

WA TRAUMA SYSTEM AND SERVICES

IMPLEMENTATION PLAN

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Executive Summary

Implementation of the WA Trauma System and Services will occur through a staged process as follows:-

- Stage 1 Short term within 1 year
- Stage 2 Medium term within 2 – 4 years
- Stage 3 Long Term within 6 years

Each stage of The Plan will inform the subsequent stage to completed implementation.

Approval to proceed to Stage 2 and 3 will require consideration and approval of the Executive Committee within the context of structures, operating budget, resources and Health System reforms at the estimated commencement dates for each stage.

Lead Service

The Lead Service will be the WA State Trauma Service

Governance

The Responsible Officer will be the WA State Trauma Director and shall report to the Executive Committee through the Chief Executive of the South Metropolitan Area Health Service

The Executive Lead for WA Trauma Service will be the Chief Executive South Metropolitan Area Health Service and report to Executive Committee and the Operations Review Committee of the State Health Executive Forum

Implementation of the Plan will be monitored through regular reporting of achievement and monitoring of key performance indicators at system level.

Implementation Mechanisms

Implementation will occur through the establishment of the Trauma System through role delineation of services; protocols and policy to change work practice and a consultation and communication strategy

Key stakeholders have been identified and a communication strategy defined in The Plan to inform, consult and involve stakeholders in the implementation of the WA Trauma System and Services

The Plan has been staged to align with whole of health system reform initiatives in clinical service redesign, the WA Health Building and Infrastructure Development Program and the WA Health Reform Agenda

Estimated Completion

The estimated completion to establish the WA Trauma System and Services is 2015.

Risk Management

A risk analysis has been applied to The Plan and a detailed risk register identified for Stage 1 of The Plan together with risk control, and mitigation strategies and responsibilities (Appendix 1). The Plan will be monitored for risk during implementation of each stage.



Resources

Stage 1 of the Plan can be met from existing operating budget and FTE establishment.

Resources for Stages 2 and 3 of the Plan will require development of a funding strategy and estimation at the end of Stage 1 and Stage 2.

Recommendations

It is recommended that the Operations Review Committee:-

1. Endorse the Draft Implementation Plan for the WA Trauma System and Services Initiatives
2. Approve the commencement of Stage 1 of the Plan to implement the WA Trauma System and Services.



Introduction

The Trauma Working Group finalised its extensive review of trauma services in Western Australia in 2007. The Final Report of the Trauma Working Group: Trauma System and Services¹ was tabled with the State Health Executive Forum (SHEF) in August 2007. Given the progress on parallel reform initiatives with emphasis on the infrastructure program, additional consultation was requested by SHEF. The Final Report was endorsed by SHEF with some amendments with regard to role delineation for major trauma services in July 2008.

The recommendations of SHEF and the Final Report of the Trauma Working Group were announced in October 2008. The Report was tabled with the Operations Review Committee (ORC) in October 2008 with a draft Implementation Plan. The ORC endorsed the recommendations of SHEF but did not endorse the draft Implementation Plan and required more detail. The ORC requested the WA State Trauma Director to develop the Implementation Plan for the WA Trauma System and Services.

Following the request of ORC, discussions were held between the A/Executive Director, Innovation and Health Services Reform Division and the WA State Trauma Director. As a result of this discussion the Health Reform Implementation Taskforce (HRIT) was tasked with providing project support to assist the WA State Trauma Director to develop the Plan for implementation of the WA Trauma System and Services Initiatives.

The ORC requested the Implementation Plan for the WA Trauma System and Services reflect the change in policy with regard to the redevelopment of Royal Perth Hospital and its role in relation to trauma services after 2015. The Addendum requested is reflected in the amendment to the wording of Initiative 4 of the *Report of the Trauma Working Group: WA Trauma System and Services* (Appendix 3)

Initiative 4: There will be single Major Trauma Service for adults with Royal Perth Hospital taking this role from late 2007. The Fiona Stanley Hospital will take this role after 2012. **Amendment by ORC July 2009:** Initiative 4: There will be a Major Trauma Service for adults with Royal Perth Hospital taking this role from late 2007. The Fiona Stanley Hospital will provide a second adult major trauma services when operational in 2014.

1. Scope

The Plan is not a static document, and will require regular review and adjustment over time as implementation progresses

Implementation of the Trauma System and Services Initiatives will be conducted through a staged implementation process as follows:-

- Stage 1: short term within one year
- Stage 2: Medium terms within 2-4 years and;
- Stage 3: Long term within 6 years.

These timeframes have been defined to align with parallel health system reforms planned over time related to the building program, upgrades of facilities and clinical

¹ Department of Health WA (2007) *Trauma System and Services: Report of the Trauma Working Group*. Department of Health. Perth WA



redesign programs coming on stream over the medium to long term for Western Australia.

1.1. Lead Service

Implementation of the Trauma System and Services will be led at the Health Service level by the WA State Trauma Service under the State Trauma Director as the direct appointment of the Director General Health.

1.2. Policy Authority

The 52 Initiatives of the Trauma System and Services: Report of the Trauma working Group was endorsed by the State Health Executive Forum in July 2008 and further endorsed by the Operations Review Committee of the SHEF in October 2008. The Initiatives of the Report are the mandated strategic plan for establishment of the WA Trauma System and Services.

1.3. Objective

The policy objective for trauma services in Western Australia is “The goal of the trauma system will be to deliver each patient to the trauma care facility which has the right resources to match his/her needs, in the shortest possible time”¹:

1.4. Planning Process

The Report of the Trauma Working Group: Trauma System and Services defines the short, medium and long term strategic goals to establish a trauma system within Western Australia.

In order to inform the planning for implementation, several analyses were conducted to refine the scope and stages of implementation to achieve the Policy objective goal. This process included:-

- Grouping of the Initiatives by short, medium and long term goals with a timeframe of within 1 year; 2-4 years and 6 years
- A feasibility analysis against 7 system level criteria was applied to all the initiatives which included requirements for workforce, recurrent funding, infrastructure, technology, and influences such as stakeholder support, political sensitivities and time dependent initiatives
- The ranking process then allowed prioritisation of the initiatives by those most feasible (within current resources; time, cost and establishment) to not feasible at all
- A risk analysis against the feasible initiatives then further informed the scope of the implementation plan
- In order to inform the Implementation Plan, key stakeholders in terms of executive authority, leadership and accountability at each level of the WA Health System were identified for each initiative.



As a result of this process, the Implementation Plan (The Plan) has been informed by the following results:-

- 10 Initiatives are in place or are in place and may require minor adjustment
- 18 Initiatives are most feasible to implement within existing resources in the short term.
- 29 Initiatives are not feasible as this time due to:-
 - the requirement of large resource
 - significant infrastructure development
 - they are dependent on a prior initiative being in place or; they are medium or long term strategic goals for trauma services.

Note: The above total 57 as several initiatives were required to be separated into component parts to permit feasibility analysis and risk assessment

1.5. Outcomes

Establishment of a trauma system in Western Australia will provide a comprehensive and consistent approach to the triage, treatment, transport and definitive care of trauma victims.

A systematic trauma system is most effective and sustainable in the Australian context where the population of the area being serviced is two million or more. Numerous studies in Australia of regionalised systems of trauma care in other state jurisdictions have shown improvements in survival and recovery rates for the injured population served by such systems. Trauma care will be delivered within a tiered system of hospitals and health care facilities, each of which will be allotted a designated role based upon its capacity to provide levels of care that match patient needs.

