|---|
| <b>Extension Rationale</b> | 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. |
| <b>Tag Name</b>            | LinkageGlobalKey  |
| <b>Data Type</b>           | string  |
| <b>Tag Group</b>           | RecordLinkages (up to 10 times)   |
| <b>Tag Usage</b>           | Optional  |

---

## Software Vendor

### Overview

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

---

| ITDX Extension             |  |
|----------------------------|--|
| <b>Extension Rationale</b> | 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. |
| <b>Tag Name</b>            | SoftwareVendor   |
| <b>Data Type</b>           | integer  |
| <b>Tag Group</b>           | ItidxRecord  |
| <b>Tag Usage</b>           | Optional   |

---

|                     |                             |
|---------------------|-----------------------------|
| <b>Field Values</b> | 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             |  |
|----------------------------|--|
| <b>Extension Rationale</b> | 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. |
| <b>Tag Name</b>            | SoftwareProduct  |
| <b>Data Type</b>           | integer  |
| <b>Tag Group</b>           | ItidxRecord  |
| <b>Tag Usage</b>           | Optional   |

---

|                     |                         |
|---------------------|-------------------------|
| <b>Field Values</b> | 0. Other Vendor Product |
|                     | 101. TraumaBase         |
|                     | 102. eTraumaBase        |
|                     | 201. V5                 |
|                     | 202. CV4/CVW            |

---

203. NTRACS

---

204. Web Collector

---

301. Patient Registry

---

401. Trauma One

---

402. Trauma One Web

---

403. TEMIS

---

## Software Version

### Overview

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

---

| ITDX Extension             |  |
|----------------------------|--|
| <b>Extension Rationale</b> | 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. |
| <b>Tag Name</b>            | SoftwareVersion  |
| <b>Data Type</b>           | string   |
| <b>Tag Group</b>           | ItdxRecord   |
| <b>Tag Usage</b>           | 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             |   |
|----------------------------|---|
| <b>Extension Rationale</b> | 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. |
| <b>Tag Name</b>            | ElementKey  |
| <b>Data Type</b>           | integer   |
| <b>Tag Group</b>           | ExplicitNegatives (up to 50 times)  |
| <b>Tag Usage</b>           | Optional  |

## Explicit Negatives - Menu Value

### Overview

The menu value for the element defined in the ElementKey.

---

| ITDX Extension             |   |
|----------------------------|---|
| <b>Extension Rationale</b> | Elements with multiple values, such as comorbidity and complications, need a distinct menu value to which to associate the explicit negative value. |
| <b>Tag Name</b>            | ValueKey  |
| <b>Data Type</b>           | integer   |
| <b>Tag Group</b>           | ExplicitNegatives (up to 50 times)  |
| <b>Tag Usage</b>           | 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             |   |
|----------------------------|---|
| <b>Extension Rationale</b> | 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. |
| <b>Tag Name</b>            | TimelinessKey   |
| <b>Data Type</b>           | integer   |
| <b>Tag Group</b>           | ExplicitTimeliness (up to 30 times)   |
| <b>Tag Usage</b>           | Optional  |

---

|                     |                               |
|---------------------|-------------------------------|
| <b>Field Values</b> | 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             |   |
|----------------------------|---|
| <b>Extension Rationale</b> | This is the explicit time associated with the element type data point or group. |
| <b>Tag Name</b>            | EtTime  |
| <b>Data Type</b>           | time  |
| <b>Tag Group</b>           | ExplicitTimeliness (up to 30 times)   |
| <b>Tag Usage</b>           | 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 – 2019->2020 Change Log

### New Data Elements:

- Whole Blood (4 Hours) (NTDS)
- Trauma Team Involvement (ITDX)

### Retired Data Elements:

- Transfusion Blood Measurement (NTDS)
- Transfusion Blood Conversion (NTDS)
- Transfusion Plasma Measurement (NTDS)
- Transfusion Plasma Conversion (NTDS)
- Transfusion Platelets Measurement (NTDS)
- Transfusion Platelets Conversion (NTDS)
- Cryoprecipitate Measurement (NTDS)
- Cryoprecipitate Conversion (NTDS)
- Drug Use Indicator (ITDX)
- Alcohol Use Indicator (ITDX)

### Other Changes:

- Comorbid Conditions
  - Retired 21. Prematurity (Keep 37. Prematurity)
  - Added 38. Pregnancy
- Hospital Complications
  - Retired 30. Unplanned Return to the OR
  - Added 39. Delirium
  - Added 40. Unplanned Visit to the OR
- Embolization Site
  - Retired 7. Aorta (thoracic or abdominal)

## 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:

### ITDX Workgroup Members:

Sue Auerbach

John Bennett

Leon Bowman

Michelle Brazel

Grant Dittmer

Caroline Israel

John Kutcher

Maggie Pajerowski

Jody Summers

Rob Tewey

Julie Violante

### Other Contributors:

Amy Hicks

Wade McAvoy

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