

Wisconsin State Trauma Registry
Data Dictionary
Version 1.1
Release Date: June 11, 2014

Dictionary Updates

Version	Page	Changes Made
1.1	Added pg. 2	Added a page to documents changes to the data dictionary.
	Pg 50 (now 51) Section: First Responders, First Responder Information WI Variable: Report Present	Clarified variable definition as being the presence of an EMS report at time of abstraction either in patient's medical record or through an outside electronic source such as Ambulance Run Data System (WARDS).
	Pg 66 (now 67) Section: First EMS Provider, Primary EMS Provider and/or Scene Transport WI Variable: Run Sheet Present	
	Pg. 98 (now 99) Section: Secondary Transport from Scene, Secondary Transport from Scene or Intercept WI Variable: Run Sheet Present	

Wisconsin State Trauma Registry

Inclusion Criteria

August 2003

Level I, II, III, and IV trauma centers will submit data from their trauma registries for all patients meeting the following criteria:

- ICD-9 discharge diagnosis 800.00 – 959.9
 - Excluding 905 – 909 (late effects of injury)
 - Excluding 910 – 924 (blisters, contusions, abrasions, insect bites)
 - Excluding 930 – 939 (foreign bodies)
 - Excluding drowning, unless consequence of MVC
 - Excluding strangulation/asphyxiation
 - Excluding poisoning or drug overdose
 - Excluding falls from same level resulting in isolated closed distal extremity fracture or isolated hip fracture

AND admitted to the hospital or transferred to another facility for trauma care

OR

- DOA transported to hospital
- Injury-related death in the ED or after hospital admission
- Facility-specified trauma response has been activated.

Section: Demographics
WI Variable: First Name
NTDB Variable: None
Database Variable:

First: (OS)

Definition: The first name of the patient.

Section: Demographics
WI Variable: Last Name
NTDB Variable: None
Database Variable:

Name, Last: (OS)

Definition: The last name of the patient.

Additional comment: If you do not know the name of the patient you may select an alias. When you become aware of the correct name please record the correction in the database. Unknown names are typically resolved by the time the record is closed.

Section: Demographics

WI Variable: Injury Date

NTDB Variable: Injury Incident Date (I_01)

Database Variable: inj_date

INJURY INCIDENT DATE

Definition

The date the injury occurred.

Field Values

- Relevant value for data element

Additional Information

- Collected as YYYY-MM-DD.
- Estimates of date of injury should be based upon report by patient, witness, family, or health care provider. Other proxy measures (e.g., 911 call time) should not be used.

Data Source Hierarchy

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. ED Nurses' Notes

Associated Edit Checks

Rule ID	Level	Message
1201	1	Invalid Value
1202	1	Date out of range
1203	4	Blank, required field
1204	4	Injury Incident Date cannot be earlier than Date of Birth
1205	4	Injury Incident Date cannot be later than EMS Dispatch Date
1206	4	Injury Incident Date cannot be later than EMS Unit Arrival on Scene Date
1207	4	Injury Incident Date cannot be later than EMS Unit Scene Departure Date
1208	4	Injury Incident Date cannot be later than ED/Hospital Arrival Date
1209	4	Injury Incident Date cannot be later than ED Discharge Date
1210	4	Injury Incident Date cannot be later than Hospital Discharge Date

Section: Demographics

WI Variable: Injury Time

NTDB Variable: Injury Incident Time (I_02)

Database Variable: inj_time

INJURY INCIDENT TIME

Definition

The time the injury occurred.

Field Values

- Relevant value for data element

Additional Information

- Collected as HH:MM military time.
- Estimates of time of injury should be based upon report by patient, witness, family, or health care provider. Other proxy measures (e.g., 911 call time) should not be used.

Data Source Hierarchy

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. ED Nurses' Notes

Associated Edit Checks

Rule ID	Level	Message
1301	1	Invalid value
1302	1	Time out of range
1303	4	Blank, required field
1304	4	If Injury Incident Date and EMS Dispatch Date are the same, the Injury Incident Time cannot be later than the EMS Dispatch Time
1305	4	If Injury Incident Date and EMS Unit Arrival on Scene Date are the same, the Injury Incident Time cannot be later than the EMS Unit Arrival on Scene Time
1306	4	If Injury Incident Date and EMS Unit Scene Departure Date are the same, the Injury Incident Time cannot be later than the EMS Unit Scene Departure Time
1307	4	If Injury Incident Date and ED/Hospital Arrival Date are the same, the Injury Incident Time cannot be later than the ED/Hospital Arrival Time
1308	4	If Injury Incident Date and ED Discharge Date are the same, the Injury Incident Time cannot be later than the ED Discharge Time
1309	4	If Injury Incident Date and Hospital Discharge Date are the same, the Injury Incident Time cannot be later than the Hospital Discharge Time

Section: Demographics, Record Information

WI Variable: Submitting Facility

NTDB Variable: None

Database Variable: facility_id

Submitting Facility: (On-Screen - OS)

Definition: The Department of Health and Family Services (DHFS) number assigned to each facility.

Note: May be prefilled

Section: Demographics, Record Information

WI Variable: Facility Trauma Registry Number

NTDB Variable: None

Database Variable: trauma_num

Facility Trauma Registry Number: (OS)

Definition: The number assigned to the patient by the facility for the trauma registry. It is necessary to have both the submitting facility number and the facility trauma registry number to identify a specific individual.

Note: May be prefilled

Section: Demographics, Record Information

WI Variable: Medical Record Number

NTDB Variable: None

Database Variable: pat_rec_num

Medical Record Number: (OS)

Definition: The Facility Medical Record Number that represents the patient. This number will not change for the person regardless of changes to the account number or facility trauma registry number. If the patient is identified as an existing patient late in their care use the final medical record number not the newly assigned number that was given prior to identifying this was an existing patient.

Section: Demographics, Record Information

WI Variable: ED Account (Visit) Number

NTDB Variable: None

Database Variable: pat_account

ED Account (Visit) Number: (OS)

Definition: The Facility Account Number that represents a specific visit. Each visit has a new account number assigned for that visit. If a patient is seen twice at a facility (even if the same day) this number should be different.

Section: Demographics, Patient Information
WI Variable: Arrival Date
NTDB Variable: ED/Hospital Arrival Date (ED_01)
Database Variable: eda_date

ED/HOSPITAL ARRIVAL DATE

Definition

The date the patient arrived to the ED/hospital.

Field Values

- Relevant value for data element

Additional Information

- If the patient was brought to the ED, enter date patient arrived at ED. If patient was directly admitted to the hospital, enter date patient was admitted to the hospital.
- Collected as YYYY-MM-DD.
- Used to auto-generate two additional calculated fields: Total EMS Time: (elapsed time from EMS dispatch to hospital arrival) and Total Length of Hospital Stay (elapsed time from ED/Hospital Arrival to ED/Hospital Discharge).

Data Source Hierarchy

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. Billing Sheet / Medical Records Coding Summary Sheet
4. Hospital Discharge Summary

Associated Edit Checks

Rule ID	Level	Message
4501	1	Invalid value
4502	1	Date out of range
4503	2	Blank, required field
4505	2	Not Known/Not Recorded, required Inclusion Criterion
4506	3	ED/Hospital Arrival Date cannot be earlier than EMS Dispatch Date
4507	3	ED/Hospital Arrival Date cannot be earlier than EMS Unit Arrival on Scene Date
4508	3	ED/Hospital Arrival Date cannot be earlier than EMS Unit Scene Departure Date
4509	2	ED/Hospital Arrival Date cannot be later than ED Discharge Date
4510	2	ED/Hospital Arrival Date cannot be later than Hospital Discharge Date
4511	3	ED/Hospital Arrival Date cannot be earlier than Date of Birth
4512	3	Ed/Hospital Arrival Date must be after 1993
4513	3	Ed/Hospital Arrival Date minus Injury Incident Date must be less than 30 days
4514	3	ED/Hospital Arrival Date minus EMS Dispatch Date cannot be greater than 7 days
4515	2	Not Applicable, required Inclusion Criterion

Section: Demographics, Patient Information

WI Variable: Arrival Time

NTDB Variable: ED/Hospital Arrival Time (ED_02)

Database Variable: eda_time

ED/HOSPITAL ARRIVAL TIME

Definition

The time the patient arrived to the ED/hospital.

Field Values

- Relevant value for data element

Additional Information

- If the patient was brought to the ED, enter time patient arrived at ED. If patient was directly admitted to the hospital, enter time patient was admitted to the hospital.
- Collected as HH:MM military time.
- Used to auto-generate two additional calculated fields: Total EMS Time (elapsed time from EMS dispatch to hospital arrival) and Total Length of Hospital Stay (elapsed time from ED/Hospital Arrival to ED/Hospital Discharge).

Data Source Hierarchy

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. Billing Sheet / Medical Records Coding Summary Sheet
4. Hospital Discharge Summary

Associated Edit Checks

Rule ID	Level	Message
4601	1	Invalid value
4602	1	Time out of range
4603	4	Blank, required field
4604	4	If ED/Hospital Arrival Date and EMS Dispatch Date are the same, the ED/Hospital Arrival Time cannot be earlier than the EMS Dispatch Time
4605	4	If ED/Hospital Arrival Date and EMS Unit Arrival on Scene Date are the same, the ED/Hospital Arrival Time cannot be earlier than the EMS Unit Arrival on Scene Time
4606	4	If ED/Hospital Arrival Date and EMS Unit Scene Departure Date are the same, the ED/Hospital Arrival Time cannot be earlier than the EMS Unit Scene Departure Time
4607	4	if ED/Hospital Arrival Date and ED Discharge Date are the same, the ED/Hospital Arrival Time cannot be later than the ED Discharge Time
4608	4	if ED/Hospital Arrival Date and Hospital Discharge Date are the same, the ED/Hospital Arrival Time cannot be later than the Hospital Discharge Time

Section: Demographics, Patient Information

WI Variable: Middle Initial

NTDB Variable: None

Database Variable:

MI: (OS)

Definition: The middle initial of the patient.

Section: Demographics, Patient Information

WI Variable: Date of Birth

NTDB Variable: Date of Birth (D_07)

Database Variable: dob_date

DATE OF BIRTH

Definition

The patient's date of birth.

Field Values

- Relevant value for data element

Additional Information

- This variable and date of service are used to auto populate the age
- Collected as YYYY-MM-DD.
- If Date of Birth is "Not Known/Not Recorded", complete variables: Age and Age Units.
- If Date of Birth equals ED/Hospital Arrival Date, then the Age and Age Units variables must be completed.
- Used to calculate patient age in days, months, or years.

Data Source Hierarchy

1. ED Admission Form
2. Billing Sheet / Medical Records Coding Summary Sheet
3. EMS Run Sheet
4. Triage Form / Trauma Flow Sheet
5. ED Nurses' Notes

Associated Edit Checks

Rule ID	Level	Message
0601	1	Invalid value
0602	1	Date out of range
0603	2	Blank, required field
0605	3	Not Known/Not Recorded, complete variables: Age and Age Units
0606	2	Date of Birth cannot be later than EMS Dispatch Date
0607	2	Date of Birth cannot be later than EMS Unit Arrival on Scene Date
0608	2	Date of Birth cannot be later than EMS Unit Scene Departure Date
0609	2	Date of Birth cannot be later than ED/Hospital Arrival Date
0610	2	Date of Birth cannot be later than ED Discharge Date
0611	2	Date of Birth cannot be later than Hospital Discharge Date
0612	2	Date of Birth + 120 years must be less than ED/Hospital Arrival Date
0613	2	Field cannot be Not Applicable

Section: Demographics, Patient Information

WI Variable: Age

NTDB Variable: AGE (D_08)

Database Variable:

- **Note:** This variable auto populated using date of birth and date of service

Section: Demographics, Patient Information

WI Variable: In

NTDB Variable: AGE UNITS (D_09)

Database Variable:

- **Note:** This variable auto populated using date of birth and date of service

Section: Demographics, Patient Information

WI Variable: Gender

NTDB Variable: Sex (D_12)

Database Variable: pat_gender

SEX

Definition

The patient's sex.

Field Values

- 1. Male
- 2. Female

Additional Information

- Patients who have undergone a surgical and/or hormonal sex reassignment should be coded using the current assignment.

Data Source Hierarchy

- 1. ED Admission Form
- 2. Billing Sheet / Medical Records Coding Summary Sheet
- 3. EMS Run Sheet
- 4. Triage Form / Trauma Flow Sheet
- 5. ED Nurses' Notes

Associated Edit Checks

Rule ID	Level	Message
1101	1	Invalid value
1102	2	Blank, required field
1103	2	Not Applicable, required Inclusion Criterion

Section: Demographics, Patient Information

WI Variable: Race

NTDB Variable: Race (D_10)

Database Variable: pat_race01

RACE

Definition

The patient's race.

Field Values

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

Additional Information

- Patient race should be based upon self-report or identified by a family member.
- The maximum number of races that may be reported for an individual patient is 2.

Data Source Hierarchy

1. ED Admission Form
2. Billing Sheet / Medical Records Coding Summary Sheet
3. Triage Form / Trauma Flow Sheet
4. EMS Run Sheet
5. ED Nurses' Notes

Associated Edit Checks

Rule ID	Level	Message
0901	1	Invalid value
0902	4	Blank, required field

Section: Demographics, Patient Information

WI Variable: Ethnicity

NTDB Variable: Ethnicity (D_11)

Database Variable:

ETHNICITY

Definition

The patient's ethnicity.

Field Values

- 1. Hispanic or Latino
- 2. Not Hispanic or Latino

Additional Information

- Patient ethnicity should be based upon self-report or identified by a family member.
- The maximum number of ethnicities that may be reported for an individual patient is 1.

Data Source Hierarchy

- 1. ED Admission Form
- 2. Billing Sheet / Medical Records Coding Summary Sheet
- 3. Triage Form / Trauma Flow Sheet
- 4. EMS Run Sheet
- 5. ED Nurses' Notes

Associated Edit Checks

Rule ID	Level	Message
1001	1	Invalid value
1002	4	Blank, required field

Section: Demographics

WI Variable: Zip Code, Patient Information

NTDB Variable: Patient's Home Zip Code (D_01)

Database Variable: pat_adr_zip

PATIENT'S HOME ZIP CODE

Definition

The patient's home ZIP code of primary residence.

Field Values

- Relevant value for data element

Additional Information

- Can be stored as a 5 or 9 digit code (XXXXX-XXXX).
- May require adherence to HIPAA regulations.
- If zip code is "Not Applicable," complete variable: Alternate Home Residence.
- If zip code is "Not Recorded/Not Known," complete variables: Patient's Home Country, Patient's Home State, Patient's Home County and Patient's Home City.

Data Source Hierarchy

1. Billing Sheet / Medical Records Coding Summary Sheet
2. ED Admission Form
3. EMS Run Sheet
4. Triage Form / Trauma Flow Sheet
5. ED Nurses' Notes

Associated Edit Checks

Rule ID	Level	Message
0001	1	Invalid value
0002	4	Blank, required field
0003	5	Not Applicable, complete variable: Alternate Home Residence
0005	5	Not Known/Not Recorded, complete variables: Patient's Home Country, Patient's Home State, Patient's Home County and Patient's Home City

Section: Demographics, Patient Information

WI Variable: City

NTDB Variable: Patient's Home City (D_05)

Database Variable:

PATIENT'S HOME CITY

Definition

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

Field Values

- Relevant value for data element (five digit FIPS code)

Additional Information

- Only completed when ZIP code is "Not Recorded/Not Known."
- Used to calculate FIPS code.

Data Source Hierarchy

1. ED Admission Form
2. Billing Sheet / Medical Records Coding Summary Sheet
3. EMS Run Sheet
4. Triage Form / Trauma Flow Sheet
5. ED Nurses' Notes

Associated Edit Checks

Rule ID	Level	Message
0401	1	Invalid value
0402	4	Blank, required to complete when Patient's Home Zip Code is Not Known/Not Recorded
0403	5	Blank, required to complete variables: Patients Home Zip Code or Alternate Home Residence

Section: Demographics, Patient Information

WI Variable: State

NTDB Variable: Patient's Home State (D_03)

Database Variable:

PATIENT'S HOME STATE

Definition

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

Field Values

- Relevant value for data element (two digit numeric FIPS code)

Additional Information

- Only completed when ZIP code is "Not Recorded/Not Known."
- Used to calculate FIPS code.

Data Source Hierarchy

1. ED Admission Form
2. Billing Sheet / Medical Records Coding Summary Sheet
3. EMS Run Sheet
4. Triage Form / Trauma Flow Sheet
5. ED Nurses' Notes

Associated Edit Checks

Rule ID	Level	Message
0201	1	Invalid value
0202	4	Blank, required to complete when Patient's Home Zip Code is Not Known/Not Recorded
0203	5	Blank, required to complete variables: Patients Home Zip Code or Alternate Home Residence

Section: Demographics, Patient Information

WI Variable: County

NTDB Variable: Patient's Home County (D_04)

Database Variable:

PATIENT'S HOME COUNTY

Definition

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

Field Values

- Relevant value for data element (three digit FIPS code)

Additional Information

- Only completed when ZIP code is "Not Recorded/Not Known."
- Used to calculate FIPS code.

Data Source Hierarchy

1. Billing Sheet / Medical Records Coding Summary Sheet
2. ED Admission Form
3. EMS Run Sheet
4. Triage Form / Trauma Flow Sheet
5. ED Nurses' Notes

Associated Edit Checks

Rule ID	Level	Message
0301	1	Invalid value
0302	4	Blank, required to complete when Patient's Home Zip Code is Not Known/Not Recorded
0303	5	Blank, required to complete variables: Patients Home Zip Code or Alternate Home Residence

Section: Demographics, Patient Information

WI Variable: Country

NTDB Variable: Patient's Home Country (D_02)

Database Variable:

PATIENT'S HOME COUNTRY

Definition

The country where the patient resides.

Field Values

- Relevant value for data element (two digit alpha country code)

Additional Information

- Only completed when ZIP code is "Not Recorded/Not Known."
- Values are two character fields representing a country (e.g., US).

Data Source Hierarchy

1. Billing Sheet / Medical Records Coding Summary Sheet
2. ED Admission Form
3. EMS Run Sheet
4. Triage Form / Trauma Flow Sheet
5. ED Nurses' Notes

Associated Edit Checks

Rule ID	Level	Message
0101	1	Invalid value
0102	4	Blank, required to complete when Patient's Home Zip Code is Not Known/Not Recorded
0103	5	Blank, required to complete variables: Patients Home Zip Code or Alternate Home Residence

Section: Demographics, Patient Information
WI Variable: Alternate Home Residence
NTDB Variable: Alternate Home Residence (D_06)
Database Variable:

ALTERNATE HOME RESIDENCE

Definition

Documentation of the type of patient without a home zip code.

Field Values

- | | |
|-------------------------|--------------------|
| 1. Homeless | 3. Migrant Worker |
| 2. Undocumented Citizen | 4. Foreign Visitor |

Additional Information

- Only completed when ZIP code is "Not Applicable."
- Homeless is defined as a person who lacks housing. The definition also includes a person living in transitional housing or a supervised public or private facility providing temporary living quarters.
- Undocumented Citizen is defined as a national of another country who has entered or stayed in another country without permission.
- Migrant Worker is defined as a person who temporarily leaves his/her principal place of residence within a country in order to accept seasonal employment in the same or different country.
- Foreign Visitor is defined as any person legally visiting a country other than his/her usual place of residence for any reason.

