Bi-national Minimum Dataset (BMDS) for Australia and New Zealand

Core Data Items

Data Dictionary

Version 1.1

July 2010
Preliminary note

This document is based on the initial draft of the Bi-national Minimum Dataset which was completed in 2010. It has been modified slightly to account for changes in terminology over time as the BMDS has continued to evolve, and to remove repeated or redundant information. Even so, this document may not accurately represent the fields, field definitions or other syntax relating to the most current version of the BMDS. Also, some of the comments made in the opening pages regarding issues associated with data capture, and registry use of data may become redundant, misleading or incorrect with time. As a result, this document has been denoted as an 'historical draft'.

Use of this document is free, provided that any papers, reports, templates or other documents which utilise the contained information acknowledge its source.

In particular, I would like to acknowledge and thank the wider trauma community, both across Australasia and worldwide, for their continued interest in standardising trauma monitoring. It is hoped that making this document publicly available will contribute towards this goal.

Cameron Palmer
August 2012
Foreword

This dictionary was created by Cameron Palmer on behalf of the Trauma Quality Improvement Sub-Committee of the Royal Australasian College of Surgeons Trauma Committee. The dataset was derived from the work performed by the National Minimum Dataset Working Party of the National Trauma Registry Consortium (2005-2008). Membership of the named committees, without whose work this dataset and data dictionary would not have been realised, are listed below.

**RACS Trauma Quality Improvement Sub-Committee (formerly the RACS Systems Performance Improvement and Registries Committee), 2008-2010**

Cliff Pollard *(Chair to 2009)*  
Russell Gruen *(Chair, 2009-2010)*

- Robert Atkinson
- Rangi Dansey
- James Hamill
- Mary Langcake
- Cameron Palmer
- Ron Somers

- Patrick Bade
- Peter Danne
- Anthony Joseph
- Rod McClure
- Sudhakar Rao
- Daryl Wall

- Daniel Cass
- Arthas Flabouris
- Leslie Lambert
- Len Notaras
- Michael Schuetz
- Stephen Wilkinson

**National Trauma Registry Consortium (Australia & New Zealand) Executive and Steering Committees, 2005-2008**

Cliff Pollard *(Chair)*

- Leanne Aitken  
- Nicholas Bellamy  
- Peter Cameron  
- Tamzyn Davey  
- William Griggs  
- Leslie Lambert  
- Sudhakar Rao

- Robert Atkinson  
- Peter Danne  
- James Hamill  
- Patricia McDougall  
- Drew Richardson

- Patrick Bade  
- Daniel Cass  
- Mark Fitzgerald  
- James Harrison  
- Frank Plani  
- Ron Somers


Cameron Palmer *(Chair)*

Tamzyn Davey *(NTRC Project Officer)*

- Christine Allsopp  
- Erica Caldwell  
- Carolyn James  
- Deirdre McDonagh  
- Ian Rowbottom

- Lynn Ashton  
- Rangi Dansey  
- Jennifer Leslie  
- Susan McLellan  
- Rebecca Weir

- Maxine Burrell  
- Rachael Henson  
- David Martens  
- Helen Naylor
Comment on registry purposes

The Australian Commission on Safety and Quality in Healthcare released their Operating Principles and Technical Standards for Australian Clinical Quality Registries (ACQR) in late 2008. While this may not provide the template ultimately used in the development of a binational trauma registry (B/NTR) as other standards may be or have been developed in Australia or New Zealand, it at least provides substantial food for thought regarding the design and implementation both of a B/NTR, and the BMDS it uses.

In order to qualify as an ACQR, a future B/NTR should use routinely collected electronic data where possible. While this lowers cost, the use of an Injury Severity Score (ISS) threshold (derived from assigned Abbreviated Injury Scale [AIS] codes) requires at least a proportion of data to be collected manually (IE, from written hospital records). An ACQR is felt to be practical only in situations where "differences in quality can have major impacts on quality of life or cost" (p20); as a result, the estimated benefit of a future B/NTR (based on current evidence of differences in outcome across different regions in Australia and New Zealand, or between these countries and the rest of the world) should be carefully assessed. Alternatively, the the potential utility of alternate data sources should be assessed. An example is ICD coding, which can in theory be mapped to AIS equivalents instead of using expensive manual AIS coding. However, the limitations of such data 'shortcuts' should be recognised. Current ICD maps offer outdated severity estimates compared to the current (2008) AIS; in addition, while similar patient numbers may be identified by this method there will be substantial differences in the actual group of patients identified.

While the elements of a BMDS can be to some extent developed independently (based on considerations such as completeness and ease of collection), the composition of a BMDS must also be governed by the population to be assessed by a future B/NTR (IE, inclusion and exclusion thresholds) as well as the outcomes which are felt to be of relevance to that population. For severe injury, death has historically been regarded as a standard outcome measure; secondary outcomes may include the length of hospital treatment, and the discharge destination (other than death). It is compelling, though, that the ACQR principles and standards document specifically mentions trauma in this context. Based on the results of the Victorian State Trauma Registry, the document states that "in the case of severe trauma a six month follow-up is needed for clinical stability to be measured"(p20). The cost associated with collection of medium- to long-term follow-up data would likely render a B/NTR unfeasible. A case could be made that as overseas standards at national level comprise discharge destination, discharge Glasgow Outcome Score or 30-day mortality that these represent acceptable international standards; equally, though, this could be seen as indicative of the generally poor quality of trauma outcomes evaluation worldwide.
Inclusion and exclusion criteria

Consideration should be given to the inclusion criteria which would be employed by a B/NTR employing the BMDS, as to some extent these will determine the particular relevance of fields within the BMDS (and hence their inclusion in the BMDS). While registries from a sole hospital, and to a lesser extent regional or state registries benefit from broad patient capture, at a national or international level only patients with injuries which are deemed significant (by some definition) should be included. The comparatively small proportion of patients which will meet assigned inclusion criteria should fit within the funding and time constraints which are imposed, particularly on smaller hospitals or regions without local data collection previously in place. It is therefore reasonable to limit inclusion in a B/NTR to patients meeting specified criteria for major trauma.

While not exhaustive, Appendix 1 provides representative summaries of major trauma, inclusion and exclusion criteria in place within Australia. For comparison, the criteria suggested or employed by other national and international trauma registries are provided in a second table. Although the threshold of an ISS >15 has been a widely accepted major trauma definition since the mid-1980s, it has not been validated in over 20 years; during this time substantive changes have taken place in injury diagnosis and treatment which would be expected to produce differences in outcomes across a population. With the adoption of the current (2008) update of the AIS in the majority of Australasian registries the number of patients classified as major trauma will decrease by an estimated 15-25% compared with previous (1998 and 1990) AIS versions. However, the majority of Australian and New Zealand registries currently have not indicated any intention to change their major trauma definitions. With this in mind, major trauma (and the inclusion criterion for a B/NTR) is currently best defined at a national level as:

Any patient dying after a trauma event, or admitted after trauma with an Injury Severity Score of greater than 15, calculated using the 2005 or Update 2008 versions of the Abbreviated Injury Scale. This excludes:

- patients with delayed admissions greater than 7 days after injury;
- poisoning or drug ingestion;
- isolated neck of femur fracture;
- admissions where injuries occurred due to other pathology; and
- admissions where management of injuries is not the primary reason for admission.
Dataset definition sources

Dataset fields should offer substantial levels of international comparability while still providing usefulness for the specific local requirements of the registry. At the same time, ease of collection (in terms of time required or cost) is essential, particularly in order to obtain data from centres which do not currently have trauma data collection (and hence are more likely to be resource-poor).

Where possible, BMDS fields should be based on standard definitions created by authoritative Australian or New Zealand bodies, or (in the absence of such definitions) pre-existing comparable or contributing datasets.

The default standard sought for each field is a definition from the Australian Institute of Health and Welfare's Australian National Health Data Dictionary (METeOR). A number of METeOR standards are in turn based on, derived from or compatible with routinely collected International Classification of Diseases (ICD) codes. In order to maximise international dataset comparability, definitions used in established registries or agreed templates (the European Utstein template, American National Trauma Data Bank [NTDB] or Canadian National Trauma Registry [NTR]) have also been considered. Reporting guidelines may also be taken from or based on these sources, as well as the data dictionaries of existing Australian state trauma registries.

Where no METeOR standard is felt to apply to a field as conventionally defined in existing trauma datasets, best matches are provided, and note made that METeOR fields may require future development. It is recognised that use of METeOR terms carries an implication that a future B/NTR will be held within, or have public funding sought from within Australia.

Within the data dictionary, reference is made to the use of a particular field, or a field providing similar information to all or part of the relevant field in one or more of the Utstein template, NTDB or Canadian NTR.

