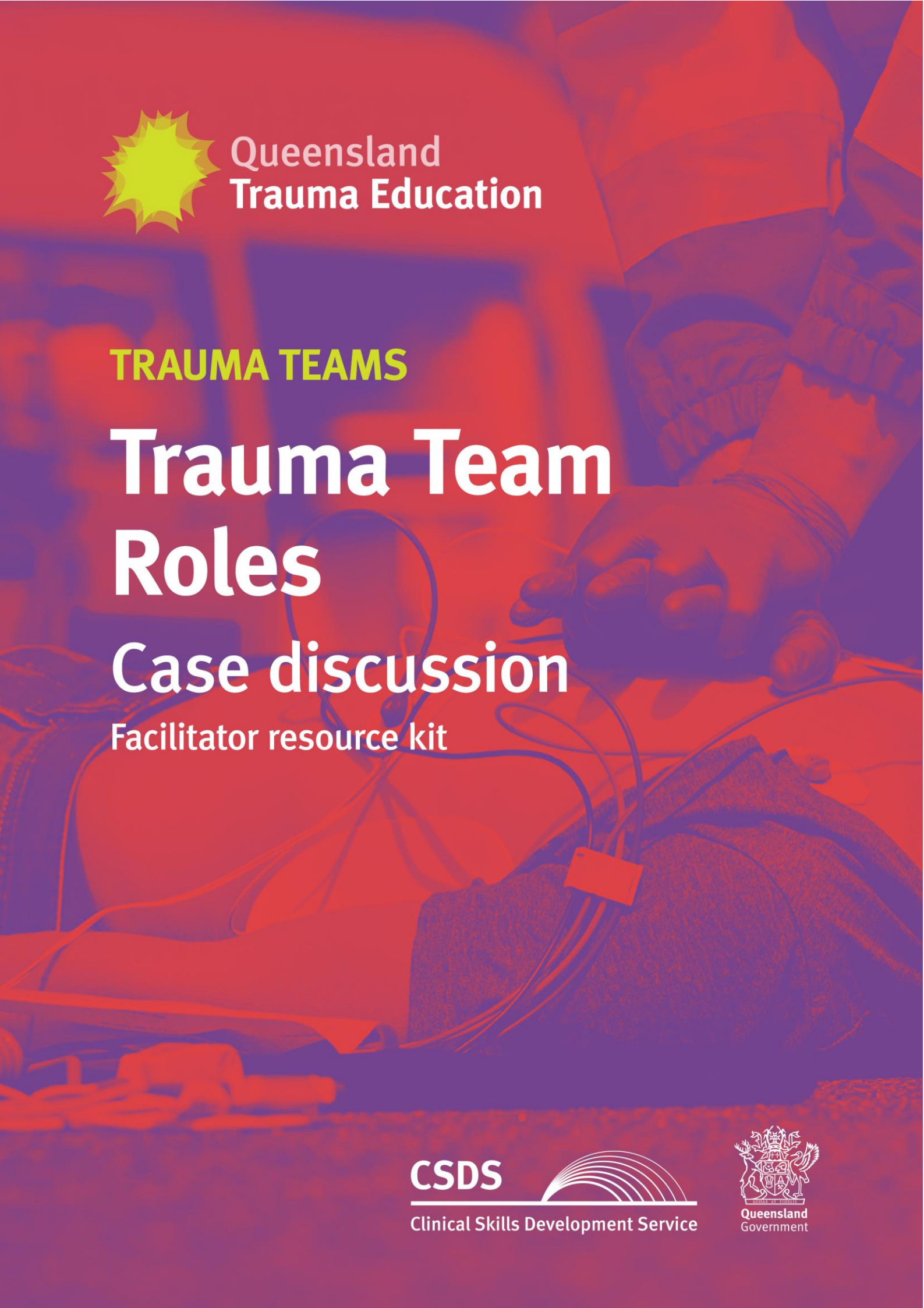

Queensland
Trauma Education

TRAUMA TEAMS

Trauma Team Roles

Case discussion

Facilitator resource kit

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Queensland Trauma Education

The resources developed for Queensland Trauma Education are designed for use in any Queensland Health facility that cares for patients who have been injured as a result of trauma. Each resource can be modified by the facilitator and scaled to the learners needs as well as the environment in which the education is being delivered, from tertiary to rural and remote facilities.

