


Trauma Triage

In conjunction with the remote simulation session
Trauma Module: T1 – Overview of Trauma Triage Process

This project was possible due to funding made available by Health Workforce Australia



General notes on language

Use second person conversation tone but avoid direct use of pronouns such as I, you and we

Use active verbs rather than nouns where possible

Use questions periodically as a prelude to a slide containing information to encourage the facilitator to be interactive

Avoid abbreviated symbols with the following examples: E.g.; I.e.

Avoid abbreviations unless universally understood

Don't omit "the" or "and"

Sponsor

This project was possible due to funding made available by



Projects within NSW are overseen by the NSW Ministry of Health on behalf of HWA



Introductions



October
2012




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Very quick round the room to assess stage of professional development for each participant.

General Aims

- Learn in a team setting
- Clinical skills blended with team skills
- Critically reflect on practice

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- This session, and package as a whole, involves learning together. Learning with the teams that you work with helps that team to function more efficiently and effectively. It allows you to learn from each other, explore different perspectives and to understand the importance of all members of the team.
- We are targeting higher level learning – applied skills and performance in contextualised events. This is through team discussion and also through working through simulated scenarios as a team. It also allows you to put into practice knowledge attained from the VLE and other solo learning environments.
- To review and reflect upon our own practice and current best practice standards. During our feedback sessions we will facilitate this but we would also encourage you to reflect on your practice and experience after these sessions.

Ground Rules

- Participation
- Privacy
- Confidentiality
- Disclaimer
- Debriefing
- Mobile phones

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- Challenge of video conferencing tips: don't change your seat, speak up nice & clearly
- Details collected and de-identified for reporting purposes
- Signed form, don't speak outside about how people performed as not necessarily indicative of real life, chance to try new things, don't tell anyone about the scenarios as they used again on subsequent courses.
- We try to use best evidence practice and strive to include as up-to-date material as possible. Please do refer to your local policies, guidelines and protocols.
- Debriefing is a chance to reflect upon what we did and how that translates to the workplace. Please use this time to explore the complexities of performance and decision making. Please contribute, we will all learn from each other's experiences.
- Like most things in life, the more that you put in the more you will take away with you.
- It is an open forum where everyone's ideas and thoughts are to be valued.
- If you could please switch your phones off or to silent or vibrate for the duration of the course.

Trauma Triage

Trauma Module: T1 – Overview of Trauma Triage Process

June 13



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Session Objectives

- To provide a brief overview of the NSW trauma service
- To discuss the identification of major trauma
- To summarise trauma patient management pre-hospital to rehabilitation
- To introduce the Australasian Triage Scale (ATS)
- To review trauma team activation criteria
- To practice using the ATS

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This session will aim to give an overview of trauma services in NSW including major, regional and specialty trauma services

Discuss identification of major trauma using the Trauma Triage Tool

Discuss the NSW strategy for management of trauma patients from the pre-hospital stage to rehabilitation

And identify the retrieval and transfer services within NSW

NSW Trauma Services Plan (2009)

- Traumatic injury can result in illness, disability and death.
- NSW Trauma model of care
 - Pre-injury
 - Pre-hospital
 - In-patient trauma care
 - Post-Acute care

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In the 15-44 age group trauma is a significant cause of morbidity and mortality, however there are also increasing admissions for trauma in older patients. This group have more comorbidities and are at risk of increased injury severity from lesser mechanism.

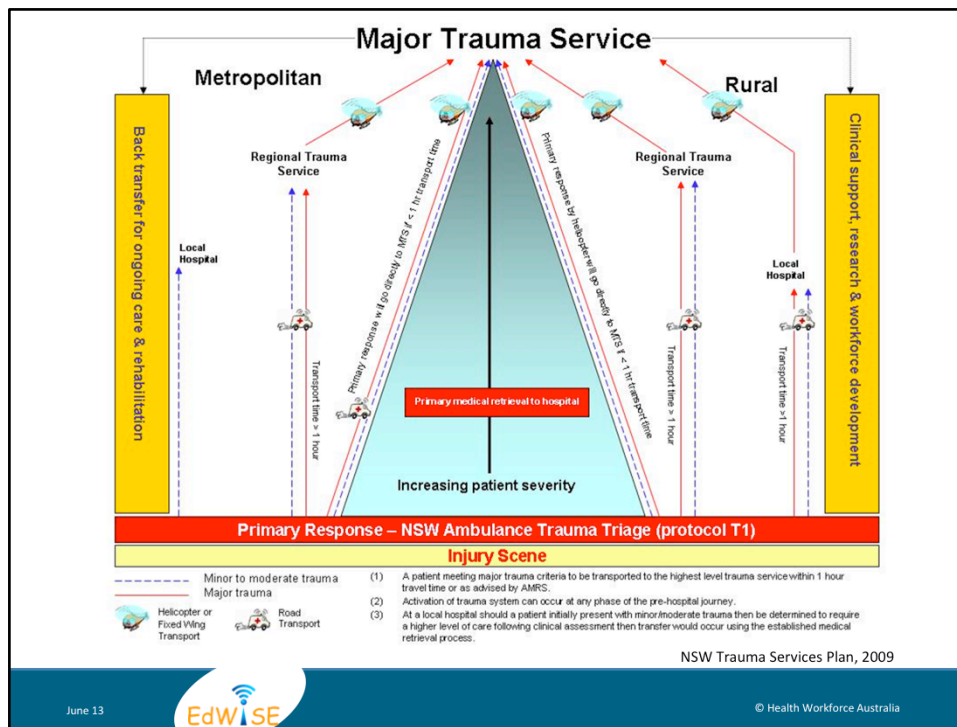
NSW Trauma model of care identifies four areas for the management of traumatic injury and seeks to provide a coordinated multidisciplinary approach to the management of the trauma patient from the time of injury to the provision of definitive care and on to rehabilitation.