A brief summary of the BMDS fields is contained in Appendix 2.
BMDS
Field Definitions
### 1.01 Institution

**Specification**

<table>
<thead>
<tr>
<th>Collection</th>
<th>Essential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition</td>
<td>The identifier for the hospital in which definitive (final) care was provided.</td>
</tr>
<tr>
<td>Definition Source</td>
<td>METeOR ID: 269973: Establishment - organisation identifier (Australian)</td>
</tr>
<tr>
<td>Database Name</td>
<td>institution</td>
</tr>
<tr>
<td>Field Size</td>
<td>9</td>
</tr>
<tr>
<td>Layout</td>
<td>NNX[X]NNNNN</td>
</tr>
<tr>
<td>Location</td>
<td>Main Table</td>
</tr>
<tr>
<td>Reporting</td>
<td>Each separately administered health care establishment (hospital) should have a unique identifier at the national or binational level. Field is derived (concatenated) from other metadata fields for state/territory, sector, region and state/territory organisation. Additional codes may require development in order to encompass New Zealand hospitals.</td>
</tr>
</tbody>
</table>

**Compatibility**

- **Utstein**: None
- **NTDB**: None
- **NTR**: Comparable: **Institution**
1.02 Trauma Number

Specification

Collection | Essential
Defination  | A person identifier unique to the establishment where the person received definitive (final) care.
Definition Source | METeOR ID: 290046:

Person - person identifier

Database Name | traumano
Field Size | 20
Location | Main Table
Data Type | String
Layout | XXXXXX[X(14)]

Reporting | This field may be a hospital medical record (UR) number, or a local trauma registry case number.

Compatibility

Utstein | None
NTDB | None
NTR | Comparable:

Trauma number
1.03 Incident number

**Specification**

<table>
<thead>
<tr>
<th>Collection</th>
<th>Definition</th>
<th>Definition Source</th>
<th>Database Name</th>
<th>Data Type</th>
<th>Field Size</th>
<th>Layout</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essential</td>
<td>An identifier which is unique to a specific trauma event for a specific person.</td>
<td>No comparable field currently exists within METeOR.</td>
<td>incident</td>
<td>Numeric</td>
<td>10</td>
<td>NNNNNN[NNNN]</td>
</tr>
</tbody>
</table>

**Location**

Main Table

**Reporting**

This field is only for use within a proposed national or binational trauma registry, and should be assigned at national level.

This field may be dependent (derived from) or independent of date of incident, region or submitting institution.

**Compatibility**

- **Utstein**: None
- **NTDB**: None
- **NTR**: Comparable: *Unique personal identifier*
2.01 Date of birth

Specification

Collection  Desirable
Definition   The date of birth of the person.
Definition Source  METeOR ID: 287007

Person - date of birth

<table>
<thead>
<tr>
<th>Database Name</th>
<th>Data Type</th>
<th>Layout</th>
</tr>
</thead>
<tbody>
<tr>
<td>datbirth</td>
<td>Date/Time</td>
<td>DDMMYYYY</td>
</tr>
</tbody>
</table>

Field Size 8

Location Main Table

Reporting If year of birth is known (but date of birth is not) use the date, 0101YYYY of the birth year to estimate age (where YYYY is the year of birth).

If person is aged under 2 years, date of birth should be estimated to the nearest three month period, ie 0101, 0104, 0107 or 0110 of the estimated year of birth.

Compatibility

Utstein None
NTDB Comparable: Date of birth
NTR None
2.02 Age

Specification

Collection Essential

Definition The age of the patient on the date of the injury event, measured as a number of years (with fractional component expressed as a decimal). If both data items are available, this should be derived as a calculated field.

Definition Source If both data fields are available - calculated value:

\[(3.01 \text{ Date & Time of Injury}) - (2.01 \text{ Date of birth})\]

If either data field is unavailable:

METeOR ID: 303794:

*Person - age, total years*

<table>
<thead>
<tr>
<th>Database Name</th>
<th>age</th>
<th>Data Type</th>
<th>Numeric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Size</td>
<td>6</td>
<td>Layout</td>
<td>[NN]N.NN</td>
</tr>
<tr>
<td>Location</td>
<td>Main Table</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reporting</td>
<td>If age cannot be calculated, is not stated and cannot be estimated, value 999 should be used. Whole years are commonly used (cf METeOR standard); data from this field can be accurately aggregated to the METeOR standard if required.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Compatibility

Utstein  Partially comparable:

*Age*

*Exception: less specific; decimal part used for age <1 year only.*

NTDB  Partially comparable:

*Age*

*Exception: less specific; unit of measure changes with age <1 year.*

NTR  Partially comparable:

*Age*

*Exception: less specific; whole years used only.*
2.03 Sex

Specification
Collection Essential
Definition The age of the patient on the date of the injury event, measured as a number of years (with fractional component expressed as a decimal). If both data items are available, this should be derived as a calculated field.
Definition Source METeOR ID: 287316:

Person - sex

Database Name sex Data Type Numeric
Field Size 1 Layout N
Location Main Table
Reporting Permissible values include male, female, intersex or indeterminate, and unknown.

Compatibility
Utstein Comparable:

Sex

NTDB Comparable:

Gender

NTR Comparable:

Sex
2.04 Pre-injury comorbidities

Specification
Collection  Desirable
Definition  The effect of any condition or conditions which pre-existed the injury incident, and which affect management of the injuries.
Definition Source  No comparable field currently exists within METeOR.
Related field:
METeOR ID: 391322:
Episode of care - additional diagnosis, code (ICD-10-AM 7th edn)

Database Name  comorbid  Data Type  Numeric
Field Size  1  Layout  N
Location  Main Table
Reporting  This field may be expressed in a number of ways. Ideally, the American Society of Anesthesiologists' scale should be used.

Compatibility
Utstein  Comparable:
Pre-injury ASA Physical Status Classification
NTDB  Comparable:
Co-morbid conditions
NTR  None
3.01 Date & Time of Injury

Specification

Collection  Essential

Definition  The date and time the person received the injuries requiring hospitalisation.

Definition Source  No comparable field currently exists within METeOR.

Related field: METeOR ID: 270544:

Patient - diagnosis date

Database Name  injdate

Field Size  14

Location  Main Table

Data Type  Date/Time

Layout  DDMMCCYY HH:NN

Reporting  If time is not accurately known, the best estimate should be used.

Must be less than or equal to:

4.02 Time of Ambulance Arrival at Patient (if used);

4.05 Time of Arrival at Referring Hospital (if used);

4.06 Time of Departure from Referring Hospital (if used); and

5.01 Date & Time of Arrival at Definitive Care Hospital

Midnight should be entered as 00:01 of the following date (00:00 and 24:00 are not accepted).

Compatibility

Utstein  None

NTDB  Comparable; formed using:

Injury Incident Date

Injury Incident Time

NTR  Partially comparable:

Date of injury
3.02 Injury Cause (Mechanism)

Specification

Collection Essential
Definition The single environmental event, circumstance or condition (external factor) which was the primary circumstance or cause of the trauma event.
Definition Source METeOR ID: 391330:

Injury event - external cause, code (ICD-10-AM 7th edn)

Database Name injcause Data Type String
Field Size 6 Layout ANN{.N[N]}
Location Main Table
Reporting If two or more cause categories are judged to be equally important, select the one that comes first in the code list
This field may be expressed in a number of ways. Existing numerical codesets used for similar fields may be mapped to or from this field, or the definition source of this field may change over time (necessitating the creation of a new METeOR code).

Compatibility

Utstein Comparable:
Mechanism of Injury

NTDB Comparable:
Primary E-Code

NTR Comparable:
Injury etiology (E-code)
3.03 Dominant Injury Type

Specification

Collection  Desirable
Definition  The dominant type of injury produced by the trauma event.
Definition Source  No comparable field currently exists within METeOR.
Database Name  injtype  Data Type  Numeric
Field Size  1  Layout  N
Location  Main Table
Reporting  If this field is not collected at local level, data may be imputed from:

3.02 Injury Cause (mechanism); or
7.01 AIS Injury Codes

Compatibility

Utstein  Comparable:
    Dominating type of injury
NTDB  Comparable:
    Trauma type
NTR  Partially comparable:
    Injury type

Exception: related primarily to anatomical injury.
3.04 Postcode of Injury

Specification
Collection Desirable
Definition The postcode where the trauma event occurred.
Definition Source No comparable field currently exists within METeOR.
Database Name injpcode Data Type Numeric
Field Size 5 Layout NNNN(N)
Location Main Table
Reporting May be derived (concatenated) from local postcode as well as a country identifier.

Compatibility
Utstein None
NTDB Comparable:
Injury Location Zip Code
NTR Comparable:
Regional identifier of incident location (GEOCODE)
3.05 Injury Intent

Specification

Collection: Desirable
Definition: The most likely role of human intent in the occurrence of the trauma event
Definition Source: METeOR ID: 268944:

Injury event - human intent of injury

Database Name: injintnt, Data Type: String
Field Size: 2, Layout: NN
Location: Main Table
Reporting: If two or more categories are judged to be equally appropriate, select the one that comes first in the code list.

Compatibility

Utstein: Comparable:

Intention of Injury

NTDB: Comparable:

Injury Intentionality

NTR: None
3.06 Place of Injury Occurrence

Specification

Collection  Desirable
Definition  The type of location where the trauma event occurred.
Definition Source  METeOR ID: 391334:
  *Injury event - place of occurrence, code (ICD-10-AM 7th edn)*

<table>
<thead>
<tr>
<th>Database Name</th>
<th>Data Type</th>
<th>Field Size</th>
<th>Layout</th>
</tr>
</thead>
<tbody>
<tr>
<td>injplace</td>
<td>String</td>
<td>6</td>
<td>ANN[N[N]]</td>
</tr>
</tbody>
</table>

Location  Main Table
Reporting  If two or more place categories are judged to be equally important, select the one that comes first in the code list.
 This field may be expressed in a number of ways. Existing numerical codesets used for similar fields may be mapped to or from this field, or the definition source of this field may change over time (necessitating the creation of a new METeOR code).

