

# **MAJOR TRAUMA CASE PEER REVIEW TOOL**

## **Data Dictionary**

**March 2017**



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## Basic information

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### Variable: Record ID

**Variable name:** ID

**Definition:** A consecutive number allocated to each record

**Format:** 2 digit numeric

**Coding frame:** 01 Record 1  
02 Record 2  
03 Record 3  
04 Record 4

**Comments:** This is the unique record used by the study team to identify each record

**Guideline for use:** Enter numeric code

---

### Variable: Reviewer ID

**Variable name:** reviewer\_ID

**Definition:** A number allocated to identify each reviewer

**Format:** 2 digit numeric

**Coding frame:** 01 Reviewer 1  
02 Reviewer 2  
03 Reviewer 3  
04 Reviewer 4

**Comments:** Each reviewer has a unique identification number

**Guideline for use:** Enter numeric code

---

### Variable: Date of review

**Variable name:** date\_reviewed

**Definition:** Date the review of the record is completed

**Format:** 6 digit numeric

**Coding frame:**

**Comments:**

**Guideline for use:** Enter date as DD/MM/YY

---

### Variable: Date of injury

**Variable name:** date\_injury

**Definition:** Date the child was injured

**Format:** 6 digit numeric

**Coding frame:**

**Comments:** Key time variables allow for the development of a chronology

**Guideline for use:** Enter date as DD/MM/YY

---

**Variable: Time of injury**

**Variable name:** time\_injury

**Definition:** Time the child was injured

**Format:** 4 digit numeric

**Coding frame:**

**Comments:** Key time variables allow for the development of a chronology

**Guideline for use:** Enter the time in 24 hour format eg. 1830

---

**Variable: Age**

**Variable name:** age

**Definition:** Age of the child to whom the incident occurred in years and months

**Format:** 3 digit numeric

**Coding frame:**

**Comments:** To allow comparative analysis across groupings and determination of specific areas for education/change within the trauma system that considers age related physiology, age specific injury patterns

**Guideline for use:** Enter the child's age in years and months

---

**Variable: Gender**

**Variable name:** gender

**Definition:** Gender of the child to whom the incident occurred

**Format:** 1 digit numeric

**Coding frame:** 1 Male  
2 Female  
9 Not recorded

**Comments:**

**Guideline for use:** Select male or female

---

**Variable: Date and time of incident(s)**

**Variable name:** date

**Definition:** Date and time of the incident(s) that occurred

**Format:** Text

**Coding frame:**

**Comments:** Key time variables allow for the development of a chronology

**Guideline for use:** Provide a brief free text description of the incident(s) that occurred and the approximate date (DD/MM/YY) and time (24 hour format) when it occurred

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## Section 1: Patient factors

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### Variable: Background

**Variable name:** background

**Definition:** Do any of the following apply to the child: identifies as Aboriginal or Torres Strait Islander, is from a culturally and linguistically diverse background, is a refugee?

**Format:** 1 digit numeric

**Coding frame:** 1 Aboriginal or Torres Strait Islander  
2 Culturally and linguistically diverse (please specify)  
3 Refugee

**Comments:** To assist with the identification of potentially vulnerable groups and engagement with appropriate stakeholders when required

**Guideline for use:** Select all options that apply to the child. If 'culturally and linguistically diverse' is selected, please specify language spoken at home

---

### Variable: Previous location

**Variable name:** prev\_location

**Definition:** Was the presentation a primary, secondary or other type of presentation?

**Format:** 1 digit numeric

**Coding frame:** 1 Primary presentation  
2 Secondary presentation (inter-hospital transfer)  
3 Other (please specify)

**Comments:** To assist with mapping of patient flow and identification of potential areas of deficits

**Guideline for use:** Select the option that applies to the child. If 'other' is selected, please provide a brief free text description

---

### Variable: Other patient factors

**Variable name:** other\_factors

**Definition:** Was the child in an altered mental state? Is the child obese, known to have a developmental delay or co-morbidities?

