ADVANCES IN PRE-HOSPITAL EMERGENCY CARE

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Format

- A bit about Marlborough
- What does a St John Ambulance Officer look like in 2016
- Clinical Abilities
- Technology
- Clinical Pathways
  - STEMI
  - Falls Prevention
  - COPD
- Where are we going?
- Questions
Marlborough St John Operations

- Ambulance service contracted by St John in December 2006
- Murray Neal (TM)
- 17 FTEs
- 10 Casuals
- 54 Volunteers
Marlborough Information

- Total land area 10491 km\(^2\)
- Total marine area 7256 km\(^2\)
- Marlborough Sounds land area 2526 km\(^2\)
- Marlborough Sounds water area 2204 km\(^2\)
- Vineyards 239.64 km\(^2\)
Population

- Total Marlborough – 44,000 people
- Average % > 65 years 21.5% (NZ average 14.3%)
- Blenheim population – 25500
- Picton population – 4053
- Havelock – 489
- Seddon/Ward population – 1437
What do they look like

- They wear Green!
- Mix of Paid and Volunteer
  - 1200 Paid
  - 3000 Volunteer
- Range of qualifications from First Responders assisting their Community to highly skilled professionals
- IT savvy
- Please don’t refer to us as “drivers”
What Can We Do?

• First Responder
  o Basic Life Support
  o Patient Assessment
  o Basic Pain Relief

• Emergency Medical Technician
  o Basic Life Support
  o Airway support (LMA)
  o Medications (ondansatron, prednisone, salbutamol)
  o Oral and Inhaled Pain Relief
• Paramedic
  o Degree Qualified
  o Generally Paid Staff
  o IV Access
  o IV Pain Relief (morphine, fentanyl)
  o Range of Medications (ceftrioxone, midazolam IM, adrenaline)
  o Manual defibrillation

• Intensive Care Paramedic
  o Intubation
  o Chest Decompression
  o Cricothyrotomy
  o Intraosseous access
  o RSI
  o Ketamine
Technology
Technology

Welcome to our Office

- Mobile Data Terminals
- Automatic Vehicle Locators
- Monitors with external communications
- Electronic Patient Report Forms
  - NHI Lookup
  - Patient History
  - GP information
  - Realtime viewing by Clinicians
- Software to support management of resources for Managers and Hospitals
Patient Pathways

STEMI

- Nelson/Marlborough specific currently
- Disadvantage of living distant to specialist cardiology services should be minimised
- 12 ECG taken
- Transmitted to Cardiologist if STEMI identified
- Thrombolysis carried out in the field (clopidogrel, tenecteplase, enoxaparin)
- Flown directly to Cath Lab bypassing ED
- Joint DHB and Ambulance paperwork for continuity of care and treatment
Patient Pathways

COPD

- Who is the best person to treat these patients?
- What is normal for the individual?
- Full patient assessment and triage for the most appropriate destination
- Contact GP or After Hours facility
- Transport to GP or After Hours Facility if clinically indicated
- Vouchers for treatment and transport home
- Not only reduce Hospital costs ($80m per year for COPD) but better continuum of care for the patient
Patient Pathways

Falls

• Data says elderly have 3 “minor” falls before significant damaging fall (eg NOF fracture)

• Financial cost of a NOF fracture is $47,000, cost to quality of life of individual is significant

• Non transported patients are fully assessed then referred to PHO for entry into falls prevention programme (exercises, physio, yoga, OT etc)
Where to from here?

- Continue to move away from a “taxi” service
- Much more involvement with primary health
- Continue to provide more treatment and advice in the home
- More telephone triage and advice
- Role out of more Pathway options nationwide
- Registration of Paramedics
Thanks for Your Time

Questions?