Pre-injury: Injury prevention addresses public health problems related to trauma and aims to reduce the number of cases and the severity of cases.

Pre-hospital: This is the period from time of injury till arrival at a definitive care trauma hospital. Can include stabilisation and interhospital transfer.

In-patient trauma care: Consists of a multidisciplinary trauma team response to management of trauma patients and may include emergency assessment +/- surgical intervention +/- intensive care

Post-acute care: Consists of ongoing multidisciplinary and rehabilitative care. The ultimate goal of trauma care is to restore the patient to pre injury status.



The aim of trauma care in NSW is to integrate all hospital facilities into an inclusive trauma network to ensure definitive trauma care is provided to injured patients throughout NSW.

The role of trauma triage is to identify major trauma and ensure the timely arrival of trauma patients to an appropriate hospital.


This diagram demonstrates the complexities of the Trauma plan and the integration of the services of the regional trauma services in the rural and urban areas.

Pre-Hospital Management

- Pre-hospital phase is the time from injury to arrival at a **DEFINITVE care trauma hospital**.

Transportation methods

- Non-ambulance
- Ambulance
- Aeromedical services

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It is important to stress that the pre-hospital phase is the time from injury to arrival at a hospital that can deliver definitive care for that patient. Ideally this should be accomplished within an hour of injury. In reality, especially in more remote areas, this is difficult due to logistics and distance, so effectively the goal is to accomplish this as quickly and as safely as possible. It is important in all trauma to consider the definitive care goal early, especially when this requires transportation of the patient to a different hospital for care. This early recognition and communication of the definitive goal, improves retrieval or transfer times of a patient to definitive care, therefore may improve the morbidity and mortality of the patient.

Non ambulance arrival occurs when patients arrive to hospital by means other than that organised by the ambulance service, for example private car, walk-ins or other services.

Ambulance occur after the application of the ambulance trauma triage tool which allows a decision to be made as to which is the most appropriate hospital for treatment.

This should be either direct transport from the scene or the most efficient means of transfer or retrieval.

Aeromedical services are launched through the Aeromedical Retrieval Unit (AMRU).

Initial Assessment/Handover

- I** Introduction (self and patient)
- M** Mechanism of injury or medical issue
- I** Injuries or illness
- S** Signs and Symptoms
- T** Transport and Treatments given
- A** Allergies
- M** Medications
- B** Background history
- O** Other information (family, situational, etc)

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Triage of trauma patients requires assessment of a number of criteria including physiological parameters, physical injuries and mechanism of injury. This trauma triage tool, used by the ASNSW, provides a quick method for identifying patients who either have, or have the potential for, serious injury using the MIST criteria (mechanism, injuries, signs and symptoms, transport) Patients who meet major trauma criteria should be transported to the highest level trauma centre within a 1 hour travel time or Aeromedical services (AMRU) informed.

M – Mechanism.

- All penetrating injuries
- Death in same vehicle
- Focal blunt trauma to head or torso

I – Injuries

- A decreased LOC
- 2 or more proximal long bone fractures
- Burns >20% in adults and >10% in children

S – Signs and Symptoms


- Airway at risk
- GCS < or equal to 13
- Any worsening of ABCDE

T – Transport. If the patient fits any major trauma criteria then they should be

Hospital Triage

- **Australasian Triage Scale**
 - Category 1
 - Immediate
 - Category 2
 - 10minutes
 - Category 3
 - 30minutes
 - Category 4
 - 60minutes
 - Category 5
 - 120 minutes

Guidelines for the Implementation of the Australasian Triage Scale in Emergency Departments Revised 05 August 2005

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ATS specifically mentions trauma as per slide. Have a think about injuries or trauma patients that would fit into the various categories

Australasian Triage Scale – the ongoing process of sorting patients based on *urgency* of their need for medical care.