Data Source Hierarchy

1. Billing Sheet / Medical Records Coding Summary Sheet
2. ED Admission Form
3. EMS Run Sheet
4. Triage Form / Trauma Flow Sheet
5. ED Nurses' Notes

Associated Edit Checks

Rule ID	Level	Message
0501	1	Invalid value
0502	4	Blank, required to complete when Patients Home Zip Code is Not Applicable
0503	5	Blank, required to complete variables: Patients Home Zip Code or (Patients Home Country, Patients Home State, Patients Home County and Patients Home City)

Section: Injury Data, Injury Information

WI Variable: Zip Code

NTDB Variable: Incident Location Zip Code (I_12)

Database Variable: inj_adr_zip

INCIDENT LOCATION ZIP CODE

Definition

The ZIP code of the incident location.

Field Values

- Relevant value for data element

Additional Information

- Can be stored as a 5 or 9 digit code (XXXXX-XXXX).
- If "Not Applicable" or "Not Recorded/Not Known," complete variables: Incident State, Incident County, Incident City and Incident Country.
- May require adherence to HIPAA regulations.

Data Source Hierarchy

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. ED Nurses' Notes

Associated Edit Checks

Rule ID	Level	Message
2001	1	Invalid value
2002	4	Blank, required field
2004	5	Not Known/Not Recorded, complete variables: Incident State, Incident County and Incident City
2005	5	Not Applicable, complete variables: Incident State, Incident County and Incident City

Section: Injury Data, Injury Information

WI Variable: City

NTDB Variable: Incident City (I_16)

Database Variable: inj_adr_c1

INCIDENT CITY

Definition

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

Field Values

- Relevant value for data element (five digit FIPS code)

Additional Information

- Only completed when Incident Location ZIP code is "Not Applicable" or "Not Recorded/Not Known."
- Used to calculate FIPS code.
- If incident location resides outside of formal city boundaries, report nearest city/town.

Data Source Hierarchy

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. ED Nurses' Notes

Associated Edit Checks

Rule ID	Level	Message
2401	1	Invalid value
2402	5	Blank, required to complete variable: Incident Location Zip Code
2403	4	Blank, required to complete when Incident Location Zip Code is Not Applicable or Not Known/Not Recorded

Section: Injury Data, Injury Information

WI Variable: State

NTDB Variable: Incident State (I_14)

Database Variable: inj_adr_st

INCIDENT STATE

Definition

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

Field Values

- Relevant value for data element (two digit numeric FIPS code)

Additional Information

- Only completed when Incident Location ZIP code is "Not Applicable" or "Not Recorded/Not Known."
- Used to calculate FIPS code.

Data Source Hierarchy

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. ED Nurses' Notes

Associated Edit Checks

Rule ID	Level	Message
2201	1	Invalid value
2202	5	Blank, required to complete variable: Incident Location Zip Code
2203	4	Blank, required to complete when Incident Location Zip Code is Not Applicable or Not Known/Not Recorded

Section: Injury Data, Injury Information

WI Variable: County

NTDB Variable: Incident County (I_15)

Database Variable: inj_adr_co

INCIDENT COUNTY

Definition

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

Field Values

- Relevant value for data element (three digit FIPS code)

Additional Information

- Only completed when Incident Location ZIP code is "Not Applicable" or "Not Recorded/Not Known."
- Used to calculate FIPS code.

Data Source Hierarchy

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. ED Nurses' Notes

Associated Edit Checks

Rule ID	Level	Message
2301	1	Invalid value
2302	5	Blank, required to complete variable: Incident Location Zip Code
2303	4	Blank, required to complete when Incident Location Zip Code is Not Applicable or Not Known/Not Recorded

Section: Injury Data, Injury Information

WI Variable: Country

NTDB Variable: Incident Country (I_13)

Database Variable:

INCIDENT COUNTRY

Definition

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

Field Values

- Relevant value for data element (two digit alpha country code)

Additional Information

- Only completed when Incident Location ZIP code is "Not Applicable" or "Not Recorded/Not Known."
- Values are two character fields representing a country (e.g., US).

Data Source Hierarchy

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. ED Nurses' Notes

Associated Edit Checks

Rule ID	Level	Message
2101	1	Invalid value
2102	4	Blank, required to complete when Incident Location Zip Code is Not Applicable or Not Known/Not Recorded
2103	5	Blank, required to complete variable: Incident Location Zip Code

Section: Injury Data, Injury Information

WI Variable: Latitude, Longitude

NTDB Variable: None

Database Variable:

GPS Coordinates Latitude (Deg-Min-Sec) and Longitude (Deg-Min-Sec): (OS)

Definition: The location where the injury occurred, using one, any combination, or all, to identify the location. Longitude coordinates include degrees, minutes and seconds.

Format: Free text entry or blank.

Section: Injury Data, Injury Information

WI Variable: Work Related

NTDB Variable: Work-Related (I_03)

Database Variable: inj_work_yn

WORK-RELATED

Definition

Indication of whether the injury occurred during paid employment.

Field Values

1. Yes

2. No

Additional Information

- If work related, two additional data fields must be completed: Patient's Occupational Industry and Patient's Occupation.

Data Source Hierarchy

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. ED Nurses' Notes

Associated Edit Checks

Rule ID	Level	Message
1401	1	Invalid value
1402	4	Blank, required field
1403	5	If completed, then Patients Occupational Industry must be completed
1404	5	If completed, then Patient Occupation must be completed

Section: Injury Data, Injury Information

WI Variable: Patient’s Occupational Industry

NTDB Variable: Patient’s Occupational Industry (I_04)

Database Variable:

PATIENT'S OCCUPATIONAL INDUSTRY

Definition

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

Field Values

- | | |
|--|----------------------------------|
| 1. Finance, Insurance, and Real Estate | 8. Construction |
| 2. Manufacturing | 9. Government |
| 3. Retail Trade | 10. Natural Resources and Mining |
| 4. Transportation and Public Utilities | 11. Information Services |
| 5. Agriculture, Forestry, Fishing | 12. Wholesale Trade |
| 6. Professional and Business Services | 13. Leisure and Hospitality |
| 7. Education and Health Services | 14. Other Services |

Additional Information

- If work related, also complete Patient’s Occupation
- Based upon US Bureau of Labor Statistics Industry Classification.

Data Source Hierarchy

1. Triage Form/Trauma Flow Sheet
2. EMS Run Sheet
3. ED Nurses’ Notes

Associated Edit Checks

Rule ID	Level	Message
1501	1	Invalid value
1502	4	If completed, then Work-Related must be 1 Yes
1503	5	If completed, then Patient Occupation must be completed
1504	4	Blank, required to complete when Work-Related is 1 (Yes)

PATIENT'S OCCUPATIONAL INDUSTRY: The occupational history associated with the patient's work environment.

Field Value Definitions:

Finance and Insurance -The Finance and Insurance sector comprises establishments primarily engaged in financial transactions (transactions involving the creation, liquidation, or change in ownership of financial assets) and/or in facilitating financial transactions. Three principal types of activities are identified:

- 1.Raising funds by taking deposits and/or issuing securities and, in the process, incurring liabilities.
- 2.Pooling of risk by underwriting insurance and annuities.
- 3.Providing specialized services facilitating or supporting financial intermediation, insurance, and employee benefit programs.

Real Estate -Industries in the Real Estate subsector group establishments that are primarily engaged in renting or leasing real estate to others; managing real estate for others; selling, buying, or renting real estate for others; and providing other real estate related services, such as appraisal services.

Manufacturing -The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that make new products by hand, such as bakeries, candy stores, and custom tailors, may also be included in this sector.

Retail Trade -The Retail Trade sector comprises establishments engaged in retailing merchandise, generally without transformation, and rendering services incidental to the sale of merchandise. The retailing process is the final step in the distribution of merchandise; retailers are, therefore, organized to sell merchandise in small quantities to the general public. This sector comprises two main types of retailers:

1. Store retailers operate fixed point-of-sale locations, located and designed to attract a high volume of walk-in customers.
2. Non-store retailers, like store retailers, are organized to serve the general public, but their retailing methods differ.

Transportation and Public Utilities -The Transportation and Warehousing sector includes industries providing transportation of passengers and cargo, warehousing and storage for goods, scenic and sightseeing transportation, and support activities related to modes of transportation. The Utilities sector comprises establishments engaged in the provision of the following utility services: electric power, natural gas, steam supply, water supply, and sewage removal.

Agriculture, Forestry, Fishing -The Agriculture, Forestry, Fishing and Hunting sector comprises establishments primarily engaged in growing crops, raising animals, harvesting timber, and harvesting fish and other animals from a farm, ranch, or their natural habitats. The establishments in this sector are often described as farms, ranches, dairies, greenhouses, nurseries, orchards, or hatcheries.

Professional and Business Services -The Professional, Scientific, and Technical Services sector comprises establishments that specialize in performing professional, scientific, and technical activities for others. These activities require a high degree of expertise and training. The establishments in this sector specialize according to expertise and provide these services to clients in a variety of industries and, in some cases, to households. Activities performed include: legal advice and representation; accounting, bookkeeping, and payroll services; architectural, engineering, and specialized design services; computer services; consulting services; research services; advertising services; photographic services; translation and interpretation services; veterinary services; and other professional, scientific, and technical services.

Education and Health Services -The Educational Services sector comprises establishments that provide instruction and training in a wide variety of subjects. This instruction and training is provided by specialized establishments, such as schools, colleges, universities, and training centers. These establishments may be privately owned and operated for profit or not for profit, or they may be publicly owned and operated. They may also offer food and/or accommodation services to their students. The Health Care and Social Assistance sector comprises establishments providing health care and social assistance for individuals. The sector includes both health care and social assistance because it is sometimes difficult to distinguish between the boundaries of these two activities.

Construction -The construction sector comprises establishments primarily engaged in the construction of buildings or engineering projects (e.g., highways and utility systems). Establishments primarily engaged in the preparation of sites for new construction and establishments primarily engaged in subdividing land for sale as building sites also are included in this sector. Construction work done may include new work, additions, alterations, or maintenance and repairs.

Government – Civil service employees, often called civil servants or public employees, work in a variety of fields such as teaching, sanitation, health care, management, and administration for the federal, state, or local government. Legislatures establish basic prerequisites for employment such as compliance with minimal age and educational requirements and residency laws.

Natural Resources and Mining -The Mining sector comprises establishments that extract naturally occurring mineral solids, such as coal and ores; liquid minerals, such as crude petroleum; and gases, such as natural gas. The term mining is used in the broad sense to include quarrying, well operations, beneficiating (e.g., crushing, screening, washing, and flotation), and other preparation customarily performed at the mine site, or as a part of mining activity.

Information Services -The Information sector comprises establishments engaged in the following processes: (a) producing and distributing information and cultural products, (b) providing the means to transmit or distribute these products as well as data or communications, and (c) processing data.

Wholesale Trade -The Wholesale Trade sector comprises establishments engaged in wholesaling merchandise, generally without transformation, and rendering services incidental to the sale of merchandise. The merchandise described in this sector includes the outputs of agriculture, mining, manufacturing, and certain information industries, such as publishing.

Leisure and Hospitality -The Arts, Entertainment, and Recreation sector includes a wide range of establishments that operate facilities or provide services to meet varied cultural, entertainment, and recreational interests of their patrons. This sector comprises (1) establishments that are involved in producing, promoting, or participating in live performances, events, or exhibits intended for public viewing; (2) establishments that preserve and exhibit objects and sites of historical, cultural, or educational interest; and (3) establishments that operate facilities or provide services that enable patrons to participate in recreational activities or pursue amusement, hobby, and leisure-time interests. The Accommodation and Food Services sector comprises establishments providing customers with lodging and/or preparing meals, snacks, and beverages for immediate consumption. The sector includes both accommodation and food services establishments because the two activities are often combined at the same establishment.

Other Services -The Other Services sector comprises establishments engaged in providing services not specifically provided for elsewhere in the classification system. Establishments in this sector are primarily engaged in activities, such as equipment and machinery repairing, promoting or administering religious activities, grant-making, advocacy, and providing dry-cleaning and laundry services, personal care services, death care services, pet care services, photofinishing services, temporary parking services, and dating services.

Section: Injury Data, Injury Information

WI Variable: Patient’s Occupation

NTDB Variable: Patient’s Occupation (I_05)

Database Variable:

PATIENT'S OCCUPATION

Definition

The occupation of the patient.

Field Values

- | | |
|---|--|
| 1. Business and Financial Operations Occupations | 13. Computer and Mathematical Occupations |
| 2. Architecture and Engineering Occupations | 14. Life, Physical, and Social Science Occupations |
| 3. Community and Social Services Occupations | 15. Legal Occupations |
| 4. Education, Training, and Library Occupations | 16. Arts, Design, Entertainment, Sports, and Media |
| 5. Healthcare Practitioners and Technical Occupations | 17. Healthcare Support Occupations |
| 6. Protective Service Occupations | 18. Food Preparation and Serving Related |
| 7. Building and Grounds Cleaning and Maintenance | 19. Personal Care and Service Occupations |
| 8. Sales and Related Occupations | 20. Office and Administrative Support Occupations |
| 9. Farming, Fishing, and Forestry Occupations | 21. Construction and Extraction Occupations |
| 10. Installation, Maintenance, and Repair Occupations | 22. Production Occupations |
| 11. Transportation and Material Moving Occupations | 23. Military Specific Occupations |
| 12. Management Occupations | |

Additional Information

- Only completed if injury is work-related.
- If work related, also complete Patient's Occupational Industry.
- Based upon 1999 US Bureau of Labor Statistics Standard Occupational Classification (SOC).

Data Source Hierarchy

1. Triage Form/Trauma Flow Sheet
2. EMS Run Sheet
3. ED Nurses’ Notes

Associated Edit Checks

Rule ID	Level	Message
1601	1	Invalid value
1602	4	If completed, then Work-Related must be 1 Yes
1603	5	If completed, then Patients Occupational Industry must be completed
1604	4	Blank, required to complete when Work-Related is 1 (Yes)

PATIENT'S OCCUPATION: The occupation of the patient.

Field Value Definitions:

Business and Financial Operations Occupations:

Buyers and Purchasing Agents Accountants and Auditors Claims Adjusters, Appraisers, Examiners, and Investigators Human Resources Workers Market Research Analysts and Marketing Specialists Business Operations Specialists, All Other

Architecture and Engineering Occupations

Landscape Architects Surveyors, Cartographers, and Photogrammetrists Agricultural Engineers Chemical Engineers Civil Engineers Electrical Engineers

Community and Social Services Occupations

Marriage and Family Therapists Substance Abuse and Behavioral Disorder Counselors Healthcare Social Workers Probation Officers and Correctional Treatment Specialists Clergy

Education, Training, and Library Occupations

Engineering and Architecture Teachers, Postsecondary Math and Computer Teachers, Postsecondary Nursing Instructors and Teachers, Postsecondary Law, Criminal Justice, and Social Work Teachers, Postsecondary Preschool and Kindergarten Teachers Librarians

Healthcare Practitioners and Technical Occupations

Dentists, All Other Specialists Dietitians and Nutritionists Physicians and Surgeons Nurse Practitioners Cardiovascular Technologists and Technicians Emergency Medical Technicians and Paramedics

Protective Service Occupations

Firefighters Police Officers Animal Control Workers Security Guards Lifeguards, Ski Patrol, and Other Recreational Protective Service

Building and Grounds Cleaning and Maintenance

Building Cleaning Workers Landscaping and Groundskeeping Workers Pest Control Workers Pesticide Handlers, Sprayers, and Applicators, Vegetation Tree Trimmers and Pruners

Sales and Related Occupations

Advertising Sales Agents Retail Salespersons Counter and Rental Clerks Door-to-Door Sales Workers, News and Street Vendors, and Related Workers Real Estate Brokers

Farming, Fishing, and Forestry Occupations

Animal Breeders Fishers and Related Fishing Workers Agricultural Equipment Operators Hunters and Trappers Forest and Conservation Workers Logging Workers

Installation, Maintenance, and Repair Occupations

Electric Motor, Power Tool, and Related Repairers Aircraft Mechanics and Service Technicians Automotive Glass Installers and Repairers Heating, Air Conditioning, and Refrigeration Mechanics and Installers Maintenance Workers, Machinery Industrial Machinery Installation, Repair, and Maintenance Workers

Transportation and Material Moving Occupations

Rail Transportation Workers, All Other Subway and Streetcar Operators Packers and Packers, Hand Refuse and Recyclable Material Collectors Material Moving Workers, All Other Driver/Sales Workers

Management Occupations

Public Relations and Fundraising Managers Marketing and Sales Managers Administrative Services Managers Transportation, Storage, and Distribution Managers Food Service Managers

Computer and Mathematical Occupations

Web Developers Software Developers and Programmers Database Administrators Statisticians Computer Occupations, All Other

Life, Physical, and Social Science Occupations

Psychologists Economists Foresters Zoologists and Wildlife Biologists Political Scientists Agricultural and Food Science Technicians

Legal Occupations

Lawyers and Judicial Law Clerks Paralegals and Legal Assistants Court Reporters Administrative Law Judges, Adjudicators, and Hearing Officers Arbitrators, Mediators, and Conciliators Title Examiners, Abstractors, and Searchers

Arts, Design, Entertainment, Sports, and Media

Artists and Related Workers, All Other Athletes, Coaches, Umpires, and Related Workers, Dancers and Choreographers, Reporters and Correspondents Interpreters and Translators Photographers

Healthcare Support Occupations

Nursing, Psychiatric, and Home Health Aides Physical Therapist Assistants and Aides Veterinary Assistants and Laboratory Animal Caretakers Healthcare Support Workers, All Other Medical Assistants

Food Preparation and Serving Related

Bartenders, Cooks, Institution and Cafeteria Cooks, Fast Food Counter Attendants, Cafeteria, Food Concession, and Coffee Shop Waiters and Waitresses, Dishwashers

Personal Care and Service Occupations

Animal Trainers Amusement and Recreation Attendants Barbers, Hairdressers, Hairstylists and Cosmetologists Baggage Porters, Bellhops, and Concierges Tour Guides and Escorts Recreation and Fitness Workers

Office and Administrative Support Occupations

Bill and Account Collectors Gaming Cage Workers Payroll and Timekeeping Clerks, Tellers Court, Municipal, and License Clerks Hotel, Motel, and Resort Desk Clerks

Construction and Extraction Occupations

Brickmasons, Blockmasons, and Stonemasons Carpet, Floor, and Tile Installers and Finishers Construction Laborers, Electricians Pipelayers, Plumbers, Pipefitters, Steamfitters and Roofers

Production Occupations

Electrical, Electronics, and Electromechanical Assemblers Engine and Other Machine Assemblers Structural Metal Fabricators and Fitters Butchers and Meat Cutters Machine Tool Cutting Setters, Operators, and Tenders, Metal and Plastic Welding, Soldering, and Brazing Workers

Military Specific Occupations

Air Crew Officers Armored Assault Vehicle Officers Artillery and Missile Officers Infantry Officers Military Officer Special and Tactical Operations Leaders, All Other

Section: Injury Data, Mechanism of Injury

WI Variable: Injury Type

NTDB Variable: None

Database Variable: inj_type01

Injury Type: (OS)

Definition: The initial type of injury. The force that caused the most severe injury.

Format Pop-up list options:

Blunt = Non-penetrating injury from an external force causing injury.

Burn = Tissue injury from excessive exposure to chemical, thermal, electrical or radioactive agents.

Penetrating = Injury resulting from a projectile force or piercing instrument entering deeply and causing tissue and/or organ injury.

Other = Injury is other than those listed.

Unknown = Injury type is unknown.

