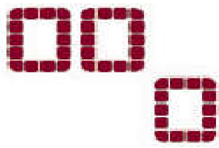
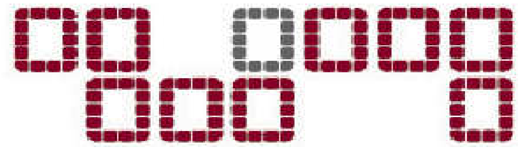
Injury & Trauma Workshop Report

November 2006

Prepared by Clinical Network Support Unit

Government of Western Australia
Department of Health





Executive Summary

The Injury & Trauma Clinical Network held a major stakeholders meeting in September 2006. The aim of the workshop was to introduce the Clinical Leads of the network to the stakeholders and to gather information from the stakeholders on what the major issues are for injury and trauma.

The outcome of the workshop was to characterise the system issues from a focussed workshop approach, which could characterise the areas for priority in setting the work agenda for the network, and inform the planning process for the Network Executive Advisory Group.

Themes from the workshop highlighted the following areas where most opportunity lies to improve health service delivery and care for people affected by injury and trauma as follows:

- Coordination and integration of services
- Workforce training and skills development
- Research, data analysis to inform policy and effective evaluation of injury prevention programs and outcomes
- Injury Prevention Programs informed by best evidence.

The stakeholders were also asked to provide their recommendations and suggestions regarding the membership of an appropriate Network Executive Advisory Group, which could best represent the interests of the broader network. Participants validated the recommendations of the 2005 workshop and the outcome from this request is discussed on Page 8 of this report.

Recommendations

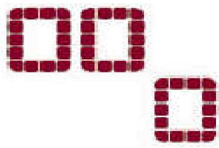
It is recommended that:

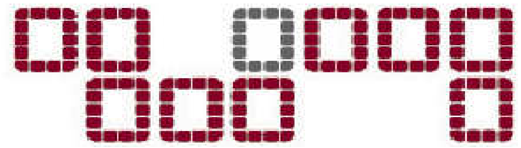
1. The Clinical Leads and the Executive Director of Health Policy and Clinical Reform progress establishment of the Network Executive Advisory Group based on the suggested membership from the stakeholders.

2. The Report of the workshop is tabled with the Network Executive Advisory Group and distributed to workshop participants for information.

3. The Network Executive Advisory Group progresses planning to address the major issues as identified by the workshop.

4. The Network Executive Advisory Group progresses short-term time limited working groups to develop policy and strategy to address the opportunities identified by the workshop.





Introduction

Clinical networking was recommended by the Health Reform Implementation Taskforce as a means of providing "…*a new focus across all clinical disciplines toward prevention of illness and injury and maintenance of health.*"[1]

Based on principles of cooperation and partnerships between and key enabling stakeholders, networking aims to improve the delivery of health services through coordination and integration of health and health related services. Further detail on the clinical networks can be found in the WA "*Clinical Networks Framework*".[2]

The establishment of the Injury & Trauma Clinical Network was commenced in August with the appointment of the Clinical Leads Professor Fiona Wood and Mr Sudhakar Rao. The Health Policy and Clinical Reform Division held a half-day workshop on 15 September 2006. The purpose of the workshop was to provide the opportunity for clinicians and major stakeholders to join together to gather information to facilitate the development of the network.

Report of the Workshop

This report is a summary of the workshop and contains outcomes and information from the working groups.

Workshop approach and format

There was willingness to engage and understand how the stakeholders could work together in developing the Injury Trauma Clinical Network. Approximately 80 participants attended the workshop.

Dr Simon Towler opened the workshop and welcomed participants to the meeting. He then presented an overview of clinical networks in Western Australia and information gathered at the first workshop held in November. Dr Towler then introduced the Clinical Leads to the stakeholders.

Participants then broke into working groups of eight tables with approximately 10 participants working around an allocated scenario. Participants were asked to consider three focus questions with regard the situation provided to them. Table 1 below provides an overview of the scenario situation provided for each table.

[1] [1]Health Reform Implementation Taskforce (25 May 2005). *Health System Role Delineation. Final Report to Staff*. Department of Health Western Australia.
[2] "*Clinical Networks Framework*. www.clinicalnetworks.health.wa.gov.au/publications).

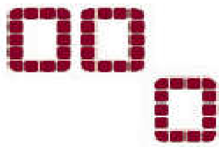
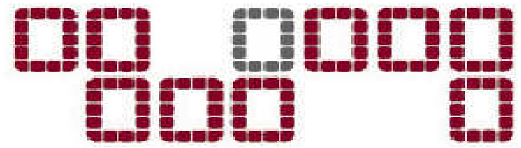



Table 1. Overview of Scenarios

Scenario	Description
Scenario 1	Metropolitan MVA car versus truck – 5 mins from secondary hospital – elderly occupants car seriously injured
Scenario 2	Country town 150kms from Perth – elderly male – fall while leaving pub – GP unable to perform required interventions – RFDS unable to respond
Scenario 3	Upcoming State Elections – Powerful motorcycle lobby group pushes for repeal of compulsory helmet laws. Note the focus questions for this scenario were: 1. How should the Injury & Trauma Network respond? 2. What local data and evidence based argument can we turn to? 3. What are the barriers to the I & T Network influencing this situation
Scenario 4	The Falls Action Group needs to implement and monitor the success of a "falls prevention program" involving prophylactic use of a new anti-dementia medication. The focus questions for this scenario were: 1. How can the target population be identified for the study? 2. How can the prevention program be monitored? 3. How do we evaluate the success of the intervention?
Scenario 5	28-yr-old MBA Rural town, motorbike versus kangaroo – no crash helmet, high blood alcohol level, permanent disability, self employed young married man with family and wife pregnant
Scenario 6	Multi casualty disaster, major blast injuries and burns, local community casualties from toxic fume poisoning
Scenario 7	12-yr-old child injured on school playground equipment, serious head injury, taken to secondary hospital, child not intubated and not transferred to tertiary care for 3-4 hours
Scenario 8	Domestic violence incident, GP declined to see victim due to circumstances of cause of injury – reports to tertiary level Emergency Department. States this has happened before

For all groups apart from Scenarios 3 and 4, the three focus questions asked were:

1. Identify and track the flow events that will occur?
2. Discuss what are the best aspects of care and services available.
3. What are the barriers to service or services in this situation?