Compatibility

Utstein  None
NTDB  Comparable:
  *Location E-Code*
NTR  Comparable:
  *Place of incident*
3.07 Activity Engaged in when Injured

**Specification**

**Collection** Desirable

**Definition** The type of activity the person was engaged in at the time of the trauma event.

**Definition Source** METeOR ID: 391320:

*Injury event - activity type, code (ICD-10-AM 7th edn)*

**Database Name** injactiv  
**Data Type** String  
**Field Size** 5  
**Layout** ANNNN

**Location** Main Table

**Reporting**

If two or more activity categories are judged to be equally important, select the one that comes first in the code list.

This field may be expressed in a number of ways. Existing numerical codesets used for similar fields may be mapped to or from this field, or the definition source of this field may change over time (necessitating the creation of a new METeOR code).

**Compatibility**

**Utstein** None

**NTDB** Partially comparable:

*Work-related*

*Exception: fields are specific to particular activities only.*

**NTR** Partially comparable:

*Sports/Recreational Activity Code*

*Work-Related Code*

*Exception: fields are specific to particular activities only.*
### 3.08 Injury Description

#### Specification
- **Collection**: Desirable
- **Definition**: Text description of the trauma event.
- **Definition Source**: METeOR ID: 268946: *Injury event - external cause, text*

<table>
<thead>
<tr>
<th>Database Name</th>
<th>Data Type</th>
<th>Layout</th>
</tr>
</thead>
<tbody>
<tr>
<td>injtext</td>
<td>String</td>
<td>[X(100)]</td>
</tr>
</tbody>
</table>

- **Field Size**: 100
- **Location**: Main Table
- **Reporting**: Text description should include information relating to the circumstances prior to and surrounding the trauma event (including place of injury and activity), and what 'went wrong' to cause the trauma event.

#### Compatibility
- **Utstein**: None
- **NTDB**: None
- **NTR**: None
3.09 Safety Devices Used

Specification

Collection | Desirable
Definition | The use (or lack of use) of safety equipment relevant to the injury cause.
Definition Source | No comparable field currently exists within METeOR.
Database Name | injsafe
Data Type | String
Field Size | 2
Layout | NN
Location | Main Table
Reporting | This field will require the development of appropriate code lists. Relevant options for this field may be derived from one or more of:

- 3.02 Injury Cause (mechanism);
- 3.06 Place of Injury Occurrence (if used) and
- 3.06 Activity Engaged in when Injured (if used)

Compatibility

Utstein | None
NTDB | Comparable:
- Protective devices
- Child specific restraint (partially comparable)
- Airbag deployment (partially comparable)
NTR | Comparable:
- Protective Devices
4.01 Mode of Transport from Scene

Specification

Collection Essential

Definition The type of transport by which the person left the scene of the trauma event.

Definition Source No comparable field currently exists within METeOR.

Related field:
METeOR ID: 270000:

*Non-admitted patient emergency department service episode - transport mode (arrival)*

Database Name prhsctpt Data Type Numeric
Field Size 1 Layout N
Location Main Table

Reporting The current related METeOR field does not have sufficient specificity.

Compatibility

Utstein Partially comparable:

*Type of transportation*

Exception: not specific enough; dependent on whether patient was transferred from another hospital.

NTDB Partially comparable:

*Transport mode*

Exception: not specific enough; dependent on whether patient was transferred from another hospital.

NTR Comparable:

*Mode of transport from scene*
4.02 Time of Ambulance Arrival at Patient

Specification

Collection  Desirable
Definition  If a person was transported by ambulance service from the scene, the time the first ambulance service reached the person.
Definition Source  No comparable field currently exists within METeOR.
Database Name  prhambar
Field Size  14
Location  Main Table
Data Type  Date/Time
Layout  DDMMCCYY HH:NN

Reporting
Must be greater than or equal to:

3.01 Date & Time of Injury
Must be less than or equal to:

4.05 Time of Arrival at Referring Hospital (if used);
4.06 Time of Departure from Referring Hospital (if used); and
5.01 Date & Time of Arrival at Definitive Care Hospital

Whether or not this field is relevant may be imputed from:

4.01 Mode of Transport from Scene

Midnight should be entered as 00:01 of the following date (00:00 and 24:00 are not accepted).

Compatibility

Utstein  None
NTDB  Partially comparable; formed using:

EMS unit arrival time at scene or transferring facility
EMS unit arrival time at scene or transferring facility
Exception: not specific enough; dependent on whether patient was transferred from another hospital.

NTR  None
4.03 Transfer from Other Hospital?

Specification

Collection  Essential
Definition  Whether the person was treated at or presented to another acute-care hospital prior to arrival at the definitive care hospital.
Definition Source  No comparable field currently exists within METeOR.
Database Name  prhtrans
Field Size  1
Location  Main Table
Reporting  This field will require the development of appropriate code lists. May be true, false or unknown; alternatively may be used to specify whether the hospital submitting data was the hospital providing definitive care.

Compatibility

Utstein  Comparable:

Inter-Hospital Transfer

NTDB  Comparable:

Inter-facility transfer

NTR  Comparable:

Direct admission
4.04 Referring Hospital

Specification

Collection                Essential
Definition                The identifier for the hospital from which the person was transferred.
Definition Source         METeOR ID: 269973:

Establishment - organisation identifier (Australian)

Database Name            prhinst       Data Type      String
Field Size               9             Layout         NNX[X]NNNNN
Location                 Main Table
Reporting                Whether or not this field is relevant may be imputed from:

4.03 Transfer from Other Hospital?

If the person attended multiple hospitals prior to arriving at the hospital of definitive care, the last transferring hospital should be given.

Each separately administered health care establishment should have a unique identifier at the national or binational level.

Field is derived (concatenated) from other metadata fields for state/territory, sector, region and state/territory organisation.

Additional codes may require development in order to encompass New Zealand hospitals.

Compatibility

Utstein                  None
NTDB                    None
NTR                     None
4.05 Time of Arrival at Referring Hospital

Specification

Collection  
Desirable

Definition  
The date and time patient was first registered, triaged or assessed (whichever comes first), by clerical officer, nurse or doctor at the hospital from which they were transferred to the definitive care hospital.

Definition Source  
Formed using:
METeOR ID: 270393

Health service event - presentation date
METeOR ID: 270080

Health service event - presentation time

Database Name  prharriv  
Data Type  Date/Time
Field Size  14  
Layout  DDMMCCYY HH:NN
Location  Main Table

Reporting  
Must be greater than or equal to:
3.01 Date & Time of Injury

4.02 Time of Ambulance Arrival at Patient (if used);  
Must be less than or equal to:
4.06 Time of Departure from Referring Hospital (if used); and
5.01 Date & Time of Arrival at Definitive Care Hospital

Whether or not this field is relevant may be imputed from:
4.03 Transfer from Other Hospital?
Midnight should be entered as 00:01 of the following date (00:00 and 24:00 are not accepted).

Compatibility

Utstein  None
NTDB  None
NTR  None
4.06 Time of Departure from Referring Hospital

Specification

Collection Desirable
Definition The date and time patient departed from the hospital from which they were transferred to the definitive care hospital.
Definition Source No comparable field currently exists within METeOR.

Related comparable field may be formed using:
METeOR ID: 322597

Emergency department stay—physical departure date
METeOR ID: 322610

Emergency department stay—physical departure time

Database Name prhdept Data Type Date/Time
Field Size 14 Layout DDMMCCYY HH:NN
Location Main Table
Reporting The current related METeOR fields specify person is either admitted or an emergency department stay, but not either.

Must be greater than or equal to:

3.01 Date & Time of Injury;

4.02 Time of Ambulance Arrival at Patient (if used); and

4.05 Time of Arrival at Referring Hospital (if used)

Must be less than or equal to:

5.01 Date & Time of Arrival at Definitive Care Hospital

Whether or not this field is relevant may be imputed from:

4.03 Transfer from Other Hospital?

Midnight should be entered as 00:01 of the following date (00:00 and 24:00 are not accepted).

If the patient is transferred by ambulance service, the time the patient is loaded into the transferring ambulance may be used.

Compatibility

Utstein None
NTDB None
NTR None
4.07 Mode of Transport from Referring Hospital to Definitive Care Hospital

Specification

Collection
Desirable

Definition
The type of transport by which the person was transferred from another hospital to the definitive care hospital.

Definition Source
No comparable field currently exists within METeOR.

Related field:
METeOR ID: 270000:
Non-admitted patient emergency department service episode - transport mode (arrival)

Database Name
prhtrpt

Data Type
Numeric

Field Size
1

Layout
N

Location
Main Table

Reporting
The current related METeOR field does not have sufficient specificity.

Whether or not this field is relevant may be imputed from:

4.03 Transfer from Other Hospital?

Compatibility

Utstein
Comparable:
Type of Transportation

NTDB
Comparable:
Transport mode

NTR
None
4.08 Pre-hospital Blood Transfusion?