**Format:** 2 digit numeric

**Coding frame:** 1 Altered mentation  
11 Alcohol intoxication  
12 Substance misuse  
13 Mental disturbance  
2 Obese  
3 Known developmental delay  
4 Co-morbidities (please specify)

**Comments:** To capture the unique characteristics of the patient in the context of their presentation

**Guideline for use:** Select all options that apply to the child. If 'co-morbidities' is selected, please specify co-morbidities

---

**Variable: Source of referral**

**Variable name:** referral\_source

**Definition:** Source where notification of the injured child came from

**Format:** 2 digit numeric

**Coding frame:** 1 Self

2 Relative

3 Carer

4 General practitioner (GP)

5 Road ambulance (paramedic)

6 Adult retrieval service (road/helicopter/fixed wing)

7 Paediatric medical retrieval service (road/helicopter/fixed wing)

8 Other

**Comments:** To assist with mapping of patient flow and identification of potential areas of deficits

**Guideline for use:** Select the option that applies to the child. If 'other' is selected, please provide a brief free text description

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## Section 2: Presenting problem/diagnosis

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### Variable: Injury mechanism

**Variable name:** injury\_mechanism

**Definition:** Event or circumstance associated with the cause of injury

**Format:** Text

**Coding frame:**

**Comments:**

**Guideline for use:** Provide a brief free text description of the injury mechanism, to provide information on specific circumstances of injury. For example:

- fall from a balcony while climbing the rail
  - MVC rollover, father driving, child unrestrained
  - travelling on holidays with family, had fall at playground
  - child playing with brother on lounge and fell through flyscreen landing on concrete
- 

### Variable: Injuries

**Variable name:** injuries

**Definition:** Nature of the injuries responsible for occasioning the attendance of the child to hospital

**Format:** Text

**Coding frame:**

**Comments:**

**Guideline for use:** Provide a brief free text description of the child's injuries. For example:

- Spinal cord injury
  - Traumatic brain injury
  - Eye injury
  - Fractured femur
- 

### Variable: Signs and symptoms on presentation

**Variable name:** signs\_symptoms

**Definition:** Signs and symptoms the child presented to hospital with

**Format:** Text

**Coding frame:**

**Comments:**

**Guideline for use:** Provide a brief free text description of the signs and symptoms the child presented with. For example:

- vomiting
  - bleeding
  - swelling
  - bruising
-

## Section 3: Timeline of events

---

### Variable: Timeline

**Variable name:** Timeline

**Definition:** A timeline of events relevant to the incident in chronological order

**Format:** Text

**Coding frame:**

**Comments:** This section is pre-filled for the convenience of the reviewer

**Guideline for use:**

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## Section 4: General incident information

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### Variable: Did the patient die?

**Variable name:** die

**Definition:** Did the child die?

**Format:** 1 digit numeric

**Coding frame:** 1 Yes  
2 No  
9 Not recorded

**Comments:**

**Guideline for use:** Select 'yes' or 'no'

---

### Variable: If yes, did the patient die pre-hospital?

**Variable name:** die\_prehosp

**Definition:** Did the child die prior to reaching hospital?

**Format:** 1 digit numeric

**Coding frame:** 1 Yes  
2 No  
9 Not recorded

**Comments:** To provide a construct on where the incident occurred, allowing monitoring of one point of care or service

**Guideline for use:** This question is only to be answered if the child died. Select 'yes' or 'no'

---

### Variable: If yes, did the patient die during transport?

**Variable name:** die\_transport

**Definition:** Did the child die whilst being transported to hospitals?

**Format:** 1 digit numeric

**Coding frame:** 1 Yes  
2 No  
9 Not recorded

**Comments:** To provide a construct on where the incident occurred, allowing monitoring of one point of care or service

**Guideline for use:** This question is only to be answered if the child died pre-hospital. Select 'yes' or 'no'. If 'yes' is selected please specify who/which organisation transported the child to hospital