At the end of the concurrent session, each group was asked to prioritise their top five (5) barriers and provide a 5-minute feedback session to the meeting.

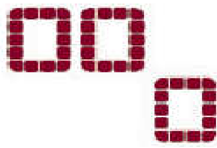
Workshop Outcomes

Appendix 1 provides the ideas and suggestions from the eight working groups to Questions 1 and 2.

The consensus responses to Question 3 provided the opportunity to assign and collate common themes to the barriers to service. The responses provide information to inform planning for the Injury & Trauma Network to prioritise immediate issues at the system level.

Analysis of data - barriers to service

Data from Question 3 has been collated and is presented in detail below.



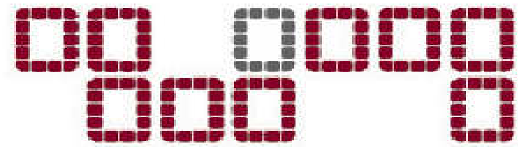
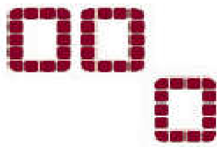


Table 2. Top 5 Barriers to Service/s for clinical scenarios

Scenario	Barrier	Category/Theme	As listed
1 Clinical	Lack of senior decision making skills	Workforce Education, Skills, Experience	1
1	Medical/Nursing staff availability/required for transfer of patient to tertiary hospital	Staff Resources	2
1	Availability of skilled ambulance officers	Workforce Education, Skills, Experience	3
1	Uneven distribution of services across metro area	Access to Services	4
1	Education/maintenance skills	Workforce Education, Skills, Experience	5
2 Clinical	Rural service issues: funding, hours of service, voluntary ambulance,	Coordination & Integration of Services	1
2	Lack of skills/knowledge /experience/training	Workforce Education, Skills, Experience	2
2	Increased population vs. resources+B12	Demand Capacity Mismatch	3
2	Poor trauma communication processes, lack of trauma system, processes etc. for accurate documentation and data collection	Data Analysis & Research	4
2	Inadequate follow up management	Delivery of Care	5
5 Clinical	Lack of robust, integrated and comprehensive data system to inform evidence based injury prevention	Data Analysis & Research	1
5	System wide co-ordination	Coordination & Integration of Services	3
5	Workforce skills, training	Workforce Education, Skills, Experience	4
5	Funding sources	Funding	5
6 Clinical	Trained staff in disaster and clinical skills	Workforce Education, Skills, Experience	1
6	Maintaining of continuum of care, staff & resources	Delivery of Care	2
6	Not "core" business (factory explosion) not experienced/skilled	Workforce Education, Skills, Experience	3
6	Communication between agencies & across sectors	Coordination & Integration of Services	4
6	GP involvement/ ID and use of other groups	Coordination & Integration of Services	5
7 Clinical	Standards for playground equipment	Injury Prevention	1
7	Lack of triage guidelines/clarity	Delivery of Care	2
7	Education - Community	Injury Prevention	3
7	Rehabilitation - resources, staffing, facilities	Delivery of Care	4
7	ED trauma management/education	Workforce Education, Skills, Experience	5
8 Clinical	New ways of managing GP/Community/Primary care services	Coordination & Integration of Services	1
8	Best practice clinical pathways across health sector	Delivery of Care	2
8	Follow up - integrated approach	Delivery of Care	3
8	Prevention approaches/Community Initiatives	Injury Prevention	4
8	Lack of evaluation of existing services	Coordination & Integration of Services	5



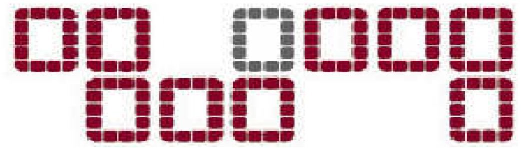


Figure 1 below shows the top 5 barriers as agreed by participants for each of the clinical scenarios by categories. Data was categorised by common theme and order of frequency was allocated by the number of times tables listed this issue as a barrier to better service or care. It should be noted 6 of the 8 tables were posed focus questions based upon a clinical scenario. This clinical bias identified issues, which are relevant to the clinical care delivery setting and could have contributed to workforce training and skills occurring most frequently as a barrier to service in the clinical area at the operational level.

Figure 1. Top Barriers by most common themes by order of frequency – clinical scenarios

