

## **Response to the Green Paper: Delivering Safe and Sustainable Clinical Services, and Feedback on the Tasmanian Role Delineation Framework for Trauma**

### **A Joint Submission by the Trauma Clinical Advisory Group (TCAG)**

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## **Service Profile**

### **Current Service Overview**

Based on the Service Descriptions provided in the draft Tasmanian Role Delineation Framework (TRDF) the CAG believes that the following levels of service are being provided in Tasmania:

- Royal Hobart Hospital – Level 6
- Launceston General Hospital – Level 5
- North West Regional Hospital – Level 4
- Mersey Community Hospital – Level 3

The Royal Hobart Hospital (RHH) meets a number of criteria for a Level 6 service or has access to particular service requirements through interstate Trauma services.

### **Recommendation 1**

The attached amendments to the Trauma Service Profile be accepted for the final version of the TRDF.

## **Volume of activity**

The Green Paper states:

- The RHH is the largest public hospital in Tasmania and provides a broad range of services at a lower volume comparable on the mainland, often expensive and in some cases not sustainable.
- However, despite having half as many beds and half as many admissions annually, the RHH has the same breadth of case load as much larger hospitals e.g. The Royal Brisbane Hospital.

In response, the TCAG proposes that service volumes for major trauma services and their supporting clinical and non-clinical services become non-discretionary after a certain threshold requirement, and this is met in Tasmania. As due to the small volumes of some trauma case loads, only some centres have the necessary provider expertise and infrastructure for trauma interventions and supportive management i.e. sufficient to maintain capability and expertise, but not acquire it.

The TCAG accepts that there are some capabilities that are unsustainable at state level e.g. pelvic-acetabular fracture reconstructive surgery, and some sub-speciality paediatric or neonatal trauma and burns. These will need to be referred interstate. The TRDF needs to be amended to reflect this.

This does not diminish the roles of the RHH, and Launceston General Hospital (LGH), as state tertiary referral centres for major trauma (Level 6 and 5 respectively) providing centralised and high quality consultant-led major trauma services, and linking where required to these services on the mainland under the direction of local experts.

This is supported by national data which demonstrates patients do not experience higher mortality rates or longer emergency department length of stay at the RHH<sup>1</sup> (when risk adjusted).

### **Recommendation 2**

Amend Level 6 service description for Trauma Service Profile to state that pelvic-acetabular fracture reconstructive surgery and some sub-specialty pediatric or neonatal trauma and burns need to be transferred interstate.

<sup>1</sup> Australian Trauma Quality Improvement Program and Australian Trauma Registry and National Trauma Research Institute, *Trauma Centre Report Supplement to Caring for the severely injured Australia, Inaugural Report of The Australian Trauma Registry 2010 – 2012 Report*

## **Statewide Trauma System**

At the inaugural TCAG meeting, a “hub and spoke” state trauma system was proposed and supported; with the RHH proposed as the central hub.

CAG members acknowledge the challenge to coordinate and match the funding, governance, workforce and service delivery in parallel, consistent with a clinical re-design intent, and we concur with the Trauma Service Profile which establishes a statewide trauma system.

### **Statewide Trauma System**

#### **Recommendation 3**

A statewide trauma system should be established with clearly defined:

- Management responsibilities and accountabilities including delegations
- Logistic transport responsibilities and accountabilities
- Clinical responsibilities and accountabilities

#### **Recommendation 4**

The state trauma system should be overseen and directed by a state Trauma Director with appropriate administrative support, access to data and funding. Responsibilities should include:

- Chairing a statewide trauma committee with multidisciplinary representation from across the state; and
- Overseeing governance of major trauma at state level, harmonise trauma care and guidelines across the state, advise and support both trauma services as well as the Health Council of Tasmania and the Minister for Health.

#### **Recommendation 5**

The statewide trauma system should be responsible for managing and coordinating all trauma transfers within and out of the state.

### **Funding**

#### **Recommendation 6**

The development of a Tasmanian trauma funding model using a mixture of activity based funding and block funding that recognises the state service delivery burdens outlined in the Trauma Clinical Service Profile and matches clinical services, performance and activity with budget, establishment and funding.

A key concern for *immediate attention* is the lack of funding for the NETS/PETS service, run by the state Neonatal and Paediatric Intensive Care Unit based at RHH.

#### **Recommendation 7**

That the NETS/PETS service be funded appropriately, that all staff specialist positions in the associated Neonatal and Paediatric Intensive Care Unit also be funded appropriately as previously agreed by the Tasmanian Health Organisation –South.

### **Coordination of intra-state transfers including major trauma criteria and trauma bypass**

Decision making for major *trauma case destination* is based on a number of relevant factors, not one single factor:

- Clinical factors, e.g. patient factors, injury pattern and severity
- Service factors, e.g. hospital surgical services and perioperative services including ICU bed availability; and
- Logistic factors, e.g. scene issues, platform availability and access, crew mix, transport time.

Major trauma criteria for pre-hospital triage and intra-hospital transfer, trauma bypass processes, and timely state co-ordination system need to be developed. These will inform referral patterns, guide referral processes, and ambulance and retrieval procedures for the most appropriate destination for major trauma cases from the scene.

Major trauma cases should be transferred to the designated state major trauma service if *within 60 minutes transport time*, or where not possible, or there is (*immediate threat to life*), the major trauma cases should be diverted to the closest appropriate centre, ideally the highest level centre available.

It is acknowledged that emergency department (ED) presentations represent a key activity of our acute hospitals, with significant potential impact on the healthcare of Tasmanians. We acknowledge the enormous and increasing pressure on the state's emergency departments. A function of the state trauma system and TRDF Service Profile for trauma is the reduction of unnecessary and inappropriate ED presentations and prolonged ED length of stay in centres not designated to receive major trauma.

