



SA Health

# South Australian Trauma System (SATS)

## Clinical Governance Framework

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Government  
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SA Health

## Introduction

The South Australian Trauma System (SATS) Clinical Governance Framework has been developed from the [Transforming Health: Trauma Governance Framework and Statewide Model of Care Project](#) including the feedback from the Statewide Consultation Project Workshop held on the 12<sup>th</sup> April 2017.

Additionally, recommendations outlined in the SA Health SA Trauma Systems Review conducted in 2010 by Health Management Advisors (HMA) have been incorporated.

The purpose of the Clinical Governance Framework and a State-wide Trauma Model of Care is to ensure that every South Australian who suffers major trauma gets the right care at the right time.

## The South Australian Trauma System

A fully inclusive trauma system plans, organises and coordinates injury management. This concept includes:

- optimal engagement with the patient and their family
- active engagement in surveillance and injury prevention strategies
- the delivery of trauma care from the time of injury to rehabilitation
- access to rehabilitation care and integration back into society
- active auditing, research, education and clinical training.

The trauma centres do not constitute the trauma system. Rather, the clinical components and governance structure of a trauma system ensure the continuum of care. These elements include:

### 1. Major Trauma Injury Prevention

- Support in-hospital injury prevention programs (e.g. P.A.R.T.Y. Program)
- Community engagement and injury prevention strategies
- Focus on high risk groups such as 15-25yr old youth, Aboriginal population, etc.
- Utilisation of major trauma injury surveillance data to direct injury prevention strategies.

### 2. Pre-hospital care

- Prevent further injury
- Timely assessment, stabilisation and transport of the injured patient to the most appropriate centre by matching the patient's needs to institutional capabilities

- Utilisation of ground and air transport with appropriately skilled personnel managed within a framework of physician led clinical coordination.
- Well-developed communication and triaging systems.

### **3. Hospital care**

- Trauma System Service designations which clearly define the role each hospital plays in the overall management of trauma care delivery
- Multi-disciplinary engagement and collaborative care including the Emergency Departments, Intensive Care Units, definitive surgical care and ongoing inpatient medical management
- Clearly defined inter-hospital referral and transfer guidelines and pathways to ensure the patient receives definitive care in the most appropriate facility.

### **4. Acute Care Allied Health and Rehabilitation**

- Early referral and engagement processes
- Appropriate screening for functional and psychological disabilities
- Access to physical rehabilitation programmes and community support.

### **5. Trauma Registry as a statewide quality improvement tool**

- Collection and use of data to identify benchmarks and variation in clinical outcomes
- Quality and safety monitoring and reporting
- Supports ability to conduct local and statewide multi-disciplinary audit
- Comparison with national and international trauma care outcomes
- Inform quality improvement projects and other initiatives.

### **A functioning trauma system ensures the right patient gets the right care at the right time.**

- The right care is that which brings appropriate resources and skills for management of that specific patient's injuries and injury severity.
- The right time is the time at which appropriate care will reverse the adverse physiological and psychosocial consequences of the injuries and prevent unnecessary complications.