Section: Injury Data, Mechanism of Injury

WI Variable: Primary E-code

NTDB Variable: ICD-9 Primary External Cause Code (I_06)

Database Variable: ecode1

ICD-9 PRIMARY EXTERNAL CAUSE CODE

Definition

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

Field Values

- Relevant ICD-9-CM code value for injury event

Additional Information

- The primary external cause code should describe the main reason a patient is admitted to the hospital.
- External cause codes are used to auto-generate two calculated fields: Trauma Type (Blunt, Penetrating, Burn) and Intentionality (based upon CDC matrix).
- ICD-9-CM codes will be accepted for this data element. Activity codes should not be reported in this field.

Data Source Hierarchy

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. Billing Sheet / Medical Records Coding Summary Sheet
4. ED Nurses' Notes

Associated Edit Checks

Rule ID	Level	Message
1701	1	Invalid, out of range
1702	2	Blank, required field (at least one ICD-9-CM or ICD-10 trauma code must be entered)
1703	4	External Cause Code should not be = (810.0, 811.0, 812.0, 813.0, 814.0, 815.0, 816.0, 817.0, 818.0, 819.0) and Age < 15
1704	2	Should not be 849.x
1705	3	External Cause Code should not be an activity code. Primary External Cause Code must be within the range of E800-999.9

Section: Injury Data, Mechanism of Injury

WI Variable: Secondary E-code

NTDB Variable: ICD-9 Additional External Cause Code (I_10)

Database Variable: ecode2

ICD-9 ADDITIONAL EXTERNAL CAUSE CODE

Definition

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.

Field Values

- Relevant ICD-9-CM code value for injury event

Additional Information

- Example for using secondary E-code: Patient involved in MVC rollover, got out of the vehicle, stumbled onto road and hit by a car. You would code both, but the primary E-code would be the one that caused the most serious injuries.
- External cause codes are used to auto-generate two calculated fields: Trauma Type: (Blunt, Penetrating, Burn) and Intentionality (based upon CDC matrix).
- Only ICD-9-CM codes will be accepted for ICD-9 Additional External Cause Code.
- Activity codes should not be reported in this field.
- Refer to Appendix 3: Glossary of Terms for multiple cause coding hierarchy.

Data Source Hierarchy

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. Billing Sheet / Medical Records Coding Summary Sheet
4. ED Nurses' Notes

Associated Edit Checks

Rule ID	Level	Message
1901	1	Invalid, out of range
1902	4	If completed, Additional External Cause Code cannot be equal to Primary External Cause Code.

Section: Injury Data, Mechanism of Injury

WI Variable: Cause of Injury

NTDB Variable: None

Database Variable:

Definition: The description of the mechanism of injury (Free text).

Section: Injury Data, Mechanism of Injury

WI Variable: Injury Site E849

NTDB Variable: ICD-9 Place of Occurrence External Cause Code (I_08)

Database Variable: inj_plc

ICD-9 PLACE OF OCCURRENCE EXTERNAL CAUSE CODE

Definition

Place of occurrence external cause code used to describe the place/site/location of the injury event (E 849.X).

Field Values

- | | |
|---------------|----------------------------|
| 0. Home | 5. Street |
| 1. Farm | 6. Public Building |
| 2. Mine | 7. Residential Institution |
| 3. Industry | 8. Other |
| 4. Recreation | 9. Unspecified |

Additional Information

- Only ICD-9-CM codes will be accepted for ICD-9 Place of Occurrence External Cause Code.

Data Source Hierarchy

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. Billing Sheet / Medical Records Coding Summary Sheet
4. ED Nurses' Notes

Associated Edit Checks

Rule ID	Level	Message
1801	1	Invalid value
1802	4	Blank, required field (at least one ICD-9-CM or ICD-10 trauma code must be entered)

Section: Injury Data, Mechanism of Injury

WI Variable: Position of Patient in Motor Vehicle

NTDB Variable: None

Database Variable: inj_veh_pos

Position of Patient in Motor Vehicle: (OS)

Definition: The position of the patient in the motor vehicle at the time of the injury. Information gathered from the EMS run sheet. (This field applies only if the mechanism is MVC (motor vehicle collision).)

Format: Pop-up list options:

Front driver seat

Front passenger seat

Rear seat

Other

Unknown

Not Applicable

Not Applicable = motor vehicles that do not meet our definition of a motor vehicle collision. Motor vehicle" includes cars, trucks, SUV"s - **not** ATV"s, motorcycles, buses or snowmobiles.

Section: Injury Data, Mechanism of Injury
WI Variable: Protective/Safety Devices
NTDB Variable: Protective Devices (I_17)
Database Variable: inj_pdev1

PROTECTIVE DEVICES

Definition

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

Field Values

- | | |
|---|---|
| 1. None | 7. Helmet (e.g., bicycle, skiing, motorcycle) |
| 2. Lap Belt | 8. Airbag Present |
| 3. Personal Floatation Device | 9. Protective Clothing (e.g., padded leather pants) |
| 4. Protective Non-Clothing Gear (e.g., shin guard) | 10. Shoulder Belt |
| 5. Eye Protection | 11. Other |
| 6. Child Restraint (booster seat or child car seat) | |

Additional Information

- Check all that apply.
- If "Child Restraint" is present, complete variable "Child Specific Restraint."
- If "Airbag" is present, complete variable "Airbag Deployment."
- Evidence of the use of safety equipment may be reported or observed.
- Lap Belt should be used to include those patients that are restrained, but not further specified.
- If chart indicates "3-point-restraint" choose 2 and 10.

Data Source Hierarchy

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. ED Nurses' Notes

Associated Edit Checks

Rule ID	Level	Message
2501	1	Invalid value
2502	4	Blank, required field
2503	5	If Protective Device = 6 (Child Restraint) then Child Specific Restraint must be completed
2504	5	If Protective Device = 8 (Airbag Present) then Airbag Deployment must be completed

Section: Injury Data, Mechanism of Injury

WI Variable: Child Specific Restraints

NTDB Variable: Child Specific Restraint (I_18)

Database Variable:

CHILD SPECIFIC RESTRAINT

Definition

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

Field Values

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

Additional Information

- Evidence of the use of child restraint may be reported or observed.
- Only completed when Protective Devices include "Child Restraint."

Data Source Hierarchy

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. ED Nurses' Notes

Associated Edit Checks

Rule ID	Level	Message
2601	1	Invalid value
2602	3	If completed, then Protective Device must be 6 (Child Restraint).
2603	4	Blank, required to complete when Protective Device is 6 (Child Restraint)

Section: Injury Data, Mechanism of Injury

WI Variable: Airbag Deployments

NTDB Variable: Airbag Deployments (I_19)

Database Variable:

AIRBAG DEPLOYMENT

Definition

Indication of airbag deployment during a motor vehicle crash.

Field Values

- | | |
|--------------------------|---|
| 1. Airbag Not Deployed | 3. Airbag Deployed Side |
| 2. Airbag Deployed Front | 4. Airbag Deployed Other (knee, airbelt, curtain, etc.) |

Additional Information

- Check all that apply.
- Evidence of the use of airbag deployment may be reported or observed.
- Only completed when Protective Devices include "Airbag."
- Airbag Deployed Front should be used for patients with documented airbag deployments, but are not further specified.

Data Source Hierarchy

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. ED Nurses' Notes

Associated Edit Checks

Rule ID	Level	Message
2701	1	Invalid value
2702	3	If completed, then Protective Device must be 8 (Airbag Present).
2703	4	Blank, required to complete when Protective Device is 8 (Airbag Present)

Section: First Responders, First Responder Information

WI Variable: Service Number

NTDB Variable: None

Database Variable: ph_agnc

Service Number: (OS)

Definition: The Service Number or Name of the First Responder Service

Format: Pop-up list options: Service Number, Unknown, Other or Not Applicable.

Unknown = there was a first responder service, but the provider is not known.

Not Applicable = there was no documentation of a first responder present on scene.

Section: First Responders, First Responder Information

WI Variable: If Other

NTDB Variable: None

Database Variable: ph_agnc_s

If Other: (OS)

Definition: The First Responder Service that does not appear on the above pop-up list, if known.

Format: Free-text of 50 characters that will only be completed when the Service Number is "other".

Section: First Responders, First Responder Information

WI Variable: Report Present

NTDB Variable: None

Database Variable: ph_rp_yn

Report Present: (OS)

Definition: “Is a First Responder written report present?” Mark ‘yes’ if a full EMS report was available in the patient’s medical, through the Wisconsin Ambulance Run Data System (WARDS), or the agency’s electronic medical record system at the time of abstraction.

Format: Pop-up list options:

Yes

No

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Section: First Responders, First Responder Information

WI Variable: Dispatched (Call Received) Date

NTDB Variable: None

Database Variable: PH_C_DATE

Dispatched (Call Received): Date (OS)

Definition: The date the First Responders were dispatched.

Format: The date is in mm/dd/yyyy or unknown.

Unknown = information that is not complete or missing entirely.

Section: First Responders, First Responder Information

WI Variable: Dispatched (Call Received) Time

NTDB Variable: None

Database Variable: PH_C_TIME

Dispatched (Call Received): Time (OS)

Definition: The time the First Responders were dispatched.

Format: Time is in 24-hour format or unknown.

Unknown = information that is not complete or missing entirely.

Section: First Responders, First Responder Information

WI Variable: Enroute Date

NTDB Variable: None

Database Variable: PH_E_DATE

En Route: Date (OS)

Definition: The date the First Responders were en route.

Format: The date is in mm/dd/yyyy or unknown.

Unknown = information that is not complete or missing entirely.

Section: First Responders, First Responder Information

WI Variable: Enroute Time

NTDB Variable: None

Database Variable: PH_E_TIME

En Route: Time (OS)

Definition: The time the First Responders were en route.

Format: Time is in 24-hour format or unknown.

Unknown = information that is not complete or missing entirely.

Section: First Responders, First Responder Information

WI Variable: Arrived at Scene Date

NTDB Variable: None

Database Variable: PH_A_DATE

Arrived at Scene: Date (OS)

Definition: The date the First Responders arrived at the scene.

Format: The date is in mm/dd/yyyy or unknown.

Unknown = information that is not complete or missing entirely.

Section: First Responders, First Responder Information

WI Variable: Arrived at Scene Time

NTDB Variable: None

Database Variable: PH_A_TIME

Arrived at Scene: Time (OS)

Definition: The time the First Responders arrived at the scene.

Format: Time is in 24-hour format or unknown.

Unknown = information that is not complete or missing entirely.

Section: First Responders, First Responder Information

WI Variable: Arrived at Patient Date

NTDB Variable: None

Database Variable: PH_P_DATE

Arrived at Patient: Date (OS)

Definition: The date the First Responders arrived at the patient.

Format: The date is in mm/dd/yyyy or unknown.

Unknown = information that is not complete or missing entirely.

Section: First Responders, First Responder Information

WI Variable: Arrived at Patient Time

NTDB Variable: None

Database Variable: PH_P_TIME

Arrived at Patient: Time (OS)

Definition: The time the First Responders arrived at the patient.

Format: Time is in 24-hour format or unknown.

Unknown = information that is not complete or missing entirely.

Section: First Responders, First Responder Information

WI Variable: Systolic Blood Pressure

NTDB Variable: None

Database Variable: PH_SBP

Initial Vitals: (OS)

Definition: The first vital signs taken by the First Responders.

Systolic Blood Pressure: (OS) Free text of 3 characters

Rule: If the vital sign's numbers are not within the acceptable ranges, a warning message will be displayed to confirm that the number entered was the intended number.

Section: First Responders, First Responder Information

WI Variable: Heart Rate

NTDB Variable: None

Database Variable: PH_HR

Initial Vitals: (OS)

Definition: The first vital signs taken by the First Responders.

Heart Rate: (OS) Free text of 3 characters

Rule: If the vital sign's numbers are not within the acceptable ranges, a warning message will be displayed to confirm that the number entered was the intended number.

Section: First Responders, First Responder Information

WI Variable: Respiratory Rate

NTDB Variable: None

Database Variable: PH_URR

Initial Vitals: (OS)

Definition: The first vital signs taken by the First Responders.

Unassisted Respiratory Rate: (OS) Free text of 2 characters

Rule: If the vital sign's numbers are not within the acceptable ranges, a warning message will be displayed to confirm that the number entered was the intended number.

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: Mode

NTDB Variable: None

Database Variable: PH2_MODE

Mode: (OS)

Definition: The mode of transport from the scene, or the initial ambulance/flight service at the scene if a secondary ambulance/flight service also responds to the scene, or intercepts.

Format: Pop-up list options:

Ambulance

Helicopter

Police

Private vehicle/walk-in

Water ambulance

Fixed wing

Unknown

Unknown = no documentation on how the patient was taken from the scene.

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: Service Number

NTDB Variable: None

Database Variable: PH2_AGNC

Service Number: (OS)

Definition: The Service number of the first ambulance/flight service attending to the patient at the scene, if applicable. (This field applies only if an ambulance/flight selection was made from previous “Mode - Primary”.)

Format: Pop-up list options: Service Number, Other or Unknown
Unknown = there was an EMS Provider, but the provider is not known.

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: Level

NTDB Variable: None

Database Variable: PH2_CARE

Level: (OS)

Definition: This corresponds to the highest level of care that the EMS is authorized to provide.

For the Trauma Registry purposes only, Intermediate and Paramedic ambulance services are ALS; Basic and Intermediate Technician (formerly Basic IV technicians.) are BLS.

Format: Pop-up list options:

ALS (Advanced Life Support)

BLS (Basic Life Support)

Unknown

Unknown = no documentation of the level of the service.

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: Role

NTDB Variable: None

Database Variable: PH2_ROLE

Role: (OS)

Definition: Whether the primary responder transported from the scene.

Format: Pop-up list options:

No transport

Transport from scene

Unknown

Unknown = no documentation of the role.

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: Run Sheet Present

NTDB Variable: None

Database Variable: PH2_RP_YN

Run Sheet Present: (OS)

Definition: “Is the primary run sheet present?” (This field applies only if an ambulance/flight selection was made from previous “Mode of Transport from Scene - Primary.”) Mark ‘yes’ if a full EMS report was available in the patient’s medical, through Wisconsin Ambulance Run Data System (WARDS), or the agency’s electronic medical record system at the time of abstraction.

Format: Pop-up list options:

Yes

No

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: Report Number

NTDB Variable: None

Database Variable: PH2_RP_NUM

Report Number: (OS)

Definition: The run number assigned and entered on the ambulance/flight run sheet of the primary ambulance/flight service, specific to the individual run/patient. Enter “Unknown” if not assigned. (This field applies only if an ambulance/flight selection was made from previous Mode of Transport from Scene - Primary”. Most do not enter a report number on site).

Format: Free text or Unknown.

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: Dispatched (Call Received) Date

NTDB Variable: None (mapped by DI)

Database Variable: PH2_C_DATE

Definition: The Date the EMS was dispatched (call received by EMS).

Format: Date is mm/dd/yyyy or unknown.

Unknown = information that is not complete or missing entirely.

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: Dispatched (Call Received) Time

NTDB Variable: None (mapped by DI)

Database Variable: PH2_C_TIME

Definition: The Time the EMS was dispatched (call received by EMS).

Format: Time is in 24-hour format or unknown.

Unknown = information that is not complete or missing entirely.

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: Enroute Date

NTDB Variable: None

Database Variable: PH2_E_DATE

En Route: Date (OS)

Definition: The date the vehicle started toward the injury scene.

Format: Date is mm/dd/yyyy or unknown.

Unknown = information that is not complete or missing entirely.

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: Enroute Time

NTDB Variable: None

Database Variable: PH2_E_TIME

En Route: Time (OS)

Definition: The time the vehicle started toward the injury scene.

Format: Time is in 24-hour format or unknown.

Unknown = information that is not complete or missing entirely.

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: Arrived at Scene Date

NTDB Variable: None (Mapped by DI)

Database Variable: PH2_A_DATE

Definition: The Date the First Responders arrived at the scene.

Format: The date is in mm/dd/yyyy or unknown.

Unknown = information that is not complete or missing entirely.

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: Arrived at Scene Time

NTDB Variable: None (Mapped by DI)

Database Variable: PH2_A_TIME

Definition: The Time the First Responders arrived at the scene.

Format: Time is in 24-hour format or unknown.

Unknown = information that is not complete or missing entirely.

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: Arrived at Patient Date

NTDB Variable: None

Database Variable: PH2_P_DATE

Arrived at Patient: Date (OS)

Definition: The date the service arrived at the patient at the injury scene.

Format: Date is mm/dd/yyyy or unknown.

Unknown = information that is not complete or missing entirely.

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: Arrived at Patient Time

NTDB Variable: None

Database Variable: PH2_P_TIME

Arrived at Patient: Time (OS)

Definition: The time the service arrived at the patient at the injury scene.

Format: Time is in 24-hour format or unknown.

Unknown = information that is not complete or missing entirely.

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: Left Scene Date

NTDB Variable: None (Mapped by DI)

Database Variable: PH2_L_DATE

Definition: The Date the service left the injury scene.

Format: Date is mm/dd/yyyy or unknown.

Unknown = information that is not complete or missing entirely.

Not Applicable = the service did not transport the patient.

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: Left Scene Time

NTDB Variable: EMS Unit Departure Date From Scene or Transferring Facility (P_06)

Database Variable: PH2_L_TIME

Definition: The Time the service left the injury scene.

Format: Time is in 24-hour format or unknown.

Unknown = information that is not complete or missing entirely.

Not Applicable = the service did not transport the patient.

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: Arrived Destination Date

NTDB Variable: None

Database Variable: PH2_AD_DATE

Arrived at Destination: Date (OS)

Definition: The date the service and patient arrived at the facility or at the intercept location.

Format: Date is mm/dd/yyyy or unknown.

Unknown = information that is not complete or missing entirely.

Not Applicable = the service did not transport the patient.

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: Arrived Destination Time

NTDB Variable: None

Database Variable: PH2_AD_TIME

Arrived at Destination: Time (OS)

Definition: The time the service and patient arrived at the facility or at the intercept location.

Format: Time is in 24-hour format or unknown.

Unknown = information that is not complete or missing entirely.

Not Applicable = the service did not transport the patient.

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: Time on Scene

NTDB Variable: None

Database Variable:

Time on Scene: (OS)

Definition: The total time the service was on the scene. (Note: This will be **automatically** calculated from the Arrived at Scene and Left Scene.)

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: Extrication Required

NTDB Variable: None

Database Variable: PH_EXT_YN

Extrication: (OS)

Definition: There was prolonged (>10 minutes) extrication required.

Format: Pop-up list options:

Yes

No

Unknown

Unknown = information that is not complete or missing entirely.

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: Extrication Time (In Minutes)

NTDB Variable: None

Database Variable: PH_EXT_MINS

Extrication Time (in minutes): (OS)

Definition: The amount of time required to extricate the patient.

Unknown = information is not available.

Format: 3 digits for minutes

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport
WI Variable: Were paralytic agents in effect at the time the vitals were taken?
NTDB Variable: None
Database Variable: PH_PAR_YN

Were paralytic agents in effect at the time the vitals were taken?

Format: Pop-up list options:

Yes

No

Unknown

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: Was patient intubated at the time the vitals were taken?

NTDB Variable: None

Database Variable: PH_INTUB_YN

Was the patient intubated at the time the vitals were taken?

Format: Pop-up list options:

Yes

No

Unknown

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: Systolic Blood Pressure

NTDB Variable: None (Mapped by DI)

Database Variable: PH2_SBP

Free text of 3 characters

Rule: If the vital sign's numbers are not within the acceptable ranges, a warning message will be displayed to confirm that the number entered was the intended number.