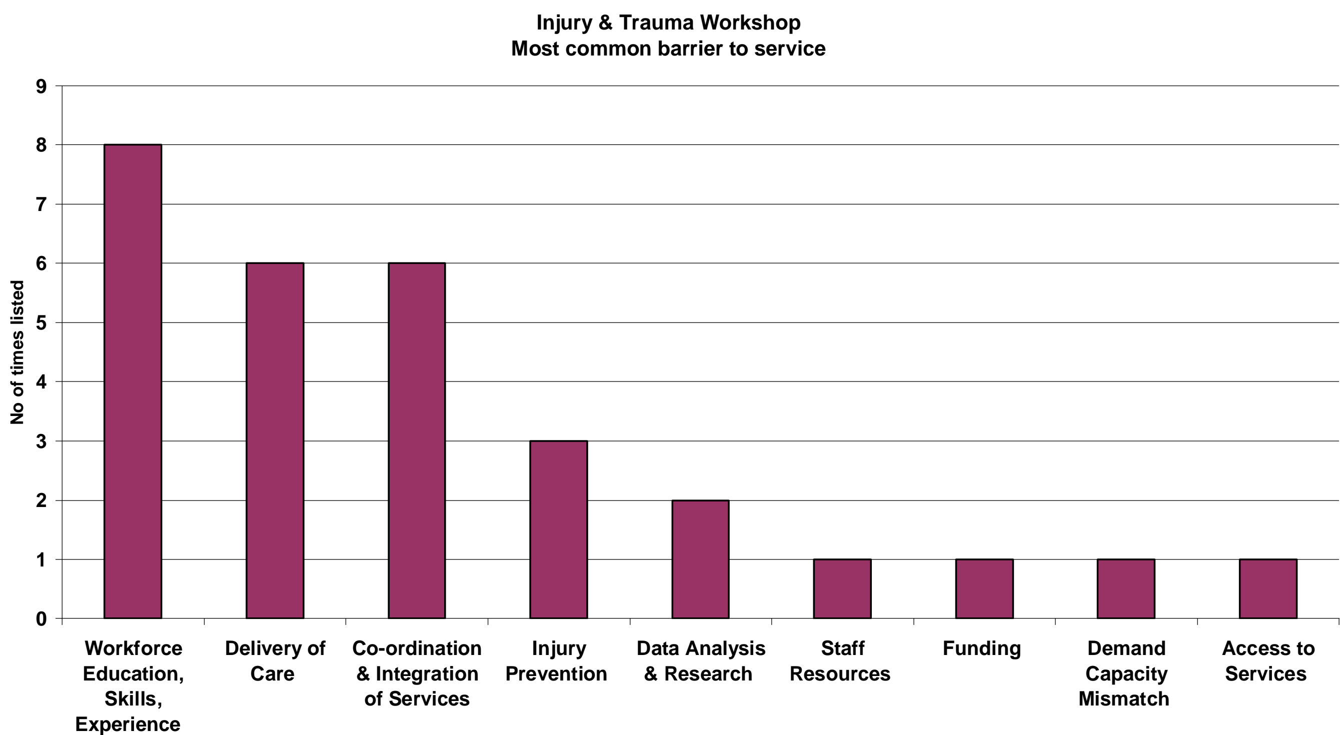


Table 3 (Page 7) below outlines the barrier quoted as the number 1 barrier for each of the clinical scenarios agreed by participants at each table. Whilst data shown is by most common issue listed, workforce skills and training was most frequently listed as shown in Figure 1. When the barriers listed as Number 1 are compared from each table, the common themes are workforce training and skills, coordination and integration of services, research and data analysis and injury prevention. When combined with the Number 1 barriers from Scenarios 3 & 4, which were non clinical scenarios, the major themes are as follows:

- Coordination and integration of services (3 times as Number 1).
- Workforce training and skills (2 times as Number 1).
- Research and Data (2 times as Number 1).
- Injury Prevention (once as Number 1).

While these were recurring themes across all the tables, it is evident that participants felt that all of these issues are prominent as barriers to better care and services for people affected by injury and trauma.

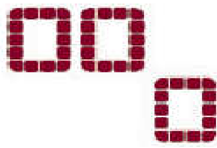
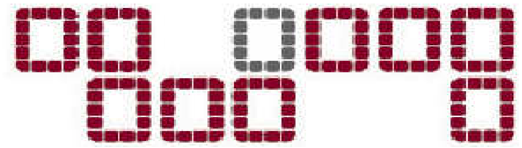



Table 3. No 1 barrier to service selected for the clinical Scenarios 1, 2, 5-8

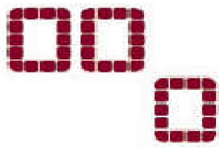
Scenario	Scenario overview	Barrier	Category/Theme	1st Option
1	MVA – metro secondary hospital	Lack of senior decision making skills	Workforce Education, Skills, Experience	1
2	Fall – rural sector – lack of access to appropriate support	Rural service issues: Funding, hours of service, voluntary ambulance	Coordination & Integration of Services	1
5	MBA – rural sector – permanent disability, risk behaviours, no helmet + alcohol	Lack of robust, integrated and comprehensive data system to inform evidence based injury prevention	Data Analysis & Research	1
6	Multi casualty disaster – metro area	Trained staff in disaster and clinical	Workforce Education, Skills, Experience	1
7	Child fall – metro area secondary hospital	Standards for playground equipment	Injury Prevention	1
8	Domestic violence injury – denied access to service in the community	New ways of managing GP/Community/Primary care services	Coordination & Integration of Services	1

Scenarios 3 and 4

Scenario 3 was slightly different as the group was asked to consider the barriers to the Injury & Trauma Health Network influencing a public interest situation. Table 4 below outlines the top five barriers as agreed by the participants for Scenario 3. Table 5 (Page 8) below outlines the top five barriers for Scenario 4 which was a situation describing monitoring and evaluation of an implemented programme.

Table 4. Top 5 barriers for the network in influencing scenario 3

Scenario 3: Upcoming State Elections – Powerful motorcycle lobby group pushes for repeal of compulsory helmet laws		
Barriers	**Category/Theme**	**Priority**
Data Access/Analysis	Data Analysis & Research	1
Communication Strategy - media, social marketing	Injury Prevention	2
Develop clear strategic direction for network - health promotion, injury prevention	Injury Prevention	3
Independence from HDWA/Govt, Ability to influence policy	Organisational Structure	4
Engage at risk populations (rural)	Injury Prevention	5



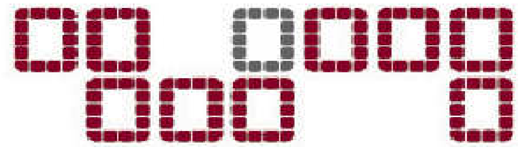


Table 5. Top 5 barriers to services for Scenario 4.

Scenario – The Falls Action Group needs to implement and monitor the success of a falls prevention program involving the use of a prophylactic medication		
Barriers	**Category/Theme**	**Priority**
Lack of integration of services across continuum of care	Coordination & Integration of Services	1
Lack of integration and consensus of source of data sources	Data Analysis & Research	2
Access to services after risk is identified	Education	3
Education for health professionals & community awareness	Injury Prevention	4
Lack of (evidence-based) policy implementation due to financial and workforce resources.	Policy Development	5

Conclusions

Representatives attended the workshop from across the health sector from health professional to consumers. Appendix 1 outlines a wealth of data provided by participants for Questions 1 and 2 related to the scenarios.