---

### Variable: Did the patient die in-hospital?

**Variable name:** die\_inhosp

**Definition:** Did the child die while being treated in hospital?

**Format:** 1 digit numeric

**Coding frame:** 1 Yes  
2 No  
9 Not recorded

**Comments:** To provide a construct on where the incident occurred, allowing monitoring of one point of care or service

**Guideline for use:** This question is only to be answered if the child died. Select 'yes' or 'no'

---

**Variable: If yes, in which location did the patient die?**

**Variable name:** death\_location

**Definition:** Which hospital department/ward was the child located in when they died?

**Format:** 1 digit numeric

**Coding frame:** 1 ED

2 Radiology

3 Angiography

4 OT

5 ICU

6 HDU

7 Ward

8 Other (please specify)

9 Not recorded

**Comments:** To provide a construct on where the incident occurred, allowing monitoring of one point of care or service

**Guideline for use:** This question is only to be answered if the child died in-hospital.

Select the most appropriate location to describe where the child died. If 'other' is selected please provide a brief free text description

---

**Variable: Was a toxicology screen conducted?**

**Variable name:** toxicology

**Definition:** Was forensic toxicology testing performed on the child?

**Format:** 1 digit numeric

**Coding frame:** 1 Yes

2 No

9 Not recorded

**Comments:** Autopsy reports are a valuable source of information and provide an important adjunct to any investigation of factors potentially contributing to patient mortality

**Guideline for use:** This question is only to be answered if the child died. Select 'yes' or 'no'

---

**Variable: Was a post mortem conducted?**

**Variable name:** post\_mortem

**Definition:** Was a post mortem conducted to determine cause of death?

**Format:** 1 digit numeric

**Coding frame:** 1 Yes

2 No

9 Not recorded

**Comments:** Autopsy reports are a valuable source of information and provide an important adjunct to any investigation of factors potentially contributing to patient mortality

**Guideline for use:** This question is only to be answered if the child died. Select 'yes' or 'no'

---

### Variable: If yes, what type of post mortem was completed?

**Variable name:** type\_post\_mortem

**Definition:** Was an open (external and internal examination of the body) or closed (external examination of the body only) post mortem conducted?

**Format:** 1 digit numeric

**Coding frame:** 1 Open  
2 Closed  
9 Not recorded

**Comments:** Autopsy reports are a valuable source of information and provide an important adjunct to any investigation of factors potentially contributing to patient mortality

**Guideline for use:** This question is only to be answered if a post mortem was conducted. Select 'open' or 'closed'

---

### Variable: Is the report available?

**Variable name:** post\_mortem\_report

**Definition:** Is the post mortem report available?

**Format:** 1 digit numeric

**Coding frame:** 1 Yes  
2 No  
9 Not recorded

**Comments:** Autopsy reports are a valuable source of information and provide an important adjunct to any investigation of factors potentially contributing to patient mortality

**Guideline for use:** This question is only to be answered if a post mortem was conducted. Select 'yes' or 'no'

---

### Variable: Categorise the problem

**Variable name:** problem\_category

**Definition:** Can the problem be categorised as a clinical, systems or communication problem?

**Format:** 2 digit numeric

**Coding frame:** 1 Clinical  
11 Airway (please explain)  
12 Breathing (please explain)  
13 Circulation (please explain)  
14 Disability (please explain)  
15 Exposure/temperature (please explain)  
2 Systems  
3 Communication

4 Unable to categorise

5 No problem identified

**Comments:** To assist with the determination of how the clinical deficit occurred and to allow comparative analysis across groupings and determination of specific areas for education/change within the trauma system

**Guideline for use:** Select the most appropriate option to describe the problem. If the problem is a clinical problem, indicate if it is related to airway, breathing, circulation, disability or exposure/temperature and provide a brief free text description

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## Section 5: Specific services involved in the care delivery problem