The following performance measures will monitor the establishment of the WA Trauma System and monitor the effectiveness of trauma services over time. The definitions, criteria and business rules for the Key Performance Indicators are detailed in Appendix 2.

Process and Performance Measures

| KPI Descriptor | Target | Target date | Data source |
|--|------------------------------|--------------------|-----------------------|
| Directors and Coordinators of Trauma Services will be in place by 2011 | 100% | 2011 | Evaluation and review |
| All hospitals and health services will assume the trauma service role designation by 2011 | 100% | 2011 | Evaluation and review |
| Major trauma cases will be triaged directly to the major trauma services | 80%* | Dec 2009 | State Trauma Registry |
| The rate of metropolitan inter-hospital transfer of major trauma cases will reduce from baseline Jan – July 2008 | 5% | Dec 2009 | State Trauma Registry |
| Rate of admissions and treatment of adult non major trauma cases will increase at metropolitan and urban centres | 2% annual increase from 2010 | Ongoing monitoring | HMDS |
| Rate of referral of adult non major trauma referrals to the major trauma service will decrease | 2% annual decrease from 2010 | Ongoing Monitoring | HMDS |

* This target reflects the current benchmarks achieved in major trauma services in other state jurisdictions with trauma systems i.e. Victoria² and New South Wales.

² Department of Human Services, Victoria (2007). *Victorian State Trauma Registry 2005-2006 Summary Report*. Melbourne Victoria



Measures of quality

Royal Perth Hospital will participate in an Australasian Trauma Verification Program Review in April 2009.

The Australasian Trauma Verification Program is a multi-disciplinary inter-collegiate process, developed through the Royal Australasian College of Surgeons to assist hospitals in analysing their system of care for the injured patient³.

The review covers pre-hospital through to discharge from acute care and identifies the strengths and weaknesses of the hospital's trauma service against the Service Model Standards of the National Road Traffic Advisory Council and the American College of Surgeons Service Model Verification Standards.

The Hospital will seek verification as a Level 1 Major Trauma Service through the Trauma Verification Review which assesses all aspects of the service delivery capacity, quality and standard of trauma care, the process aligns with the recommendations of the Australian Council of Health Standards for trauma care. It will be a long term aim for all trauma services to participate in the accreditation program once the WA Trauma System has been established and services can achieve the standards of the Program.

1.6. Implementation mechanisms

The WA Trauma System and Services will be implemented through a staged process of clinical service redesign of existing trauma services and the enhancement and development of services to reflect a system level structure. Implementation mechanisms to establish the trauma system will include:-

- Establishment of the authority structure for trauma services in hospitals and health services by appointments of Directors and Coordinators of Trauma Services
- Service delivery redesign by establishment of the trauma service structure and roles as endorsed policy for trauma services
- Re-alignment of work practices through system level policy, protocols and guidelines for trauma care at each level of the trauma system
- Implementation will occur via a communication strategy and consultation process with key stakeholders in hospitals, health services and service providers

1.7. Implementation assumptions

The identification of assumptions is made to inform the scheduling of tasks, and works plans to achieve implementation of the WA Trauma System and Services and are listed below.

Preliminary estimates for completion of implementation of the WA Trauma System and Services for each stage are listed below. These estimates have been considered within the context of medium and long term health system reform initiatives in the building and infrastructure program for the WA Health System.

These estimates are based on implementation assumptions of current knowledge of what is known. Assumptions that become invalid or inaccurate will require modification of the implementation plan at each stage and over time.

³ Royal Australasian College of Surgeons (2008) *The Australasian Trauma Verification Manual*. Melbourne Vic.



| | |
|----------------------|--|
| Assumption 1: | The intent of WA Trauma System and Services Initiatives remains relevant to the evolving health system reform agenda for WA Health |
| Assumption 2: | The proposed building program for hospital upgrades and infrastructure development continues to estimated completion dates |
| Assumption 3 | The Fiona Stanley Hospital is commissioned by the estimated completion date of 2014 |
| Assumption 4 | Physical resources (project support and management) are provided to support the WA State Trauma Director to implement the Plan during a prolonged period of budget restraint |

1.8. Estimated completion

Appendix 3 shows details of the Trauma Initiatives by system elements as allocated to each stage of the Implementation Plan.

The initiatives are phased by component parts for each the system elements to align with medium and long term system reforms and required resources and the WA Health System infrastructure development.

Stage 1 Completion Year: 2009 related to the following system elements

- Service level role delineation (2 Initiatives)
- Appointments [State Director, Major Trauma Services and Metropolitan Trauma Services] (1 Initiative)
- Single Paediatric Major Trauma Service (3 Initiatives)
- Special Services in Trauma Care (2 Initiatives)
- Pre Hospital Triage (2 Initiatives)
- Triage Destination (2 Initiatives)
- Trauma Registries (1 Initiative)
- Primary & Secondary Retrieval (1 Initiative)
- Education and training (4 Initiatives)

Stage 2: Completion Year: 2011 related to the following system elements:-

- Service level role delineation (1 Initiative)
- Appointments [Directors Regional Trauma Resource Centres and Trauma Coordinators Urban Trauma Services] (1 Initiative)
- Paediatric trauma care (1 Initiative)
- Rehabilitation Services [Adult and Paediatric] (1 Initiative)
- Medical transfer of trauma patients to Darwin (1 Initiative)
- WA State Trauma Registry (2 Initiatives)
- Training and Education Trauma care skills (2 Initiatives)
- Data, information monitoring and reporting (1 Initiative)
- Evaluation of Trauma System services (1 Initiative)



Stage 3: Completion Year 2015 related to the following system elements:-

- Role delineation and structure (1 initiative)
- Trauma System Evaluation (1 Initiative)
- Rehabilitation Services [Paediatric] (1 Initiative)
- Linkage of State Trauma Registry data systems to external service providers and other government agency data systems (1 Initiative)
- Review retrieval system for children in Western Australia (1 Initiative)
- Relocation of trauma services at Fiona Stanley Hospital (3 Initiatives)

Appendix 3 provides an overview of the Initiatives by stage and responsible agency to implement the WA Trauma System.

2. Breakdown of tasks

2.1. Agencies and services involved

The agencies and services involved in the implementation of the Trauma System and Services are listed below:-

| Service Area/Organisation |
|--|
| Department of Health WA |
| Disaster Preparedness and Management Unit, Department of Health WA |
| WA State Trauma Service |
| Area Health Services |
| Tertiary Hospitals |
| Metropolitan General Hospitals |
| Regional Resource Centres of the WA Country Health Service |
| Rehabilitation and Disability Services (Commonwealth and State) |
| St John Ambulance Association |
| Royal Flying Doctor Service |

2.2. Work Plans

The high level Work Plan for each stage of the Implementation Plan is listed below.

Each stage of the Implementation Plan will be further governed by a detailed project plan which will identify the following key elements where appropriate and relevant to each Initiative and the stage of implementation.

The Project Plans for each stage should include as a minimum the following:-

- Resource Implications
- Risks (including staffing recruitment)
- Capital expenditure (major, minor and/or medical equipment funding)
- Support Services (Diagnostic Services)
- Communication Plan including stakeholder engagement (Internal and External Stakeholders)

The implementation of the WA Trauma System will realign existing core trauma services to meet the needs of trauma victims at each level of the trauma service.