**Specification**

- **Collection**: Desirable
- **Definition**: Whether the person was administered any blood products prior to arrival at the definitive care hospital.
- **Definition Source**: No comparable field currently exists within METeOR.
- **Database Name**: prhblood
- **Data Type**: Numeric
- **Field Size**: 1
- **Layout**: N
- **Location**: Main Table
- **Reporting**: This field will require the development of appropriate code lists. May be true, false or unknown.

**Compatibility**

- **Utstein**: None
- **NTDB**: None
- **NTR**: None
4.09 Pre-hospital CPR?

**Specification**

- **Collection**: Desirable
- **Definition**: Whether the person received cardiopulmonary resuscitation at any stage prior to arrival at the definitive care hospital.
- **Definition Source**: No comparable field currently exists within METeOR.
- **Database Name**: prhcpr
- **Data Type**: Numeric
- **Field Size**: 1
- **Layout**: N
- **Location**: Main Table
- **Reporting**: This field will require the development of appropriate code lists. May be true, false or unknown.

This field requires data quality evaluation compared with the quality of field:

4.10 Pre-Hospital Cardiac Arrest?

**Compatibility**

- **Utstein**: None
- **NTDB**: None
- **NTR**: None
4.10 Pre-hospital Cardiac Arrest?

**Specification**

<table>
<thead>
<tr>
<th>Collection</th>
<th>Desirable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition</td>
<td>Whether the person suffered a cardiac arrest at any stage prior to arrival at the definitive care hospital.</td>
</tr>
<tr>
<td>Definition Source</td>
<td>No comparable field currently exists within METeOR.</td>
</tr>
<tr>
<td>Related field:</td>
<td>METeOR ID: 285123</td>
</tr>
</tbody>
</table>

**Person - heart rate, total beats per minute**

<table>
<thead>
<tr>
<th>Database Name</th>
<th>prharest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Type</td>
<td>Numeric</td>
</tr>
<tr>
<td>Field Size</td>
<td>1</td>
</tr>
<tr>
<td>Layout</td>
<td>N</td>
</tr>
<tr>
<td>Location</td>
<td>Main Table</td>
</tr>
</tbody>
</table>

**Reporting**

This field will require the development of appropriate code lists. May be true, false or unknown.

Current related METeOR field contains cardiac arrest as a supplementary value. Consequently, a value for this field may be imputed from:

4.11 First Pulse

Cardiac arrest requires the absence of a detectable pulse, unresponsiveness, and apnoea.

This field requires data quality evaluation compared with the quality of field:

4.09 Pre-Hospital CPR?

**Compatibility**

<table>
<thead>
<tr>
<th>Utstein</th>
<th>Comparable:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-hospital Cardiac Arrest</td>
<td></td>
</tr>
<tr>
<td>NTDB</td>
<td>None</td>
</tr>
<tr>
<td>NTR</td>
<td>None</td>
</tr>
</tbody>
</table>
4.11 First Pulse

Specification

Collection Desirable

Definition The first recorded heart rate measured at the scene of trauma, or (if unavailable or presented directly to referring hospital), the first recorded pulse measured at a referring hospital.

Definition Source METEOR ID: 285123

Person - heart rate, total beats per minute

Database Name prhpulse Data Type Numeric

Field Size 3 Layout N[NN]

Location Main Table

Reporting If the person is in cardiac arrest at the time of first measurement, value 997 should be used.
If the person's heart rate cannot be measured, value 999 should be used.

Compatibility

Utstein None

NTDB Partially comparable

Initial field pulse rate

Exception: more specific; requires measurement at scene.

NTR None
4.12 First Systolic BP

**Specification**

**Collection**
Desirable

**Definition**
The first recorded systolic blood pressure measured at the scene of trauma, or (if unavailable or presented directly to referring hospital), the first recorded systolic blood pressure measured at a referring hospital.

**Definition Source**
METeOR ID: 270073

*Person - blood pressure (systolic)*

<table>
<thead>
<tr>
<th>Database Name</th>
<th>Data Type</th>
<th>Field Size</th>
<th>Location</th>
<th>Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>prhysbp</td>
<td>Numeric</td>
<td>3</td>
<td>Main Table</td>
<td>Must be in millimetres of mercury (mmHg). If the systolic blood pressure is not or cannot be measured, value 999 should be used.</td>
</tr>
</tbody>
</table>

**Compatibility**

**Utstein**
Partially comparable:

*Systolic Blood Pressure upon arrival of EMS personnel at scene*

*Exception: more specific; requires measurement at scene.*

**NTDB**
Partially comparable:

*Initial field systolic blood pressure*

*Exception: more specific; requires measurement at scene.*

**NTR**
None
4.13 First Spontaneous Respiratory Rate

Specification

Collection  Desirable

Definition  The first recorded unassisted rate of respiration measured at the scene of trauma, or (if unavailable or presented directly to referring hospital), the first recorded unassisted rate of respiration measured at a referring hospital.

Definition Source  No comparable field currently exists within METeOR.

Database Name  prhresps  Data Type  Numeric

Field Size  3  Layout  N[NN]

Location  Main Table

Reporting  If the person is in respiratory arrest at the time of first measurement, value 997 should be used.

If the person has been intubated at the time of first measurement, value 998 should be used.

If the respiratory rate is not or cannot be measured, value 999 should be used.

Compatibility

Utstein  Partially comparable:

*Respiratory Rate upon arrival of EMS personnel at scene*

*Exception: more specific; requires measurement at scene.*

NTDB  Partially comparable:

*Initial field respiratory rate*

*Exception: more specific; requires measurement at scene.*

NTR  None
4.14 First Temperature

**Specification**

<table>
<thead>
<tr>
<th>Collection</th>
<th>Desirable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition</strong></td>
<td>The first recorded body temperature measured at the scene of trauma, or (if unavailable or presented directly to referring hospital), the first recorded body temperature measured at a referring hospital.</td>
</tr>
<tr>
<td><strong>Definition Source</strong></td>
<td>No comparable field currently exists within METeOR.</td>
</tr>
<tr>
<td><strong>Database Name</strong></td>
<td>prhtemp</td>
</tr>
<tr>
<td><strong>Data Type</strong></td>
<td>Numeric</td>
</tr>
<tr>
<td><strong>Field Size</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>Layout</strong></td>
<td>NN[.N]</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td>Main Table</td>
</tr>
<tr>
<td><strong>Reporting</strong></td>
<td>Must be in degrees Celsius.</td>
</tr>
<tr>
<td></td>
<td>If the temperature is not or cannot be measured, value 99.9 should be used.</td>
</tr>
</tbody>
</table>

**Compatibility**

<table>
<thead>
<tr>
<th>Utstein</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTDB</td>
<td>None</td>
</tr>
<tr>
<td>NTR</td>
<td>None</td>
</tr>
</tbody>
</table>
4.15 First GCS Eye

Specification
Collection Desirable
Definition The first recorded indication of the responsiveness to stimuli by eye opening at the scene of trauma, or (if unavailable or presented directly to referring hospital), the first recorded indication of the responsiveness to stimuli by eye opening measured at a referring hospital.
Definition Source No comparable field currently exists within METeOR.
Database Name prhgcsey
Field Size 1
Location Main Table
Reporting Field is used as a component of:

4.18 First Total GCS

Compatibility
Utstein None
NTDB Partially comparable:
Initial field GCS - eye
Exception: more specific; requires measurement at scene.
NTR None
4.16 First GCS Voice

**Specification**

**Collection**
Desirable

**Definition**
The first recorded Indication of the level of verbal response at the scene of trauma, or (if unavailable or presented directly to referring hospital), the first recorded Indication of the level of verbal response measured at a referring hospital.

**Definition Source**
No comparable field currently exists within METeOR.

**Database Name**
prhgcsvo  
**Data Type**
Numeric

**Field Size**
1  
**Layout**
N

**Location**
Main Table

**Reporting**
Field is used as a component of:

4.18 First Total GCS

**Compatibility**

**Utstein**
None

**NTDB**
Partially comparable:

*Initial field GCS - verbal*

Exception: more specific; requires measurement at scene.

**NTR**
None
4.17 First GCS Motor

Specification

Collection  Desirable
Definition  The first recorded indication of the level of motor response at the scene of trauma, or (if unavailable or presented directly to referring hospital), the first recorded indication of the level of motor response measured at a referring hospital.

Definition Source  No comparable field currently exists within METeOR.

Database Name  prhgcsmo  Data Type  Numeric
Field Size  1  Layout  N
Location  Main Table
Reporting  Field is used as a component of:

4.18 First Total GCS

Compatibility

Utstein  Partially comparable:

Glasgow Coma Scale Motor Component upon arrival of EMS personnel at scene
Exception: more specific; requires measurement at scene.

NTDB  Partially comparable:

Initial field GCS - motor
Exception: more specific; requires measurement at scene.

NTR  None
4.18 First Total GCS

Specification

Collection: Desirable

Definition: The first recorded total Glasgow Coma Scale score at the scene of trauma, or (if unavailable or presented directly to referring hospital), the first recorded total Glasgow Coma Scale score measured at a referring hospital.

Definition Source: No comparable field currently exists within METeOR.

Database Name: prhgc
Data Type: Numeric
Field Size: 2
Layout: N[N]
Location: Main Table

Reporting: If the person has been intubated at the time of first measurement, or is otherwise sedated or paralysed due to drug administration, value -2 should be used.