Australasian Triage Scale

Category 1

Immediately life threatening

Category 2

Major multi trauma requiring rapid organised team response
Severe localised trauma – major fracture, amputation

Category 3

Head injury with short LOC, now alert
Moderate limb injury – Deformity, severe laceration, crush

Category 4

Minor limb trauma - Sprained ankle, possible fracture

Category 5

Minor wounds – Abrasions, minor lacerations

Generic Trauma Team Activation Criteria

Mechanism / History

- MVA with ejection
- Cyclist or pedestrian hit by car > 30km/hr
- Fall >5m
- Fatality in same vehicle
- Inter-hospital transfer meeting activation criteria

Anatomical

- Injury 2 or more body areas
- Fractures in 2 or more proximal long bones
- Spinal cord injury
- Limb amputation
- Penetrating injury head, neck, torso or proximal limb
- Burns >15% adults, >10% paed or airway burns

Physiological

- Systolic BP < 90 with evidence of shock
- Respiratory rate <10 or >30 per minute
- Depressed LOC or fitting
- Deterioration of vital signs in the ED
- Age > 70 with chest injuries
- Pregnancy >24 weeks with torso injuries

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Major trauma requires a rapid and often resource intensive response. The requirements for team activation can be made using either this tool or a similar variant. As you may have observed, this tool is similar to the tool used by ambulance personnel to make their initial transport decision. Based on MIST handover hospital should decide on trauma team activation. May be two tiered in some hospitals.

Often trauma teams are activated based on the pre-hospital notification (BAT call). This improves the response times of the teams, allows unified handover from the pre-hospital care team and improves the co-ordination of the team response in the emergency department.

Like all triage tools this also has an element of over triage in order to capture the majority of patients likely to have a major injury. Even if your hospital does not have a trauma team it is important to realise that patients who meet one or more of the above criteria are very likely to have sustained a major injury and will require a rapid coordinated assessment.

Patient Trauma Care

- Trauma team response
 - Primary survey
 - Initiate treatment
- Post Emergency Department Care
- Post acute care
 - Discharge planning
 - Rehabilitation
 - Outpatient services

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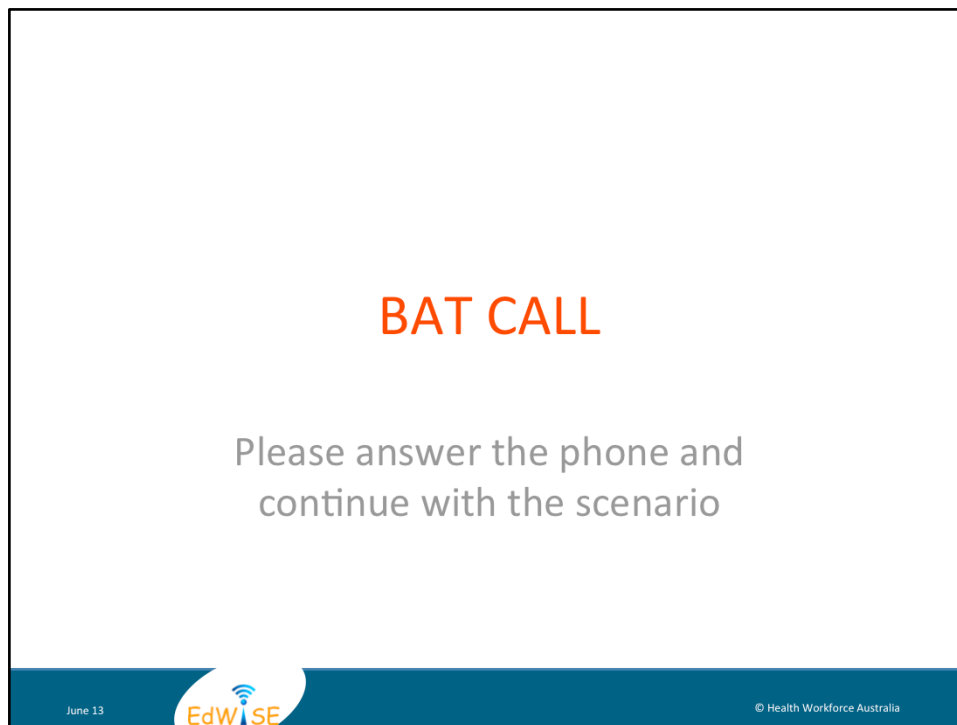


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Trauma team response should be appropriate to the facility. From ED staff specialist / ED reg, nurses, trauma CNC, surgical, anaesthetic and ICU registrars, mobile x-ray, specialties as required (obstetrics, orthopaedics, neurosurgical, vascular etc), social work etc in major hospitals to ED staff specialist / registrar and ED nurse in local / rural hospitals.


At this stage staff should also be considering transport / retrieval if not a major trauma service and the patient requires a level of care not available in their service. Transport and retrieval will be discussed in other sub-modules.

Other sessions will cover initial assessment and management of major trauma. I.e primary and secondary surveys



BAT CALL

Please answer the phone and
continue with the scenario


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This is a pause and discuss scenario – it is important to reiterate the points of pause and discuss given during the familiarization.

The BAT phone will ring for the start of the scenario. Part of this is an exercise in listening.

Scenario

Taylor Swift has just arrived at triage.
Please triage Taylor.



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This is a triaging scenario of a patient Taylor Swift.

Scenario

Charlie Sheen has been brought in by
the ambulance service.
Please triage Charlie.

Summary

- Trauma triage begins in the pre-hospital environment
- Consider major trauma based on mechanism
- Active handover practices are essential for good patient care.
- Activation of trauma teams leads to a co-ordinated approach to trauma.

References

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