Stage 1 - Work Plan

| Key Activity | Start Date | End date | Key Milestone /Deliverable Products | Agency/ Responsible Officer | Group/individual overseeing progress | Resources |
|---|------------|-----------|---|--|---|---|
| Stage 1 | | | | | | |
| Develop Implementation Plan | Jan 2008 | Feb 2009 | Draft Implementation Plan | WA State Trauma Director Health System Improvement Unit | State Trauma Director Innovation & Health System Reform Division Project Manager Health System Improvement Unit | <i>WCR (Within current resource)</i> |
| Approval Implementation Plan | May 2009 | May 2009 | Implementation Plan Endorsed | WA State Trauma Director Health System Improvement Unit | Operations Review Committee | <i>WCR</i> |
| Approved detailed Project Plan – Stage 1 | June 2009 | June 2009 | Stage 1 formally commenced | WA State Trauma Director Health System Improvement Unit | Executive Director Innovation & Health System Reform Division | <i>EPR (Estimated project resource)</i> |
| Commence implementation | June 2009 | Ongoing | Quarterly reports – status and progress | WA State Trauma Director Project Manager | Operations Review Committee | <i>EPR</i> |
| Monitor and review progress | Sept 2009 | Ongoing | Quarterly Reports KPI | WA State Trauma Director State Trauma Registry | Operations Review Committee | <i>WCR</i> |
| Review Implementation Plan | Aug 2009 | Aug 2009 | Written Updated Implementation Plan | WA State Trauma Director | State Trauma Director | <i>EPR</i> |
| Approval to proceed – Stage 2 | Aug 2009 | Sept 09 | Stage 2 Implementation Plan approved | WA State Trauma Director | State Health Executive Forum Operations Review Committee | <i>WCR</i> |
| Close Stage 1 – Transition to core business | Oct 09 | Dec 09 | Stage 2 endorsed | WA State Trauma Director | State Trauma Director Operations Review Committee | <i>WCR</i> |



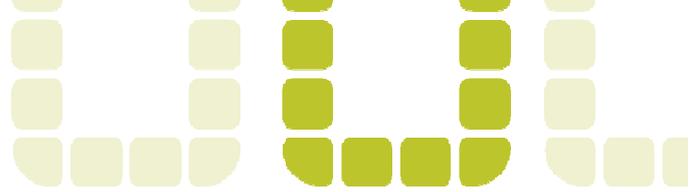
Stage 2 – Work Plan

| Key Activity | Start Date | End date | Key Milestone Deliverable Products | Agency/ Responsible Officer | Group/individual overseeing progress | Resources (Established project resource (EPR)) |
|--|------------|----------|---|--|--|--|
| Stage 2 | | | | | | |
| Approved detailed Project Plan – Stage 2 | 2010 | 2010 | Established Project Stage 2 | WA State Trauma Director Office of State Trauma Director | Office of State Trauma Director | (EPR) |
| Commence implementation – Stage 2 - Initiatives | 2010 | 2011 | Six Monthly Reports – status and progress | WA State Trauma Director Office of State Trauma Director | Operations Review Committee | (EPR) |
| Evaluate Trauma System and services | Mar 2011 | Oct 2011 | Evaluation Report | WA State Trauma Director State Trauma Registry | Operations Review Committee | (EPR + established resource) |
| Monitor & review progress | March 2009 | Ongoing | Six Monthly Reports KPI's | WA State Trauma Director State Trauma Registry | Operations Review Committee | Within Established Resource |
| Develop business cases for required service delivery resources as identified | 2010 | 2011 | Business Cases submitted as identified | WA State Trauma Director Area Health Service Planning & Infrastructure Branches | Operations Review Committee | (EPR + established resource) |
| Review Implementation Plan | Sept 2011 | Oct 2011 | Written Updated Implementation Plan | WA State Trauma Director | State Trauma Director Office of the State Trauma Director | (EPR) |
| Approval to proceed – Stage 3 | Nov 2011 | Nov 2011 | Written endorsement for Stage 3 | WA State Trauma Director | State Health Executive Forum Operations Review Committee | (EPR) |
| Close Stage 2 – Transition to core business | Dec 2011 | Dec 2011 | Project Support for Stage 3 assigned | WA State Trauma Director | Office of State Trauma Director | (EPR) |



Stage 3 – Work Plan

| Key Activity | Start Date | End date | Key Milestone /Deliverable Products | Agency/ Responsible Officer | Group/individual overseeing progress | Estimated Resources |
|---|------------|----------|--|---|---|------------------------------|
| Stage 3 | | | | | | |
| Approved detailed Project Plan – Stage 3 | 2012 | 2015 | Established Project Stage 3 | WA State Trauma Director WA State Trauma Service | WA State Trauma Director | (EPR) |
| Commence implementation – Stage 3 - Initiatives | 2012 | 2015 | Six monthly reports – status and progress | WA State Trauma Director Office of State Trauma Director | Operations Review Committee | (EPR) |
| Monitor & review progress | 2012 | Ongoing | Six Monthly Reports and KPI's | WA State Trauma Director State Trauma Registry | Operations Review Committee | (EPR + established resource) |
| Develop business plans as identified for service delivery resources | 2012 | 2015 | Business Plans/Cases submitted as identified | WA State Trauma Director Area Health Service Planning & Infrastructure Units | State Health Executive Forum Operations Review Committee | Within Established Resource |
| Establish major trauma centre at FSH | 2013 | 2014 | Service established | WA State Trauma Director Area Health Service FSH Project team Service planning and development SMAHS | Chief executive SMAHS | |
| Review metropolitan trauma services | 2015 | 2015 | Written Report | Planning and Development Unit SMAHS WA State Trauma Director | Chief Executive South Metropolitan Area Health Service Operations Review Committee | (EPR) |
| Final Report - Implementation | Oct 2015 | Dec 2015 | Written Report tabled | WA State Trauma Director Office of the State | Operations Review Committee | (EPR) |
| Close Stage 3 – Transition to core business | Oct 2015 | Dec 2015 | Resources reallocated | WA State Trauma Director Office of the State Trauma Director | Executive Director Innovation and Health System Reform Division | (EPR) |



3. Governance

3.1. Structure

Governance of the Implementation Plan will be as follows:-

| | |
|---|---|
| Executive Sponsor: State Health Executive Forum | Chief Executive, South Metropolitan Area Health Service |
| Executive Committee | Operations Review Committee of the State Health Executive Forum |
| Project Executive Lead Health Service Level | State Trauma Director WA State Trauma Service |
| Implementation Steering Committee Project management and support | WA Trauma System and Services Implementation Committee Office of WA State Trauma Director |
| Health Service Clinical Reference Groups | Hospital Trauma Committees – Hospitals; Health Networks |
| Working Parties and Experts | Defined, convened or engaged as need identified |

3.2. Responsible Officer

With the approval and endorsement of the Operations Review Committee, the State Trauma Director shall be the responsible officer for the implementation of the WA Trauma System and Services

4. Reporting, monitoring, evaluation

4.1. Reporting arrangements

The State Trauma Director shall report directly to the Chief Executive of the South Metropolitan Area Health Service.

The State Trauma Director shall report regularly to the Operations Review Committee (ORC) of the SHEF through the Chief Executive of the South Metropolitan Area Health Service on the implementation of the Plan.

Such reports shall include a progress reports to the ORC on the status of the implementation of the initiatives and the baseline measures of performance and monitoring of trauma services.