If the total GCS is not or cannot be measured, value -1 should be used.

This field may be entered directly (particularly where individual component scores are unavailable, or calculated using:

4.15 First GCS Eye
4.16 First GCS Voice
4.17 First GCS Motor

Compatibility

Utstein: Partially comparable:
Glasgow Coma Scale Score upon arrival of EMS personnel at scene
Exception: more specific; requires measurement at scene.

NTDB: Partially comparable:
Initial field GCS - total
Exception: more specific; requires measurement at scene.

NTR: None
5.01 Date & Time of Arrival at Definitive Care Hospital

Specification
Collection Essential
Definition The date and time patient was first registered, triaged or assessed (whichever comes first), by clerical officer, nurse or doctor.
Definition Source Formed using:
METeOR ID: 270393

*Health service event - presentation date*
METeOR ID: 270080

*Health service event - presentation time*

<table>
<thead>
<tr>
<th>Database Name</th>
<th>Data Type</th>
<th>Layout</th>
</tr>
</thead>
<tbody>
<tr>
<td>dcharriv</td>
<td>Date/Time</td>
<td>DDMMCCYY HH:NN</td>
</tr>
</tbody>
</table>

Field Size 14
Location Main Table
Reporting Must be greater than or equal to:

3.01 *Date & Time of Injury*;
4.02 *Time of Ambulance Arrival at Patient (if used)*;
4.05 *Time of Arrival at Referring Hospital (if used)*; and
4.06 *Time of Departure from Referring Hospital (if used)*;

Must be less than or equal to:

5.18 *ED Discharge Date & Time*
7.02 *Date & Time of Discharge*;

Midnight should be entered as 00:01 of the following date (00:00 and 24:00 are not accepted).

Compatibility
Utstein None
NTDB Comparable; formed using:

*ED/Hospital Arrival Date*
*ED/Hospital Arrival Time*

NTR Partially comparable:

*Date of arrival at trauma centre*

*Exception: incomplete; time component is missing.*
5.02 Pulse on Arrival

Specification

Collection  Essential
Definition  The first recorded heart rate measured following arrival at the definitive care hospital.
Definition Source  METeOR ID: 285123

*Person - heart rate, total beats per minute*

<table>
<thead>
<tr>
<th>Database Name</th>
<th>Data Type</th>
<th>Numeric</th>
</tr>
</thead>
<tbody>
<tr>
<td>dchpulse</td>
<td>Field Size</td>
<td>3</td>
</tr>
<tr>
<td>Location</td>
<td>Main Table</td>
<td></td>
</tr>
</tbody>
</table>

Reporting

If the person is in cardiac arrest at the time of first measurement, value 997 should be used.

If the person's heart rate cannot be measured, value 999 should be used.

Compatibility

Utstein  None
NTDB  Comparable:

*Initial ED/hospital pulse rate*

NTR  None
5.03 Systolic BP on Arrival

Specification

Collection  Essential
Definition  The first recorded systolic blood pressure measured following arrival at the definitive care hospital.
Definition Source  METeOR ID: 270073

Person - blood pressure (systolic)

Database Name  dchsysbp  Data Type  Numeric
Field Size  3  Layout  NN[N]
Location  Main Table
Reporting  Must be in millimetres of mercury (mmHg).
If the systolic blood pressure is not or cannot be measured, value 999 should be used.

Compatibility

Utstein  Comparable:
Systolic Blood Pressure upon arrival in ED / hospital

NTDB  Comparable:
Initial ED/hospital systolic blood pressure

NTR  Comparable:
Systolic blood pressure on arrival at trauma centre
5.04 First Spontaneous Respiratory Rate

Specification

Collection  Essential
Definition  The first recorded unassisted rate of respiration measured following arrival at the definitive care hospital.
Definition Source  No comparable field currently exists within METeOR.
Database Name  dchresp  Data Type  Numeric
Field Size  3  Layout  N[NN]
Location  Main Table
Reporting  If the person is in respiratory arrest at the time of first measurement, value 997 should be used.
          If the person has been intubated at the time of first measurement, value 998 should be used.
          If the respiratory rate is not or cannot be measured, value 999 should be used.

Compatibility

Utstein  Comparable:

  Respiratory rate upon arrival in ED / hospital

NTDB  Comparable:

  Initial ED/hospital respiratory rate

NTR  Comparable:

  Unassisted respiratory rate on arrival at trauma centre
5.05 Temperature on Arrival

Specification

Collection  Desirable
Definition  The first recorded body temperature measured following arrival at the definitive care hospital.
Definition Source  No comparable field currently exists within METeOR.
Database Name  dchtemp
Data Type  Numeric
Field Size  3
Layout  NN[N]
Location  Main Table
Reporting  Must be in degrees Celsius.
If the temperature is not or cannot be measured, value 99.9 should be used.

Compatibility

Utstein  None
NTDB  Comparable: 
  Initial ED/hospital temperature
NTR  None
5.06 GCS Eye on Arrival

Specification

Collection  Desirable
Definition  The first recorded indication of the responsiveness to stimuli by eye opening following arrival at the definitive care hospital.
Definition Source  No comparable field currently exists within METeOR.
Database Name  dchgcsey
Data Type  Numeric
Field Size  1
Location  Main Table
Reporting  Field is used as a component of:

5.09 Total GCS on Arrival

Compatibility

Utstein  None
NTDB  Comparable:
    Initial ED/hospital GCS - eye
NTR  Comparable:
    GCS - Eye opening on arrival at trauma centre
5.07 GCS Voice on Arrival

**Specification**

**Collection**  
Desirable

**Definition**  
The first recorded indication of the level of verbal response following arrival at the definitive care hospital.

**Definition Source**  
No comparable field currently exists within METeOR.

**Database Name**  
dchgcsvo

**Data Type**  
Numeric

**Field Size**  
1

**Layout**  
N

**Location**  
Main Table

**Reporting**  
Field is used as a component of:

5.09 Total GCS on Arrival

**Compatibility**

**Utstein**  
None

**NTDB**  
Comparable:

*Initial ED/hospital GCS - verbal*

**NTR**  
Comparable:

*GCS - Verbal response on arrival at trauma centre*
5.08 GCS Motor on Arrival

Specification

Collection  Desirable
Definition  The first recorded indication of the level of motor response following arrival at the definitive care hospital.
Definition Source  No comparable field currently exists within METeOR.
Database Name  dchgcsmo  Data Type  Numeric
Field Size  1  Layout  N
Location  Main Table
Reporting  Field is used as a component of:

5.09 Total GCS on Arrival

Compatibility

Utstein  Comparable:

Glasgow Coma Scale Motor Component upon arrival in ED/hospital

NTDB  Comparable:

Initial ED/hospital GCS - motor

NTR  Comparable:

GCS - Motor response on arrival at trauma centre
5.09 Total GCS on Arrival

Specification

Collection  Essential
Definition  The first recorded total Glasgow Coma Scale score following arrival at the definitive care hospital.

Definition Source  No comparable field currently exists within METeOR.

Database Name  dchgcs  Data Type  Numeric
Field Size  2  Layout  N[N]

Location  Main Table

Reporting
If the person has been intubated at the time of first measurement, or is otherwise sedated or paralysed due to drug administration, value -2 should be used.

If the total GCS is not or cannot be measured, value -1 should be used.

This field may be entered directly (particularly where individual component scores are unavailable, or calculated using:

5.06 GCS Eye on Arrival
5.07 GCS Voice on Arrival
5.08 GCS Motor on Arrival

Compatibility

Utstein  Comparable:
Glasgow Coma Scale Score upon arrival in ED/hospital

NTDB  Comparable:
Initial ED/hospital GCS - total

NTR  Comparable:
Total GCS on arrival at trauma centre
5.10 CPR on arrival?

**Specification**

**Collection**  
Desirable

**Definition**  
Whether the person received cardiopulmonary resuscitation at any stage within 24 hours of arrival at the definitive care hospital.

**Definition Source**  
No comparable field currently exists within METeOR.

**Database Name**  
dchcpr  
**Data Type**  
Numeric

**Field Size**  
1  
**Layout**  
N

**Location**  
Main Table

**Reporting**  
This field will require the development of appropriate code lists. May be true, false or unknown.

**Compatibility**

**Utstein**  
None

**NTDB**  
None

**NTR**  
None
5.11 Blood Transfusion on Arrival?

Specification

Collection  Desirable
Definition  Whether the person was administered any blood products at any stage within 24 hours of arrival at the definitive care hospital.
Definition Source  No comparable field currently exists within METeOR.
Database Name  dcblood  Data Type  Numeric
Field Size  1  Layout  N
Location  Main Table
Reporting  This field will require the development of appropriate code lists. May be true, false or unknown.

Compatibility

Utstein  None
NTDB  None
NTR  None
5.12 Patient Intubated?

Specification

Collection  Essential
Definition  Whether the person was intubated at any stage of their care, whether prior to or at the definitive care hospital.
Definition Source  No comparable field currently exists within METeOR.
Database Name  intubate
Field Size  1
Location  Main Table
Reporting  This field will require the development of appropriate code lists. May be true, false or unknown.

Compatibility

Utstein  Partially comparable:
Type of Pre-Hospital Airway Management
Exception: more specific; pre-hospital only.