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### Variable: Department

**Variable name:** department\_involved

**Definition:** Which departments were involved in the care delivery problem?

**Format:** 2 digit numeric

**Coding frame:**

- 1 Angiography
- 2 Cardiothoracic surgery
- 3 Emergency Department
- 4 General surgical
  - 5 Paediatric
  - 6 Non-paediatric
- 7 ICU/HDU
- 8 Mental health service
- 9 Neurosurgery
- 10 Operating theatre
- 11 Orthopaedic
- 12 Out of hospital service
  - 13 Fixed wing
  - 14 Helicopter
  - 15 Road
- 16 Pathology
- 17 Plastic surgery
- 18 Radiology
- 19 Rehabilitation
- 20 Urology
- 21 Other (please specify)

**Comments:**

**Guideline for use:** Select all departments involved in the incident. If 'ambulance' is selected please indicate if it is a 'fixed wing', 'helicopter' or 'road' ambulance. If 'other' is selected please provide a brief free text description

---

### Variable: Agency/site/specialty level of staff

**Variable name:** staff\_involved

**Definition:** Agency/site/specialty level of staff involved in the care delivery problem

**Format:** Text

**Coding frame:**

**Comments:**

**Guideline for use:** List the agency/site/specialty level of staff involved in the care delivery problem. For example:

- staff specialist
  - P1 paramedic
-

## Section 6: Factors contributing to the care delivery problem

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### Variable: Did any of the following factors contribute to difficulties in delivering the required care?

**Variable name:** contributing\_factors

**Definition:** What are the contributing factors identified that led to difficulties in delivering the required care?

**Format:** 3 digit numeric

**Coding frame:** 1 Equipment

- 11 Lack of medical equipment
- 12 Medical equipment breakage or failure
- 13 Equipment failure – design
- 14 Medical equipment not elsewhere classified
- 15 Non-medical equipment
- 16 Medical supplies
- 2 Work environment
  - 21 Light
    - 211 No or too little light
    - 212 Too much light
    - 213 Light not elsewhere classified
  - 22 Temperature
    - 221 Too hot
    - 222 Too cold
    - 223 Temperature not elsewhere classified
  - 23 Noise
    - 231 Too noisy
    - 232 Too quiet
    - 233 Noise not elsewhere classified
  - 24 Physical layout
    - 241 Isolation
    - 242 Poor access
    - 243 Physical layout not elsewhere classified
  - 25 Security
  - 26 Work environment
- 3 Staff action
  - 31 Verbal communication and written documentation issues
    - 311 Verbal communication with patient (please describe)
    - 312 Verbal communication with staff – handover (describe)
    - 313 Verbal communication with staff – not during handover
    - 314 Written communication with patient (please describe)
    - 315 Written communication with staff (please describe)
    - 316 Other communication issue (please describe)
  - 32 Medical task failure
    - 321 Skill-based error
    - 322 Rule-based error
    - 323 Knowledge-based error
    - 324 Violation
    - 329 Not known
  - 33 Monitoring
    - 331 Skill-based error



- 332 Rule-based error
- 333 Knowledge-based error
- 334 Violation
- 339 Not known
- 34 Delay
  - 341 Skill-based error
  - 342 Rule-based error
  - 343 Knowledge-based error
  - 344 Violation
  - 349 Not known
- 35 Misdiagnosis
  - 351 Skill-based error
  - 352 Rule-based error
  - 353 Knowledge-based error
  - 354 Violation
  - 359 Not known
- 36 Medication issue
  - 361 Skill-based error
  - 362 Rule-based error
  - 363 Knowledge-based error
  - 364 Violation
  - 369 Not known
- 37 Human factors not elsewhere classified. Please specify:
  - 371 Skill-based error
  - 372 Rule-based error
  - 373 Knowledge-based error
  - 374 Violation
  - 379 Not known
- 4 Patient
  - 41 Physical health (pre-existing)
    - 411 Pre-existing disease or physical disability
    - 412 Physical characteristic
    - 413 Intellectual disability
    - 414 Psychological disturbance
    - 415 Sensory impairment – vision
    - 416 Sensory impairment – hearing
    - 417 Physical health not elsewhere classified. Specify:
  - 42 Health state
    - 421 Airway obstruction
    - 422 Respiratory failure
    - 423 Coagulopathy
    - 424 Uncontrolled bleeding
    - 425 Deterioration in physical condition
    - 426 Severity of injury
    - 427 Infection
    - 428 Fatigue
    - 429 Health state not elsewhere classified. Please specify:
  - 43 Communication issues
    - 431 Language barrier – child
    - 432 Language barrier – parent
    - 433 Not disclosing information – unintentional
    - 434 Not disclosing information – intentional