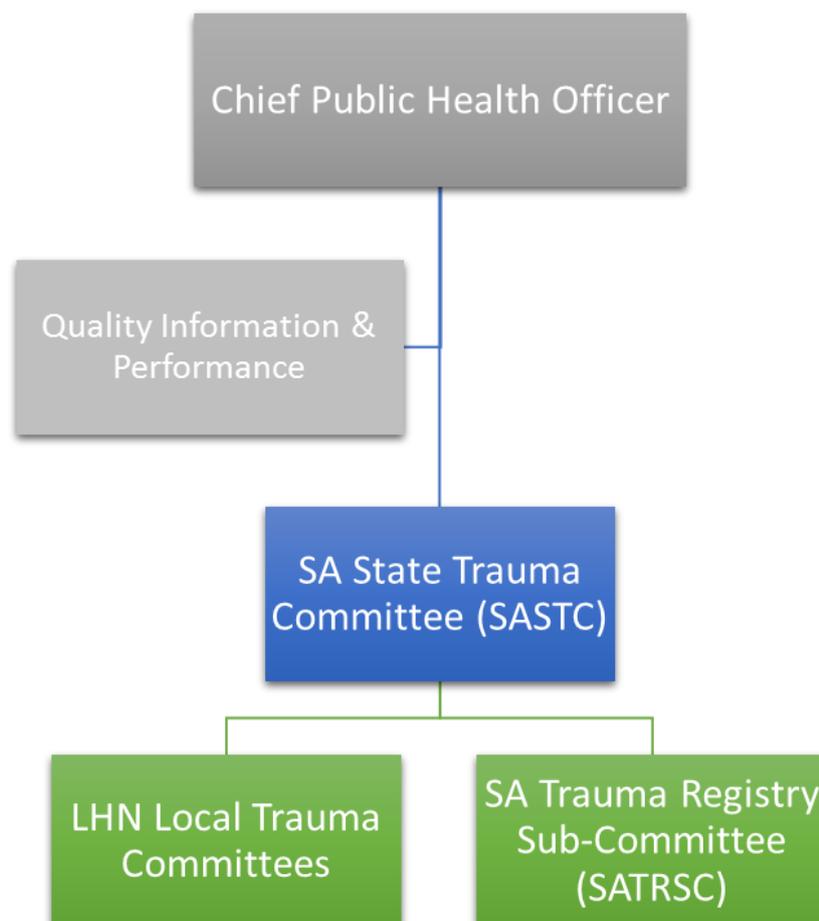
## The SA Trauma System (SATS) Clinical Governance Framework

The SATS will include the above mentioned components and the Clinical Governance of this will be based on the following:

- Education & training (including guideline development).
- Audit and case review (local level and via open State-wide forum).
- Data, Research and development.
- Incident reporting & risk management.

The SATS will have strong clinical governance via the below structure and reporting lines allowing collaboration and communication between all its relevant components and committees.

## The South Australian Trauma System (SATS) Governance Structure & Hierarchy



## The SA State Trauma Committee (SASTC)

The SASTC is the lead clinical governance body for trauma care in South Australia. Its principal role and function is to provide advice to the Chief Public Health Officer on state wide policy, clinical guidelines and strategy development for trauma care and provide oversight of the South Australian trauma system.

The membership and scope of this committee are outlined in the Terms of Reference for the SASTC.

The structure of the SASTC can be viewed below:



\*Trauma Director or Trauma Medical Leadership Role

\*\* SATRSC = SA Trauma Registry Sub-Committee

Local Health Network trauma committees are expected to have multi-disciplinary membership with broad representation of relevant specialties (e.g. ICU, nursing, anaesthesia, spinal, burns, surgery, allied health, psychosocial etc.). It is expected that members of the SASTC will be members of the relevant LHN trauma committee and be expected to disseminate information between both committees.

The SASTC and LHN level trauma committees will ensure that there is consumer representative involvement, where appropriate, on relevant clinical improvement activities undertaken.

## South Australian Trauma System – Service Designation

The SATS service designations describe the main role of South Australian hospitals within the South Australian trauma system and are in line with the [Royal Australasian College of Surgeons Trauma Verification Model Resource Criteria](#) published in January 2016. The service designations do not preclude hospitals from providing care that is within their Service Capability Framework.

The SATS Trauma services in metropolitan Adelaide are designated into three descending levels of care. These are:

- Major Trauma Services
- Metropolitan Trauma Services
- Rural, Regional & Metropolitan Health Care Services.

### Major Trauma Services (RACS Level I Trauma Services)

The Major Trauma Services (MTS) are capable of providing the full spectrum of care for the most critically injured patient, from initial reception and resuscitation through to discharge and rehabilitation.