NTDB  None

NTR  Partially comparable:
Intubation code on arrival at trauma centre
Exception: more specific; definitive care hospital arrival only.
5.13 Date & Time Patient Intubated

Specification
Collection: Desirable

Definition: The date and time patient was first intubated - at any stage of their care, whether prior to or at the definitive care hospital.

Definition Source: No comparable field currently exists within METeOR.

Database Name: intubdat  
Data Type: Date/Time

Field Size: 14
Layout: DDMMCCYY HH:NN

Location: Main Table

Reporting: Must be greater than or equal to:

3.01 Date & Time of Injury

Must be less than or equal to:

7.02 Date & Time of Discharge

Midnight should be entered as 00:01 of the following date (00:00 and 24:00 are not accepted).

Compatibility
Utstein: None
NTDB: None
NTR: None
5.14 Respiratory Qualifier on Arrival

Specification

Collection: Essential
Definition: Whether respiratory assistance was required at the time the respiratory rate was recorded on arrival at the definitive care hospital.
Definition Source: No comparable field currently exists within METeOR.
Database Name: dchrespq
Data Type: Numeric
Field Size: 1
Layout: N
Location: Main Table
Reporting: This field will require the development of appropriate code lists.
This field may be redundant depending on formatting of null options for:

5.04 First Spontaneous Respiratory Rate
If this field is not collected at local level, data may be imputed from:

5.12 Patient Intubated?
and
5.13 Date & Time Patient Intubated

Compatibility

Utstein: None
NTDB: Comparable:
Initial ED/hospital respiratory assistance
NTR: Partially comparable:
Intubation code on arrival at trauma centre
Exception: imputed value; must be inferred from status of other field.
5.15 Blood Alcohol Concentration on Arrival

Specification
Collection  Desirable
Definition  The first blood alcohol concentration result recorded on arrival at the definitive care hospital.
Definition Source  No comparable field currently exists within METeOR.
Database Name  dcchalo  Data Type  Numeric
Field Size  4  Layout  N.NN
Location  Main Table
Reporting  Must be in gm%’ can be converted from mmol/L by dividing by 217.1.
Must be taken within the first 24 hours following arrival at the definitive care hospital.

Compatibility
Utstein  None
NTDB  Partially comparable:
Alcohol use indicator
Exception: less specific; categorical field (none/trace/high).
NTR  Comparable:
Blood alcohol concentration
5.16 First Measured Arterial Base Excess

Specification

Collection  Desirable
Definition  The first recorded arterial base excess result following arrival at the definitive care hospital.
Definition Source  No comparable field currently exists within METeOR.
Database Name  dchartbe  Data Type  Numeric
Field Size  2  Layout  N[N]
Location  Main Table
Reporting  Must be in mmol/L.
    Must be taken within the first 24 hours following arrival at the definitive care hospital.
    If the arterial base excess is not or cannot be measured, value 99 should be used.

Compatibility

Utstein  Comparable:  
    Arterial Base Excess
NTDB  None
NTR  None
5.17 First Measured INR

Specification

Collection       Desirable
Definition        The first recorded prothrombin time INR result following arrival at the
definitive care hospital.
Definition Source No comparable field currently exists within METeOR.
Database Name    dchlnr  Data Type   Numeric
Field Size       4  Layout       [N]N.N
Location         Main Table
Reporting        Must be in mmol/L.
                 Must be taken within the first 24 hours following arrival at the definitive
care hospital.
                 If the INR is not or cannot be measured, value 99.9 should be used.

Compatibility

Utstein         Comparable:
                    Coagulation: INR
NTDB            None
NTR             None
5.18 ED Discharge Date & Time

Specification

Collection  Essential

Definition  The date and time patient left the emergency department at the definitive care hospital, or (if dying in the emergency department) the time of death.

Definition Source  Formed using:

METeOR ID: 322597

Emergency department stay - physical departure date

METeOR ID: 322610

Emergency department stay - physical departure time

Database Name  dcheddep  Data Type  Date/Time

Field Size  14  Layout  DDMMCCYY HH:NN

Location  Main Table

Reporting  Must be greater than or equal to:

5.01 Date & Time of Arrival at Definitive Care Hospital

Must be less than or equal to:

7.02 Date & Time of Discharge;

If a patient goes directly to another area in the hospital on hospital arrival (such as ICU or OR), this should be the same as:

5.01 Date & Time of Arrival at Definitive Care Hospital

Midnight should be entered as 00:01 of the following date (00:00 and 24:00 are not accepted).

Compatibility

Utstein  None

NTDB  Comparable; formed using:

ED discharge date

ED discharge time

NTR  None
5.19 Disposition After ED

Specification

Collection | Desirable
Definition | The first location for which the patient departed on leaving the emergency department at the definitive care hospital.
Definition Source | No comparable field currently exists within METeOR.
Database Name | dchedd
data Type | Numeric
Field Size | 2
Location | Main Table
Reporting | This field will require the development of appropriate code lists.

Compatibility

Utstein | None
NTDB | Comparable:
ED discharge disposition
NTR | None
### 6.01 Diagnosis made >24 hours after arrival?

#### Specification

<table>
<thead>
<tr>
<th>Collection</th>
<th>Desirable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition</td>
<td>Whether the specified injury was diagnosed more than 24 hours after arrival at the definitive care hospital.</td>
</tr>
<tr>
<td>Definition Source</td>
<td>No comparable field currently exists within METeOR.</td>
</tr>
<tr>
<td>Database Name</td>
<td>injdelay</td>
</tr>
<tr>
<td>Field Size</td>
<td>1</td>
</tr>
<tr>
<td>Location</td>
<td>Injuries Table</td>
</tr>
<tr>
<td>Reporting</td>
<td>This field will require the development of appropriate code lists. May be true, false or unknown.</td>
</tr>
</tbody>
</table>

| Data Type | Numeric |
| Layout | N |

#### Compatibility

| Utstein | None |
| NTDB | None |
| NTR | None |
6.02 Date & Time CT Performed

**Specification**

**Collection** Desirable

**Definition** The date and time patient received a CT scan - at any stage of their care, whether prior to or at the definitive care hospital.

**Definition Source** No comparable field currently exists within METeOR.

**Database Name** ctdate

**Data Type** Date/Time

**Field Size** 14

**Layout** DDMMCCYY HH:NN

**Location** CT Table

**Reporting** May be limited to CT performed at the definitive care hospital.

May be limited to CT performed within 24 hours of arrival at the definitive care hospital.

Must be greater than or equal to:

3.01 Date & Time of Injury

Must be less than or equal to:

7.02 Date & Time of Discharge

Midnight should be entered as 00:01 of the following date (00:00 and 24:00 are not accepted).

**Compatibility**

**Utstein** Partially comparable:

*Time until First CT Scan*

Exception: more specific; definitive care hospital only.

**NTDB** None

**NTR** None
6.03 CT type

Specification

<table>
<thead>
<tr>
<th>Collection</th>
<th>Desirable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition</td>
<td>The body region on which the specified CT scan was performed.</td>
</tr>
<tr>
<td>Definition Source</td>
<td>No comparable field currently exists within METeOR.</td>
</tr>
<tr>
<td>Database Name</td>
<td>ct type</td>
</tr>
<tr>
<td>Data Type</td>
<td>Numeric</td>
</tr>
<tr>
<td>Field Size</td>
<td>2</td>
</tr>
<tr>
<td>Layout</td>
<td>N[N]</td>
</tr>
<tr>
<td>Location</td>
<td>CT Table</td>
</tr>
<tr>
<td>Reporting</td>
<td>This field will require the development of appropriate code lists. May be limited to CT performed at the definitive care hospital. May be limited to CT performed within 24 hours of arrival at the definitive care hospital.</td>
</tr>
</tbody>
</table>

Compatibility

| Utstein | None |
| NTDB | None |
| NTR | None |
6.04 Operative Procedures in OR or ED

**Specification**

**Collection**  Desirable

**Definition**  Operative intervention undertaken - at any stage of their care, whether prior to or at the definitive care hospital.

**Definition Source**  No comparable field currently exists within METeOR.

Related field:

METeOR ID: 391349:

*Episode of admitted patient care - procedure, code (ACHI 7th edn)*

**Database Name**  operproc  **Data Type**  Numeric

**Field Size**  2  **Layout**  N[N]

**Location**  Operations Table

**Reporting**  This field will require the development of appropriate code lists.

Limited to interventions for severe or potentially severe injuries only.

May be limited to interventions performed at the definitive care hospital.

May be limited to interventions performed within 24 hours of arrival at the definitive care hospital.

**Compatibility**

**Utstein**  Partially comparable:

*Type of First Key Emergency Intervention*

Exception: more specific; first procedure only.

**NTDB**  Comparable:

*Hospital procedures*

**NTR**  Comparable:

*Operative procedures*
6.05 Operation Date & Time

Specification

Collection  Desirable
Definition  The date and time operative intervention was undertaken - at any stage of their care, whether prior to or at the definitive care hospital.
Definition Source  No comparable field currently exists within METeOR.

Reporting
Limited to interventions for severe or potentially severe injuries only.
May be limited to interventions performed at the definitive care hospital.
May be limited to interventions performed within 24 hours of arrival at the definitive care hospital.
Must be greater than or equal to:

3.01 Date & Time of Injury

Must be less than or equal to:

7.02 Date & Time of Discharge
Midnight should be entered as 00:01 of the following date (00:00 and 24:00 are not accepted).