Real-time ICU bed state management data will be required to inform coordinating agencies to best coordinate responses from across the state and between trauma centres.

By-products of this designation process, including triage from the pre-hospital scene, include avoiding unnecessary and inappropriate ED presentations, and prolonged stays, supporting optimal utilisation of ICU beds, avoid unnecessary secondary transport, prevent unnecessary duplication of clinical service delivery, and enhance timely and safe major trauma care without delay.

Social support services will need to mirror this patient movement to support next of kin.

**Recommendation 8**

Amend the Trauma Service Profile to reflect that all major trauma cases should be directed to a Level 5 or 6 Trauma Service if within 60 minutes transport time. Where not possible, or there is an immediate threat to life, major trauma should be diverted to the closest appropriate centre, ideally the highest level centre available.

**Recommendation 9**

As part of the statewide trauma system, a Trauma By-Pass Policy be developed mandating Recommendation 8.

**Recommendation 10**

Access to real-time ICU bed state management data is made available to coordinate ambulance and retrieval responses and transfers between centres.

To support the above recommendations robust major trauma criteria for pre-hospital triage and intra-hospital transfer, trauma bypass processes, and a timely state coordination system, will be developed by the TCAG.

**Coordination of out-of-state transfers**

One of the responsibilities of a major trauma centre (Level 6 Trauma Service) is to provide statewide coordination for out of state transfers. This will need to include local clinical experts in developing the guidelines for the indications and processes governing out of state transfer. This is currently missing from the TRDF Trauma Service Profile.

The TCAG has established a working group to develop guidelines on these issues.

**Recommendation 11**

Amend Level 6 service requirements of the Trauma Service Profile to include the following dot point:

- 'Responsibility for coordination of out of state transfers'.

**State Trauma Registry**

To support a statewide trauma service, a state trauma registry needs to be developed and implemented. The registry must include a validated and recognised defined data set to accurately capture all activity, performance and outcomes for reporting and analysis to guide further refinement of the state trauma system at strategic, operational and clinical levels<sup>2</sup>.

<sup>2</sup> For supporting documents refer to Trauma Centre Report Supplement to Caring for the severely injured Australia, Inaugural Report of The Australian Trauma Registry 2010 – 2012/ Victorian State Trauma System, Paediatric Trauma Guideline, Version 1.0 - 26/09/2014/ Victorian State Trauma System, Pre-Hospital Triage Guideline Version 1.0 – 25/09/2014/ Victorian State Trauma System, Inter-Hospital Transfer Guideline Version 1.0 – 25/09/2014

### **Recommendation 12**

A statewide trauma registry needs to be developed, implemented and maintained to support a statewide trauma service.

### **Integrating Ambulance Tasmania**

The TCAG recommends Ambulance Tasmania (AT) be fully supported in developing capabilities to meet the ongoing demands for timely high quality ambulance services including:

- a) the constitution and composition of its services;
- b) the nature of operations it undertakes;
- c) the supporting training, techniques and procedures it implements; and
- d) the prerequisite staffing, platforms and resources required.

Novel models of care merit further examination, as well as supporting AT's efforts for achieving the optimal balance between road, fixed-wing and rotary-wing transport.

AT needs to be intimately involved and engaged in the generation of the White Paper, and development and implementation of the TRDF and operation and governance of the state trauma system, both as key stakeholder, and to inform its own ongoing development.

Similarly the state trauma system clinicians need to continue to be intimately involved in the with the retrieval services.

Improved links, closer ties, and shared data between the Tasmanian Health Service (THS) and AT will be supportive. The role delineation framework does not describe inter-hospital transport or pre-hospital care. These are critical components of the proposed sustainable and accessible state trauma system operating within the single THS.

### **Community Care**

Trauma occurs in the community and the community has legitimate ownership of the initial local trauma responses at the interface between care in peripheral centres and the state trauma system.

### **Recommendation 13**

Engage local clinicians and communities in the state periphery to promote the improved access to the state trauma system, eliminating barriers in the current system.

- This will include public awareness and education campaigns about how the state trauma system serves as their pathway to accessing expert, high quality trauma care, and returning to care in their community at the earliest opportunity.

## **Elective Surgery**

Emergency surgery is increasing state-wide at approximately 3% per annum. As a result, emergency surgery is having a greater impact on elective surgery capability. This includes access to postoperative ICU beds. Conversely timely and effective trauma surgery should not compete with elective service delivery.

### **Recommendation 14**

Eliminate competition between emergency and elective surgical throughput for access to theatre and post-operative HDU or ICU beds.

## **Major Burns**

The TCAG covers major burns in its terms of reference.

While the volume of major burns cases is considerably lower than for major trauma, they both benefit from similar systems of referral, care by phase, and management of multiple injuries.

The prerequisite primary services for burns are plastic reconstructive surgery units, which in the TRDF are allocated to Level 6 centres. Consideration should be given to burns centre designation mirroring the existing plastic reconstructive surgery units at both RHH and LGH however they are designated.

The TCAG has established a sub-working group, which includes TCAG membership, plastic surgeons (LGH and RHH) and Strategic Planning (DHHS) to examine the issues of volume of activity, role delineation for burns, and state burns referral processes.

Recommendations regarding plastic reconstructive services generally and burns specifically at RHH and LGH to be withheld pending the outcome of the burns working group.

## **Access to rehabilitation services**

Access to inpatient rehabilitation services, including geriatric and mental health services, provides for ongoing post-acute care as well as the ability of acute care centres to discharge and maintain capacity to admit.

### **Recommendation 15**

That the Service Profile for Rehabilitation takes major trauma requirements, including ortho-geriatrics, traumatic brain injury, and burns into account.