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: Heart Rate

NTDB Variable: None (Mapped by DI)

Database Variable: PH2_HR

Free text of 3 characters

Rule: If the vital sign's numbers are not within the acceptable ranges, a warning message will be displayed to confirm that the number entered was the intended number.

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: Respiratory Rate

NTDB Variable: None (Mapped by DI)

Database Variable: PH2_URR

Free text of 3 characters

Rule: If the vital sign's numbers are not within the acceptable ranges, a warning message will be displayed to confirm that the number entered was the intended number.

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: Oxygen Saturation

NTDB Variable: None (Mapped by DI)

Database Variable:

Definition

Oxygen saturation measured by First EMS Provider (expressed as a percentage).

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: GCS Eye

NTDB Variable: None Mapped by DI

Database Variable: PH2_GCS_EO

Definition

Glasgow Coma Score (Eye) measured at the scene of injury by First EMS Provider.

Field Values

- | | |
|--|---|
| 1. No eye movement when assessed | 3. Opens eyes in response to verbal stimulation |
| 2. Opens eyes in response to painful stimulation | 4. Opens eyes spontaneously |

Additional Information

- Used to calculate Overall GCS - EMS Score.
- The null value "Not Known/Not Recorded" is used if the patient is transferred to your facility with no EMS run sheet from the scene of injury.
- If a patient does not have a numeric GCS score recorded, but written documentation closely (or directly) relates to verbiage describing a specific level of functioning within the GCS scale, the appropriate numeric score may be listed. E.g. the chart indicates: "patient withdraws from a painful stimulus," a Motor GCS of 4 may be recorded, IF there is no other contradicting documentation.

Data Source Hierarchy

1. EMS Run Sheet

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: GCS Verbal

NTDB Variable: None (Mapped by DI)

Database Variable: PH2_GCS_VR

Definition

Glasgow Coma Score (Verbal) measured at the scene of injury by First EMS Provider.

Field Values

Pediatric (≤ 2 years):

- | | |
|---------------------------------------|---|
| 1. No vocal response | 4. Cries but is consolable, inappropriate interactions |
| 2. Inconsolable, agitated | 5. Smiles, oriented to sounds, follows objects, interacts |
| 3. Inconsistently consolable, moaning | |

Adult

- | | |
|----------------------------|-------------|
| 1. No verbal response | 4. Confused |
| 2. Incomprehensible sounds | 5. Oriented |
| 3. Inappropriate words | |

Additional Information

- Used to calculate Overall GCS - EMS Score.
- The null value "Not Known/Not Recorded" is used if the patient is transferred to your facility with no EMS run sheet from the scene of injury.
- If patient is intubated then the GCS Verbal score is equal to 1.
- If a patient does not have a numeric GCS score recorded, but written documentation closely (or directly) relates to verbiage describing a specific level of functioning within the GCS scale, the appropriate numeric score may be listed. E.g. the chart indicates: "patient withdraws from a painful stimulus," a Motor GCS of 4 may be recorded, IF there is no other contradicting documentation.

Data Source Hierarchy

1. EMS Run Sheet

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: GCS Motor

NTDB Variable: Initial Field GCS – Motor (P_15)

Database Variable: PH2_GCS_MR

Definition

Glasgow Coma Score (Motor) measured at the scene of injury by First EMS Provider.

Field Values

Pediatric (≤ 2 years):

- | | |
|----------------------|--|
| 1. No motor response | 4. Withdrawal from pain |
| 2. Extension to pain | 5. Localizing pain |
| 3. Flexion to pain | 6. Appropriate response to stimulation |

Adult

- | | |
|----------------------|-------------------------|
| 1. No motor response | 4. Withdrawal from pain |
| 2. Extension to pain | 5. Localizing pain |
| 3. Flexion to pain | 6. Obeys commands |

Additional Information

- Used to calculate Overall GCS - EMS Score.
- The null value "Not Known/Not Recorded" is used if the patient is transferred to your facility with no EMS run sheet from the scene of injury.
- If a patient does not have a numeric GCS score recorded, but written documentation closely (or directly) relates to verbiage describing a specific level of functioning within the GCS scale, the appropriate numeric score may be listed. E.g. the chart indicates: "patient withdraws from a painful stimulus," a Motor GCS of 4 may be recorded, IF there is no other contradicting documentation.

Data Source Hierarchy

1. EMS Run Sheet

Associated Edit Checks

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: GCS Total

NTDB Variable: None (Mapped by DI)

Database Variable: PH2_GCS_TO

INITIAL FIELD GCS - TOTAL

Definition

Glasgow Coma Score (total) measured at the scene of injury by First EMS Provider..

Field Values

- Relevant value for data element

Additional Information

- Note: Automatically calculated from components
- Utilize only if total score is available without component scores.
- The null value "Not Known/Not Recorded" is used if the patient is transferred to your facility with no EMS run sheet from the scene of injury.
- If a patient does not have a numeric GCS recorded, but there is documentation related to their level of consciousness such as "AAOx3," "awake alert and oriented," or "patient with normal mental status," interpret this as GCS of 15 IF there is no other contradicting documentation.

Data Source Hierarchy

1. EMS Run Sheet

Section: First EMS Provider, Primary EMS Provider and/or Scene Transport

WI Variable: RTS (Calculated)

NTDB Variable: None

Database Variable:

RTS (Revised Trauma Score): (OS)

Definition: The ambulance service Revised Trauma Score is the sum of the coded values assigned to three physiological parameters: Glasgow Coma Scale, systolic blood pressure, and respiratory rate, taken from the initial readings at the scene.

Automatically calculated from GCS, blood pressure and respiratory rate if there are numeric values.

Section: Secondary Transport from Scene, Secondary Transport from Scene or Intercept

WI Variable: Mode

NTDB Variable: None

Database Variable: PH3_MODE

Mode: (OS)

Definition: The secondary responding ambulance/flight service at the scene and transporting to the facility from the scene, or intercept if applicable.

Format: Pop-up list options:

Mode:

Ambulance

Helicopter

Police

Fixed wing

Unknown

Not Applicable

Unknown = no documentation on how the patient was taken from the scene.

Not Applicable = no secondary transport.

Section: Secondary Transport from Scene, Secondary Transport from Scene or Intercept

WI Variable: Service Number

NTDB Variable: None

Database Variable: PH3_AGNC

Service Number: (OS)

Definition: The Service Number of the secondary ambulance/flight service attending to the patient at the scene or at intercept if applicable. (This field applies only if an ambulance/flight service was selected in previous “Mode – Transport from Scene, or Intercept - Secondary”.)

Format: Pop-up list options:

Service Number, Other, Unknown.

Unknown = there was a Secondary service, but the service is not known.

Section: Secondary Transport from Scene, Secondary Transport from Scene or Intercept

WI Variable: Level

NTDB Variable: None

Database Variable: PH3_CARE

Level: (OS)

Definition: This corresponds to the highest level of care that the EMS is authorized to provide.

For the Trauma Registry purposes only, Intermediate and Paramedic ambulance services are ALS; Basic and Intermediate Technician (formerly Basic IV technician) are BLS.

Format: Pop-up list options:

ALS (Advanced Life Support)

BLS (Basic Life Support)

Unknown

Unknown = no documentation of the level of the service.

Section: Secondary Transport from Scene, Secondary Transport from Scene or Intercept

WI Variable: Role

NTDB Variable: None

Database Variable: PH3_ROLE

Role: (OS)

Definition: Whether the secondary responder transported from the scene or from intercept.

Format: Pop-up list options:

Transport from scene

Transport from intercept

Unknown

Unknown = no documentation of the role.

Section: Secondary Transport from Scene, Secondary Transport from Scene or Intercept

WI Variable: Run Sheet Present

NTDB Variable: None

Database Variable: PH3_RP_YN

Run Sheet Present: (OS)

Definition: “Is the run sheet present?” (This field applies only if an ambulance/flight service was selected in previous “Mode – Transport from Scene, or Intercept – Secondary.”) Mark ‘yes’ if a full EMS report was available in the patient’s medical, through Wisconsin Ambulance Run Data System (WARDS), or the agency’s electronic medical record system at the time of abstraction.

Format: Pop-up list options:

Yes

No

Version 1.0 located on pg. 98

Section: Secondary Transport from Scene, Secondary Transport from Scene or Intercept

WI Variable: Report Number

NTDB Variable: None

Database Variable: PH3_RP_NUM

Report Number - Ambulance/Flight Run Number: (OS)

Definition: The run number assigned and entered on the ambulance/flight run sheet of the secondary ambulance/flight service specific to the individual run/patient, if applicable.

Format: Free text, Enter “Unknown” if not assigned. (This field applies only if an ambulance/flight service was selected in previous “Mode – Transport from Scene, or Intercept - Secondary”.)

Section: Secondary Transport from Scene, Secondary Transport from Scene or Intercept

WI Variable: Dispatched (Call Received) Date

NTDB Variable: None

Database Variable: PH3_C_DATE

Dispatched (Call Received): Date (OS)

Definition: The date the secondary service was dispatched.

Format: Date is in mm/dd/yyyy or unknown.

Unknown = information that is not complete or missing entirely.

Section: Secondary Transport from Scene, Secondary Transport from Scene or Intercept

WI Variable: Dispatched (Call Received) Time

NTDB Variable: None

Database Variable: PH3_C_TIME

Dispatched (Call Received): Time (OS)

Definition: The time the secondary service was dispatched.

Format: Time is in 24-hour format or unknown.

Unknown = information that is not complete or missing entirely.

Section: Secondary Transport from Scene, Secondary Transport from Scene or Intercept

WI Variable: En Route Date

NTDB Variable: None

Database Variable: PH3_E_DATE

En Route: Date (OS)

Definition: The date the secondary service started toward the injury scene or intercept location.

Format: Date is in mm/dd/yyyy or unknown.

Unknown = information that is not complete or missing entirely.

Section: Secondary Transport from Scene, Secondary Transport from Scene or Intercept

WI Variable: En Route Time

NTDB Variable: None

Database Variable: PH3_E_TIME

En Route: Time (OS)

Definition: The time the secondary service started toward the injury scene or intercept location.

Format: Time is in 24-hour format or unknown.

Unknown = information that is not complete or missing entirely.

Section: Secondary Transport from Scene, Secondary Transport from Scene or Intercept

WI Variable: Arrived at Location Date

NTDB Variable: None

Database Variable: PH3_A_DATE

Arrived at Location: Date (OS)

Definition: The date the secondary service arrived on the scene or the intercept location.

Format: Date is in mm/dd/yyyy or unknown.

Unknown = information that is not complete or missing entirely.

Section: Secondary Transport from Scene, Secondary Transport from Scene or Intercept

WI Variable: Arrived at Location Time

NTDB Variable: None

Database Variable: PH3_A_TIME

Arrived at Location: Time (OS)

Definition: The time the secondary service arrived on the scene or the intercept location.

Format: Time is in 24-hour format or unknown.

Unknown = information that is not complete or missing entirely.

Section: Secondary Transport from Scene, Secondary Transport from Scene or Intercept

WI Variable: Arrived at Patient Date

NTDB Variable: None

Database Variable: PH3_P_DATE

Arrived at Patient: Date (OS)

Definition: The date the secondary service arrived at the patient at the injury scene or the intercept location.

Format: Date is in mm/dd/yyyy or unknown.

Unknown = information that is not complete or missing entirely.

Section: Secondary Transport from Scene, Secondary Transport from Scene or Intercept

WI Variable: Arrived at Patient Time

NTDB Variable: None

Database Variable: PH3_P_TIME

Arrived at Patient: Time (OS)

Definition: The time the secondary service arrived at the patient at the injury scene or the intercept location.

Format: Time is in 24-hour format or unknown.

Unknown = information that is not complete or missing entirely.

Section: Secondary Transport from Scene, Secondary Transport from Scene or Intercept

WI Variable: Left for Destination Date

NTDB Variable: None

Database Variable: PH3_L_DATE

Left for Destination: Date (OS)

Definition: The date the secondary service left the injury scene or the intercept location.

Format: Date is in mm/dd/yyyy or unknown.

Unknown = information that is not complete or missing entirely.

Section: Secondary Transport from Scene, Secondary Transport from Scene or Intercept

WI Variable: Left for Destination Time

NTDB Variable: None

Database Variable: PH3_L_TIME

Left for Destination: Time (OS)

Definition: The time the secondary service left the injury scene or the intercept location.

Format: Time is in 24-hour format or unknown.

Unknown = information that is not complete or missing entirely.

Section: Secondary Transport from Scene, Secondary Transport from Scene or Intercept

WI Variable: Arrived at Destination Date

NTDB Variable: None

Database Variable: PH3_AD_DATE

Arrived at Destination: Date (OS)

Definition: The date the secondary service arrived at the facility.

Format: Date is in mm/dd/yyyy or unknown. Unknown = information that is not complete or missing entirely.

Section: Secondary Transport from Scene, Secondary Transport from Scene or Intercept

WI Variable: Arrived at Destination Time

NTDB Variable: None

Database Variable: PH3_AD_TIME

Arrived at Destination: Time (OS)

Definition: The time the secondary service arrived at the facility.

Format: Time is in 24-hour format or unknown.

Unknown = information that is not complete or missing entirely.

Section: Secondary Transport from Scene, Secondary Transport from Scene or Intercept

WI Variable: Time on Scene/Meeting Location (Calculated)

NTDB Variable: None

Database Variable:

Time on Scene: Secondary

Definition: The total time the secondary service was on the scene. (Note: This will be **automatically** calculated from the Arrived at Location and Left for Destination.)

Section: Referring Facility

WI Variable: Facility Transfer

NTDB Variable: Inter-facility Transfer (P_17)

Database Variable: it_xfr_yn

INTER-FACILITY TRANSFER

Definition

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

Field Values

1. Yes

2. No

Additional Information

- Patients transferred from a private doctor's office, stand-alone ambulatory surgery center, or delivered to your hospital by a non-EMS transport are not considered an inter-facility transfers.
- Outlying facilities purporting to provide emergency care services or utilized to stabilize a patient are considered acute care facilities.

Data Source Hierarchy

1. EMS Run Sheet

Associated Edit Checks

Rule ID	Level	Message
4401	2	Blank, required field
4402	1	Invalid value
4404	3	Not Known/Not Recorded, required Inclusion Criterion
4405	2	Not Applicable, required Inclusion Criterion

Section: Referring Facility
WI Variable: Referring Facility
NTDB Variable: None
Database Variable: rf_fac

Referring Facility: (OS)

Definition: The name or number of the referring facility.

Format: List of Wisconsin Facilities.
Other (Out-of-State Facility).

Section: Referring Facility

WI Variable: If Other/Out of State

NTDB Variable: None

Database Variable: re_fac_s

If Other/Out of State: (OS) Free text field for other/out-of-state facility name.

Section: Referring Facility
WI Variable: City
NTDB Variable: None
Database Variable: rf_adr_ci

City: (OS) Free text

Section: Referring Facility

WI Variable: State

NTDB Variable: None

Database Variable: rf_adr_st

State: (OS) Pop-up FIPS Code States in alphabetical order, Wisconsin is at the top of list and is the default; Out of Country or Unknown.

Section: Referring Facility
WI Variable: Arrival Date
NTDB Variable: None
Database Variable: rf_a_date

Arrival: Date (OS)

Definition: The date the patient arrived at the referring facility.

Format: Date is in mm/dd/yyyy or unknown.

Section: Referring Facility
WI Variable: Arrival Time
NTDB Variable: None
Database Variable: rf_a_time

Arrival: Time (OS)

Definition: The time the patient arrived at the referring facility.

Format: Time is in 24-hour format or unknown.

Unknown = information that is not complete or missing entirely.

Section: Referring Facility

WI Variable: Discharge Date

NTDB Variable: None

Database Variable: rf_dis_date

Discharge: Date, Time (OS)

Definition: The date the patient was discharged from the referring facility.

Format: Date is in mm/dd/yyyy or unknown.

Unknown = information that is not complete or missing entirely.

Section: Referring Facility
WI Variable: Discharge Time
NTDB Variable: None
Database Variable: rf_dis_time

Discharge: Date, Time (OS)

Definition: The time the patient was discharged from the referring facility.

Format: Time is in 24-hour format or unknown.

Unknown = information that is not complete or missing entirely.

Section: Referring Facility

WI Variable: Were paralytic agents in effect at the time the vitals were taken?

/Was patient intubated at the time the vitals were taken?/ Sedated/EyeObstruction

NTDB Variable: Initial ED/Hospital GCS Assessment Qualifiers (ED_14)

Database Variable:

INITIAL ED/HOSPITAL GCS ASSESSMENT QUALIFIERS

Definition

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

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

Additional Information

- Identifies treatments given to the patient that may affect the first assessment of GCS. This field does not apply to self-medications the patient may administer (i.e., ETOH, prescriptions, etc.).
- If an intubated patient has recently received an agent that results in neuromuscular blockade such that a motor or eye response is not possible, then the patient should be considered to have an exam that is not reflective of their neurologic status and the chemical sedation modifier should be selected.
- Neuromuscular blockade is typically induced following the administration of agent like succinylcholine, mivacurium, rocuronium, (cis)atracurium, vecuronium, or pancuronium. While these are the most common agents, please review what might be typically used in your center so it can be identified in the medical record.
- Each of these agents has a slightly different duration of action, so their effect on the GCS depends on when they were given. For example, succinylcholine's effects last for only 5-10 minutes.
- Please note that first recorded/hospital vitals do not need to be from the same assessment.
- Check all that apply.

Data Source Hierarchy

- 1. Triage Form / Trauma Flow Sheet
- 2. ED Record
- 3. EMS Run Sheet
- 4. Nurses notes

Associated Edit Checks

Rule ID	Level	Message
5801	1	Invalid value
5802	2	Blank, required field

Section: Referring Facility
WI Variable: Systolic Blood Pressure
NTDB Variable: None
Database Variable: rf_sbp

Initial Vitals: (OS)

Definition: The initial vital signs taken at the referring facility.

Systolic Blood Pressure: (OS) Free text of 3 characters

Rule: If the vital sign's numbers are not within the acceptable ranges, a warning message will be displayed to confirm that the number entered was the intended number.

Section: Referring Facility

WI Variable: Heart Rate

NTDB Variable: None

Database Variable: rf_hr

Initial Vitals: (OS)

Definition: The initial vital signs taken at the referring facility.

Heart Rate: (OS) Free text of 3 characters

Rule: If the vital sign's numbers are not within the acceptable ranges, a warning message will be displayed to confirm that the number entered was the intended number.

Section: Referring Facility

WI Variable: Unassisted Respiratory Rate

NTDB Variable: None

Database Variable: rf_urr

Initial Vitals: (OS)

Definition: The initial vital signs taken at the referring facility.

Unassisted Respiratory Rate: (OS) Free text of 2 characters

Rule: If the vital sign's numbers are not within the acceptable ranges, a warning message will be displayed to confirm that the number entered was the intended number.

Section: Referring Facility
WI Database: GCS Eye
NTDB Database: None
Database Variable: rf_gcs_eo

GCS: Definition: The Glasgow Coma Scale is used to measure level of consciousness, based on a total of three aspects of behavior. Scores should reflect the first assessment by the referring facility and the best response in each category. Enter appropriate score.
Unknown = Not Documented

	Adults and Children	Infants	Points
Eye Opening	Spontaneous	Spontaneous	4
	To voice	To voice	3
	To pain	To pain	2
	None	None	1

Section: Referring Facility
WI Variable: GCS Verbal
NTDB Variable: None
Database Variable: rf_gcs_vr

GCS:

Definition: The Glasgow Coma Scale is used to measure level of consciousness, based on a total of three aspects of behavior. Scores should reflect the first assessment by the referring facility and the best response in each category. Enter appropriate score.