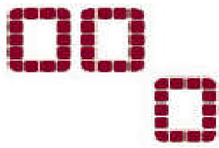
This data has not been collated but is provided for your information and will be retained to characterise issues around existing services and examples of what is working well in the area of injury and trauma.

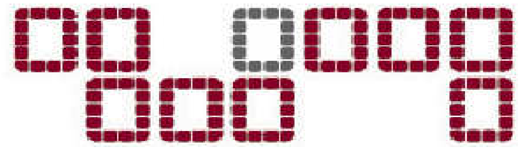
Collated data from Question 3 showed that the major themes developed from the issues are related to coordination and integration of service, workforce training and skills development, and research and data analysis and injury prevention.

Recommendations from stakeholders regarding a network executive advisory group

Participants were asked to validate the nominated areas of expertise and organisations that could provide members to represent the broader interest of the network. The following list of organisations represents the commonly listed representation and validates the same recommendations at the first Injury & Trauma Workshop. Given this mandate, the Clinical Leads will progress establishing the Injury & Trauma Clinical Network with the following representation:

- The clinical specialities of Emergency Medicine, Burns, Trauma Surgery and General Surgery
- Trauma Education – Management and Treatment
- Injury Control Council of WA





Office of Road Safety
Mental Health
WA Drug and Alcohol Office
WorkSafe
Occupational Health & Safety
University Sector and Injury Research
Disaster Preparedness and Management
Royal Flying Doctor Service
St John Ambulance – Pre Hospital Care
General Practice WAGP Network
Consumer – Headwest WA
Non government sector organisations
Aboriginal & Torres Strait Islander Representative.

Recommendations

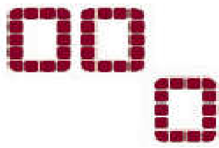
It is recommended that:

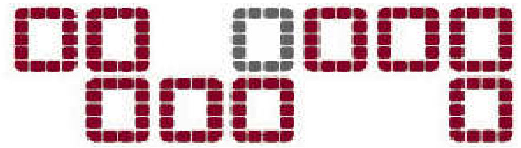
1. The Clinical Leads and the Executive Director of Health Policy and Clinical Reform progress establishment of the Network Executive Advisory Group based on the suggested membership from the stakeholders.

2. The report of the workshop will be tabled with the Network Executive Advisory Group once it is established.

3. The Network Executive Advisory Group progresses planning to address the major issues as identified by the workshop.

4. The Network Executive Advisory Group progresses short-term time-limited workings groups to develop policy and strategy to address the opportunities identified by the workshop.





Appendix 1
Data from Participants Worksheets by Scenario and Table

Scenario 1: TABLE 1

MVA - Car vs. Truck at 0020 hours
Location: 5 minutes from secondary hospital; 30 minutes from RPH
2 car occupants seriously injured

Male	Female
68 years	65 years
GCS 10,	GCS 14
Pulse 120	Pulse 94
BP 80 /	BP 130/75

Male - taken to nearest ED, Intubated. BP 70/-; Left Tension Pneumothorax treated with ICC. Still hypotensive. No surgeons available. This patient did not survive his injuries

Scenario 1/Q1: Identify and track the flow of events that will occur?

- Alert ambulance
- Depending on night, arrival time of SJA could be up to 30 min.
- Secure scene
- Extrication requirements – Fire Brigade may be required
- SJA call back up? Professional vs. volunteer officers
- Assess scene/requirements
  - IV insertion
  - Advanced airway
  - Swoop and scoop/vs. stay and play
- Decision on destination
- Ring ahead to facility
- Facility activates trauma – Priority 1
  - assemble persons/equipment
- Institute care – medical/nursing/orderlies + anaesthetist on call
- Institute emergency care – ETT/ICC
- Clinical decision to transfer
- SJA transfer – either call back or they had stayed to assist

Scenario 1/Q2: Discuss what are the best aspects of care and services available?

SJA:

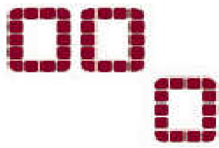
- Single service
- Enthusiasm of paramedics
- Strong educational support
  - ALS
  - Crit care
- Strong guidelines/agreed approach
- Deliver with minimal financial support

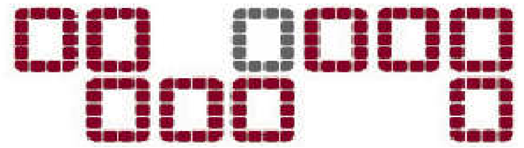
Secondary Hospital:

- Staff sufficiently skilled to initiate primary response
- Good road system
- Identification of need for transfer
- Agreed response/trauma team

Tertiary Hospital

- Agreed response/trauma team
- Definitive services
- Appropriately skilled staff available / on-call
- Medical management universal





Scenario 1/Q3: What are the barriers to service (s)?