- 44 Medication
  - 441 Prescribed drug(s) – excessive or inappropriate use
  - 442 Prescribed drug(s) – appropriate use
- 45 Toxicology
  - 451 Alcohol consumption
  - 452 Non-prescribed or illicit drug consumption
  - 453 Other toxicology. Please specify:
- 46 Clothing
  - 461 Flammable
  - 462 No helmet
  - 463 No protective wear
- 47 Patient characteristics not elsewhere classified
- 5 Organisational factors
  - 51 Work practices, policies or guidelines
    - 511 Work practice, but no policy/guidelines
    - 512 Policy/guidelines exist, but are unclear/inconsistent/inadequate
    - 513 Policy/guidelines exist, but are not followed
    - 514 Policy/guidelines not elsewhere classified. Specify:
  - 52 Supervision
  - 53 Organisational resources
    - 531 Staffing issues (eg. skill mix)
    - 532 No bed available (at treating site)
    - 533 No bed available (at referring site)
    - 534 Organisational resources not elsewhere classified
  - 54 Work pressure
  - 55 Organisation factors not elsewhere classified. Please specify:
- 6 Individual factors
  - 61 Training
  - 62 Experience
  - 63 Fatigue
  - 64 Stress
  - 65 Individual factors not elsewhere classified Please specify:
  - 70 Other factors. Please specify:

**Comments:** Contributing factors are largely pre-existing conditions and include any further factor which makes a direct contribution to the occurrence of the incident. Experience refers to 'lack of skill or competence to perform task'.

**Guideline for use:** Select all factors that led to the incident occurring. For factors 3.1.1-3.3.6, 3.7.1-3.7.9, 4.1.7, 4.2.9, 4.5.3, 4.7, 5.1.4, 5.3.4, 5.5, 6.7 and 7 please provide a brief free text description

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## Section 7: Outcome

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### **Variable: Tick the option that best describes the incident**

**Variable name:** describe\_incident

**Definition:** Was the incident preventable/near-preventable/non-preventable, was it a near miss and did it result in death/disability?

**Format:** 1 digit numeric

**Coding frame:**

- 1 Clinically preventable trauma death
- 2 Clinically near-preventable trauma death
- 3 Clinically non-preventable trauma death
- 4 Near miss of death
- 5 Near miss of incident that did not result in death
- 6 Preventable error causing lasting disability
- 7 No problems identified

**Comments:**

**Guideline for use:** Select the option that best describes the incident

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## Section 8: Positives of care

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### Variable: Positives of care

**Variable name:** positive\_care

**Definition:** What were the positive aspects of care the patient received?

**Format:** Text

**Coding frame:**

**Comments:**

**Guideline for use:** Provide a brief free text description of the positive aspects of care the patient received

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## Section 9: Prior knowledge

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### **Variable: Did you have prior knowledge of this case?**

**Variable name:** prior\_knowledge

**Definition:** Did the reviewer have prior knowledge of the case?

**Format:** 1 digit numeric

**Coding frame:** 1 Yes  
2 No

**Comments:**

**Guideline for use:** Select 'yes' or 'no' and provide details where necessary

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## Section 10: Panel discussion

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### Variable: Summary of review and recommendations

**Variable name:** recommendation

**Definition:** Summary of the conclusions and recommendations of the review

**Format:** Text

**Coding frame:**

**Comments:**

**Guideline for use:** Provide a brief free text description

---

### Variable: Interview staff involved?

**Variable name:** staff\_interview

**Definition:** Should staff involved in the care delivery problem be interviewed?

**Format:** 1 digit numeric

**Coding frame:** 1 Yes  
2 No

**Comments:**

**Guideline for use:** Select 'yes' or 'no' and provide details where necessary

---