The Key Performance Indicators for the WA Trauma System will be developed as the State Trauma Registry is established to fulfil its monitoring and trauma research role within Western Australia.



4.2. Evaluation strategy

Implementation evaluation will occur through written and regular reporting of the completion of implementation and progress to completion of the 52 Initiatives to establish the WA Trauma System and Services.

The WA Trauma System and Services will be formally evaluated in 2011 for its effectiveness and in particular will review the service needs for the future requirements for adult major trauma services.

The Review of Trauma Services in 2011 will include as a minimum:-

- The effectiveness of trauma services as evidenced by reduction in metropolitan inter hospital transfer of trauma cases
- Hospital activity in relation to admissions for patients presenting as a result of trauma and injury in Western Australia to hospitals and health services.
- The service delivery profile of all public health services providing trauma care including pre-hospital, major trauma services, metropolitan, urban and rural trauma services, and rehabilitation services
- Review of workforce and the effectiveness of training and education strategies to train and maintain trauma care skills for the clinical workforce and workforce retention
- Evaluation of data and information systems relevant to trauma and progress to establishment of the data systems for monitoring, performance review and reporting.

A second review of the WA Trauma System and Services will be conducted in the final year of the Implementation Plan in 2015 to inform core business plans and opportunities for development and improvement of trauma services.

5. Risk Management

5.1. Risk Analysis

The Implementation Projects for each stage of the implementation will be assessed for project and system risks to implementation. Risk analysis will be conducted using the ANZ 6360 Standard for Risk Management and the Department of Health Risk Management procedures and tools.

Risk analysis, and risk control will be informed and developed for each detailed project plan for each stage of the implementation of the WA Trauma System and Services Plan.

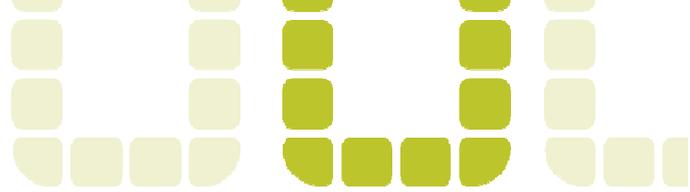
The Identified risks to implementation for Stage 1 of The Plan as high risks for Stage 1 of the Implementation Plan are detailed below together with risk mitigation strategies.

The complete Risk Register and risk analysis tools developed to conduct the risk analysis for Stage 1 is attached as Appendix 1.

Risk Assessment and management – Stage 1 Implementation

| Risk Area/Description | Risk Level | Risk Mitigation Strategy |
|--|------------|---|
| Physical resources (project support) cannot be sustained due reduced health system budget | High | Redirect existing resources and FTE to support implementation |
| Physical resources (project leadership and management time) is not quarantined by State Trauma Director to lead project | High | Delegation of project tasks and targets to Project Manager where appropriate. Frequent and regular communication between Project Lead and Health Service Project Sponsor |
| Lack of clinical and transport provider's consensus on the reliability of triage tools. Delay in development of triage tool and subsequently Triage System (Initiative 27 – Triage Tool) | High | Consult with primary transport service provider Evaluate impact of hospital bypass after six months on patient outcomes, ambulance distribution and other service impacts |
| Lack of agreement on priority allocation of RFDS transfers leading to delays by road transport (Initiative 35 – Formal communication process between transport providers) | High | Review current service providers' contracts. Liaise with service providers |
| Lack of consensus regarding clinical coordination in proposed model for retrieval service between transport service providers | High | Continue consultation process through multidisciplinary review group Acute Care Network to achieve agreement |
| Lack of consensus with regard to location and funding of the Trauma Care Education Unit | High | Ensure Directors of Trauma Services are included in consultation |
| Lack of consensus with regard to clinical rotations between different area health services and clinical rosters for adult trauma services Capacity at Paediatric Trauma Service to support education and training | High | Engage and ensure Directors of Major Trauma Services and Clinical Heads of Departments Metropolitan Trauma Services are consulted with regard to clinical rosters for trauma services |

These risk mitigation strategies will be managed by the WA State Trauma Director and Project Manager during Stage 1. The Risk Register for Stage 1 will be monitored and identified and emerging risks incorporated into project management procedures.



6. Stakeholder engagement

6.1. Key Stakeholders

Key stakeholders who will be impacted or have a role in participating in the implementation are listed below:-

| Area/organisation | How are they affected or How are they participating |
|---|---|
| Director General Health | Principal executive authority and leadership |
| State Health Executive Forum (SHEF) | Advice and leadership |
| Operations Review Committee (ORC) of the SHEF | Advice, authority, operational support and leadership |
| Chief Executive, South Metropolitan Area Health Service | Executive Lead WA Trauma Services SHEF and ORC, Advice, authority, operational support and leadership |
| WA State Trauma Director | Health Service Project leadership and implementation management |
| Area Chief Executives Health Services | Advice, operational support and leadership health services |
| Executive Director, Innovation and Health System Reform Division Department of Health | Implementation planning and project planning support (Planning phase) |
| Chief Medical Officer/Director Health Networks | Advice, consultation and leadership |
| Directors of Trauma Services Major Trauma Services (Chairs Trauma Committees) | Advice, consultation, operational support and leadership tertiary hospitals |
| Director Trauma Service Metropolitan Trauma Service (Chair Trauma Committee) | Advice, consultation, operational support and leadership |
| Directors of Clinical Divisions Hospitals | Advice and consultation |
| Clinical Heads of Departments providing trauma care – Hospitals | Advice and consultation |
| Medical Directors Pre Hospital Transport Providers | Operational support, advice and consultation |
| Clinical Leads Health Networks | Operational support, consultation and policy development to establish elements of the Trauma System |
| Members of Trauma Committees – hospitals | Key stakeholders - operational support and advice |
| Clinical Consultants Trauma Service Departments – hospitals | Key stakeholders |
| Clinicians providing trauma care – hospitals | Stakeholders |

6.2. Communication Strategy

The Communication Strategy for the Plan is detailed below in the Communication Plan which identifies key stakeholders, mechanisms of engagement, communication tools, information to be communicated and accountability to ensure communication occurs.

Communication throughout the stages of the Implementation Plan will be informed by the risk management process and an ongoing consultation process which will include meetings with Directors, Heads of Departments and the responsible Executive Officers across Area Health Services, the Department of Health and with External Service Providers as appropriate.

