



# ADVANCES IN PRE-HOSPITAL EMERGENCY CARE

NZ Enrolled Nurses Conference, Blenheim, June 2016

Murray Neal, Territory Manager, St John



**St John**

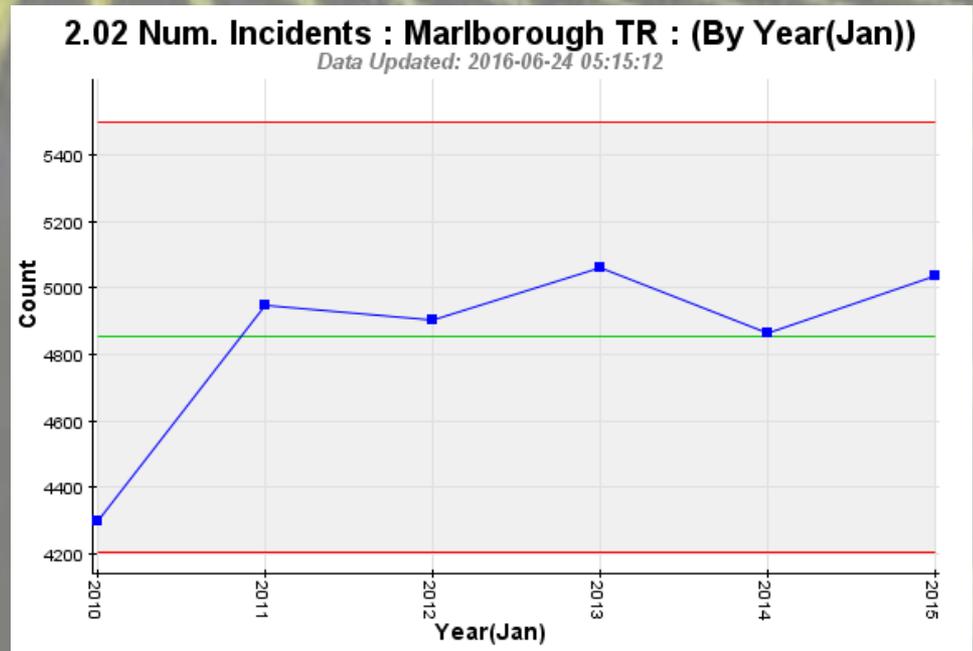
Here for Life

# 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<sup>2</sup>
- Total marine area 7256 km<sup>2</sup>
- Marlborough Sounds land area 2526 km<sup>2</sup>
- Marlborough Sounds water area 2204 km<sup>2</sup>
- Vineyards 239.64 km<sup>2</sup>



# 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





# 2016 Ambulance Officer

## 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
  - Basic Life Support
  - Patient Assessment
  - Basic Pain Relief
- Emergency Medical Technician
  - Basic Life Support
  - Airway support (LMA)
  - Medications (ondansatron, prednisone, salbutamol)
  - Oral and Inhaled Pain Relief



- Paramedic
  - Degree Qualified
  - Generally Paid Staff
  - IV Access
  - IV Pain Relief (morphine, fentanyl)
  - Range of Medications (ceftriaxone, midazolam IM, adrenaline)
  - Manual defibrillation
- Intensive Care Paramedic
  - Intubation
  - Chest Decompression
  - Cricothyrotomy
  - Intraosseous access
  - RSI
  - 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

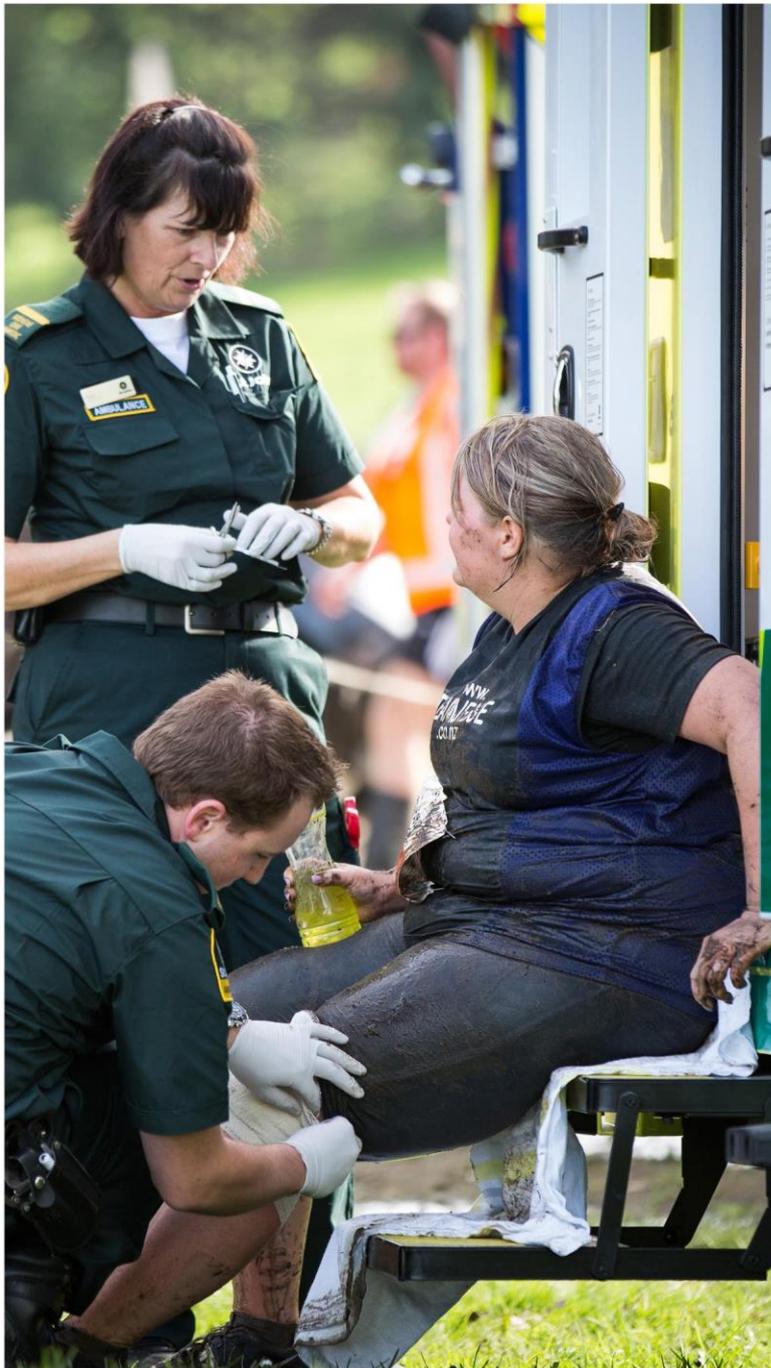
- Who is the best person to treat these patients?
- What is normal for the individual?
- Full patient assessment and triage for the most appropriate destination
- Contact GP or After Hours facility
- Transport to GP or After Hours Facility if clinically indicated
- Vouchers for treatment and transport 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?

