Best Practice in Trauma Care in Australia

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Modern Medicine
Trauma clinicians need to understand decision dynamic

- Increasingly more effort for increasingly smaller health gains
- How does a Minister of Health decide between:
  - Cardiac disease (drug eluted stents)
  - Stroke units
  - Obesity and diabetes
  - Bird flu
- Decisions
  - Advocacy
  - “Policy capture”
  - Big hospitals are under attack “regional hierarchies”
How to build a best trauma system

- Trauma Surgeons need to be well informed united and perpetual advocates
- Trauma clinicians need to understand each other’s needs for service provision
- The solution is that there is enough room for different models: there can be an alignment between patient/local needs and provider needs.
Trauma Systems future - trends

- The tyranny of resources is increasingly overwhelming the tyranny of distance
- Increase public skills (emergent provider)
- Aeromedical trauma specific full skills to scene airway/breathing/circulation
  - HEMS London/German/USA
- Rapid transport to Definitive Care
  - ED 15 min, Scan on same floor space
  - Interventional Radiology Special Theatres
  - Inhouse senior consultants (Surgeons/Radiology)
- Outcome studies with comprehensive outpatients and in house research
Trauma Surgical Training Centre

Trauma Laparotomies (Surgical Training must centralise)
- NSW 2003 – 178
  2004 – 157
  2005 – 137

- Clinician lead change
  - Trauma Surgeons have to lead with they themselves initiating amalgamation

- Achieve critical mass:
  - work with like minded clinicians
  - acceptable “in house” rosters
  - modern equipment with skilled staff
  - senior trauma fellows

- “Best patient care” and “providers needs” do coincide
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- Institute of Trauma and Injury Management (ITIM): 2001
  - Not associated with any one hospital but clinician focused
  - Separate from the Department of Health (DOH)
  - Triple reporting
    - To the trauma clinicians (Series of clinician lead committees)
    - To the Department of Health
    - To the Greater Metropolitan Clinical Taskforce (senior clinicians)

- Major and Critical Trauma Database (2000+ per year)
- Tackle all levels – bottom to top, top to bottom
- Problem solving
- Education
- Encourage research
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- **Victoria:**
  - Minister of Health leadership (Top down)
  - 2 Adult 1 Paediatric Centre for State
  - One Aeromedical service

- **Queensland:**
  - Exhaustive consultative process,
  - Potential of 3 Adult and 1 Paediatric centre for the State

- **NSW:**
  - Extensive collegiate system,
  - Good metropolitan data,
  - But planning paralysis (9 Adult, 3 Paediatric)
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- **Western Australia:**
  - 2 good hospital based services but dispute as to which should be State Trauma Centre

- **South Australia:**
  - Trauma, burns at one hospital and retrieval service based at the other

- **Northern Territory:**
  - National trauma hospital funding but difficulty in implementation

- **Canberra:**
  - Good service but struggles to achieve critical mass

- **Federal Government:**
  - “Trauma is a State responsibility”
SUMMARY

Best Practice depends on:

- A whole community approach
- Public:
  - understand and embrace prevention
  - Learn first responder and first aid skills
- Health services:
  - be trauma patient focused
  - Resist tendency to be self-serving
  - Plan for the long term but be flexible
- Government:
  - listen to trauma experts
  - Follow USA lead – Model Trauma system planning and evaluation (National Trauma Plan)
  - pick from the best around Australia and the world
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Patient Journey Model

- Patients (Minor / Major)
- Resources
  - Equipment
  - Providers
- System (Plans)
  - Hospital
  - Health Area
  - Region/State
  - National
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Public Health Model

- Prevention
  - Avoidance
  - Injury minimisation
- Care
  - Scene
  - Transport
  - Definitive
  - Rehabilitation
- Data
  - Collect
  - Analyse
  - Plan
  - Implement
  - Measure
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- Australian experience in planning
- Each State has made its own plan
  - NSW: Regional plan 1992: under review-stalled
  - Victoria: Ministerial committee 1999
  - Queensland: RACS trauma committee 2006
  - Western Australia: External reviews (x3)
  - South Australia: Internal review - forgotten
- No Federal Government National Plan
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- Simple
- The most critical part of optimal trauma practice is rapid transport from scene to definitive care.
- Injured patients have possible life saving intervention at the scene, or stop off at suitable hospitals for this.
Best Practice in Trauma Care Implementation

1. Starts with Scholarship
   Literature
   Local data
2. Lead by Example
   Walk the Talk
3. Understand the different local needs
   One size does not fit all
4. Definitive surgical care is the key component
   need a trauma surgical training centre
   trauma/acute surgery model
   ED lead service
5. Continual evaluation
   dynamic environment
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- Trauma optimal care does not result from preparing an evidence-based plan and all will understand, money will be provided and a system will be implemented.

  Rather

- Trauma best practice is a campaign between zealots and cynics, between those happy with the status quo and those who want further improvement.
Trauma Care Systems: where it goes wrong

The unfortunate truth:

- Many services focus on their system rather than patient needs
  - Ambulance “acute transfer”
  - Emergency Departments “acute resuscitation”
  - ICU “critical care”

- Many clinicians put self interest first
  - Nurses like to be close to home
  - Doctors want to feel comprehensive, and keep their skills up
Some surgeons can be part of a arcane culture:

- "I learnt by being thrown in, so should you".
- "They are the hospitals patients and if administrators employ untrained people against my advice then it is their problem"
- "The data shows volume does not matter so I am happy to deal with the few trauma patients who come into my hospital"
- "Trauma fits best with acute surgery"
- "I know I was espousing a different plan when I was at the other hospital, but now I have seen the light"