6.3. Communication Plan

| Key Stakeholders (Distribution Schedule) | Engagement Aims, Scope Objective <i>The key points stakeholder(s) groups need to understand and act upon</i> | Stakeholder Engagement Action <ul style="list-style-type: none"> • Inform • Consult • Involve • Collaborate • Empower | Description of Specific Topics <i>Content, format, level of detail.</i> | Engagement Methods/ tools to be used | By whom | Other: Costs (WCR) Within current Resource |
|--|--|---|--|---|---|---|
| | | | | | <i>Position responsible</i> | |
| Director General Health | Progress towards establishment of the WA Trauma System | Inform | Milestones and status | Written Reports | <i>State Trauma Director</i> | (WCR) |
| State Health Executive Forum | Establishment, aims and benefits | Inform, authority and consult | Status outcomes | Implementation Plan Written Reports | <i>Chief Executive, South Metropolitan Area Health Service State Trauma Director</i> | (WCR) |
| Operations Review Committee | Establishment, aims, progress, benefits | Inform, authority, consult and involve | Status and milestones | Implementation Plan Written Reports | <i>Executive Director Innovation & Health System Reform Division WA State Trauma Director</i> | (WCR) |
| Executive Sponsor Chief Executive South Metropolitan Area Health Service | All aspects of implementation project | Inform, authority, consult and involve | Status and milestones | Implementation Plan Written Reports | <i>State Trauma Director Project Manager</i> | (WCR) |
| Executive Director Innovation & Health System Reform Division | Establishment, aims, progress, benefits | Inform, consult and involve | Status and milestones | Implementation Plan Written Reports <i>(Planning Phase)</i> | <i>Health System Improvement Unit</i> | (WCR) |
| WA State Trauma Director | All aspects of implementation project | Inform, consult and involve | All aspects of project | Verbal and written reports, regular one on one meetings | <i>Project Manage</i> | (WCR) |
| Chief Executives Area Health Services | Establishment, aims, benefits and progress | Inform, consult and involve | Status and milestones | Verbal and written reports, email | <i>WA State Trauma Director Project Manager</i> | (WCR) |

Communication Plan (contd)

| Key Stakeholders (Distribution Schedule) | Engagement Aims, Scope Objective | Stakeholder Engagement Action | Description of Specific Topics | Engagement Methods/ tools to be used | By whom | Cost: (Within current Resource) |
|---|---|-------------------------------------|-----------------------------------|---|--|--|
| Chief Medical Officer/ Director Health Networks | Establishment, aims, scope and progress | Inform, consult and involve | Status and milestones | Verbal and written reports, email | <i>WA State Trauma Director Project Manager</i> | (WCR) |
| Directors Clinical Services; Medical Directors; Hospitals | Establishment, aims benefits and progress | Inform, consult and involve | Status and milestones | Verbal presentations, one on one meetings, email | <i>WA State Trauma Director/ Project Manager</i> | (WCR) |
| Directors Trauma Services (Chairs of Trauma Committees, Metropolitan Hospitals) | Establishment, aims benefits and progress | Inform, consult and involve | Status and milestones | Verbal presentations, one on one meetings, email | <i>WA State Trauma Director/ Project Manager</i> | (WCR) |
| Coordinators of Trauma Services, Metropolitan, Urban and Regional Trauma Centres | Establishment, aims benefits and progress | Inform, consult and involve | Status and milestones | Verbal presentations, face to face meetings, email | <i>WA State Trauma Director Project Manager</i> | (WCR) |
| Directors/Heads of Departments Clinical Services– Hospitals | Establishment, aims, benefits | Inform, consult and involve | Status and progress | Verbal presentations, face to face meetings, email | <i>WA State Trauma Director Project Manage</i> | (WCR) |
| Medical Directors – Pre Hospital Transport Service Providers | Establishment, aims, progress | Inform, consult and involve | Status and progress | Verbal presentations, meetings, email | <i>WA State Trauma Director/Project Manager</i> | (WCR) |
| Health Networks | Establishment, Scope, progress | Inform, consult and involve | Status and progress | Meetings, written reports, email | <i>WA State Trauma Director/ Project Manager</i> | (WCR) |

Communication Plan (cont'd)

| Key Stakeholders (Distribution Schedule) | Engagement Aims, Scope Objective | Stakeholder Engagement Action | Description of Specific Topics | Engagement Methods/ tools to be used | By whom/ | Other: (Within current Resource) |
|--|---|-------------------------------------|--------------------------------------|--|---|---|
| Clinical Consultants Trauma Services – Hospitals | Establishment, scope, benefits | Inform | Status | Meetings, email | <i>WA State Trauma Director/Project Manager</i> | (WCR) |
| Members of Trauma Committees - Hospitals | Establishment, aims, scope, benefits | Inform | Status | Verbal presentations meetings | <i>Project Manager/WA State Trauma Director</i> | (WCR) |
| Clinical Professions providing trauma care – Hospitals | Establishment, aims | Inform | Status | Verbal presentations | <i>Project Manage</i> | (WCR) |

7. Potential variances

7.1. Implementation Constraints

The following implementation constraints are identified as potential variances which could impact on the achievement of implementation of the WA Trauma System and Services

The implementation constraints are possible barriers to implementation progress and success. They are considered in concert with the risk analysis and inform the risk mitigation strategies and ongoing project risk management during each stage of The Plan.

| | |
|---------------------|--|
| Constraint 1 | Implementation of clinical service delivery change during a period of required operating budget reduction |
| Constraint 2 | Clinical concern regarding distribution of tertiary hospital services under the hospital facility upgrades and building program |
| Constraint 3 | Recruitment and retention of the workforce with trauma management skills to support role delineation and the provision of services at non major trauma centres |
| Constraint 4 | Loss of relevance of the proposed initiatives over time in line with significant system level hospital reform |

The implementation constraints will be monitored and managed by project and risk management procedures during each stage of The Plan.

8. Resource Allocation

Resources required to achieve Stage 1 of The Plan have been identified and costs are details below.

Resource allocation for subsequent stages of the Plan will be informed by identification of required resource and funding strategies during each stage.

The estimated minimum resources identified for Stage 2 and 3 of The Plan are provided below.

| Stage 1 | | | |
|--|------------|--------------------|-------------------|
| Resource description | FTE | Other costs | Total |
| Project management and support | 1.4 | \$3,000 | \$73,000 |
| Stage 2 – - Estimated known minimum | | | |
| Project management and support – 2 years | 1.4 | To be costed | \$292,000* |
| Stage 3 - Estimated known minimum | | | |
| Project management and support | 1.4 | To be costed | \$292,000* |
| Grand Total | | | \$657,000 |

*Based on current award salaries and known on costs.

RISK REGISTER – WA TRAUMA SYSTEM AND SERVICES IMPLEMENTATION PLAN – STAGE 1

Appendix 1 Risk Register

MEASURES OF LIKELIHOOD AND CONSEQUENCES - IMPLEMENTATION OF TRAUMA SYSTEM INITIATIVES

Table 1. Qualitative Risk Analysis matrix – level of risk

| Likelihood | Consequences | | | |
|-------------|--------------|--------------|-----------|-------------|
| | Minor (1) | Moderate (2) | Major (3) | Extreme (4) |
| 1. Rare | 1 (L) | 2 (L) | 3 (L) | 4 (M) |
| 2. Unlikely | 2 (L) | 4 (M) | 6 (S) | 8 (S) |
| 3 Moderate | 3 (L) | 6 (S) | 9 (S) | 12 (H) |
| 4 Likely | 4 (M) | 8 (S) | 12 (H) | 16 (E) |
| 5 Certain | 5 (M) | 10 (H) | 15 (E) | 20 (E) |