Unknown = Not Documented

Verbal Response	Oriented	Coos, babbles	5
	Confused	Irritable cry	4
	Inappropriate words	Cries to pain	3
	Incomprehensible	Moans to pain	2
	None	None	1

Section: Referring Facility

WI Variable: GCS Motor

NTDB Variable: None

Database Variable: rf_gcs_mr

GCS:

Definition: The Glasgow Coma Scale is used to measure level of consciousness, based on a total of three aspects of behavior. Scores should reflect the first assessment by the referring facility and the best response in each category. Enter appropriate score.

Unknown = Not Documented

Motor	Obeys commands	Normal spontaneous movement	6
Response	Localizes pain	Withdraws to touch	5
	Withdraws to pain	Withdraws to pain	4
	Flexor response	Flexor response	3
	Extensor response	Extensor response	2
	None	None	1

Section: Referring Facility
WI Variable: GCS Total
NTDB Variable: None
Database Variable: rf_gcs_to

GCS: (OS)

Definition: The Glasgow Coma Scale is used to measure level of consciousness, based on a total of three aspects of behavior. Scores should reflect the first assessment by the referring facility and the best response in each category. Enter appropriate score.

Unknown = Not Documented

Total: (OS)

Definition: **Automatically calculated Total GCS-Score** = sum of integers in each category.

Section: Referring Facility
WI Variable: RTS (Calculated)
NTDB Variable: None
Database Variable:

Definition: The Revised Trauma Score is the sum of the coded values assigned to three physiological parameters: Glasgow Coma Scale, systolic blood pressure, and respiratory rate, taken from the initial readings at the referring facility and multiplied by an assigned weight derived from regression analysis of patients in the Major Trauma Outcome Study.

Automatically calculated from GCS, blood pressure and respiratory rate if there are numeric values.

Section: Referring Facility

WI Variable: ETOH Level

NTDB Variable: None

Database Variable: rf_bac_lvl

ETOH Level: (OS)

Definition: The initial laboratory value of blood alcohol level drawn at the referring facility. This must be multiplied by 1000 if returned as a decimal to be entered as a whole number.

Format: Free Text as mg/dl

000 = Tested, but results negative

Unknown = tested, but result not available

Not Applicable = Not Drawn or Not Tested

Example: If a legal blood alcohol is .08 g/dl at your facility it should be entered as 80 (mg/dl).

Section: Referring Facility

WI Variable: Drug Screen (multiple entries possible)

NTDB Variable: None

Database Variable:

Drug Screen: (OS)

Definition: Presence of drugs in patient's system as confirmed by laboratory drug screen. Enter all positive drugs. Do not include positive results for drugs given by EMS or Facility personnel prior to the drug screen.

Format: Pop-up list options:

Cannabis

Cocaine

PCP

Barbiturates

Narcotics

Amphetamines

Valium

Benzodiazepines

Other – specify in free text field

Unknown = tested, but result not available

Not Applicable = not tested

None = tested but result negative

Section: Referring Facility

WI Variable: If Other (drug identified)

NTDB Variable: None

Database Variable:

Drug Screen: (OS)

Definition: Presence of drugs in patient's system as confirmed by laboratory drug screen. Enter all positive drugs. Do not include positive results for drugs given by EMS or Facility personnel prior to the drug screen.

If Other: (OS) Free Text

Section: Referring Facility

WI Variable: Transport from Referring Facility

NTDB Variable: None

Database Variable: it_mode

Transport from Referring Facility: (OS)

Definition: The mode of transport by which the patient was transported from the referring facility to the receiving facility.

Format: Pop-up list options:

Ambulance

Helicopter

Police

Private vehicle/walk-in

Fixed wing

Unknown

Section: Referring Facility
WI Variable: Level
NTDB Variable: None
Database Variable: it_care

Level: (OS)

Definition: This corresponds to the highest level of care that the EMS is authorized to provide.

For the Trauma Registry purposes only, Intermediate and Paramedic ambulance services are ALS; Basic and Intermediate Technician (formerly Basic IV technician) are BLS.

Format: Pop-up list options:

ALS (Advanced Life Support)

BLS (Basic Life Support)

Unknown

Section: ED/Admission

WI Variable: Facility Access

NTDB Variable: None

Database Variable Name: fac_access

Facility Access: (OS)

Definition: How did the patient come into this facility?

Format: Pop-up Options

Emergency Department (ED)

Direct Admit

Dead on Arrival (DOA)

Section: ED/Admission

WI Variable: Were paralytic agents in effect at the time the vitals were taken? / Was patient intubated at the time the vitals were taken? / Sedated / Eye Obstruction

NTDB Variable: Initial ED/Hospital GCS Assessment Qualifiers (ED_14)

Database Variable:

INITIAL ED/HOSPITAL GCS ASSESSMENT QUALIFIERS

Definition

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

Field Values

- 1. Patient Chemically Sedated or Paralysed
- 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

Additional Information

- Identifies treatments given to the patient that may affect the first assessment of GCS. This field does not apply to self-medications the patient may administer (i.e., ETOH, prescriptions, etc.).
- If an intubated patient has recently received an agent that results in neuromuscular blockade such that a motor or eye response is not possible, then the patient should be considered to have an exam that is not reflective of their neurologic status and the chemical sedation modifier should be selected.
- Neuromuscular blockade is typically induced following the administration of agent like succinylcholine, mivacurium, rocuronium, (cis)atracurium, vecuronium, or pancuronium. While these are the most common agents, please review what might be typically used in your center so it can be identified in the medical record.
- Each of these agents has a slightly different duration of action, so their effect on the GCS depends on when they were given. For example, succinylcholine's effects last for only 5-10 minutes.
- Please note that first recorded/hospital vitals do not need to be from the same assessment.
- Check all that apply.

Data Source Hierarchy

- 1. Triage Form/Trauma Flow Sheet
- 2. ED Records
- 3. EMS Run Sheet
- 4. Nurses notes

Associated Edit Checks

Rule ID	Level	Message
5801	1	Invalid value
5802	2	Blank, required field

Section: ED/Admission

WI Variable: Systolic Blood Pressure

NTDB Variable: Initial ED/Hospital Systolic Blood Pressure (ED_03)

Database Variable: ed_sbp

INITIAL ED/HOSPITAL SYSTOLIC BLOOD PRESSURE

Definition

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

Field Values

- Relevant value for data element

Additional Information

- Please note that first recorded/hospital vitals do not need to be from the same assessment.

Data Source Hierarchy

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. Nurses notes

Associated Edit Checks

Rule ID	Level	Message
4701	1	Invalid value
4702	2	Blank, required field
4704	2	Invalid, out of range

Section: ED/Admission

WI Variable: Heart Rate

NTDB Variable: Initial ED/Hospital Pulse Rate (ED_04)

Database Variable: ed_hr

INITIAL ED/HOSPITAL PULSE RATE

Definition

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).

Field Values

- Relevant value for data element

Additional Information

- Please note that first recorded/hospital vitals do not need to be from the same assessment.

Data Source Hierarchy

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. Nurses notes

Associated Edit Checks

Rule ID	Level	Message
4801	1	Invalid value
4802	2	Blank, required field
4804	2	Invalid, out of range

Section: ED/Admission

WI Variable: Unassisted Respiratory Rate

NTDB Variable: Initial ED/Hospital Respiratory Rate (ED_06)

Database Variable: ed_urr

INITIAL ED/HOSPITAL RESPIRATORY RATE

Definition

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

Field Values

- Relevant value for data element

Additional Information

- If available, complete additional field: "Initial ED/Hospital Respiratory Assistance."
- Note: all recorded values should be unassisted
- Please note that first recorded/hospital vitals do not need to be from the same assessment.

Data Source Hierarchy

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. Nurses notes

Associated Edit Checks

Rule ID	Level	Message
5001	1	Invalid value
5002	2	Blank, required field
5004	5	If completed, then Initial Ed/Hospital Respiratory Assistance must be completed.
5005	2	Invalid, out of range

Section: ED/Admission

WI Variable: Oxygen Saturation

NTDB Variable: Initial ED/Hospital Oxygen Saturation (ED_08)

Database Variable:

INITIAL ED/HOSPITAL OXYGEN SATURATION

Definition

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

Field Values

- Relevant value for data element

Additional Information

- If available, complete additional field: "Initial ED/Hospital Supplemental Oxygen."
- Please note that first recorded/hospital vitals do not need to be from the same assessment.

Data Source Hierarchy

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. Nurses notes

Associated Edit Checks

Rule ID	Level	Message
5201	1	Invalid value
5202	4	Blank, required field
5203	5	If completed, then Initial Ed/Hospital Supplemental Oxygen must be completed

Section: ED/Admission

WI Variable: Supplemental Oxygen

NTDB Variable: Initial ED/Hospital Supplemental Oxygen (ED_09)

Database Variable:

INITIAL ED/HOSPITAL SUPPLEMENTAL OXYGEN

Definition

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.

Field Values

1. No Supplemental Oxygen
2. Supplemental Oxygen

Additional Information

- Only completed if a value is provided for "Initial ED/Hospital Oxygen Saturation."
- Please note that first recorded/hospital vitals do not need to be from the same assessment.

Data Source Hierarchy

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. Nurses notes

Associated Edit Checks

Rule ID	Level	Message
5301	1	Invalid value
5303	4	Blank, required to complete when Initial ED/Hospital Oxygen Saturation is complete

Section: ED/Admission

WI Variable: GCS Eye

NTDB Variable: Initial ED/Hospital GCS – Eye (ED_10)

Database Variable: ed_gcs_eo

INITIAL ED/HOSPITAL GCS - EYE

Definition

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

Field Values

1. No eye movement when assessed
2. Opens eyes in response to painful stimulation
3. Opens eyes in response to verbal stimulation
4. Opens eyes spontaneously

Additional Information

- Used to calculate Overall GCS - ED Score.
- If a patient does not have a numeric GCS score recorded, but written documentation closely (or directly) relates to verbiage describing a specific level of functioning within the GCS scale, the appropriate numeric score may be listed. E.g. the chart indicates: "patient withdraws from a painful stimulus," a Motor GCS of 4 may be recorded, IF there is no other contradicting documentation.
- Please note that first recorded/hospital vitals do not need to be from the same assessment.

Data Source Hierarchy

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. Nurses notes

Associated Edit Checks

Rule ID	Level	Message
5401	1	Invalid value
5402	5	Blank, required to complete variable: Initial ED/Hospital GCS -Total

Section: ED/Admission

WI Variable: GCS Verbal

NTDB Variable: Initial ED/Hospital GCS – Verbal (ED_11)

Database Variable: ed_gcs_vr

INITIAL ED/HOSPITAL GCS - VERBAL

Definition

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

Field Values

Pediatric (≤ 2 years):

- | | |
|---------------------------------------|---|
| 1. No vocal response | 4. Cries but is consolable, inappropriate interactions |
| 2. Inconsolable, agitated | 5. Smiles, oriented to sounds, follows objects, interacts |
| 3. Inconsistently consolable, moaning | |

Adult

- | | |
|----------------------------|-------------|
| 1. No verbal response | 4. Confused |
| 2. Incomprehensible sounds | 5. Oriented |
| 3. Inappropriate words | |

Additional Information

- Used to calculate Overall GCS - ED Score.
- If patient is intubated then the GCS Verbal score is equal to 1.
- If a patient does not have a numeric GCS score recorded, but written documentation closely (or directly) relates to verbiage describing a specific level of functioning within the GCS scale, the appropriate numeric score may be listed. E.g. the chart indicates: "patient withdraws from a painful stimulus," a Motor GCS of 4 may be recorded, IF there is no other contradicting documentation.
- Please note that first recorded/hospital vitals do not need to be from the same assessment.

Data Source Hierarchy

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. Nurses notes

Associated Edit Checks

Rule ID	Level	Message
5501	1	Invalid value
5502	5	Blank, required to complete variable: Initial ED/Hospital GCS -Total

Section: ED/Admission

WI Variable: GCS Motor

NTDB Variable: Initial ED/Hospital GCS – Motor (ED_12)

Database Variable: ed_gcs_mr

INITIAL ED/HOSPITAL GCS - MOTOR

Definition

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

Field Values

Pediatric (≤ 2 years):

- | | |
|----------------------|--|
| 1. No motor response | 4. Withdrawal from pain |
| 2. Extension to pain | 5. Localizing pain |
| 3. Flexion to pain | 6. Appropriate response to stimulation |

Adult

- | | |
|----------------------|-------------------------|
| 1. No motor response | 4. Withdrawal from pain |
| 2. Extension to pain | 5. Localizing pain |
| 3. Flexion to pain | 6. Obeys commands |

Additional Information

- Used to calculate Overall GCS – ED Score.
- If a patient does not have a numeric GCS score recorded, but written documentation closely (or directly) relates to verbiage describing a specific level of functioning within the GCS scale, the appropriate numeric score may be listed. E.g. the chart indicates: "patient withdraws from a painful stimulus," a Motor GCS of 4 may be recorded, IF there is no other contradicting documentation.
- Please note that first recorded/hospital vitals do not need to be from the same assessment.

Data Source Hierarchy

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. Nurses notes

Associated Edit Checks

Rule ID	Level	Message
5601	1	Invalid value
5602	5	Blank, required to complete variable: Initial ED/Hospital GCS – Total

Section: ED/Admission

WI Variable: GCS Total

NTDB Variable: Initial ED/Hospital GCS – Total (ED_13)

Database Variable: ed_gcs_to

INITIAL ED/HOSPITAL GCS - TOTAL

Definition

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

Field Values

- Relevant value for data element

Additional Information

- Utilize only if total score is available without component scores.
- If a patient does not have a numeric GCS recorded, but there is documentation related to their level of consciousness such as "AAOx3," "awake alert and oriented," or "patient with normal mental status," interpret this as GCS of 15 IF there is no other contradicting documentation.
- Please note that first recorded/hospital vitals do not need to be from the same assessment.

Data Source Hierarchy

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. Nurses notes

Associated Edit Checks

Rule ID	Level	Message
5701	1	Invalid, out of range
5702	5	Blank, required to complete if Initial ED/Hospital GCS -Eye, Initial ED/Hospital GCS -Verbal, and Initial ED/Hospital GCS -Motor are Not Applicable or Not Known/Not Recorded
5703	4	Initial ED/Hospital GCS -Total does not equal the sum of Initial ED/Hospital GCS -Eye, Initial ED/Hospital GCS -Verbal, and Initial ED/Hospital GCS -Motor
5704	4	ONE of the following: Initial ED/Hospital GCS -Eye, Initial ED/Hospital GCS -Verbal, or Initial ED/Hospital GCS -Motor is blank but Initial ED/Hospital GCS -Total is completed

Section: ED/Admission

WI Variable: RTS (calculated)

NTDB Variable: None

Database Variable:

RTS (Revised Trauma Score):

Definition: The receiving facility Revised Trauma Score is the sum of the coded values assigned to three physiological parameters: Glasgow Coma Scale, systolic blood pressure, and respiratory rate, taken from the initial readings at the receiving facility and multiplied by an assigned weight derived from regression analysis of patients in the Major Trauma Outcome Study.

Automatically calculated from GCS, blood pressure and respiratory rate if there are numeric values.

Section: ED/Admission

WI Variable: Temperature

NTDB Variable: Initial ED/Hospital Temperature (ED_05)

Database Variable: ed_temp

INITIAL ED/HOSPITAL TEMPERATURE

Definition

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

Field Values

- Relevant value for data element

Additional Information

- Please note that first recorded/hospital vitals do not need to be from the same assessment.

Data Source Hierarchy

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. Nurses notes

Associated Edit Checks

Rule ID	Level	Message
4901	1	Invalid value
4902	4	Blank, required field
4903	3	Invalid, out of range

Section: ED/Admission
WI Variable: In (Temperature)
NTDB Variable:
Database Variable:

In:

Format: Pop-up list options:

F=Fahrenheit

C=Celsius

Section: ED/Admission
WI Variable: Route (Temperature)
NTDB Variable:
Database Variable:

Section: ED/Admission

WI Variable: Height

NTDB Variable: Initial ED/Hospital Height (ED_15)

Database Variable:

INITIAL ED/HOSPITAL HEIGHT

Definition

First recorded height upon ED/hospital arrival.

Field Values

- Relevant value for data element

Additional Information

- Converted to centimeters.
- May be based on family or self-report.
- Please note that first recorded/hospital vitals do not need to be from the same assessment.

Data Source Hierarchy

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. EMS Run Sheet
4. Nurses notes
5. Self-report
6. Family report

Associated Edit Checks

Rule ID	Level	Message
8501	1	Invalid value
8502	2	Blank, required field
8503	3	Invalid, out of range

Section: ED/Admission
WI Variable: In (Height)
NTDB Variable: None
Database Variable:

Section: ED/Admission

WI Variable: Weight

NTDB Variable: Initial ED/Hospital Weight (ED_16)

Database Variable:

INITIAL ED/HOSPITAL WEIGHT

Definition

Measured or estimated baseline weight.

Field Values

- Relevant value for data element

Additional Information

- Converted to kilograms.
- May be based on family or self-report.
- Please note that first recorded/hospital vitals do not need to be from the same assessment.

Data Source Hierarchy

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. EMS Run Sheet
4. Nurses notes
5. Self-report
6. Family report

Associated Edit Checks

Rule ID	Level	Message
8601	1	Invalid value
8602	2	Blank, required field
8603	3	Invalid, out of range

Section: ED/Admission
WI Variable: In (Weight)
NTDB Variable: None
Database Variable:

Section: ED/Admission

WI Variable: ETOH Level

NTDB Variable: None

Database Variable: ed_bac_ivl

ETOH Level: (OS)

Definition: The initial laboratory value of blood alcohol level drawn at the receiving facility. This must be multiplied by 1000 if returned as a decimal to be entered as a whole number.

Format: Free Text as mg/dl

000 = Tested, but results negative

Unknown = tested, but result not available

Not Applicable = Not Drawn or Not Tested

Example: If a legal blood alcohol is .08 g/dl at your facility it should be entered as 80 (mg/dl).

Section: ED/Admission

WI Variable: Alcohol Use Indicator

NTDB Variable: Alcohol Use Indicator (ED_17)

Database Variable:

ALCOHOL USE INDICATOR

Definition

Use of alcohol by the patient.

Field Values

- | | |
|---------------------------|---|
| 1. No (not tested) | 3. Yes (confirmed by test [trace levels]) |
| 2. No (confirmed by test) | 4. Yes (confirmed by test [beyond legal limit]) |

Additional Information

- Blood alcohol concentration (BAC) may be documented at any facility (or setting) treating this patient event.
- "Trace levels" is defined as any alcohol level below the legal limit, but not zero.
- "Beyond legal limit" is defined as a blood alcohol concentration above the legal limit for the state in which the treating institution is located. Above any legal limit, DUI, DWI or DWAI, would apply here.
- If alcohol use is suspected, but not confirmed by test, record null value "Not Known/Not Recorded."

Data Source Hierarchy

1. Lab Results
2. ED Physician Notes

Associated Edit Checks

Rule ID	Level	Message
5901	1	Invalid value
5902	4	Blank, required field

Section: ED/Admission

WI Variable: Drug Use Indicator

NTDB Variable: Drug Use Indicator (ED_18)

Database Variable:

DRUG USE INDICATOR

Definition

Use of drugs by the patient.