SJA

- **Lack of senior decision-making skills (1)**
- **Medical/nursing staff required for secondary hospital transfers therefore taking staff away from hospital (2)**
- **Skilled staff ambulance plus officers not available (3)**
- **Uneven distribution of services for Perth metro area (4)**
- **Education/maintenance skills (5)**
- Lack of secondary hospital medical retrieval
- Not allowed to bypass secondary hospitals

Secondary Hospitals

- Surgical skills/availability
- Retention of staff

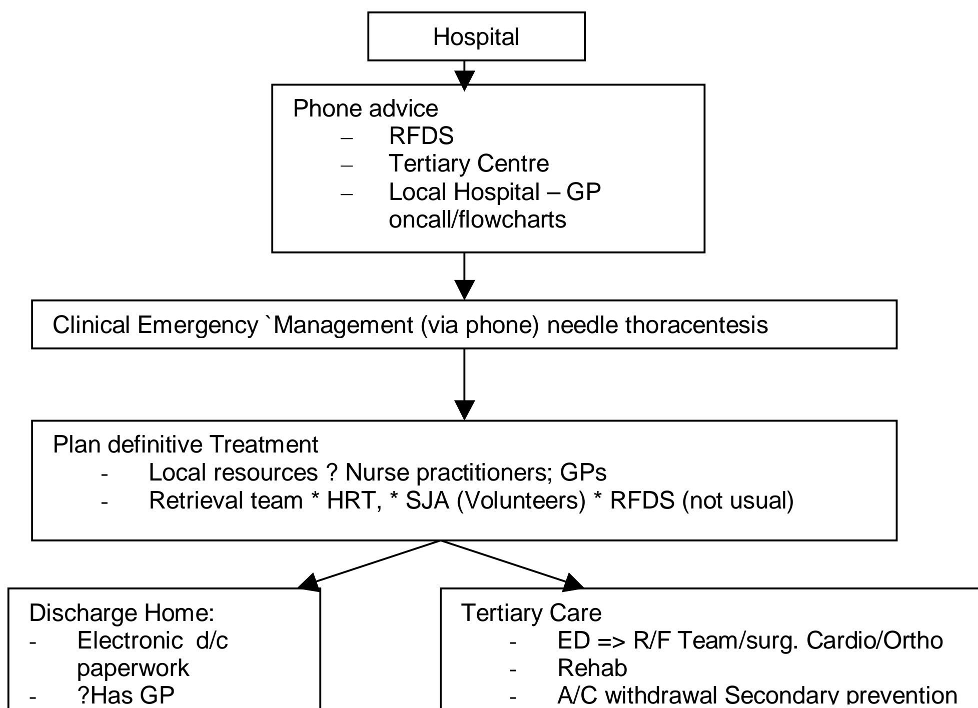
Tertiary Hospitals

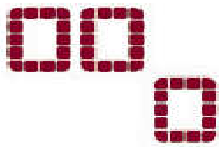
- Retention of staff
- Lack ICU beds/staff
- 24hr consultant on-site availability
- Lack of centralisation of services

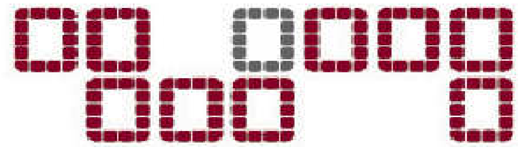
Scenario 2: TABLE 2

Country town 150 kms from Perth
65-year-old male
Fall from standing while leaving pub at 9 p.m. on a weekend
Fell and hit right side of chest
Taken to local hospital (regional centre)
Short of breath, BP dropping 90/60, Rapid shallow breathing
Chest X-Ray shows right tension pneumothorax developing
GP unable to perform required interventions
RFDS unable to attend for 3 hours

Scenario 2/Q1: Identify and track the flow of events that will occur?







Scenario 2/Q2: Discuss what are the best aspects of care and services available?

Pre-hospital:
- Private
- Community goodwill

Local hospital
- Staff
- Facilities
- Line of communication
  - RFDS/Tertiary

Tertiary/ED
- Trauma teams
- Resources on tap
- Staff
- Equipment
- Not 24/7 SMO cover plus other resources
- Communication

Ward
- Communication

Post Discharge
- RV falls risk

Scenario 2/Q3: What are the barriers to service (s)?

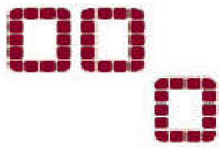
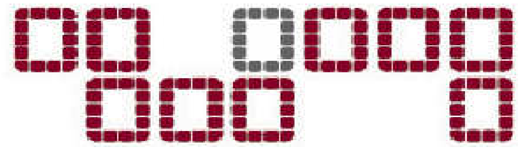
1) Local Level:
- Skill/knowledge deficit
- Poor orientation
- State Commonwealth Divide/Private
- Funded by local services
- Discrepancy of 24/7 services
- No obligation to provide hospital services
- SJA voluntary ambulances => Discrepancies of training/education & recruitment issues

2)
- Lack of experience/Skill/Knowledge/Exposure = training

3)
- Gap of retrieval services >250km radius
- RFDS overload of services
  - lack of resources
- Increase population vs. resources (Pop Boom)

4)
- Communications
  - Familiarity of local needs/culture
  - No central phone number/system
- No Trauma System
- Data collection system very poor
  - Documentation
  - Education clinicians about data

5)
- Inadequate follow-up/Management to services

Scenario 3: TABLE 3

Upcoming state elections
Powerful motorcycle lobby group pushes for change from compulsory helmet law to voluntary helmet law.
How should the Injury & Trauma Network respond?
What local data and evidence based argument can we turn to?

Scenario 3/1: How should the Injury & Trauma Network respond?

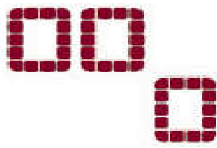
- Evidence based approach
  - Review local data (trauma registry)
  - Review the literature
  - Do we have any existing position?
- Form a position/New {Probably opposed based on evidence) target their argument
- Communicate position
  - NGO's – exploit the fuzzy boundary }
  - Chief Medical Officer }Talking Heads
- Advocacy Role - Strategy of response

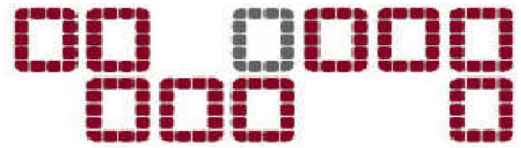
Scenario 3/2: What local data and evidence based argument can we turn to?

- Linkage Project
  - ✓ Trauma Reg
  - ✓ Police data
  - ✓ ED data
  - ✓ Regional data
  - ✓ Literature
  - ✓ Interstate data (eg Monash)
  - ✓ Coronial data
  - ✓ International data (MSU)
  - ✓ Ambulance data
  - ✓ Main roads
- Explore data – sources from biker associations

Scenario 3/Q3:What are the barriers for the Injury & Trauma Network in influencing this situation?