Compatibility

Utstein  Partially comparable:

Time until First Key Emergency Intervention

Exception: more specific; valid for first procedure only; imputed value; must be inferred from other fields.

NTDB  Comparable; formed using:

Hospital procedure start date
Hospital procedure start time

NTR  None
6.06 Number of days on ventilator

Specification

Collection: Desirable
Definition: The total number of days (whole or partial) on which mechanical ventilation was used.
Definition Source: No comparable field currently exists within METeOR.
Database Name: dchvent
Data Type: Numeric
Field Size: 3
Layout: [NN]N
Location: Main Table
Reporting: Integer value, with partial days rounded up.
Field allows for multiple “start” and “stop” dates and calculates total days spent (in part or in whole) on a mechanical ventilator (excluding during an OR procedure).
If mechanical ventilation was used at the definitive care hospital, value must be 1 or more.
Exception is when the only mechanical ventilation used occurs during an OR procedure.

Compatibility

Utstein: Comparable:
  Number of Days on Ventilator
NTDB: Partially comparable:
  Total Ventilator Days
  Exception: specifically excludes OR-associated ventilation time.
NTR: Partially comparable:
  Number of days ventilated
  Exception: specifically excludes BIPAP and CPAP.
7.01 AIS Injury Codes

Specification
Collection  Essential
Definition  The assigned Abbreviated Injury Scale codes for each injury sustained by the patient.
Definition Source  No comparable field currently exists within METeOR.
Database Name  injais  Data Type  String
Field Size  8  Layout  NNNNNN.N
Location  Injuries Table
If earlier AIS versions are used, mapping may be necessary to obtain comparable 2008 AIS estimates.
If AIS coding is not used, mapping from International Classification of Diseases (ICD) codes may be necessary to obtain comparable AIS estimates.

Compatibility
Utstein  Comparable:
Abbreviated Injury Scale
NTDB  Comparable:
AIS predot code
AIS severity
NTR  Comparable:
Severity Codes
7.02 Date & Time of Discharge

**Specification**

**Collection** Essential

**Definition** The date and time patient was discharged from the definitive care hospital, or (if dying in hospital) the time of death.

**Definition Source** Formed using:

METeOR ID: 270025

*Episode of admitted patient care - separation date*

METeOR ID: 270026

*Episode of admitted patient care - separation time*

**Database Name** outdate

**Data Type** Date/Time

**Field Size** 14

**Layout** DDMMCCYY HH:NN

**Location** Main Table

**Reporting** Must be greater than or equal to:

5.01 Date & Time of Arrival at Definitive Care Hospital

5.18 ED Discharge Date & Time

Midnight should be entered as 00:01 of the following date (00:00 and 24:00 are not accepted).

**Compatibility**

- **Utstein** None
- **NTDB** Comparable; formed using:
  
  *Hospital discharge date*
  
  *Hospital discharge time*
- **NTR** Partially comparable:
  
  *Date of discharge*

  *Exception: less specific; date only*
7.03 Discharge Destination from Acute Care

Specification

Collection Desirable
Definition The location to which the patient was discharged from the definitive care hospital.
Definition Source METeOR ID: 270094

*Episode of admitted patient care - separation mode*

<table>
<thead>
<tr>
<th>Database Name</th>
<th>Data Type</th>
<th>Layout</th>
</tr>
</thead>
<tbody>
<tr>
<td>outdest</td>
<td>Numeric</td>
<td>N[N]</td>
</tr>
</tbody>
</table>

Field Size 2
Location Main Table
Reporting This field will require the development of appropriate code lists.

Compatibility

Utstein Comparable:

*Discharge Destination*

NTDB Comparable:

*Hospital discharge disposition*

NTR Comparable:

*Discharge disposition*
7.04 Injury Severity Score

Specification

Collection  Essential
Definition  The calculated Injury Severity Score based on the entered Abbreviated Injury Scale codes.
Definition Source  No comparable field currently exists within METeOR.

Database Name  outiss  Data Type  Numeric
Field Size  2  Layout  [N]N
Location  Main Table
Reporting  A non-zero integer number calculated using:

7.01 AIS Injury Codes

Compatibility

Utstein  None
Comment: could be imputed using:
Abbreviated Injury Scale

NTDB  Comparable:
Injury Severity Score; or
Locally calculated ISS

NTR  Comparable:
Injury Severity Score (ISS)
7.05 New Injury Severity Score

Specification

Collection Essential
Definition The calculated New Injury Severity Score based on the entered Abbreviated Injury Scale codes.
Definition Source No comparable field currently exists within METeOR.

Database Name outniss Data Type Numeric
Field Size 2 Layout [N]N
Location Main Table
Reporting A non-zero integer number calculated using:

7.01 AIS Injury Codes

Compatibility

Utstein None
Comment: could be imputed using:
Abbreviated Injury Scale

NTDB None
Comment: could be imputed using combination of:
AIS predot code
AIS severity

NTR None
Comment: could be imputed using:
Severity Codes
7.06 Length of Stay

Specification

Collection Essential

Definition The calculated length of stay in the definitive care hospital, measured as a number of days (with fractional component expressed as a decimal), rather than bed days.

Definition Source No comparable field currently exists within METeOR.

Related field:
METeOR ID: 329889:

*Episode of admitted patient care - length of stay (including leave days)*

Database Name outlos Data Type Numeric
Field Size 6 Layout [NN]N.NN
Location Main Table

Reporting A non-zero number expressed in days.

Value is calculated using:

5.01 Date & Time of Discharge

7.02 Date & Time of Arrival at Definitive Care Hospital

If patient dies within the first 7 minutes of care, should automatically adjust to 0.01. (IE, if calculated value <0.005 days, default to 0.01 days).

Bed days or whole days are commonly used (cf METeOR standard 329889 : *Episode of admitted patient care—length of stay (including leave days)*), but this gives rise to data inaccuracies; data from this field can be accurately aggregated to this standard if required.

Compatibility

Utstein Partially comparable:

*Length of Stay in Reporting Hospital*

*Exception: less specific; measured in whole days.*

NTDB Partially comparable:

*Total Length of Hospital Stay*

*Exception: less specific; stay < 1 day rounded up to 1 day.*

NTR Partially comparable:

*Length of stay (LOS)*

*Exception: less specific; measured in whole bed days.*
7.07 Length of ICU Stay

Specification

Collection: Essential

Definition: The calculated length of stay in the intensive care unit at the definitive care hospital, measured as a number of days (with fractional component expressed as a decimal), rather than bed days.

Definition Source: No comparable field currently exists within METeOR.

Database Name: outiclos

Data Type: Numeric

Field Size: 6

Layout: [NN]N.NN

Location: Main Table

Reporting: A non-zero number expressed in days.

Bed days or whole days are commonly used, but this gives rise to data inaccuracies; data from this field can be accurately aggregated to this standard if required.

Compatibility

Utstein: None

NTDB: Partially comparable:

*Total ICU length of Stay*

Exception: less specific; stay < 1 day rounded up to 1 day.

NTR: None
7.08 Severe Complications?

**Specification**

<table>
<thead>
<tr>
<th>Collection</th>
<th>Desirable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition</td>
<td>Whether a condition arising following the injury event had a substantial effect on the management, progress or eventual outcome of the patient.</td>
</tr>
<tr>
<td>Definition Source</td>
<td>No comparable field currently exists within METeOR.</td>
</tr>
<tr>
<td>Database Name</td>
<td>outcomp</td>
</tr>
<tr>
<td>Data Type</td>
<td>Numeric</td>
</tr>
<tr>
<td>Field Size</td>
<td>1</td>
</tr>
<tr>
<td>Layout</td>
<td>N</td>
</tr>
<tr>
<td>Location</td>
<td>Main Table</td>
</tr>
<tr>
<td>Reporting</td>
<td>This field requires substantial refinement and may require data type modification. Potentially, mapping from ICD codes may offer a practical solution in some settings. At present, this field may require the development of appropriate code lists. May be true, false or unknown.</td>
</tr>
</tbody>
</table>

**Compatibility**

<table>
<thead>
<tr>
<th>Utstein</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTDB</td>
<td>Partially comparable:</td>
</tr>
<tr>
<td></td>
<td>Hospital complications</td>
</tr>
<tr>
<td></td>
<td>Exception: less specific; all complications listed.</td>
</tr>
<tr>
<td>NTR</td>
<td>Partially comparable:</td>
</tr>
<tr>
<td></td>
<td>Complications</td>
</tr>
<tr>
<td></td>
<td>Exception: less specific; multiple complications listed.</td>
</tr>
<tr>
<td>Region</td>
<td>Major Trauma Criteria</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Western Australia</td>
<td>Death within 24 hours of injury</td>
</tr>
<tr>
<td>Queensland</td>
<td>Death after injury</td>
</tr>
<tr>
<td>New South Wales</td>
<td>ICU stay &gt; 24 hours with mechanical ventilation</td>
</tr>
<tr>
<td>Victoria</td>
<td>ICU stay &gt; 48 hours</td>
</tr>
</tbody>
</table>