Legend:
E: Extreme
H: High
S: Significant
M: Moderate
L: Low

Table 2: Qualitative measures of consequences or impact

| Level | Rank | Implementation Delay | Delivery of trauma services/ Service redesign | Reputation and image | Financial loss | Performance (Both in Quality and Quantity) |
|-------|----------|--|--|---|---|--|
| 1 | Minor | No delay in implementation of defined initiatives | No impact - implementation commenced – AHS/Clinical staff engaged; trauma service redesign commenced | No impact, no news item, consumer complaints | < \$10000 or 0.025% operational budget | Up to 1% variation in KPI – achievement key deliverables |
| 2 | Moderate | Moderate delay in implementation of defined initiatives | Implementation of system controls fragmented; loss of clinical engagement; increase in clinical staff dissatisfaction in trauma services; workplace practice not defined; Delay in service redesign | Public embarrassment, local community response and loss of faith, impact on skilled staff retention, low news profile | \$10,000 to \$250,000 or 0.15% of operational budget | 2 – 5% variation in KPI – achievement key deliverables |
| 3 | Major | Significant delay in implementation of defined initiatives | Loss of relevance of endorsed policy to retain currency; Increasing frustration with reforms by clinical staff; increase in information leaks; increased political scrutiny; Service delivery and patient care fragmented | Public embarrassment, organised community action and censure, high potential news profile, moderate impact on skilled staff attraction & retention. Ministerial involvement | \$500,000 - \$1 million or 1% of operational budget | 5-15% variation in KPI- achievement key deliverables |
| 4 | Extreme | Halts implementation (Show stopper) | Loss of relevance of endorsed policy: Active resistance to reforms by clinical staff; (reform fatigue); significant information leaks; Significant political scrutiny and loss of political will to support service redesign | Public embarrassment, high widespread multiple news profile, significant impact on skilled staff recruitment & retention, public and government censure, high level Ministerial involvement | More than \$5 million or more than 3% of operational budget | 15-25% variation in KPI – achievement key deliverables |

Table 3: Risk Acceptance Criteria

| Level of risk | | Criteria for Management of Risk |
|---------------|-------------|---|
| 1-3 | Low | Acceptable managed by routine procedures |
| 4-5 | Moderate | Monitor – management responsibility - Project Manager |
| 6-9 | Significant | Management control required – Project Manager/ State Trauma Director |
| 10-14 | High risk | Urgent Management attention – Senior Project Director/ State Director Trauma /Directors Clinical Services |
| 15-20 | Extreme | Unacceptable – Director General/Executive Director Divisions/Area Chief Executive Area Health Services |

RISK REGISTER – WA TRAUMA SYSTEM AND SERVICES IMPLEMENTATION PLAN – STAGE 1

As at 14/01/2009

Note: The risk analysis has only been applied to the WA Trauma System Initiatives ranked feasible and feasible with adjustment for implementation in Stage 1 of The Plan

| Risk ID | Initiative No | Description Initiative | Description of Risk | Likelihood | Seriousness (consequences) | Risk level | Mitigation Actions | Responsible Officer |
|--|---------------|---|--|-------------|----------------------------|------------|--|--|
| Overall Implementation Risks | | | | | | | | |
| 1.1 | N/a | All Initiatives not in place | Physical resources (implementation support) cannot be sustained during a period of reduced health system budget | 4 (Likely) | 3 (Moderate) | 12 (H) | Redirect existing resources and FTE to support implementation | State Trauma Chief Executive, South Metropolitan Area Health Service |
| 1.2 | N/a | All Initiatives not in place | Physical resources (Health service project leadership and management time) is not quarantined by State Trauma Director to lead project | 4 (Likely) | 3 (Major) | 12 (H) | Delegation of project tasks to project manager where appropriate. Frequent and regular communication between Health Service Project Lead and Project Manager | State Trauma Director Project Manager |
| Establishment Paediatric Major Trauma Service | | | | | | | | |
| 1.3 | 5 | Establishment Paediatric Major Trauma Service | Delay in review and planning for Paediatric Rehabilitation Service | 4 (Likely) | 2 (Moderate) | 8 (S) | Consult with Planners and communicate information on planning as soon as available | State Trauma Director/Project Manager |
| 1.4 | 11 | Ambulance Access PMH | Delay due to long term planning for paediatric hospital site | 5 (Certain) | 1 (Minor) | 5 (M) | Review status in short term capitals works program PMH | Project Manager |
| 1.5 | 11 | Appropriate and timely access by helicopter | Delay in safe transfer of paediatric patients | 4 (Certain) | 2 (Moderate) | 8 (S) | Review current work practice and evaluate any issues with SJAA/Paediatric Trauma Service | Project Manager |

RISK REGISTER – WA TRAUMA SYSTEM AND SERVICES IMPLEMENTATION PLAN – STAGE 1

| Risk ID | Initiative No | Description Initiative | Description of Risk | Likelihood | Seriousness (consequences) | Risk level | Mitigation Actions | Responsible Officer |
|---------|---------------|--|---|--------------|----------------------------|------------|---|---|
| 1.6 | 12 | Assessment of staffing 24/7 ED ICU Neurosurgery and General Surgery | Potential for staffing levels to be inadequate to cover major trauma care | 3 (Moderate) | 1 (Minor) | 5 (M) | Review status with Director Trauma Service PMH Heads of Depts. PMH | State Trauma Director/Project Manager |
| 1.7 | 31 | Paediatric Major Trauma patients under going retrieval by helicopter will be met a medical team from SCGH and PTS | Lack of agreement over roles of both medical teams - delays in road transfer to Princess Margaret Hospital | 3 (Certain) | 3 (Major) | 9 (S) | Consult with Directors of Trauma Service SCGH and PMH with regard to protocols in place or in development | Project Manager/ Directors Adult & Paediatric Trauma Services, State Trauma Director |
| 1.8 | 13 | Children with major trauma will be triaged to the Paediatric Trauma Service while adolescents from the age of 14 will be triaged to Adult Trauma Service | Secondary transfer due to triage to wrong service by pre hospital personnel | 4 (Likely) | 2 (Moderate) | 8 (S) | Review and report on activity and response for adolescent major trauma - monitor issues | Project Manager/ State Trauma Director |
| 1.9 | 13 | Children with major trauma will be triaged to the Paediatric Trauma Service while adolescents from the age of 14 will be triaged to Adult Major Trauma Service | Lack of clinical confidence in managing adolescent major trauma cases in adult major trauma services | 4 (Likely) | 2 (Moderate) | 8 (S) | Review and document issues and develop short term strategies to address any training gaps | Project Manager State Trauma Director |
| 1.10 | 13 | Children with major trauma will be triaged to the Paediatric Trauma Service while adolescents from the age of 14 will be triaged to Adult Major Trauma Service | Inadequate services to meet all the needs of adolescent patients at major trauma services in the short term | 5 (Certain) | 2 (Minor) | 10 (H) | Identify demand. Develop short term processes, protocols to address immediate need | Project Manager State Trauma Director |

RISK REGISTER – WA TRAUMA SYSTEM AND SERVICES IMPLEMENTATION PLAN – STAGE 1

| Risk ID | Initiative No | Description Initiative | Description of Risk | Likelihood | Seriousness (consequences) | Risk level | Mitigation Actions | Responsible Officer |
|--|---------------|---|--|-------------|----------------------------|------------|--|--|
| Special Services in Trauma Services | | | | | | | | |
| 1.11 | 16 | Injured pregnant patients will be treated for trauma care as the primary response with secondary obstetric response – triaged to major trauma service | Variation in work practice between services receiving adult major trauma | 5 (Certain) | 2 (Moderate) | 10 (H) | Review current protocols between SCGH & KEMH | Project Manager State Trauma Director |
| 1.12 | 17 | Protocols will be put in place with transport providers, metropolitan & country hospitals to ensure pregnant women receive treatment at the most appropriate service | Variation in work practice between all providers and lack of consensus on protocols | 5 (Certain) | 2 (Moderate) | 10 (H) | Consult with stakeholders and service providers to align processes Share information on protocols between different providers | Project Manager State Trauma Director |
| Pre-Hospital Care & Transport | | | | | | | | |
| 1.13 | 27 | The current pre-hospital process for transport is maintained and monitored for a six month period after implementation of the Trauma System. A Pre-hospital triage system with supporting triage tool is developed with one year of implementation of the trauma system for Adult and Paediatric Trauma | Lack of clinical and transport provider's consensus on the reliability of triage tools. Delay in development of triage tool and subsequently Triage System | 5 (Certain) | 2 (Moderate) | 10 (H) | Consult with primary transport service provider Establish multidisciplinary group to develop triage tool or agree process | State Trauma Director Project Manager |