- **Data Access/Analysis (1)**
- **Communication Strategy – media, social marketing (2)**
- **Develop clear strategic direction for network – health promotion, injury prevention (3)**
- **Independence from HDWA/Govt, Ability to influence policy (4)**
- **Engage at risk populations (Rural) (5)**
- Nature of WA: centralisation v geography
- Credibility/independence/perceived expertise of the network
- Champions go stale
- Advocacy is difficult from within a govt agency
- Difficult to be sensible and sexy at the same time
- Fear of being targeted as an individual
- Timely response within govt network
- Timely access to data variable/+ resource dependant
- Timely function of network ?autocratic or consultative?





Scenario 4: TABLE 4

The Falls Action Group needs to implement and monitor the success of a "falls prevention programme" involving the prophylactic use of new anti-dementia medication.

Based on current systems and databases
A) How can the target population be identified for the study?
B) How can the prevention programme be monitored?
C) How do we evaluate the success of the intervention?

A) How can the target population be identified for the study?

- Hospital Morbidity Data (Diag Codes, E Codes)
- SJA Clinical data – rural + metro
- Trauma registries – RPH, SCGH, PMH, FH
- RFDS Data
- EDIS (Metro Eds)
- Death Register
- AIMS (Incident Clinical Reporting)
- Population survey of prevalence
- PBS Data – use of medication
- Cohort Studies – longitudinal
- "At Risk" group – age, (65+), >3 Meds previous hx of fall, Male >80 at GP/Aged care services/Falls clinics HACC Agencies
- Research study design ?RCT? Before/after cohort

B) How can the prevention programme be monitored?
C) How do we evaluate the success of the intervention?

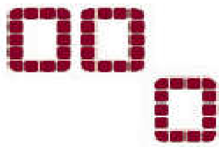
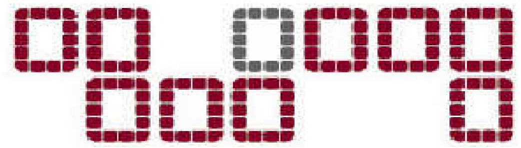
- Monitoring of prevention program and evaluation
- Injury severity score and type
- Fear of falling
- Functional outcome => hospital D/C destination.
- Frequency of falls
- Hospital LOS
- Hospital/ED presentation Rates
- Pts satisfaction plus carer
- Drug side effects/actions
- Maintenance of activity

Scenario 4/Q1: Identify and track the flow of events that will occur?

- Existing data sources
- Existing clinical knowledge
- Existing literature/research/reports

Scenario 4/Q2: Discuss what are the best aspects of care and services available?

- Continuum of care – coordination of all levels of care (when/if it existed)
  - Prevention
  - First aid
  - Pre-hospital
  - Acute care
  - Rehabilitation
  - Outcomes

- Care Co-ordinators – 24/7
  - Inter-disciplinary (senior clinicians)
  - Screen for “at risk” (comprehensive assessment) => refer as required plus education
- Transition of care for older people
- Injury prevention
  - Stay on your feet for “healthy aging”

Scenario 4/Q3: What are the barriers to service (s)?

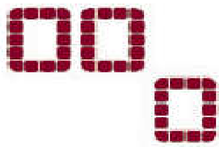
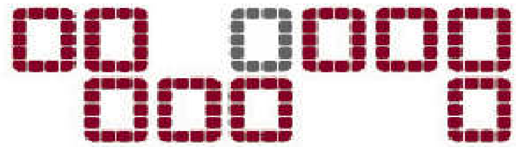
- **Lack of integration of services across continuum of care (/sectors) (1)**
- **Lack of integration (+consensus definition of data sources (2)**
- **Access to services after risk is identified (3)**
- **Education for health professionals + community awareness (4)**
- **Lack of (evidence-based) policy implementation due to financial and workforce resources. (5)**
- Need coordination across all levels of care
  - Govt – local, State, Commonwealth funding
- Working in “silos”
  - Professional groups
  - Settings (primary hospital care vs. tertiary hospital care)
  - Lack of linkages Prevention ⇔ Rehab
  - Rural: metro
  - Acute ⇔ GP
  - $$$$$
- Lack of integrated data
  - Accurate and validated and consensus definition
  - Under reporting of falls
  - Lack of policy implementation
- Workforce time
- Language/culture barriers
- Transport services for elderly
  - Access to services – referral bias (timely)
  - Accurate assessment and referral
- Integration of services => appropriate referral
- Population focus required

Scenario 5: TABLE 5

28-year-old male (country resident)
MBA at Narrogin
No crash helmet
Motorbike vs. kangaroo
High blood alcohol level
Injuries: Ruptured spleen (small laceration); Left Brachial Plexus injury; Left Tibial plateau fracture, self employed, can no longer work in his trade due to his injury
Social History: 2 children, Wife pregnant, Fitter and turner, Smokes 20 cig per day, 2 cones marijuana per day, Moderate drinker

Scenario 5/Q1: Identify and track the flow of events that will occur?

- Belief – 6” and bullet proof?
- ? Safety messages (impact?)
- Education – not working
- Tolerance of society to this behaviour (etoh & speed)

- "Will I get caught?" … Those beliefs (Y/N)
- Influence behaviour (Helmet, speed, etoh)
- 1st Responder: Delayed(?) knowledge Experience (?)
- Phone:? CDMA/Access/? 000 call in => volunteers sent: delay 20'+(rural area) => Narrogin (GP + nurse)
- ?ABDO concern (ED Levels/skills? Of those staff)
- Fractured Rural services - ?
- Communication/Co-ordination – Source of consult
  - ?TRAWA Unit Perth
- Transport – Where?/How? "Staging Post"
- RFDS – priorities => Jandakot (Standard Process – No)
- Jandakot => Where?
- Police report => Main Roads
- Multiple teams managing medical presentations (?)
- Plexus injury: life changing: not structured management/protocol (across the board)
  - (50-60 plexus injuries per year in WA – but no teams or structured network)
  - (Neurosurgery vs. plastics vs. ortho)
- Social Support – Social work, clinical psych retaining etc

Scenario 5/Q2: Discuss what are the best aspects of care and services available?