Field Values

- | | |
|---------------------------|--|
| 1. No (not tested) | 3. Yes (confirmed by test [prescription drug]) |
| 2. No (confirmed by test) | 4. Yes (confirmed by test [illegal use drug]) |

Additional Information

- Drug use may be documented at any facility (or setting) treating this patient event.
- "Illegal use drug" includes illegal use of prescription drugs.
- If drug use is suspected, but not confirmed by test, record null value "Not Known/Not Recorded."
- This data element refers to drug use by the patient and does not include medical treatment.
- Check all that apply.

Data Source Hierarchy

1. Lab Results
2. ED Physician Notes

Associated Edit Checks

Rule ID	Level	Message
6001	1	Invalid value
6002	4	Blank, required field

Section: ED/Admission

WI Variable: Drug Screen (can make multiple entries)

NTDB Variable: None

Database Variable: ed_drg_01 through ed_drg_06 and ed_drg_s

Drug Screen:

Definition: Presence of drugs in patient's system as confirmed by laboratory drug screen. Enter all positive drugs. Do not include positive results for drugs given by EMS or hospital personnel prior to the drug screen.

Format: Pop-up list options:

Cannabis

Cocaine

PCP

Barbiturates

Narcotics

Amphetamines

Valium

Benzodiazepines

Other – specify in free text field

Unknown = tested, but result not available

Not Applicable = not tested

None = tested, but result negative

Section: ED/Admission

WI Variable: If Other (drug screen)

NTDB Variable: None

Database Variable:

Drug Screen:

Definition: Presence of drugs in patient's system as confirmed by laboratory drug screen. Enter all positive drugs. Do not include positive results for drugs given by EMS or hospital personnel prior to the drug screen.

If Other: Free Text

Section: ED/Admission

WI Variable: ED Discharge Date

NTDB Variable: ED Discharge Date (ED_21)

Database Variable: edd_date

ED DISCHARGE DATE

Definition

The date the patient was discharged from the ED.

Field Values

- Relevant value for data element

Additional Information

- Collected as YYYY-MM-DD.
- Used to auto-generate an additional calculated field: Total ED Time: (elapsed time from ED admit to ED discharge).
- The null value "Not Applicable" is used if the patient is directly admitted to the hospital.

Data Source Hierarchy

1. Hospital Discharge Summary
2. Billing Sheet / Medical Records Coding Summary Sheet
3. Physician's Progress Notes

Associated Edit Checks

Rule ID	Level	Message
6301	1	Invalid value
6302	1	Date out of range
6303	4	Blank, required field
6304	4	ED Discharge Date cannot be earlier than EMS Dispatch Date
6305	4	ED Discharge Date cannot be earlier than EMS Unit Arrival on Scene Date
6306	4	ED Discharge Date cannot be earlier than EMS Unit Scene Departure Date
6307	2	ED Discharge Date cannot be earlier than ED/Hospital Arrival Date
6308	2	ED Discharge Date cannot be later than Hospital Discharge Date
6309	3	ED Discharge Date cannot be earlier than Date of Birth
6310	3	ED Discharge Date minus ED/Hospital Arrival Date cannot be greater than 365 days

Section: ED/Admission

WI Variable: ED Discharge Time

NTDB Variable: ED Discharge Time (ED_22)

Database Variable: edd_time

ED DISCHARGE TIME

Definition

The time the patient was discharged from the ED.

Field Values

- Relevant value for data element

Additional Information

- Collected as HH:MM military time.
- Used to auto-generate an additional calculated field: Total ED Time (elapsed time from ED admit to ED discharge).
- The null value "Not Applicable" is used if the patient is directly admitted to the hospital.

Data Source Hierarchy

1. Hospital Record
2. Billing Sheet / Medical Records Coding Summary Sheet
3. Physician's Progress Notes

Associated Edit Checks

Rule ID	Level	Message
6401	1	Invalid value
6402	1	Time out of range
6403	4	Blank, required field
6404	4	If ED Discharge Date and EMS Dispatch Date are the same, the ED Discharge Time cannot be earlier than the EMS Dispatch Time
6405	4	If ED Discharge Date and EMS Unit Arrival on Scene Date are the same, the ED Discharge Time cannot be earlier than the EMS Unit Arrival on Scene Time
6406	4	If ED Discharge Date and EMS Unit Scene Departure Date are the same, the ED Discharge Time cannot be earlier than the EMS Unit Scene Departure Time
6407	4	If ED Discharge Date and ED/Hospital Arrival Date are the same, the ED Discharge Time cannot be earlier than the ED/Hospital Arrival Time
6408	4	If ED Discharge Date and Hospital Discharge Date are the same, the ED Discharge Time cannot be later than the Hospital Discharge Time

Section: ED/Admission

WI Variable: Post-ED or Direct Admission Disposition

NTDB Variable: ED Discharge Disposition (ED_19)

Database Variable: ed_dsp

ED DISCHARGE DISPOSITION

Definition

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

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. Died/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

Additional Information

- The null value "Not Applicable" is used if the patient is directly admitted to the hospital.
- If ED Discharge Disposition is 4, 5, 6, 9, 10, 11, then Hospital Discharge Date, Time, and Disposition should be "Not Applicable".

Data Source Hierarchy

1. Discharge Sheet
2. Nursing Progress Notes
3. Social Worker Notes

Associated Edit Checks

Rule ID	Level	Message
6101	1	Invalid value
6102	2	Blank, required field
6104	2	Not Known/Not Recorded, required Inclusion Criterion
6105	3	Not Applicable, required Inclusion Criterion

Section: ED/Admission

WI Variable: Admitting/Primary Care Service

NTDB Variable: None

Database Variable: adm_to

Admitting/Primary Care Service: (OS)

Definition: The service to which the patient is designated upon admission to the facility. In the case of death in the ED, or discharge from the ED, or transfer to another Facility, the service which gives the patient primary care in the ED.

Format: Pop-up list options:

Trauma Service

Neurosurgical Service

Orthopedic Surgery Service

Thoracic Surgery Service

General Surgery Service

Other Surgical Service

Non-Surgical Service

ED Physician

Section: ED/Admission

WI Variable: Signs of Life

NTDB Variable: Signs of Life (ED_20)

Database Variable:

SIGNS OF LIFE

Definition

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

Field Values

1. Arrived with NO signs of life
2. Arrived with signs of life

Additional Information

- A patient with no signs of life is defined as having none of the following: organized EKG activity, pupillary responses, spontaneous respiratory attempts or movement, and unassisted blood pressure. This usually implies the patient was brought to the ED with CPR in progress.

Data Source Hierarchy

1. Triage Form / Trauma Flow Sheet
2. Physician's Progress Notes
3. ED Nurses' Notes

Associated Edit Checks

Rule ID	Level	Message
6201	1	Invalid value
6202	2	Blank, required field
6206	3	Not Known/Not Recorded, required Inclusion Criterion
6207	2	Field cannot be Not Applicable

Section: Procedures

WI Variable: Procedures

NTDB Variable: ICD-9 Hospital Procedures (HP_01)

Database Variable:

ICD-9 HOSPITAL PROCEDURES

Definition

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. The list of procedures below should be used as a guide to non-operative procedures that should be provided to NTDB. This list is based on procedures sent to NTDB with a high frequency. Not all hospitals capture all procedures listed below. Please transmit those procedures that you capture to NTDB.

Field Values

- Major and minor procedure ICD-9-CM procedure codes.
- The maximum number of procedures that may be reported for a patient is 200.

Additional Information

- The null value "Not Applicable" is used if the patient did not have procedures.
- Include only procedures performed at your institution.
- Capture all procedures performed in the operating room.
- Capture all procedures in the ED, ICU, ward, or radiology department that were essential to the diagnosis, stabilization, or treatment of the patient's specific injuries or their complications.
- Procedures with an asterisk have the potential to be performed multiple times during one episode of hospitalization. In this case, capture only the first event. If there is no asterisk, capture each event even if there is more than one.
- Note that the hospital may capture additional procedures.
- The null value "Not Known/Not Recorded" is used if not coding ICD-9.

Diagnostic and Therapeutic Imaging

Computerized tomographic studies *
Diagnostic ultrasound (includes FAST) *
Doppler ultrasound of extremities *

Genitourinary

Ureteric catheterization (i.e. Ureteric stent)
Suprapubic cystostomy

Angiography

Angioembolization

Echocardiography

Cystogram

IVC filter

Urethrogram

Cardiovascular

Central venous catheter *

Pulmonary artery catheter *

Cardiac output monitoring *

Open cardiac massage

CPR

CNS

Insertion of ICP monitor *

Ventriculostomy *

Cerebral oxygen monitoring *

Musculoskeletal

Soft tissue/bony debridements *

Closed reduction of fractures

Skeletal and halo traction

Fasciotomy

Data Source Hierarchy

1. Operative Reports
2. ER and ICU Records
3. Trauma Flow Sheet
4. Anesthesia Record
5. Billing Sheet / Medical Records Coding Summary Sheet
6. Hospital Discharge Summary

Transfusion

The following blood products should be captured over first 24 hours after hospital arrival:

Transfusion of red cells *

Transfusion of platelets *

Transfusion of plasma *

In addition to coding the individual blood products listed above assign the 99.01 ICD-9 procedure code on patients that receive > 10 units of blood products over first 24 hours following hospital arrival *

For pediatric patients (age 14 and under), assign 99.01 ICD-9 procedure code on patients that receive 40cc/kg of blood products over first 24 hours following hospital arrival*

Respiratory

Insertion of endotracheal tube*

Continuous mechanical ventilation *

Chest tube *

Bronchoscopy *

Tracheostomy

Gastrointestinal

Endoscopy (includes gastroscopy, sigmoidoscopy, colonoscopy)

Gastrostomy/jejunostomy (percutaneous or endoscopic)

Percutaneous (endoscopic) gastrojejunoscopy

Other

Hyperbaric oxygen

Decompression chamber

TPN *

Associated Edit Checks

Rule ID	Level	Message
6501	1	Invalid value
6502	1	Procedures with the same code cannot have the same Hospital Procedure Start Date and Time.
6503	4	Blank, must either (1) contain a valid ICD-9 code or (2) be Not Known/Not Recorded if not coding ICD-9
6504	4	Not Applicable, must either (1) contain a valid ICD-9 code or (2) be Not Known/Not Recorded if not coding ICD-9

Section: Procedures

WI Variable: Start Date

NTDB Variable: Hospital Procedure Start Date (HP_03)

Database Variable:

HOSPITAL PROCEDURE START DATE

Definition

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

Field Values

- Relevant value for data element

Additional Information

- Collected as YYYY-MM-DD.

Data Source Hierarchy

1. OR Nurses' Notes
2. Operative Reports
3. Anesthesia Record

Associated Edit Checks

Rule ID	Level	Message
6601	1	Invalid value
6602	1	Date out of range
6603	4	Hospital Procedure Start Date cannot be earlier than EMS Dispatch Date
6604	4	Hospital Procedure Start Date cannot be earlier than EMS Unit Arrival on Scene Date
6605	4	Hospital Procedure Start Date cannot be earlier than EMS Unit Scene Departure Date
6606	4	Hospital Procedure Start Date cannot be earlier than ED/Hospital Arrival Date
6607	4	Hospital Procedure Start Date cannot be later than Hospital Discharge Date
6608	4	Hospital Procedure Start Date cannot be earlier than Date of Birth
6609	4	Blank, required field

Section: Procedures

WI Variable: Start Time

NTDB Variable: Hospital Procedure Start Time (HP_04)

Database Variable:

HOSPITAL PROCEDURE START TIME

Definition

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

Field Values

- Relevant value for data element

Additional Information

- Collected as HH:MM military time.
- Procedure start time is defined as the time the incision was made (or the procedure started).
- If distinct procedures with the same procedure code are performed, their start times must be different.

Data Source Hierarchy

1. OR Nurses' Notes
2. Operative Reports
3. Anesthesia Record

Associated Edit Checks

Rule ID	Level	Message
6701	1	Invalid value
6702	1	Time out of range
6703	4	If Hospital Procedure Start Date and EMS Dispatch Date are the same, the Hospital Procedure Start Time cannot be earlier than the EMS Dispatch Time
6704	4	If Hospital Procedure Start Date and EMS Unit Arrival on Scene Date are the same, the Hospital Procedure Start Time cannot be earlier than the EMS Unit Arrival on Scene Time
6705	4	if Hospital Procedure Start Date and EMS Unit Scene Departure Date are the same, the Hospital Procedure Start Time cannot be earlier than the EMS Unit Scene Departure Time
6706	4	If Hospital Procedure Start Date and ED/Hospital Arrival Date are the same, the Hospital Procedure Start Time cannot be earlier than the ED/Hospital Arrival Time
6707	4	If Hospital Procedure Start Date and Hospital Discharge Date are the same, the Hospital Procedure Start Time cannot be later than the Hospital Discharge Time
6708	4	Blank, required field

Section: Outcome

WI Variable: Discharge Status

NTDB Variable: None

Database Variable: dis_status

Discharge Status: (OS)

Definition: The status of the patient at discharge

Pop-up list options:

Alive

Dead

Section: Outcome

WI Variable: Discharge Date

NTDB Variable: Hospital Discharge Date (O_03)

Database Variable: dis_date

HOSPITAL DISCHARGE DATE

Definition

The date the patient was discharged from the hospital.

Field Values

- Relevant value for data element

Additional Information

- Collected as YYYY-MM-DD.
- Used to auto-generate an additional calculated field: Total Length of Hospital Stay (elapsed time from ED/hospital arrival to hospital discharge).
- The null value "Not Applicable" is used if ED Discharge Disposition = 5 (Died).
- The null value "Not Applicable" is used if ED Discharge Disposition = 4,6,9,10, or 11.

Data Source Hierarchy

1. Hospital Record
2. Billing Sheet / Medical Records Coding Summary Sheet
3. Physician Discharge Summary

Associated Edit Checks

Rule ID	Level	Message
7701	1	Invalid value
7702	1	Date out of range
7703	3	Blank, required field
7704	3	Hospital Discharge Date cannot be earlier than EMS Dispatch Date
7705	3	Hospital Discharge Date cannot be earlier than EMS Unit Arrival on Scene Date
7706	3	Hospital Discharge Date cannot be earlier than EMS Unit Scene Departure Date
7707	2	Hospital Discharge Date cannot be earlier than ED/Hospital Arrival Date
7708	2	Hospital Discharge Date cannot be earlier than ED Discharge Date
7709	3	Hospital DischargeDate cannot be earlier than Date of Birth
7710	3	Hospital Discharge Date minus Injury Incident Date cannot be greater than 365 days
7711	3	Hospital Discharge Date minus ED/Hospital Arrival Date cannot be greater than 365 days
7712	2	If ED Discharge Disposition = 4,6,9,10, or 11 then Hospital Discharge Date must be NA (BIU = 1)
7713	2	If ED Discharge Disposition = 5 (Died) then Hospital Discharge Date should be NA (BIU=1)

Section: Outcome

WI Variable: Discharge Time

NTDB Variable: Hospital Discharge Time (O_04)

Database Variable: dis_time

HOSPITAL DISCHARGE TIME

Definition

The time the patient was discharged from the hospital.

Field Values

- Relevant value for data element

Additional Information

- Collected as HH:MM military time.
- Used to auto-generate an additional calculated field: Total Length of Hospital Stay (elapsed time from ED/hospital arrival to hospital discharge).
- The null value "Not Applicable" is used if ED Discharge Disposition = 5 (Died).
- The null value "Not Applicable" is used if If ED Discharge Disposition = 4,6,9,10, or 11.

Data Source Hierarchy

1. Hospital Record
2. Billing Sheet / Medical Records Coding Summary Sheet
3. Physician Discharge Summary

Associated Edit Checks

Rule ID	Level	Message
7801	1	Invalid value
7802	1	Time out of range
7803	4	Blank, required field
7804	4	If Hospital Discharge Date and EMS Dispatch Date are the same, the Hospital Discharge Time cannot be earlier than the EMS Dispatch Time
7805	4	If Hospital Discharge Date and EMS Unit Arrival on Scene Date are the same, the Hospital Discharge Time cannot be earlier than the EMS Unit Arrival on Scene Time
7806	4	If Hospital Discharge Date and EMS Unit Scene Departure Date are the same, the Hospital Discharge Time cannot be earlier than the EMS Unit Scene Departure Time
7807	4	If Hospital Discharge Date and ED/Hospital Arrival Date are the same, the Hospital Discharge Time cannot be earlier than the ED/Hospital Arrival Time
7808	4	If Hospital Discharge Date and ED Discharge Date are the same, the Hospital Discharge Time cannot be earlier than the ED Discharge Time
7809	2	If ED Discharge Disposition = 4,6,9,10, or 11 then Hospital Discharge Time must be NA (BIU = 1)
7810	2	If ED Discharge Disposition = 5 (Died) then Hospital Discharge Time should be NA (BIU=1)

Section: Outcome

WI Variable: Total ICU Days

NTDB Variable: Total ICU Length of Stay (O_01)

Database Variable: icu_days

TOTAL ICU LENGTH OF STAY

Definition

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

Field Values

- Relevant value for data element

Additional Information

- Recorded in full day increments with any partial calendar day counted as a full calendar day.
- The calculation assumes that the date and time of starting and stopping an ICU episode are recorded in the patient's chart.
- If any dates are missing then a LOS cannot be calculated.
- If patient has multiple ICU episodes on the same calendar day, count that day as one calendar day.
- At no time should the ICU LOS exceed the Hospital LOS.
- The null value "Not Applicable" is used if the patient had no ICU days according to the above definition.

Example #	Start Date	Start Time	Stop Date	Stop Time	LOS
A.	01/01/11	01:00	01/01/11	04:00	1 day (one calendar day)
B.	01/01/11	01:00	01/01/11	04:00	
	01/01/11	16:00	01/01/11	18:00	1 day (2 episodes within one calendar day)
C.	01/01/11	01:00	01/01/11	04:00	
	01/02/11	16:00	01/02/11	18:00	2 days (episodes on 2 separate calendar days)
D.	01/01/11	01:00	01/01/11	16:00	
	01/02/11	09:00	01/02/11	18:00	2 days (episodes on 2 separate
E.	01/01/11	01:00	01/01/11	16:00	
	01/02/11	09:00	01/02/11	21:00	2 days (episodes on 2 separate
F.	01/01/11	Unknown	01/01/11	16:00	1 day
G.	01/01/11	Unknown	01/02/11	16:00	2 days (patient was in ICU on 2
H.	01/01/11	Unknown	01/02/11	16:00	
	01/02/11	18:00	01/02/11	Unknown	2 days (patient was in ICU on 2 separate calendar days)
I.	01/01/11	Unknown	01/02/11	16:00	
	01/02/11	18:00	01/02/11	20:00	2 days (patient was in ICU on 2 separate calendar days)
J.	01/01/11	Unknown	01/02/11	16:00	
	01/03/11	18:00	01/03/11	20:00	3 days (patient was in ICU on 3 separate calendar days)
K.	Unknown	Unknown	01/02/11	16:00	
	01/03/11	18:00	01/03/11	20:00	Unknown (can't compute total)

Data Source Hierarchy

1. ICU Nursing Flow Sheet
2. Calculate Based on Admission Form and Discharge Sheet
3. Nursing Progress Notes

Associated Edit Checks

Rule ID	Level	Message
7501	1	Invalid, out of range
7502	3	Blank, required field
7503	3	Total ICU Length of Stay should not be greater than the difference between ED/Hospital Arrival Date and Hospital Discharge Date
7504	3	Should not be greater than 365

Section: Outcome

WI Variable: Total Facility Days (Calculated)

NTDB Variable: None

Database Variable: hosp_days

Total Facility Days: (OS)

Definition: The Total number of days the patient was in the acute care facility setting.