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Queensland Trauma Education
Trauma Teams – Trauma team roles: Case discussion – Facilitator resource kit
Version 2.0

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About this training resource kit

This resource kit provides participants the opportunity to explore the trauma team roles and effective communication strategies for patient care.

National Safety and Quality Health Service (NSQHS) Standards

Target audience

Emergency department medical, nursing and allied health clinicians.

Duration

30- 45 minutes.

Group size

Suited to small group participation.

Learning objectives

By the end of this session the participant will be able to:

- Understand trauma team roles and how to effectively mobilise trauma team members
- Explore team composition with varied numbers of team members and skill mix
- Identify key strategies for effective communication within the trauma team

Facilitation guide

1. Facilitator to deliver case discussion and utilise the question and answer guide to promote discussion.
2. Utilise supporting documents to reinforce learning throughout case discussion.
3. Facilitator to explore the challenges and solutions for effective trauma team performance and discuss the team leader and team membership roles in trauma team activation.

Supporting resources (in Printable resources)

1. Team Mental Model and Transactive Memory System Definitions
2. Trauma Role Card

Case discussion

Case study

Prenotification from QAS for a 35yr old male who has fallen 6 metres from the roof where he was installing a skylight. He was witnessed to land on his back, initially unconscious with workmate bystanders.

On initial QAS arrival he was GCS 13 (E3V4M6), no neurological deficits, HR 120, BP 80/60mmHg, saturations 96% RA, resp rate 22, temp 35.6. He has had IV access obtained, 100microg IV fentanyl, spinal precautions instituted and is on route to hospital.

He has no known allergies or PMHx.

You are given 5 minutes to prepare for this patient.

Tasks:

1. Identify the trauma team roles required and allocation process
2. Discuss the trauma team leader role responsibilities
3. Explore techniques for effective communication within the trauma team

Question and answer guide

1. What are the trauma team roles?

These can vary depending on the hospital/health service and team member numbers. The roles are adapted to the clinical need of the patient. Broadly, the roles encompass:

a. Trauma Team leader (TTL) – controls the room, provides direction and plans
b. Assessment – performs primary survey, vocalises immediate life threats
c. Circulation – gains IV access, ensures trauma blood panel collected, responsible for blood and fluid administration
d. Procedure – assists with circulation, performs procedures as needed
e. Airway – assessment of airway adequacy, anterior neck, and cervical spine assessment, performs airway procedures
f. Scribe/runner – documents assessment, procedures and medications/fluids administered to be confirmed by the TTL, collects additional equipment as the team require.

The roles are focussed on completing the initial tasks required in the immediate assessment and management of the trauma patient.

These roles may be given different titles in each facility.

2. How can this be adapted with more team members? Less team members?

Ideally two staff members will perform each role, with a medical and nursing officer for each. Other roles with additional ED staff include pharmacist, admin officer, wards-person and radiographer.

If there are less team members available, a more flexible approach to the roles is assumed. Ideally the TTL role remains constant, with the airway clinician assisting the other doctor in the assessment and procedures required. If there are only two nursing staff available, priority is given to attaching monitoring, assisting with circulation and procedures, and the preparation and delivery of medications.

3. What other factors may contribute to the trauma team structure?

Time of day, availability of staff, hospital resources and skill set of the team members.

4. **What strategies are used to ensure effective communication between the team members?**

Closed loop communication
Communication via team leader
Use of shared mental model
Frequent recap of assessment and plan
Minimal noise in the trauma bay

5. **What is the Trauma Team leader role?**

- Trauma Team leader (TTL) is responsible for the initial role allocation, ensure additional teams are notified, confirm known patient information, disseminate information to the team, maintain crowd control.
- The TTL will direct all the conversations in the room to ensure a consistent message is directed to the team.
- Team members will update the TTL with new or relevant information.
- TTL maintains a 'hands off' approach to allow for oversight of the case and does not become task focussed.
- The medical TTL stands next to the nursing TTL to communicate closely.
- The TTL is responsible for the accurate documentation of the case.