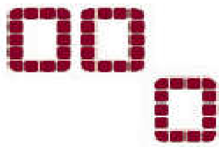
- Retrieval: can be very good or not
- ED: Ax, Intervention etc
- Individual elements will most likely be very good (ED, Ambulance, Surgery Rehab etc)
- Pockets of good data (Peter Spri database – unique to Perth – Multiple sources feeding into this – tracking +++ Trauma Registry Database)
- Follow up – (Good or bad)
- Rural Follow up (PAYS Scheme => Patient Assistance Travel Scheme)
- Do know who to prevent this (accident) happening
- Multi disc team works well (would have more soc support like AHI)
- Have good data – need to utilise these better/use them

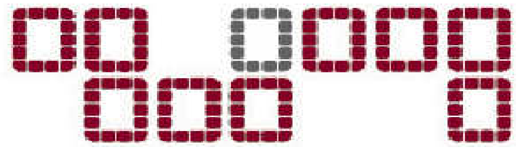
Scenario 5/Q2: Table 5, Continued.

- ED Care of Trauma patients
- Initiatives in place of what we do know
- Volunteers (in Narrogin) should be paramedics
- Physio sound knowledge of appropriate referrals in ID (initial contact)
- EBP approach to in regard to Road Safety and etoh (Prevention)
- ED – staffing (consultants etc) influence outcome => resources after initial appointment
- Patient outcomes with catastrophic injury better with multi disciplinary team
- Loose ends tie them up – multi disciplinary

Scenario 5/Q3: What are the barriers to service (s)?

- **Robust and integrated data and prevention program – non fuzzy, comprehensive and evidence based (1 & 2)**
- **System wide coordination (3)**
- **Workforce – skills, training, place – consistency/access (4)**
- **Funding (5)**
  - **Sources – State vs. Commonwealth**
  - **Impact on Policy**
- **Social Outcomes**
- Are we giving the "correct" public health messages?
- Integration of those messages
- System-wide commitment and agreement





- Resources – pull tog/management support "What will make a difference" Infrastructure often already there
- Linkage between health messages? (does one issue learn from others?)
- Lack of integration of legislation
- Brach. Plexus: not seen as isolated diagnostic entity and consequent specialisation paucity
- Early appropriate intervention (all areas – medical, social, allied health etc)
- Inexact identification of specific injuries/pathologies (eg Plexus lesion – many permutations of a plexus lesion)
- Workforce barrier – right skills (right place, right time)
- Vocational Outcome (Disability pension for life if not retrained)
- Vocational Rehabilitation – currently business of Commonwealth (not state)
- Interagency issues
- Support/co-ordination of rural medical practitioners
- Retrieval/Co-ordination etc
- Metro
  - Referral for surgery slower in metro c/w, some (larger) country centres
  - Junior medical officers/experience etc
  - VMO – not available
  - No interest in trauma
  - Knowledge of the "right" person/place to contact

Scenario 6: TABLE 6

An explosion occurs at a paint factory in the metropolitan area
4 casualties are deceased at the scene, 15 casualties are injured at the site with the following injuries
At the site:
7 with multiple fractures, burns and blast injuries
4 with major blast injuries resulting from penetrating metal and building material fragments
4 with minor blast injuries from blast fragments
Surrounding Suburbs:
98 people are affected by smoke and fumes inhalation in the immediate local area from the toxic smoke drifting from the site. Of these, 30% have severe respiratory distress, the remainder are suffering from symptoms of toxic fume poisoning.
Investigation of the incident shows poor compliance with legislation for Occ Health & Safety and using unskilled workers with no training on handling of flammable liquids

Scenario 6/Q1: Identify and track the flow of events that will occur?

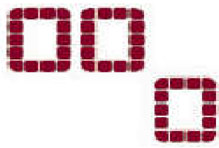
Phone Alert:-

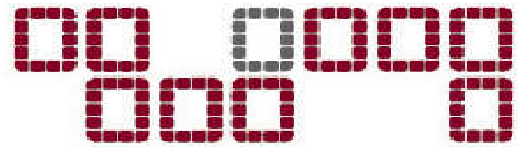
- FESA – safe area – inner and toxic issues, containment and contamination
- Police – safe outer area
- St Johns Ambulance – cas clearing station and decision State plan?

=>

- Public health (smoke affected)
- State welfare plan
- Triage and disposition
  - Burns to RPH – G
  - Others shared teaching hospitals
- Code Brown Hospital
- EPA
- Worksafe
- Western Power
- Public Relations (code brown)

- Victim explosion
- Walking wounded
- Normal ED patients
- Smoke affected





- GP's no specific role
- Secondary hospitals

Scenario 6/Q2: Discuss what are the best aspects of care and services available?

- Emergency services partnerships
- State and local emergency plans in place
- Demonstrated good response through exercises and events – local, national, international
- Commitment from State and Executive levels
- Constant evaluation
- Designed with escalating responses
- Strength in legislation:- OH&S
- Education programs
- Surge capacity planning
- Flexibility and resources

Scenario 6/Q3: What are the barriers to service (s)?