RISK REGISTER – WA TRAUMA SYSTEM AND SERVICES IMPLEMENTATION PLAN – STAGE 1

| Risk ID | Initiative No | Description Initiative | Description of Risk | Likelihood | Seriousness (consequences) | Risk level | Mitigation Actions | Responsible Officer |
|-------------------------------|---------------|---|---|-------------|----------------------------|------------|--|--|
| 1.14 | 35 | RFDS & SJA will ensure that there is an effective communication system and appropriate protocols in place to ensure a high level of coordination between their services | Lack of agreement on priority allocation of RFDS transfers leading to delays by road transport | 5 (Certain) | 2 (Moderate) | 10 (H) | Review current service providers' contracts. Liaise with service providers | State Trauma Director Project Manager |
| 1.15 | 37 | Primary & secondary retrieval of critically ill and injured patients in the metropolitan area will be reviewed with the aim of determining whether there is a need for a dedicated service and if so what model would be most appropriate | Lack of consensus regarding clinical coordination in proposed model for retrieval service between transport service providers | 4 (Likely) | 3 (Major) | 12 (H) | Continue consultation process through multidisciplinary review group Acute Care Network to achieve agreement | Clinical Leads Health Networks/ State Trauma Director |
| Education and Training | | | | | | | | |
| 1.16 | 49 | The Clinical Leads of the Injury & Trauma Health Network will investigate aligning the resources of the Trauma Care Education Unit to the Adult Major Trauma Service to support its state-wide education and training role | Lack of consensus with regard to location and funding of the Trauma Care Education Unit | 4 (Likely) | 2 (Moderate) | 10 (H) | Ensure Directors of Trauma Services are included in consultation | Clinical Leads Injury & Trauma Health Network |

RISK REGISTER – WA TRAUMA SYSTEM AND SERVICES IMPLEMENTATION PLAN – STAGE 1

| | | | | | | | | |
|------|---------|--|--|------------|-----------|--------|---|-----------------------|
| 1.17 | 50 & 51 | The Directors of the ATS and PTS are to develop clearly articulated approaches to ensuring that the workforce in services impacted on by the establishment of the Trauma System are provided with opportunities to maintain their major trauma care skills | Lack of consensus with regard to clinical rotations between different area health services and clinical rosters for adult trauma services Investigate capacity at Paediatric Trauma Service to support education & training | 4 (Likely) | 3 (Major) | 12 (H) | Engage and ensure Directors of Major Trauma Services and Clinical Heads of Departments Metropolitan Trauma Services are consulted with regard to clinical rosters for trauma services | State Trauma Director |
|------|---------|--|--|------------|-----------|--------|---|-----------------------|

Appendix 2

Quantitative Key Performance Indicators – Business Rules

The quantitative key performance indicators and targets will be reviewed annually and appropriate targets to improve quality of care will be negotiated as the WA Trauma System and Services is established and matures. The Key Performance Indicators will be increased as the trauma system is established.

| | |
|------------------------|---|
| Key Indicator 1 | Major trauma cases will be triaged directly to the major trauma services |
|------------------------|---|

Purpose: To monitor the effectiveness of hospital bypass and its impact on the reduction of time to definitive care for metropolitan major trauma cases.

Target: 80%

Inclusion Criteria:

All patients admitted to major and metropolitan trauma services as a result of injury or trauma characterised by the following clinical features

1. A fatal or potentially fatal outcomes
 2. ISS Score of ≥ 15
 3. Acutely disordered cardiovascular, respiratory or neurological function
 4. Require urgent surgery for intracranial, intrathoracic or intra-abdominal injury or have major pelvic or spinal injury
 5. Serious injuries to two or more body regions
 6. Require the patient's admission to an intensive care unit including the need for mechanical ventilation
- All cases transported to Royal Perth Hospital which meet the above characteristics of major trauma will be included in the defined period of study.
 - All cases transported to Sir Charles Gairdner Hospital which meet the above characteristics of major trauma will be included in the defined period of study with the following **exceptions**:-
 - Major Pelvic Injury
 - Major Spinal Injury
 - Major Burn Injury
 - All trauma cases transported via primary retrieval by transport providers including; transport by road ambulance and rotary and fixed wing primary retrievals will be included in the defined period of study

Exclusion Criteria:

All metropolitan major trauma cases meeting the above characteristics transported in the first instance to a non major trauma service due to unstable or life threatening clinical state and transferred to the major trauma service when stabilised.

Paediatric cases where the child is considered to be in an unstable clinical state.

Calculation or Rate:

Numerator: Total metropolitan major trauma cases admitted to the Major Trauma Services

Denominator: Total number of major trauma cases admitted to Metropolitan Trauma Services

Data Source: State Trauma Registry, Royal Perth Hospital, and the Tertiary Hospital Trauma Registries at Sir Charles Gairdner Hospital; Princess Margaret Hospital and Fremantle Hospital

| | |
|-----------------|--|
| Key Indicator 2 | The rate of metropolitan inter-hospital transfer of major trauma cases will reduce |
|-----------------|--|

Purpose: To monitor the effectiveness and impact on time to definitive care for metropolitan major trauma cases.

Target: 5% reduction from baseline commencing 2010 (baseline year 2009)

Inclusion Criteria:

All patients transported to metropolitan non metropolitan trauma services as a result of injury or trauma characterised by the following clinical features:-

1. A fatal or potentially fatal outcomes
2. ISS Score of ≥ 15
3. Acutely disordered cardiovascular, respiratory or neurological function
4. Require urgent surgery for intracranial, intrathoracic or intra-abdominal injury or have major pelvic or spinal injury
5. Serious injuries to two or more body regions
6. Require the patient's admission to an intensive care unit including the need for mechanical ventilation

All patients transported or admitted to metropolitan non major trauma services and then transferred to the major trauma services during the defined period of study.

Exclusion Criteria:

All metropolitan major trauma cases meeting the above characteristics transported in the first instance to a non major trauma service due to unstable or life threatening clinical state and transferred to the major trauma service when stabilised.

Paediatric cases where the child was considered to be in an unstable clinical state.

Calculation or Rate:

Numerator: Total number of metropolitan major trauma cases transferred to the Major Trauma Services from a non major trauma service

Denominator: Total number of metropolitan major trauma cases admitted to the major trauma services

Data Source: State Trauma Registry, Royal Perth Hospital, and the Tertiary Hospital Trauma Registries at Sir Charles Gairdner Hospital; Princess Margaret Hospital and Fremantle Hospital

| | |
|------------------------|---|
| Key Indicator 3 | The rate of admission and treatment of adult non major trauma cases at metropolitan and urban trauma centres |
|------------------------|---|

Purpose: To monitor the effectiveness and capacity of non major trauma services to provide trauma care for metropolitan non major trauma cases.