Appendix 1

Table 1. Summary of major trauma, inclusion and exclusion criteria of prominent Australian trauma registries with published annual reports.
<table>
<thead>
<tr>
<th>Major trauma criteria</th>
<th>Region</th>
<th>Additional register inclusion criteria</th>
<th>Registry exclusion criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head, neck or torso # or internal organ injury</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tibia or fibula # above ankle level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laparoscopic, laparotomy or DPL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Significant burns</td>
<td>Sydney</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss of consciousness</td>
<td>South West</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injury to multiple body regions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISS &gt; 15</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Injured at Royal Perth &gt; 24 hours</th>
<th>Hospital</th>
<th>Death after injury</th>
<th>Admission &gt; 7 days after injury</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poisoning or drug overdose</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Summary of major trauma inclusion and exclusion criteria of prominent Australian trauma registries with published annual reports (cont).
<table>
<thead>
<tr>
<th>Registry Criteria</th>
<th>TARN (UK)</th>
<th>NTR (Canada)</th>
<th>NTD (United States)</th>
<th>NTDB (Europe)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isolated simple facial #</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isolated # or dislocation to lower leg or foot</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isolated # or dislocation to upper limb</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isolated soft tissue injuries</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isolated burns &gt;10% BSA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isolated # single pubic rami and age &lt;65 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isolated # neck of femur and age &gt;65 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complications and late effects of injury</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Envenomation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poisoning or drug overdose</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Conceptually) Injury not resulting from energy transfer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isolated foreign bodies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isolated superficial injuries</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Admission for late effects of injury</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Death after injury</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital admission of transfer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Admission &gt;24 hours after injury</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Death prior to hospital arrival</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isolated burn injury or admission to bum unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asphyxia of drowning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major Registry Inclusion Criteria</th>
<th>Additional Registry Inclusion Criteria</th>
<th>Additional Registry Exclusion Criteria</th>
<th>Major Registry Exclusion Criteria</th>
<th>Dataset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isolated simple facial #</td>
<td>Isolated # or dislocation to lower leg or foot</td>
<td>Isolated # or dislocation to upper limb</td>
<td>Isolated soft tissue injuries</td>
<td>TARN (UK)</td>
</tr>
<tr>
<td>Isolated burns &gt;10% BSA</td>
<td>Isolated # single pubic rami and age &lt;65 years</td>
<td>Isolated # neck of femur and age &gt;65 years</td>
<td>Isolated foreign bodies</td>
<td>NTR (Canada)</td>
</tr>
<tr>
<td>Isolated # single pubic rami and age &lt;65 years</td>
<td>Isolated # neck of femur and age &gt;65 years</td>
<td>Isolated # neck of femur and age &gt;65 years</td>
<td>Isolated foreign bodies</td>
<td>NTD (United States)</td>
</tr>
<tr>
<td>Isolated burn injury or admission to bum unit</td>
<td>Asphyxia of drowning</td>
<td>Asphyxia of drowning</td>
<td>Asphyxia of drowning</td>
<td>NTDB (Europe)</td>
</tr>
<tr>
<td>Hospital admission of transfer</td>
<td>Additional Registry Exclusion Criteria</td>
<td>Additional Registry Exclusion Criteria</td>
<td>Additional Registry Exclusion Criteria</td>
<td>Ustsein Template</td>
</tr>
</tbody>
</table>

Table 2. Summary of major registry inclusion and exclusion criteria of prominent international registries and datasets.
## Appendix 2

**Bi-national Minimum Dataset for Australia and New Zealand**

Table 1: Summary of current BMDS data fields, grouped by phases of patient care.

<table>
<thead>
<tr>
<th>Field Number</th>
<th>Dataset field names (* = Essential data items)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IDENTIFICATION</strong></td>
<td></td>
</tr>
<tr>
<td>1.01</td>
<td>Institution *</td>
</tr>
<tr>
<td>1.02</td>
<td>Trauma Number *</td>
</tr>
<tr>
<td>1.03</td>
<td>Incident Number *</td>
</tr>
<tr>
<td><strong>DEMOGRAPHICS</strong></td>
<td></td>
</tr>
<tr>
<td>2.01</td>
<td>Date of birth</td>
</tr>
<tr>
<td>2.02</td>
<td>Age *</td>
</tr>
<tr>
<td>2.03</td>
<td>Sex *</td>
</tr>
<tr>
<td>2.04</td>
<td>Pre-injury Comorbidities</td>
</tr>
<tr>
<td><strong>INJURY EVENT DATA</strong></td>
<td></td>
</tr>
<tr>
<td>3.01</td>
<td>Date &amp; Time of Injury *</td>
</tr>
<tr>
<td>3.02</td>
<td>Injury Cause *</td>
</tr>
<tr>
<td>3.03</td>
<td>Dominant Injury Type</td>
</tr>
<tr>
<td>3.04</td>
<td>Postcode of Injury</td>
</tr>
<tr>
<td>3.05</td>
<td>Injury Intent</td>
</tr>
<tr>
<td>3.06</td>
<td>Place of Injury Occurrence</td>
</tr>
<tr>
<td>3.07</td>
<td>Activity Engaged in When Injured</td>
</tr>
<tr>
<td>3.08</td>
<td>Injury Event Description</td>
</tr>
<tr>
<td>3.09</td>
<td>Safety Devices Used</td>
</tr>
<tr>
<td><strong>PRE DEFINITIVE CARE HOSPITAL MANAGEMENT</strong></td>
<td></td>
</tr>
<tr>
<td>4.01</td>
<td>Mode of Transport from Scene *</td>
</tr>
<tr>
<td>4.02</td>
<td>Time of Ambulance Arrival at Patient</td>
</tr>
<tr>
<td>4.03</td>
<td>Transfer from Other Hospital ? *</td>
</tr>
<tr>
<td>4.04</td>
<td>Referring Hospital *</td>
</tr>
<tr>
<td>4.05</td>
<td>Date &amp; Time of Arrival at Referring Hospital</td>
</tr>
<tr>
<td>4.06</td>
<td>Date &amp; Time of Departure from Referring Hospital</td>
</tr>
<tr>
<td>4.07</td>
<td>Mode of Transport from Referring Hospital to Definitive Care Hospital</td>
</tr>
<tr>
<td>4.08</td>
<td>Pre-hospital Blood Transfusion ?</td>
</tr>
<tr>
<td>4.09</td>
<td>Pre-hospital CPR ?</td>
</tr>
<tr>
<td>Field Number</td>
<td>Dataset field names (* = Essential data items)</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>4.10</td>
<td>Pre-hospital Cardiac Arrest ?</td>
</tr>
<tr>
<td>4.11</td>
<td>First Pulse</td>
</tr>
<tr>
<td>4.12</td>
<td>First Systolic BP</td>
</tr>
<tr>
<td>4.13</td>
<td>First Spontaneous Respiratory Rate</td>
</tr>
<tr>
<td>4.14</td>
<td>First Temperature</td>
</tr>
<tr>
<td>4.15</td>
<td>First GCS Eye</td>
</tr>
<tr>
<td>4.16</td>
<td>First GCS Voice</td>
</tr>
<tr>
<td>4.17</td>
<td>First GCS Motor</td>
</tr>
<tr>
<td>4.18</td>
<td>First Total GCS</td>
</tr>
</tbody>
</table>

5. DEFINITIVE CARE HOSPITAL MANAGEMENT - ED

| 5.01         | Date & Time of Arrival at Definitive Care Hospital * |
| 5.02         | Pulse on Arrival *                                |
| 5.03         | Systolic BP on Arrival *                         |
| 5.04         | Respiratory Rate on Arrival *                    |
| 5.05         | Temperature on Arrival                           |
| 5.06         | GCS Eye on Arrival                               |
| 5.07         | GCS Voice on Arrival                             |
| 5.08         | GCS Motor on Arrival                             |
| 5.09         | Total GCS on Arrival *                           |
| 5.10         | CPR on Arrival ?                                 |
| 5.11         | Blood Transfusion on Arrival ?                   |
| 5.12         | Patient Intubated ? *                           |
| 5.13         | Date & Time Patient Intubated                    |
| 5.14         | Respiratory Qualifier on Arrival                |
| 5.15         | Blood Alcohol Concentration on Arrival          |
| 5.16         | First Measured Arterial Base Excess             |
| 5.17         | First Measured INR                               |
| 5.18         | ED Discharge Date & Time *                      |
| 5.19         | Disposition after ED                            |

6. OTHER DEFINITIVE CARE HOSPITAL MANAGEMENT

<p>| 6.01         | Diagnosis Made &gt;24 hours after Arrival?         |
| 6.02         | Date &amp; Time CT Performed                        |
| 6.03         | CT Type                                         |
| 6.04         | Operative Procedures in OR                      |
| 6.05         | Operation Date &amp; Time                           |</p>
<table>
<thead>
<tr>
<th>Field Number</th>
<th>Dataset field names (* = Essential data items)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.06</td>
<td>Number of Days on Ventilator</td>
</tr>
</tbody>
</table>

7. **OUTCOME**

- 7.01 Abbreviated Injury Scale Injury Codes *
- 7.02 Date & Time of Discharge from Definitive Care *
- 7.03 Discharge Destination from Acute Care *
- 7.04 Injury Severity Score *
- 7.05 New Injury Severity Score *
- 7.06 Length of Stay *
- 7.07 Length of ICU Stay *
- 7.08 Severe Complications ?