A Level I Trauma Service will have significant case volumes to sustain clinical excellence. There will be a 24 hour system in place to form a trauma reception team, prompt 24 hour availability of senior consultant level general surgeon, an appointed trauma director and, ideally, a surgical trauma admitting service (bed card). Elective and Emergency surgery in neurosurgery, cardiothoracic, orthopaedics and plastics are essential. A MTS will essentially have first class facilities including emergency department, operating theatre suite, and intensive care units, with dedicated emergency O.R. availability 24 hours for Trauma.

The MTS's should be the 'central hub' of an integrated system, with responsibility for coordination of other services both urban and rural in any given region, and for advising such Trauma Services. Transfer agreements for reception of patients from the Metropolitan and Rural & Remote Trauma Services should be in place.

A helipad landing site is essential as well as road and ambulance reception.

The SATS has the following designated Major Trauma Services (MTS):

❖ **ADULT (≥16 years) MTS** are:

- The Royal Adelaide Hospital
- Flinders Medical Centre

The Royal Adelaide Hospital is the SATS designated **ADULT COMPLEX POLY-TRAUMA MTS** as this service provides the state's main **Adult Burns Service, Spinal Cord Injury Service and Major Pelvic Injury Service.**

- ❖ The other SATS designated **ADULT & OBSTETRIC MTS** is Flinders Medical Centre (FMC) who can provide care to Trauma patients within their service capability framework. **PAEDIATRIC (<16 years) MTS** and **Paediatric Burns Service** is The Women's & Children's Hospital.

*FMC also has the ability to provide care to paediatric trauma patients within its Service Capability Framework.*

For those patients **requiring the resources of a Major Trauma Service**, the SA Trauma System outlines the following service designations:

- Patients who have had their 16<sup>th</sup> Birthday (≥16yrs) should be referred & transferred to the Adult Major Trauma Services (RAH or FMC)
- Patients who are under 16 years of age (<16yrs) should be referred & transferred to the Paediatric Major Trauma Service (WCH).

### **Metropolitan Trauma Service (MeTS) (RACS Level III Trauma Service)**

The major role of this level service is the provision of high quality care to medium and minor level trauma, with the capability of stabilising major trauma patients who cannot be transported directly to a MTS. It can provide definitive care to a limited number of major trauma patients, in concert, with the MTS. In general terms, the Metropolitan Trauma Service (MeTS) will be able to provide prompt assessment, resuscitation, emergency surgery, and stabilisation of a small number of seriously injured patients, while arranging for their transfer to the responsible Major Trauma Service.

The MeTS can provide all aspects of immediate care, including some definitive care for non-major trauma patients according to patient needs and available resources. It will have a consistent general surgical service which also provides most aspects of definitive care to severely injured patients. Its principal function, with respect to major trauma, is to provide initial resuscitation and operative stabilisation, prior to appropriate early transfer of major trauma patients. A MeTS will have established transfer agreements with the MTS. It will require the 24 hour availability of an on-duty specialist surgeon and anaesthetist, as well as a nurse experienced in the care of trauma, and radiology facilities. Helicopters should be able to land safely nearby.

#### **The SATS has one designated Adult Metropolitan Trauma Service:**

- Lyell McEwin Hospital

*LMH also has the ability to provide trauma care to obstetric and paediatric patients within its Service Capability Framework.*

## Rural, Regional & Metropolitan Health Care Services

(RACS Level IV Trauma Services)

Rural, Regional & Metropolitan Health Care Services are not intended to care for major trauma patients, but are recognised because they participate in the care of minor trauma, and because, on occasions, individual patients, may self-present, with major trauma, or in rural situations there will be periodic need for resuscitation of a major trauma patient, with rapid transfer on.

In a metropolitan area, these may be large, mature tertiary institutions, which are not designated for trauma care specifically. In the rural setting these institutions will usually be very small and isolated hospitals or medical centres, with no immediately available medical practitioner, and minimal radiology or acute care facilities.