6. **How do the medical, nursing and allied health roles ensure a 'shared mental model' is used?**

Team leader completes an 'update' frequently (often every 10-15 minutes) where progress, injuries and next steps in management are described to the team.
This is an opportunity for team members to question or add relevant information.

7. **What other team members may be involved?**

Additionally, depending on the location external staff may be included in the trauma team. These include, anaesthetics, intensive care, surgery, theatre co-ordinator, blood bank pathology, radiology, specialist surgery teams and social work.
Facilitator to discuss role of:

- Ambulance Officers
- Inpatient teams- Surgery, Intensive Care, Theatre Co-ordinator, Anaesthetist, Radiology, Pathology.
- Social Work

8. Why is situational awareness important as the TTL?

Situational awareness allows the clinician to be able to see the 'bigger picture'. This can only occur when the clinician is able to pay attention to what is going on around them, without getting caught up with the minutia/task focussed. Ideally the TTL maintains a hands-off approach to allow them to manage the often loud and distracting environment, but sometimes they may be required to step in and assist with a procedure. In this setting they should handover the TTL role during this time to allow for continued overview of the case.

9. What does the term shared mental model mean?

A shared mental model encompasses the communication strategy to allow all members of the team to become familiar with the clinical priorities and allow an environment for effective communication by all members. This approach is recognised to facilitate the common goals in the patient care journey and realign competing priorities and skill mix of the team.

For example- by recapping the clinical needs and focussing the team to manage the tension pneumothorax prior to reduction of the compound ankle fracture/dislocation.

10. How can the pre-brief be used to facilitate the shared mental model?

The use of a pre-brief once roles are allocated allows each team member to confirm their understanding, capability and concerns with the tasks and reasoning prior to the patient arrival.

Formalisation of this process allows for explicit communication of priorities and reasoning, rather than relying on tactic communication. For example: TTL informs the team that the patient is shocked, likely from blood loss with abdominal source- directs the circulation team member/s to gain IV access, send trauma bloods and given PRBC via warmer until the SBP > 80. In tactic communication the instruction would have been assumed that the team members are aware that the patient is hypovolaemic as the cause of their hypotension and shock, but without articulating this some members may have been preparing to manage neurogenic shock and not had blood products available.

11. What is closed loop communication?

In addition to the shared mental model and use of explicit communication, using closed loop communication can ensure tasks are performed in a timely manner during a high stress environment.

In the same example above, the use of closed loop communication allows for confirmation that the direction has been heard, understood and can be completed. For example: The circulation clinician confirms they are capable of gaining IV access and sending the bloods but does not know how to use the blood warmer. This allows an opportunity for another team member to assist with this task.

This is especially important when ordering medications in a trauma resuscitation – it allows for the instruction to be heard and understood. For example: TTL: 'Please give 20mg of ketamine which is 2mL', to which the reply is 'I am giving 20mg ketamine IV now, which is 2mL'.

The use of names (or roles) and eye contact will also reduce confusion regarding who has been allocated each task, ensuring it is completed. For example: 'Jane, can you please review the chest Xray and tell me the findings' rather than 'can someone look at the chest Xray'.

12. How does the team ensure effective handover to other clinical teams?

Clinical care will be continued when the patient leaves the trauma bay in ED. Clear communication must occur for safe transfer of care to other clinical teams. This should occur in a structured format, ensuring relevant and important clinical details are passed to the next team.

The format of this handover will vary, depending on the clinical needs of the patient and the team structure. As with the initial QAS/Retrieval handover this may occur in a hands-off handover format prior to or after transfer. A structured format highlighting the ATMIST (age/sex, time of injury, mechanism, injuries known, or suspected, vital signs and treatments given) should be used to ensure critical detail is not missed. If time allows a more in-depth handover may be performed with additional detail.

Written documentation should accompany the patient with any transfer of clinical care.

References

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2. Georgiou, A., & Lockey, D.J. (2010). The performance and assessment of hospital trauma teams. *Scand J Trauma Resusc Emerg Med*,*18*, 66. https://doi.org/10.1186/1757-7241-18-66

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