Format: **Automatically** calculated.

Section: Outcome

WI Variable: Total Ventilator Days

NTDB Variable: Total Ventilator Days (O_02)

Database Variable:

TOTAL VENTILATOR DAYS

Definition

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

Field Values

- Relevant value for data element

Additional Information

- Excludes mechanical ventilation time associated with OR procedures.
- Non-invasive means of ventilatory support (CPAP or BIPAP) should not be considered in the calculation of ventilator days.
- Recorded in full day increments with any partial calendar day counted as a full calendar day.
- The calculation assumes that the date and time of starting and stopping Ventilator episode are recorded in the patient's chart.
- If any dates are missing then a Total Vent Days cannot be calculated.
- At no time should the Total Vent Days exceed the Hospital LOS.
- The null value "Not Applicable" is used if the patient was not on the ventilator according to the above definition.

Example #	Start Date	Start Time	Stop	Stop Time	LOS
A.	01/01/11	01:00	01/01/11	04:00	1 day (one calendar day)
B.	01/01/11	01:00	01/01/11	04:00	
	01/01/11	16:00	01/01/11	18:00	1 day (2 episodes within
C.	01/01/11	01:00	01/01/11	04:00	
	01/02/11	16:00	01/02/11	18:00	2 days (episodes on 2
D.	01/01/11	01:00	01/01/11	16:00	
	01/02/11	09:00	01/02/11	18:00	2 days (episodes on 2
E.	01/01/11	01:00	01/01/11	16:00	
	01/02/11	09:00	01/02/11	21:00	2 days (episodes on 2
F.	01/01/11	Unknown	01/01/11	16:00	1 day
G.	01/01/11	Unknown	01/02/11	16:00	2 days (patient was on Vent
					on 2 separate calendar
H.	01/01/11	Unknown	01/02/11	16:00	
	01/02/11	18:00	01/02/11	Unknown	2 days (patient was on Vent
					on 2 separate calendar
I.	01/01/11	Unknown	01/02/11	16:00	
	01/02/11	18:00	01/02/11	20:00	2 days (patient was in on
					Vent on 2 separate
J.	01/01/11	Unknown	01/02/11	16:00	
	01/03/11	18:00	01/03/11	20:00	3 days (patient was on Vent
					on 3 separate calendar

Data Source Hierarchy

1. ICU Respiratory Therapy Flowsheet
2. ICU Nursing Flow Sheet
3. Physician's Daily Progress Notes
4. Calculate Based on Admission Form and Discharge Sheet

Associated Edit Checks

Rule ID	Level	Message
7601	1	Invalid, out of range
7602	4	Blank, required field
7603	4	Total Ventilator Days should not be greater than the difference between ED/Hospital Arrival Date and Hospital Discharge Date
7604	4	Should not be greater than 365

Section: Outcome

WI Variable: Facility Disposition

NTDB Variable: Hospital Discharge Disposition (O_05)

Database Variable: dis_dest

HOSPITAL DISCHARGE DISPOSITION

Definition

The disposition of the patient when discharged from the hospital.

Field Values

- | | |
|---|--|
| 1. Discharged/Transferred to a short-term general hospital for inpatient care | 8. Discharged/ Transferred to hospice care |
| 2. Discharged/Transferred to an Intermediate Care Facility (ICF) | 9. RETIRED 2014 Discharged/Transferred to another type of rehabilitation or long term care facility |
| 3. Discharge/Transferred to home under care of organized home health service | 10. Discharged/Transferred to court/law enforcement. |
| 4. Left against medical advice or discontinued care | 11. Discharged/Transferred to inpatient rehab or designated unit |
| 5. Expired | 12. Discharged/Transferred to Long Term Care Hospital (LTCH) |
| 6. Discharged home with no home services | 13. Discharged/transferred to a psychiatric hospital or psychiatric distinct part unit of a hospital |
| 7. Discharged/Transferred to Skilled Nursing Facility (SNF) | 14. Discharged/Transferred to another type of institution not defined elsewhere |

Additional Information

- Field value = 6, "home" refers to the patient's current place of residence (e.g., prison, Child Protective Services etc.)
- Field values based upon UB-04 disposition coding.
- Disposition to any other non-medical facility should be coded as 6.
- Disposition to any other medical facility should be coded as 14.
- The null value "Not Applicable" is used if ED Discharge Disposition = 5 (Died).
- The null value "Not Applicable" is used if If ED Discharge Disposition = 4,6,9,10, or 11.

Data Source Hierarchy

1. Hospital Discharge Summary Sheet
2. Nurses' notes
3. Case Manager / Social Services' Notes

Associated Edit Checks

Rule ID	Level	Message
7901	1	Invalid value
7902	2	Blank, required field
7903	2	If ED Discharge Disposition = 5 (Died) then Hospital Discharge Disposition should be NA (BIU=1)
7906	2	If ED Discharge Disposition = 1,2,3,7, or 8 then Hospital Discharge Disposition cannot be blank
7907	2	If ED Discharge Disposition = 4,6,9,10, or 11 then Hospital Discharge Disposition must be NA (BIU = 1)
7908	2	Not Applicable, required Inclusion Criterion
7909	2	If Hospital Arrival Date and Hospital Discharge Date are valued, the Hospital Discharge Disposition cannot be Not Known/Not Recorded

Section: Outcome

WI Variable: If Transferred: Name of Facility

NTDB Variable: None

Database Variable: dis_fac

If Transferred, Name of Facility (only complete if 'Transfer' was selected under Facility Disposition):

Definition: The name or number of the referring facility.

Format: List of Wisconsin Facilities.

Other (out-of-state Facility).

Section: Outcome

WI Variable: If Other/Out of State

NTDB Variable: None

Database Variable: dis_fac_s

If Other/Out of State: Free text field for other/out-of-state facilities

Section: Outcome, If Other/Out of State

WI Variable: City

NTDB Variable: None

Database Variable: dis_adr_ci

City: (OS) Free text

Section: Outcome, If Other/Out of State

WI Variable: State

NTDB Variable: None

Database Variable: dis_adr_st

State: (OS) Pop-up FIPS Code States in alphabetical order. Wisconsin is at the top of the list and is the default; Out of Country or Unknown.

Section: Outcome

WI Variable: If Transferred, Reason

NTDB Variable: None

Database Variable: dis_rs_s

If Transferred, Reason: (OS)

Definition: Reason for transfer from the facility.

Format: Free text

Section: Outcome

WI Variable: If Transferred, Mode of Transfer

NTDB Variable: None

Database Variable: dis_mode

If Transferred, Mode of Transfer: (OS)

Definition: The mode of transport by which the patient was transported from the referring facility to the receiving facility.

Format: Pop-up list options:

Ambulance

Helicopter

Police

Private vehicle/walk-in

Fixed wing

Unknown

Section: Outcome

WI Variable: If Transferred, Level of EMS Service

NTDB Variable: None

Database Variable: dis_care

Level of EMS Service: (OS) (If Transferred)

Definition: This corresponds to the highest level of care that the EMS is authorized to provide.

For the Trauma Registry purposes only, Intermediate and Paramedic ambulance services are ALS; Basic and Intermediate Technician (formerly Basic IV technician) are BLS.

Format: Pop-up list options:

ALS (Advanced Life Support)

BLS (Basic Life Support)

Unknown

Unknown = no documentation of the level of the service.

Section: Outcome

WI Variable: Did the patient donate organs, tissues, bone, or eyes?

NTDB Variable: None

Database Variable: org_gr_yn

Did the patient donate organs, tissue, bone or eyes? (OS)

Definition: This field opens only if Discharge Status = "Dead".

Format: Pop-up list options:

Yes

No

Unknown

Section: Outcome

WI Variable: Was an autopsy performed?

NTDB Variable: None

Database Variable: aut_yn

Was an autopsy performed?

Definition: This field opens only if Discharge Status = “Dead.”

Pop-up list options:

Yes

No

Unknown

Section: Outcome

WI Variable: Primary Method of Payment

NTDB Variable: Primary Method of Payment (F_01)

Database Variable:

PRIMARY METHOD OF PAYMENT

Definition

Primary source of payment for hospital care.

Field Values

- 1. Medicaid
- 2. Not Billed (for any reason)
- 3. Self Pay
- 4. Private/Commercial Insurance
- 5. No Fault Automobile
- 6. Medicare
- 7. Other Government
- 8. Workers Compensation
- 9. Blue Cross/Blue Shield
- 10. Other

Additional Information

Data Source Hierarchy

- 1. Billing Sheet / Medical Records Coding Summary Sheet
- 2. Hospital Admission Form

Associated Edit Checks

Rule ID	Level	Message
8001	1	Invalid value
8002	4	Blank, required field

Section: Diagnosis

WI Variable: Injury Narrative (Tri-code)

NTDB Variable: None

Database Variable:

Injury Narrative: (OS)

Format: Free text used with the Tri-Code software.

When entering diagnosis into Tri-Code, be as specific as possible when describing the injury. Instead of documenting “femur fracture”, you should be specific, for example, “Femur fracture, shaft, comminuted”. This will get the more accurate AIS score.

Section: Diagnosis
WI Variable: AIS Version
NTDB Variable:
Database Variable:

Autofilled.

Section: Diagnosis

WI Variable: ISS (Calculated)

NTDB Variable: Locally Calculated ISS (IS_05)

Database Variable: ISS

LOCALLY CALCULATED ISS

Definition

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

Field Values

- Relevant ISS value for the constellation of injuries

Additional Information

- Variable is autofilled
- This variable is considered optional and is not required as part of the NTDS dataset.

Data Source Hierarchy

Associated Edit Checks

Rule ID	Level	Message
7401	1	Invalid value
7402	3	Must be the sum of three squares

Section: Diagnosis

WI Variable: TRISS (Calculated)

NTDB Variable: None

Database Variable: org_gr_yn

TRISS: (Probability of Survival Score)

Format: **Automatically** calculated data element.

Section: Diagnosis

WI Variable: First Diagnosis

NTDB Variable: ICD-9 Injury Diagnoses (DG_02)

Database Variable: ICD_01

ICD-9 INJURY DIAGNOSES

Definition

Diagnoses related to all identified injuries.

Field Values

- Injury diagnoses as defined by ICD-9-CM code range: 800-959.9, except for 905 – 909.9, 910 – 924.9, 930 – 939.9. The maximum number of diagnoses that may be reported for an individual patient is 50.

Additional Information

- Note: Auto filled by tricode
- ICD-9-CM codes pertaining to other medical conditions (e.g., CVA, MI, co-morbidities, etc.) may also be included in this field.
- Used to auto-generate additional calculated fields: Abbreviated Injury Scale (six body regions) and Injury Severity Score.
- The null value "Not Applicable" is used if not coding ICD-9.

Data Source Hierarchy

1. Hospital Discharge Summary
2. Billing Sheet / Medical Records Coding Summary Sheet
3. Trauma Flow Sheet
4. ER and ICU Records

Associated Edit Checks

Rule ID	Level	Message
6901	1	Invalid value
6902	4	Blank, must either (1) contain a valid ICD-9 code or (2) be Not Applicable if not coding ICD-9
6903	2	If coding with ICD-9, then at least one diagnosis must be provided and meet inclusion criteria (800 -959.9, except for 905 -909.9, 910 -924.9, 930 -939.9)
6904	4	Not Known/Not Recorded, required Inclusion Criterion

Section: Diagnosis

WI Variable: First Predot

NTDB Variable: AIS Predot Code (IS_01)

Database Variable: predot_01

AIS PREDOT CODE

Definition

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

Field Values

- The predot code is the 6 digits preceding the decimal point in an associated AIS code

Additional Information

- Note: Auto filled by tricode
- This variable is considered optional and is not required as part of the NTDS dataset.

Data Source Hierarchy

Associated Edit Checks

Rule ID	Level	Message
7001	1	Invalid value
7002	5	If completed, then AIS Severity must be completed.
7003	5	If completed, then AIS Version must be completed.
7004	3	AIS PreDot codes are version AIS 2005 but do not match the AIS Version used
7005	3	AIS PreDot codes are version AIS 1998 but do not match the AIS Version used
7006	4	Both AIS 2005 and AIS 1998 versions have been detected in the same record

Section: Diagnosis

WI Variable: AIS Severity

NTDB Variable: AIS Severity (IS_02)

Database Variable: ais_sev_01

AIS SEVERITY

Definition

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

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

Additional Information

- Note: Auto filled by tricode
- This variable is considered optional and is not required as part of the NTDS dataset.
- The field value (9) "Not Possible to Assign" would be chosen if it is not possible to assign a severity to an injury.

Data Source Hierarchy

Associated Edit Checks

Rule ID	Level	Message
7101	1	Invalid value
7102	5	If completed, then AIS Version must be completed.
7103	4	Blank, required to complete when AIS PreDot Code is complete

Section: Diagnosis

WI Variable: ISS Body Region

NTDB Variable: ISS Body Region (IS_03)

Database Variable: ISS

ISS BODY REGION

Definition

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

Field Values

- | | |
|-----------------|---------------------------------|
| 1. Head or Neck | 4. Abdominal or pelvic contents |
| 2. Face | 5. Extremities or pelvic girdle |
| 3. Chest | 6. External |

Additional Information

- Note: Auto filled by tricode
- This variable is considered optional and is not required as part of the NTDS dataset.
- Head or neck injuries include injury to the brain or cervical spine, skull or cervical spine fractures.
- Facial injuries include those involving mouth, ears, nose and facial bones.
- Chest injuries include all lesions to internal organs. Chest injuries also include those to the diaphragm, rib cage, and thoracic spine.
- Abdominal or pelvic contents injuries include all lesions to internal organs. Lumbar spine lesions are included in the abdominal or pelvic region.
- Injuries to the extremities or to the pelvic or shoulder girdle include sprains, fractures, dislocations, and amputations, except for the spinal column, skull and rib cage.
- External injuries include lacerations, contusions, abrasions, and burns, independent of their location on the body surface.

Data Source Hierarchy

Associated Edit Checks

Rule ID	Level	Message
7201	1	Invalid value
7202	5	If completed, then AIS Severity must be completed.
7203	5	If completed, then AIS Version must be completed.

Section: Diagnosis

WI Variable: Complications

NTDB Variable: Hospital Complications (Q_01)

Database Variable:

HOSPITAL COMPLICATIONS

Definition

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

Field Values

1. Other	17. RETIRED 2011 Intracranial pressure
2. RETIRED 2011 Abdominal compartment syndrome	18. Myocardial infarction
3. RETIRED 2011 Abdominal fascia left open	19. Organ/space surgical site infection
4. Acute kidney injury	20. Pneumonia
5. Acute lung injury/Acute respiratory distress syndrome (ARDS)	21. Pulmonary embolism
6. RETIRED 2011 Base deficit	22. Stroke / CVA
7. RETIRED 2011 Bleeding	23. Superficial surgical site infection
8. Cardiac arrest with resuscitative efforts by healthcare provider	24. RETIRED 2011 Systemic sepsis
9. RETIRED 2011 Coagulopathy	25. Unplanned intubation
10. RETIRED 2011 Coma	26. RETIRED 2011 Wound disruption
11. Decubitus ulcer	27. Urinary tract infection
12. Deep surgical site infection	28. Catheter-related blood stream infection
13. Drug or alcohol withdrawal syndrome	29. Osteomyelitis
14. Deep Vein Thrombosis (DVT) / thrombophlebitis	30. Unplanned return to the OR
15. Extremity compartment syndrome	31. Unplanned return to the ICU
16. Graft/prosthesis/flap failure	32. Severe sepsis

Additional Information

- The null value "Not Applicable" should be used for patients with no complications.
- Refer to Appendix 3: Glossary of Terms for definitions of Complications.
- Check all that apply.

Data Source Hierarchy

1. Discharge Sheet
2. History and Physical
3. Billing Sheet

Associated Edit Checks

Rule ID	Level	Message
8101	1	Invalid value
8102	2	Blank, required field

COMPLICATIONS

Acute kidney injury: A patient who did not require chronic renal replacement therapy prior to injury, who has worsening renal dysfunction after injury requiring renal replacement therapy. If the patient or family refuses treatment (e.g., dialysis,) the condition is still considered to be present if a combination of oliguria and creatinine are present.

- *GFR criteria:* Increase creatinine x3 or GFR decrease >75%
- *Urine output criteria:* UO <0.3ml/kg/h x 24 hr or Anuria x 12 hrs
-

ALI/ARDS Acute Lung Injury/Adult (Acute) Respiratory Distress Syndrome: ALI/ARDS occurs in conjunction with catastrophic medical conditions, such as pneumonia, shock, sepsis (or severe infection throughout the body, sometimes also referred to as systemic infection, and may include or also be called a blood or blood-borne infection,) and trauma. It is a form of sudden and often severe lung failure that is usually characterized by a PaO₂/FiO₂ ratio of <300 mmHg, bilateral fluffy infiltrates seen on a frontal chest radiograph, and an absence of clearly demonstrable volume overload (as signified by pulmonary wedge pressure , 18mmHg, if measured, or other similar surrogates such as echocardiography which do not demonstrate analogous findings.)

Cardiac arrest with CPR: The sudden abrupt loss of cardiac function that results in loss of consciousness requiring the initiation of any component of basic and/or advanced cardiac life support. EXCLUDE patients that arrive at the hospital in full arrest.

Decubitus ulcer: Any partial or full thickness loss of dermis resulting from pressure exerted by the patient's weight against a surface. Deeper tissues may or may not be involved. Equivalent to NPUAP Stages II – IV and NPUAP "unstageable" ulcers. EXCLUDES intact skin with non-blanching redness (NPUAP Stage I,) which is considered reversible tissue injury.

Deep surgical site infection: A deep incisional SSI must meet one of the following criteria: Infection occurs within 30 days after the operative procedure if no implant is left in place or within one year if implant is in place and the infection appears to be related to the operative procedure and involves deep soft tissues (e.g., fascial and muscle layers) of the incision; AND patient has at least one of the following:

- Purulent drainage from the deep incision but not from the organ/space component of the surgical site of the following:
- A deep incision spontaneously dehisces or is deliberately opened by a surgeon and is culture-positive or not cultured when the patient has at least one of the following signs or symptoms: fever (>38C,) or localized pain or tenderness. A culture negative finding does not meet this criterion.
- An abscess or other evidence of infection involving the deep incision is found on direct examination, during reoperation, or by histopathologic or radiologic examination.
- Diagnosis of a deep incisional SSI by a surgeon or attending physician.

NOTE: There are two specific types of deep incisional SSIs:

- Deep Incisional Primary (DIP): a deep incisional SSI that is identified in a primary incision in a patient that has had an operation with one or more incisions (e.g., Csection incision or chest incision for CBGB)
- Deep Incisional Secondary (DIS): a deep incisional SSI that is identified in the secondary incision in a patient that has had an operation with more than one incision (e.g., donor site [leg] incision for CBGB.)

REPORTING INSTRUCTION: Classify infection that involves both superficial and deep incision sites as deep incisional SSI.

Drug or alcohol withdrawal syndrome: A set of symptoms that may occur when a person who has been habitually drinking too much alcohol or habitually using certain drugs (e.g., narcotics, benzodiazepine) experiences physical symptoms upon suddenly stopping consumption. Symptoms may include: activation syndrome (i.e., tremulousness, agitation, rapid heartbeat and high blood pressure,) seizures, hallucinations or delirium tremens.