**The SATS designated Rural, Regional & Metropolitan Health Care Services are:**

- Modbury Hospital
- The Queen Elizabeth Hospital
- Noarlunga Hospital
- Country Health SA Sites

## Major trauma definition

Trauma can be defined as physical injury to the body, occurring mostly unintentionally (accident) but also intentionally (assault). Trauma has a major impact on the health of Australians and affects people of all ages. At present, trauma is the greatest cause of death up to the age of 45 years.<sup>1</sup>

- “Minor Trauma” refers to less serious injuries that usually involve a single part of the body, and that can be well managed with less specialised resources in a variety of clinical settings.
- “Major Trauma” refers to multiple injury requiring complex multidisciplinary management or single system injuries of potentially life-threatening nature. These usually require complex management at specifically designated and equipped health facilities.<sup>2</sup>

**The definition of major trauma for the South Australian Trauma System (SATS)** is adapted from the [\*Review of Trauma and Emergency Services Victorian 1999 \(ROTES\) report\*](#).

The definition includes all trauma patients with injury as their principal diagnosis (irrespective of age) who meet any of the following criteria.<sup>3</sup>

- death after injury
- ISS greater than 12
- admission to an intensive care unit for more than 24 hours and requiring mechanical ventilation
- urgent surgery for intracranial, intrathoracic or intraabdominal injury, or for fixation of pelvic or spinal fractures
- injury being the principal diagnosis (irrespective of age) and satisfying any of the South Australian Trauma Registry (SATR) patient inclusion criteria.

1. Royal Australian College of Surgeons website [www.surgeons.org](http://www.surgeons.org)
2. NSW Trauma Services Plan (2009). NSW Health. [www.nsw.gov.au](http://www.nsw.gov.au)
3. Victorian Ministerial Taskforce on Trauma and Emergency Services and the Department of Human Services Working Party on Emergency and Trauma Services 1999.

## **The South Australian Trauma Registry (SATR)**

The SATR collects information on all cases of major trauma admitted to the:

- Royal Adelaide Hospital
- Flinders Hospital
- Women's and Children's Hospital
- Lyell McEwin Hospital.

The information collected includes the injuries sustained, mechanism of injury, details of the care received including pre-hospital care and transfer information (from the injury scene to a hospital, between hospitals) and the patient outcome. Data is collected from SA Ambulance Service, MedSTAR, the clinical record and hospital systems which provide medical imaging and pathology reports.

Data provided to the SATR from the three major trauma centres is also provided to the Australian Trauma Registry.

## **The SA Trauma Registry Sub-Committee (SATRSC)**

The SATRSC brings together key officers responsible for SATR data collection, coding and input and the nominated SATR lead from the Department for Health and Ageing, Prevention and Population Health Branch.

SATRSC reports to the SA State Trauma Committee (SASTC).

The membership and scope of the SATRSC are outlined in its Terms of Reference which can be viewed via the following link <<hyperlink>>.

## **Data Reporting from SATR**

Reports from the SATR will inform service providers about the quality of health care on a continuous basis in the different registry sites. The information will have the ability to be reported in various ways to the Trauma clinical teams and used to better understand opportunities for quality improvement.

Staff responsible for data collation, data entry, data use and management of the hospital Trauma Registries are located at:

- Royal Adelaide Hospital
- Flinders Hospital
- Women's and Children's Hospital
- Lyell McEwin Hospital.

In addition, staff in the Department for Health and Ageing, Prevention and Population Health Branch are responsible for data management, data extraction, analysis and reporting, this includes:

- Producing an annual report bringing together data from each of the hospital sites. The annual report will be tabled at the South Australian State Trauma Committee (SASTC) meetings
- Data is also collated and reported (de-identified) to the Australian Trauma Quality Improvement Program led by Monash University (under an ethics agreement).

Matters concerning authorisation and custodianship of the data will be addressed by the SATRSC going forward.

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For more information

**SA State Trauma System - Clinical Governance Framework**

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[www.sahealth.sa.gov.au](http://www.sahealth.sa.gov.au)

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