- **Staffing – trained clinical and disaster plus broader groups (1)**
- **Maintaining continuum of care – staff and resources (2)**
- **Not a "core" business (3)**
- **Communication (4)**
- **GP involvement – lack of (5)**
- **Failure to identify and use other groups (5)**
- OHS/Emergency plans and training
- Ability to decant patients
- Lack of surge planning - $$$
- Response times
- Overloaded, under funded, under resourced system
- Distance – stage geography
- Concentration of expertise
- Training to engage broader groups
- Awareness of State planning
- Need to expand evaluation

Scenario 7: TABLE 7

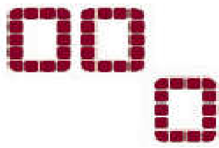
A group of children are playing in a school playground on the monkey bars. One 12-year-old falls and sustains a closed head injury. The monkey bars were later found to be in poor condition. The adolescent is taken to a secondary hospital in the northern suburbs.
The adolescent has the following investigations
CT head and Spine
X rays of major limbs, chest and abdomen
The child is transferred to PMH 3-4 hours after initial presentation with a GCS of 9 and was not intubated

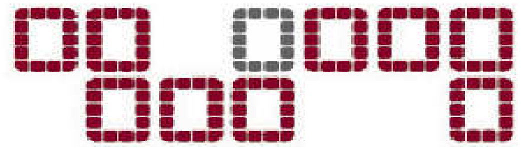
Scenario 7/Q1: Identify and track the flow of events that will occur?

- Accident
  - Staff supervision
  - Staff at School – nurse?
  - Equipment

=> Parents

- Transfer – ambulance – treatment
- Triage
  - bypass?





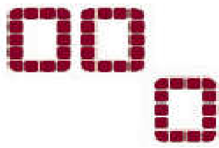
    – Adult vs. paeds
    – Advice from tertiary
- Primary hospital
    - Radiology ?/staff availability
    - Triage/transfer (dependant on time of day)
- T/F
    - GCS 9
    - Not intubated?
- R/V – prevention/injury surveillance => ICU => Rehabilitation

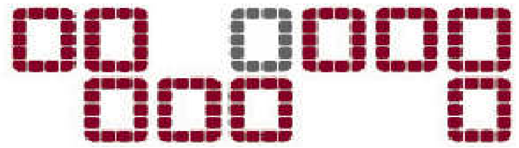
Scenario 7/Q2: Discuss what are the best aspects of care and services available?

- Ambulance
    - Time
    - Quality
- Secondary hospital
    - Location
    - Quality/standard
    - Communication/joint appointments
- Tertiary hospital
    - Location
    - Definitive/neurosurgery
    - PACS/IT technology (ability to share across sites)
- MRI (Predictive)

Scenario 7/Q3: What are the barriers to service (s)?

- **Standards/guidelines for playground equipment/prevention (1)**
- **Triage guidelines/clarity (pre-hospital/ambulance staff) (2)**
- **First Aid Education (nurse/community, students/teachers) (3)**
- **Rehabilitation (4)**
    - **Under resourced**
    - **Under staffed**
    - **Facilities**
- **ED Trauma management/education (5)**
    - **Primary hospitals**
    - **Total?**
- **Out of hours – diagnostic Imaging services (6)**
- Playground equipment/safety standards and monitoring
- First aid/nurse at school
- Identify priority
- Triage
    – policy
    – ambulance availability
- Radiology services/after hours
- ED training at Primary centres
- Level of care/availability of staff to transfer patients
- Rehabilitation
    - Under resourced
    - Adolescent
- Data collection/injury surveillance/injury research





Scenario 8: TABLE 8

As a result of domestic violence, a young adult woman presents to a tertiary hospital Emergency Department. Her GP has declined to see her given the circumstances of her injury.
She has severe facial bruising and a minor facial laceration and superficial lacerations and bruising to her hands. She is highly distressed and tells staff this has happened before.

Scenario 8/ Q1: Identify and track the flow of events that will occur?

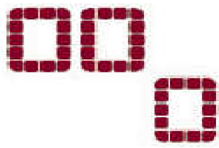
- Triage – Category 3
- Junior/Registrar
  - full assessment – includes sexual assault
  - Treatment for lacerations
  - Possibly referred to consultant
- Seen by nurses
- Possible social work referral – depends on hours and availability
- Possible referral points
  - ie: Refuges
  - Police
- Possible screening/risk assessment
- Aboriginal health worker
- Interpreters?
- Safety issues – suppress details

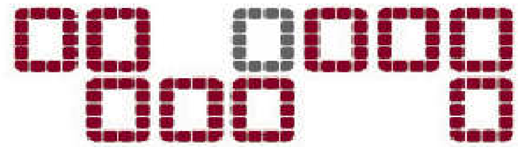
Scenario 8/Q2: Discuss what are the best aspects of care and services available?

- Good physical health care at hospital despite lack of GP care
  - access to all services. Comprehensive health assessment including AOD
- Psychosocial assessment – multi-disciplinary
- Best care
  = mental health assessment
  = safety assessment
- Network of referral agencies
- MOUS are being developed between key agencies
- DV co-ordinated responses
- CALD – new services and approaches
- New legislation – police orders
- Family violence – new awareness and policy development
- Need a state policy – one is being developed

Scenario 8/Q3: What are the barriers to service (s)?

- **New and creative ways of managing GP services/Community Primary Care teams 24/7 (NZ Model) (1)**
  - **Multi-disciplinary approaches**
  - **Accessible services**
  - **Promote existing services i.e. volunteer counsellors**
- **Best practice clinical pathways for DV across health sector (2)**
  - **Integration not segregation 24/7**
- **Follow up (3)**
  - **Who is responsible?**
  - **Integrated/Brokerage approach**
- **Prevention approaches/Community initiatives (4)**
- **Evaluation of what we have already got in place. (5)**
  - **Better accountability**
- **Where is the most need? Focus on Indigenous and rural communities**





- Availability of support depends on time of presentation (i.e. weekend) and place of presentation.
- Lack of standardised approach
- Lack of resources for follow up (GP's too)
- Waiting time
- Access and knowledge Re: resources/services
- Mobility of staff
- Availability of social work 24/7
- Need more allied health in GP surgeries
- Identification of DV – some practitioners are reluctant to ask. Lack of understanding about dynamics of DV
- Educational training opportunities – GP's, CPE
- Prevention strategies – culturally specific
- Lack of co-ordinated approach to follow up – be aware of safety issues
- Gordon Inquiry
  - Accountability?
  - Funding
- Fragmentation in implementing policy