Deep Vein Thrombosis (DVT): The formation, development, or existence of a blood clot or thrombus within the vascular system, which may be coupled with inflammation. This diagnosis may be confirmed by a venogram, ultrasound, or CT. The patient must be treated with anticoagulation therapy and/or placement of a vena cava filter or clipping of the vena cava.

Extremity compartment syndrome: A condition not present at admission in which there is documentation of tense muscular compartments of an extremity through clinical assessment or direct measurement of intracompartmental pressure requiring fasciotomy. Compartment syndromes usually involve the leg but can also occur in the forearm, arm, thigh, and shoulder. Record as a complication if it is originally missed, leading to late recognition, a need for late intervention, and has threatened limb viability.

Graft/prosthesis/flap failure: Mechanical failure of an extracardiac vascular graft or prosthesis including myocutaneous flaps and skin grafts requiring return to the operating room or a balloon angioplasty.

Myocardial infarction: A new acute myocardial infarction occurring during hospitalization (within 30 days of injury.)

Organ/space surgical site infection: An infection that occurs within 30 days after an operation and infection involves any part of the anatomy (e.g., organs or spaces) other than the incision, which was opened or manipulated during a procedure; and at least one of the following, including:

- Purulent drainage from a drain that is placed through a stab wound or puncture into the organ/space.
- Organisms isolated from an aseptically obtained culture of fluid or tissue in the organ/space.
- An abscess or other evidence of infection involving the organ/space that is found on direct examination, during reoperation, or by histopathologic or radiologic examination
- Diagnosis of an organ/space SSI by a surgeon or attending physician.

Pneumonia: Patients with evidence of pneumonia that develops during the hospitalization and meets at least one of the following two criteria:

- *Criterion #1:* Rales or dullness to percussion on physical examination of chest AND any of the following:
 - New onset of purulent sputum or change in character of sputum.
 - Organism isolated from blood culture.
 - Isolation of pathogen from specimen obtained by transtracheal aspirate, bronchial brushing, or biopsy.
- *Criterion #2:* Chest radiographic examination shows new or progressive infiltrate, consolidation, cavitation, or pleural effusion AND any of the following:
 - New onset of purulent sputum or change in character of sputum.
 - Organism isolated from the blood.
 - Isolation of pathogen from specimen obtained by transtracheal aspirate, bronchial brushing, or biopsy
 - Isolation of virus or detection of viral antigen in respiratory secretions
 - Diagnostic single antibody titer (IgM) or fourfold increase in paired serum samples (IgG) for pathogen
 - Histopathologic evidence of pneumonia

Pulmonary embolism: A lodging of a blood clot in a pulmonary artery with subsequent obstruction of blood supply to the lung parenchyma. The blood clots usually originate from the deep leg veins or the pelvic venous system. Consider the condition present if the patient has a V-Q scan interpreted as high probability of pulmonary embolism or a positive pulmonary arteriogram or positive CT angiogram.

Stroke/CVA: A focal or global neurological deficit of rapid onset and NOT present on admission. The patient must have at least one of the following symptoms:

- Change in level of consciousness
- Hemiplegia
- Hemiparesis

- Numbness or sensory loss affecting on side of the body
- Dysphasia or aphasia
- Hemianopia
- Amaurosis fugax
- Other neurological signs or symptoms consistent with stroke

AND:

- Duration of neurological deficit ≥ 24 h

OR:

- Duration of deficit < 24 h, if neuroimaging (MR, CT, or cerebral angiography) documents a new hemorrhage or infarct consistent with stroke, or therapeutic intervention(s) were performed for stroke, or the neurological deficit results in death

AND:

- No other readily identifiable non-stroke cause, e.g., progression of existing traumatic brain injury, seizure, tumor, metabolic or pharmacologic etiologies, is identified

AND:

- Diagnosis is confirmed by neurology or neurosurgical specialist or neuroimaging procedure (MR, CT, angiography,) or lumbar puncture (CSF demonstrating intracranial hemorrhage that was not present on admission.)
- Although the neurologic deficit must not present on admission, risk factors predisposing to stroke (e.g., blunt cerebrovascular injury, dysrhythmia) may be present on admission.

Superficial surgical site infection: An infection that occurs within 30 days after an operation and infection involves only skin or subcutaneous tissue of the incision and at least one of the following:

- Purulent drainage, with or without laboratory confirmation, from the superficial incision.
- Organisms isolated from an aseptically obtained culture of fluid or tissue from the superficial incision.
- At least one of the following signs or symptoms of infection: pain or tenderness, localized swelling, redness, or heat and superficial incision is deliberately opened by the surgeon, unless incision is culture-negative.
- Diagnosis of superficial incisional surgical site infection by the surgeon or attending physician.

Do not report the following conditions as superficial surgical site infection:

- Stitch abscess (minimal inflammation and discharge confined to the points of suture penetration.)
- Infected burn wound.
- Incisional SSI that extends into the fascial and muscle layers (see deep surgical site infection.)

Unplanned intubation: Patient requires placement of an endotracheal tube and mechanical or assisted ventilation because of the onset of respiratory or cardiac failure manifested by severe respiratory distress, hypoxia, hypercarbia, or respiratory acidosis. In patients who were intubated in the field or Emergency Department, or those intubated for surgery, unplanned intubation occurs if they require reintubation > 24 hours after extubation.

Urinary Tract Infection: An infection anywhere along the urinary tract with clinical evidence of infection, which includes at least one of the following symptoms with no other recognized cause:

- Fever $\geq 38^{\circ}$ C
- WBC $> 10,000$ or $< 3,000$ per cubic millimeter
- Urgency
- Frequency
- Dysuria
- Suprapubic tenderness

AND:

- Positive urine culture ($\geq 100,000$ microorganisms per cm³ of urine with no more than two species of microorganisms)

OR At least two of the following signs or symptoms with no other recognized cause:

- Fever $\geq 38^{\circ}$ C
- WBC $>10,000$ or $<3,000$ per cubic millimeter
- Urgency
- Frequency
- Dysuria
- Suprapubic tenderness

AND at least one of the following:

- Positive dipstick for leukocyte esterase and/or nitrate
- Pyuria (urine specimen with >10 WBC/mm³ or >3 WBC/high power field or unspun urine)
- Organisms seen on Gram stain of unspun urine
- At least two urine cultures with repeated isolation of the same uropathogen (gram-negative bacteria or *S. saprophyticus*) with $\geq 10^2$ colonies/ml in nonvoided specimens
- $\leq 10^5$ colonies/ml of a single uropathogen (gram-negative bacteria or *S. saprophyticus*) in a patient being treated with an effective antimicrobial agent for a urinary tract infection
- Physician diagnosis of a urinary tract infection
- Physician institutes appropriate therapy for a urinary tract infection

Excludes asymptomatic bacteriuria and “other” UTIs that are more like deep space infections of the urinary tract.

Catheter-Related Blood Stream Infection: An organism cultured from the bloodstream that is not related to an infection at another site but is attributed to a central venous catheter. Patients must have evidence of infection including at least one of the following:

- *Criterion #1:* Patient has a recognized pathogen cultured from one or more blood cultures and organism cultured from blood is not related to an infection at another site.

OR:

- *Criterion #2:* Patient has at least one of the following signs or symptoms:
 - Fever $\geq 38^{\circ}$ C
 - Chills
 - WBC $> 10,000$ or $< 3,000$ per cubic millimeter
 - Hypotension (SBP <90) or $>25\%$ drop in systolic blood pressure
 - Signs and symptoms and positive laboratory results are not related to an infection at another site AND common skin contaminant (i.e., diphtheroids [*Corynebacterium* spp.], *Bacillus* [not *B. anthracis*] spp., *Propionibacterium* spp., coagulase-negative staphylococci [including *S. epidermidis*,] viridans group streptococci, *Aerococcus* spp., *Micrococcus* spp.) is cultured from two or more blood cultures drawn on separate occasions.

OR:

- *Criterion #3:* Patient <1 year of age has at least one of the following signs or symptoms:
 - Fever $> 38^{\circ}$ C
 - Hypothermia $< 36^{\circ}$ C
 - Apnea, or bradycardia
 - Signs and symptoms and positive laboratory results are not related to an infection at another site and common skin contaminant (i.e., diphtheroids [*Corynebacterium* sup.] *Bacillus* [not *B. anthracis*] spp., *Propionibacterium* spp., coagulase-negative staphylococci [including *S. epidermidis*], viridans group streptococci, *Aerococcus* spp., *Micrococcus* spp.) is cultured from two or more blood cultures drawn on separate occasions.
 - Erythema at the entry site of the central line or positive cultures on the tip of the line in the absence of positive blood cultures is not considered a CRBSI.

Osteomyelitis: Defined as meeting at least one of the following criteria:

- Organisms cultured from bone.

- Evidence of osteomyelitis on direct examination of the bone during a surgical operation or histopathologic examination.
 - At least two of the following signs or symptoms with no other recognized cause:
 - Fever (38° C)
 - Localized swelling at suspected site of bone infection
 - Tenderness at suspected site of bone infection
 - Heat at suspected site of bone infection
 - Drainage at suspected site of bone infection
- AND at least one of the following:
- Organisms cultured from blood positive blood antigen test (e.g., H. influenza, S. pneumonia)
 - Radiographic evidence of infection, e.g., abnormal findings on x-ray,
 - CT scan, magnetic resonance imaging (MRI,) radiolabel scan (gallium, technetium, etc.)

Unplanned return to the OR: Unplanned return to the operating room after initial operation management for a similar or related previous procedure.

Unplanned return to the ICU: Unplanned return to the intensive care unit after initial ICU discharge. Does not apply if ICU care is required for postoperative care of a planned surgical procedure.

Severe sepsis: Sepsis and/or Severe Sepsis defined as an obvious source of infection with bacteremia and two or more of the following:

- Temp >38° C or <36° C
- WBC count >12,000/mm³, or > 20%immature (source of infection)
- Hypotension – (Severe Sepsis)
- Evidence of hypo perfusion: (Severe Sepsis)
- Anion gap or lactic acidosis or Oliguria, or Altered mental status.

Section: Diagnosis

WI Variable: Comorbidities

NTDB Variable: Co-Morbid Conditions (DG_01)

Database Variable:

CO-MORBID CONDITIONS

Definition

Pre-existing co-morbid factors present before patient arrival at the ED/hospital.

Field Values

- 1. Other
- 2. Alcoholism
- 3. Ascites within 30 days
- 4. Bleeding disorder
- 5. Currently receiving chemotherapy for cancer
- 6. Congenital anomalies
- 7. Congestive heart failure
- 8. Current smoker
- 9. Chronic renal failure
- 10. CVA/residual neurological deficit
- 11. Diabetes mellitus
- 12. Disseminated cancer
- 13. Advanced directive limiting care
- 14. Esophageal varices
- 15. Functionally dependent health status
- 16. History of angina within 30 days
- 17. History of myocardial infarction
- 18. History of PVD
- 19. Hypertension requiring medication
- 20. ~~RETIRED 2012~~ Impaired sensorium
- 21. Prematurity
- 22. Obesity
- 23. Respiratory disease
- 24. Steroid use
- 25. Cirrhosis
- 26. Dementia
- 27. Major psychiatric illness
- 28. Drug or dependence
- 29. Pre-hospital cardiac arrest with resuscitative efforts by healthcare provider

Additional Information

- The null value "Not Applicable" is used for patients with no known co-morbid conditions.
- Refer to Appendix 3: Glossary of Terms for definition of Co-Morbid Conditions.
- Check all that apply.

Data Source Hierarchy

- 1. History and Physical
- 2. Discharge Sheet
- 3. Billing Sheet

Associated Edit Checks

Rule ID	Level	Message
6801	1	Invalid value
6802	2	Blank, required field

CO-MORBID CONDITIONS

Alcoholism: Evidence of chronic use, such as withdrawal episodes. Exclude isolated elevated blood alcohol level in absence of history of abuse.

Ascites within 30 days: The presence of fluid accumulation (other than blood) in the peritoneal cavity noted on physical examination, abdominal ultrasound, or abdominal CT/MRI.

Bleeding disorder: Any condition that places the patient at risk for excessive bleeding due to a deficiency of blood clotting elements (e.g., vitamin K deficiency, hemophilia, thrombocytopenia, chronic anticoagulation therapy with Coumadin, Plavix, or similar medications.) Do not include patients on chronic aspirin therapy.

Currently receiving chemotherapy for cancer: A patient who is currently receiving any chemotherapy treatment for cancer prior to admission. Chemotherapy may include, but is not restricted to, oral and parenteral treatment with chemotherapeutic agents for malignancies such as colon, breast, lung, head and neck, and gastrointestinal solid tumors as well as lymphatic and hematopoietic malignancies such as lymphoma, leukemia, and multiple myeloma.

Congenital Anomalies: Documentation of a cardiac, pulmonary, body wall, CNS/spinal, GI, renal, orthopaedic, or metabolic congenital anomaly.

Congestive Heart Failure: The inability of the heart to pump a sufficient quantity of blood to meet the metabolic needs of the body or can do so only at an increased ventricular filling pressure. To be included, this condition must be noted in the medical record as CHF, congestive heart failure, or pulmonary edema with onset of increasing symptoms within 30 days prior to injury. Common manifestations are:

- Abnormal limitation in exercise tolerance due to dyspnea or fatigue
- Orthopnea (dyspnea on lying supine)
- Paroxysmal nocturnal dyspnea (awakening from sleep with dyspnea)
- Increased jugular venous pressure
- Pulmonary rales on physical examination
- Cardiomegaly
- Pulmonary vascular engorgement

Current Smoker: A patient who reports smoking cigarettes every day or some days. Excludes patients who smoke cigars or pipes or use smokeless tobacco (chewing tobacco or snuff.)

Chronic renal failure: Acute or chronic renal failure prior to injury that was requiring periodic peritoneal dialysis, hemodialysis, hemofiltration, or hemodiafiltration.

CVA/residual neurological deficit: A history prior to injury of a cerebrovascular accident (embolic, thrombotic, or hemorrhagic) with persistent residual motor sensory or cognitive dysfunction (e.g., hemiplegia, hemiparesis, aphasia, sensory deficit, impaired memory.)

Diabetes mellitus: Diabetes mellitus prior to injury that required exogenous parenteral insulin or an oral hypoglycemic agent.

Disseminated cancer: Patients who have cancer that has spread to one site or more sites in addition to the primary site, AND in whom the presence of multiple metastases indicates the cancer is widespread, fulminant, or near terminal. Other terms describing disseminated cancer include: "diffuse," "widely metastatic," "widespread," or "carcinomatosis." Common sites of metastases include major organs, (e.g., brain, lung, liver, meninges, abdomen, peritoneum, pleura, bone.)

Advanced directive limiting care: The patient had a Do Not Resuscitate (DNR) document or similar advanced directive recorded prior to injury.

Esophageal varices: Esophageal varices are engorged collateral veins in the esophagus which bypass a scarred liver to carry portal blood to the superior vena cava. A sustained increase in portal pressure results in esophageal varices which are most frequently demonstrated by direct visualization at esophagoscopy.

Functionally dependent health status: Pre-injury functional status may be represented by the ability of the patient to complete activities of daily living (ADL) including: bathing, feeding, dressing, toileting, and walking. This item is marked YES if the patient, prior to injury, was partially dependent or completely dependent upon equipment, devices or another person to complete some or all activities of daily living. Formal definitions of dependency are listed below:

Partially dependent: The patient requires the use of equipment or devices coupled with assistance from another person for some activities of daily living. Any patient coming from a nursing home setting who is not totally dependent would fall into this category, as would any patient who requires kidney dialysis or home ventilator support that requires chronic oxygen therapy yet maintains some independent functions.

Totally dependent: The patient cannot perform any activities of daily living for himself/herself. This would include a patient who is totally dependent upon nursing care, or a dependent nursing home patient. All patients with psychiatric illness should be evaluated for their ability to function with or without assistance with ADLs just as the non-psychiatric patient.

History of angina within past 1 month: Pain or discomfort between the diaphragm and the mandible resulting from myocardial ischemia. Typically angina is a dull, diffuse (fist sized or larger) sub sternal chest discomfort precipitated by exertion or emotion and relieved by rest or nitroglycerine. Radiation often occurs to the arms and shoulders and occasionally to the neck, jaw (mandible, not maxilla), or interscapular region. For patients on anti-angina medications, enter yes only if the patient has had angina within one month prior to admission.

History of myocardial infarction: The history of a non-Q wave, or a Q wave infarction in the six months prior to injury and diagnosed in the patient's medical record.

History of Peripheral Vascular disease (PVD): Any type of operative (open) or interventional radiology angioplasty or revascularization procedure for atherosclerotic PVD (e.g., aorta-femoral, femoral-femoral, femoral-popliteal, balloon angioplasty, stenting, etc.) Patients who have had amputation from trauma or resection/repair of abdominal aortic aneurysms, including Endovascular Repair of Abdominal Aortic Aneurysm (EVAR,) would not be included.

Hypertension requiring medication: History of a persistent elevation of systolic blood pressure >140mm Hg and a diastolic blood pressure >90mm Hg requiring an antihypertensive treatment (e.g., diuretics, beta blockers, angiotensin-converting enzyme (ACE) inhibitors, calcium channel blockers.)

Prematurity: Documentation of premature birth, a history of bronchopulmonary dysplasia, or ventilator support for greater than 7 days after birth. Premature birth is defined as infants delivered before 37 weeks from the first day of the last menstrual period.

Obesity: A Body Mass Index of 30 or greater.

Respiratory Disease: Severe chronic lung disease, chronic obstructive pulmonary disease (COPD) such as emphysema and/or chronic bronchitis resulting in any one of more of the following:

- Functional disability from COPD (e.g., dyspnea, inability to perform activities of daily living [ADLs].)
- Hospitalization in the past for treatment of COPD.
- Requires chronic bronchodilator therapy with oral or inhaled agents.
- A Forced Expiratory Volume in 1 second (FEV1) of <75% of predicted on pulmonary function testing.
- Do not include patients whose only pulmonary disease is acute asthma. Do not include patients with diffuse interstitial fibrosis or sarcoidosis.

Steroid use: Patients that required the regular administration of oral or parenteral corticosteroid medications (e.g., prednisone, dexamethasone in the 30 days prior to injury for a chronic medical condition (e.g., COPD, asthma, rheumatologic disease, rheumatoid arthritis, inflammatory bowel disease.) Do not include topical corticosteroids applied to the skin or corticosteroids administered by inhalation or rectally.

Cirrhosis: Documentation in the medical record of cirrhosis, which might also be referred to as end stage liver disease. If there is documentation of prior or present esophageal or gastric varices, portal hypertension, previous hepatic encephalopathy, or ascites with notation of liver disease, then cirrhosis should be considered present. Cirrhosis should also be considered present if documented by diagnostic imaging studies or a laparotomy/laparoscopy.

Dementia: With particular attention to senile or vascular dementia (e.g., Alzheimer's.)

Major psychiatric illness: Documentation of the presence of pre-injury major depressive disorder, bipolar disorder, schizophrenia, anxiety/panic disorder, borderline or antisocial personality disorder, and/or adjustment disorder/post-traumatic stress disorder.

Drug abuse or dependency: With particular attention to opioid, sedative, amphetamine, cocaine, diazepam, alprazolam, or lorazepam dependence (excludes ADD/ADHD or chronic pain with medication use as prescribed.)

Pre-hospital cardiac arrest with CPR: A sudden, abrupt loss of cardiac function which occurs outside of the hospital, prior to admission at the center in which the registry is maintained, that results in loss of consciousness requiring the initiation of any component of basic and/or advanced cardiac life support by a health care provider.