Target: 2% increase from baseline commencing 2010 (baseline year 2009)

Inclusion Criteria:

All patients admitted to a metropolitan non major trauma service as a result of injury and trauma during the defined period of study.

Exclusion Criteria:

All patients admitted to a metropolitan non major trauma service as a result of unstable clinical state and/or require stabilisation and who are later transferred to the major trauma service due to complex care needs.

Calculation or Rate:

Numerator: Total number of non major trauma cases admitted to a non major trauma service

Denominator: Total number of metropolitan non major trauma cases admitted to all trauma services in the metropolitan area

| | |
|------------------------|--|
| Key Indicator 4 | The rate of referral and admissions of adult non major trauma cases to the major trauma service |
|------------------------|--|

Purpose: To monitor the effectiveness and capacity of non major trauma services to provide trauma care for metropolitan non major trauma cases.

Target: 2% decrease from baseline commencing 2010 (baseline year 2009)

Inclusion Criteria:

All cases that present who are non major trauma cases as defined by the characteristics of major trauma to an Emergency Department of a non major trauma service and are then referred to the major trauma services within 72 hours during the defined period of study.

All cases that present who are non major trauma cases as defined by the characteristics of major trauma that are admitted to a metropolitan non major trauma service and then transferred or referred to the major trauma services during the defined period of study.

Exclusion Criteria:

All patients admitted to a metropolitan non major trauma service as a result of unstable clinical state and/or require stabilisation and who are later transferred to the major trauma service due to complex care needs. (This includes all paediatric cases that have complex needs or where a paediatric service is not available).

Calculation or Rate:

Numerator: Total number of non major trauma cases admitted to a major trauma service within 72 hours of a previous admission/presentation to a metropolitan non major trauma service

Denominator: Total number of metropolitan non major trauma cases admitted to all trauma services in the metropolitan area

Data Source: Hospital Morbidity Data System Department of Health

Appendix 3

WA Trauma System and Services Initiatives – Overview by Stages and Responsible Agencies

| Initiative Number | Description | Implementation Stage | Responsible Agency |
|-------------------|--|----------------------|--|
| 1 | A trauma system will be developed, encompassing the continuum of care from injury detection and control through to definitive care and rehabilitation incorporating all hospitals & health care facilities in Western Australia. The goal of the trauma system will be to deliver each to each patient to the trauma care facility which has the right resources to match his/her needs, in the shortest possible time | Stage 3 | State Health Executive Forum Area Health Services |
| | Role delineation and hospital designation | | |
| 2 | Trauma Care will be delivered within a tiered system of hospitals and health care facilities, each of which will be allotted a designated role based upon its capacity to provide levels of care that match patient needs | Stage 3 | State Health Executive Forum Area Health Services |
| 3 | The system of designation of hospitals and health care facilities that have been recommended by the TWG and will be implemented in WA as is follows - Major Trauma Services; Metropolitan Trauma Services; Urban Trauma Services: Regional Trauma Services; Rural Trauma Services: Remote Trauma Services | Stages 1, 2 & 3 | State Health Executive Forum Area Health Services |
| | The WA State Trauma Service | | |
| 4 | There will be single Major Trauma Service for adults with Royal Perth Hospital taking this role from late 2007. The Fiona Stanley Hospital will take this role after 2012. Amendment by ORC July 2009: There will be a major trauma service for adults at Royal Perth Hospital from late 2007. The Fiona Stanley Hospital will provide adult major trauma services when operational in 2014. | Stage 1 In place | South Metropolitan Area Health Service |
| 5 | There will be a single Major Trauma Service for Children at Princess Margaret Hospital | Stage 1 | Child & Adolescent Health Service |
| 6 | Sir Charles Gairdner and Fremantle Hospital will be designated Metropolitan Trauma Services: Amendment by SHEF July 2008 , Sir Charles Gairdner Hospital will also receive adult major trauma patients with certain injury type exceptions. | Stage 1 In place | North & South Metropolitan Area Health Services |
| 7 | Rockingham Health Service,, Armadale/Kelmscott, Swan/Kalamunda & Joondalup and Peel Health Services will be designated Urban Trauma Centres | Stages 2 & 3 | North and South Metropolitan Area Health Services |
| 8 | Kalgoorlie, Albany, Bunbury, Geraldton, Port Hedland and Broome Hospitals will be designated as Regional Trauma Services | Stages 2 & 3 | WA Country Health Service |
| 9 | Appointment of the following positions will be completed by 2007: WA State Trauma Director, Directors Major Trauma Services; Metropolitan Trauma Services, Trauma Coordinators Urban and Regional Trauma Centres | Stages 1, 2 & 3 | Area Health Services |

WA Trauma System and Services Initiatives – Overview by Stages and Responsible Agencies (contd)

| Initiative Number | Description | Implementation Stage | Responsible Agency |
|-------------------|--|----------------------|---|
| 10 | The Trauma System will be evaluated by 2011 to determine its effectiveness and in particular, whether there is a need for a second Major Trauma Service for adults Amendment ORC July 2009: A second major trauma service will be provided from FSH when operational in 2014. | Stages 2 & 3 | WA State Trauma Service |
| 11 | Critical Infrastructure at Princess Margaret Hospital need to be re-assessed to ensure there is ready access to emergency services at all hours including: <ul style="list-style-type: none"> • Ambulance access to the emergency department • An adequate level of resuscitation services • Appropriate and timely access for patients brought by helicopter • Access to 24 hour Blood Transfusion Service • Availability of 24 Hour Anaesthetic Services • Access to 24 hour Laboratory and Imaging Services | Stage 1 & 2 | Child & Adolescent Health Service |
| 12 | Princess Margaret will need to assess whether: <ul style="list-style-type: none"> • Staffing of its critical clinical areas including the emergency department, intensive care unit, neurosurgical and general surgical services is sufficient to ensure that there is access to these services for paediatric major trauma victims 24 hours a day • After hours provision of biochemistry, haematology, imaging and transfusion services is appropriate for the timely provision of these services | Stage 1 | Child & Adolescent Health Service |
| 13 | Children with major trauma up to and including 13 years of age will be triaged to the Paediatric Major Trauma Service, while adolescents from the age 14 will be triaged to the Adult Major Trauma Service. Amendment by SHEF July 2008, Sir Charles Gairdner Hospital will also receive major trauma patients with certain injury type exceptions | Stage 1 | St John Ambulance |
| 14 | The Adult and Paediatric Major Trauma Services will develop processes for the conjoint management of adolescents to ensure that the special needs of adolescents, both for acute care and rehabilitation Amendment by SHEF July 2008, Sir Charles Gairdner Hospital will also receive major trauma patients with certain injury type exceptions | Stage 2 & 3 | North and South Area Health Services and Child & Adolescent Health Services |
| 15 | A clear and consistent policy for the transfer of trauma patients from the north of WA to Darwin rather than Perth for definitive care will be negotiated with the Northern Territory Department of Health and Community Services | In place | Office of Chief Medical Officer WA Country Health Service |
| 16 | As the response to the injury pregnant patient must be a comprehensive trauma response with a prompt and secondary pregnancy response, pregnant women with major injury will be transported directly to the adult major trauma services where initial assessment and resuscitation will be undertaken with obstetric and neonatal input from King Edward Memorial Hospital Amendment by SHEF July 2008, Sir Charles Gairdner Hospital will also receive | | |