Presentation Outline

• Recent NZ Reviews & Initiatives
• NZ specific trauma data
• Suggestions to enhance NZ Trauma System
• Summary
Recent NZ Reviews & Initiatives

- RACS NZ Trauma System Review
- NASO Air Ambulance Co-design Project
- Request for Proposals for Air Ambulance Services
- National Air Desk Review
- Revision of NZ Standard 8156: Ambulance & Paramedicine Services

NZ Trauma & Aeromedical Systems are at a critical junction
Previous Reviews & Outcomes

• 1998. “Roadside to Bedside” NZ MoH
  – Goals outlined but Framework not fully established

• 2009. Quality Improvement Committee Min Report
  – Establish NZ National Trauma System

• 2012. Major Trauma National Clinical Network
  – Establish formal trauma structure and system in NZ
  – Establish NZ Major Trauma Registry
  – Trauma specific guidelines and plans
NZ Trauma Context

• Good data from ACC, NZTA and NZMTR
• Leading cause death NZ <45yrs
• MVC 5th leading cause of death Males (Maori & NM)
• 52% of major trauma was road traffic related
• TBI occurred in 38% of all major trauma cases
• 16/17 344 deaths <30/7 post MVC, 284 prehospital
• MVA social cost 2016 $3.79B ($4.2M per fatality)
• Road toll increased last year (378 cf 327)
Road deaths per 10,000 vehicles and per 100,000 population 1936 to 2016

12% Increase
2014-2016
RACS NZ Trauma System Review

• UN Decade of Road Safety Action 2010-20 Strategy
  – 5th Pillar of Road Safety: Post Impact Care
  – Strategic Priority NZTA Centre of Excellence for Road Safety
• Commissioned by NZTA & MTNCN
• RACS Trauma Verification Program
  – First ever National Trauma Verification Review
• 27 November- 01 December 2017
• Report recently provided to NZTA
Fundamentals of a Trauma System

- Injury Prevention
- Prehospital Care
- Acute Care Facilities
- Post-hospital Care

Success of a trauma system is largely determined by the degree to which it is supported by public policy.

- Leadership
- Professional Resources
- Education and Advocacy
- Information Management
- Finances
- Research & Technology
- Disaster Prep & Response
Benefits of a Trauma System

- Many studies (USA & Victoria)
- Decreased mortality (15-25%)
- Reduction in the number & severity of injuries
- Improved outcomes for survivors
- Saves money
- Reduced community impact
What's relevant for New Zealand?

- Policy and Leadership
- Strategic Planning
- Governance
- System Coordination
- Funding
Policy and Leadership

- Trauma; A National Health Priority
- *Post Crash Response* included in all national road safety strategies e.g. Safer Journey
- MTNCN.
  - Enhance representation for trauma in NZ Health System
  - Greater advocacy, support, authority & responsibility.
- NASO
  - Rationalisation of the aeromedical network
  - Standards for aeromedical services and clinical crewing
Strategic Planning

- NZ Health System should align trauma related planning with other related organisations & injury prevention
- Align trauma related planning across all regions/DHB (NTP)
- Disaster Management
  - Recognition of role of MTNCN in National Disaster Plans
  - Modelling/exercising of retrieval & trauma services in MCI
  - Incorporate aeromedical tasking and 3 x ACC into NDP
- National Rehabilitation Strategy
- Multidisciplinary Mx of elderly trauma and at risk Groups
Governance

- MTNCN (Governance/leadership/collaboration)
  - Collaborate with HQSC (Incidence/trends/performance)
  - Enhance and support NZMTR (local data/$/training/minor)
  - Set collaborative research agenda
  - Designation of levels of trauma hospitals
  - Minimum criteria, resourcing and standards for each level
  - Monitor and support 4 Regional Trauma Committees
  - Designate roles and responsibilities for RTC
  - Establish National Trauma Mortality Review Committee
Trauma System Coordination

- Further refine Triage and Destination Policies
- Coordination of Regional critical care beds
- Coordination of specialist services across sites
- (AIM) One Major Trauma Hospital/region
- Systematic national review of TBI management
- Improve integration of acute rehabilitation services
- Central coordination, tasking and oversight of all aeromedical platforms and teams
Retrieval System Coordination

• Interdependency of Retrieval and Trauma Systems
  – Systems are synergistic in improving outcomes
• Most fatalities are Pre Hospital (284 of 344 in 17_18)
• Importance of coordinated out of hospital trauma care
  – Rapid identification of significant injury (Pre & IHT)
  – Specialist level oversight (selective)
  – Targeted, tiered, patient specific clinical response
  – Patient centred destination determination
Retrieval System Clinical Care

- Recent advances in PHRM (U/S, Blood, procedures)
- Better balance between Speed and Skills
- Regional, medically staffed retrieval capability 24/7.
- Primary, Interhospital, fixed and rotary wing response
- Close proximity to Tertiary Major Trauma Hospitals
- Standardised retrieval training and equipment
- Integrated & transparent clinical governance (Trauma)
Funding

- Too complex; needs simplified
- MoH. Fund separately and regionally
- Trauma incidence incorporated (populn)
- ACC fund trauma programmes
- Standardise aeromedical funding & billing
Summary

• Significant gains in NZ Trauma System >2012
• National prioritisation and political leadership
• High cost/Low volume services; rationalise
• Real opportunity to evolve further;
  – Equity of access
  – Consistent and quality services
THANK YOU.

“A great wind is blowing, and that gives you either imagination or a headache."

Catherine the Great