

Out-of-hospital update

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Evolution of out-of-hospital care

- Brief overview of what happens when you dial 111
 - An ambulance response is no longer a certainty
- Transition from the 'three Ps' to the 'three Ts'
- Overview of how the ambulance sector is evolving
 - Our personnel
 - Right care for the patient
 - Right destination for the patient
- Not just high acuity patients
- Questions and discussion

When you dial 111

- Calls answered centrally Police, Fire or Ambulance
- Three ambulance control centres: Auckland, Wellington and Christchurch, operating a single system
- Dedicated call handlers
 - 500, 000 calls a year
 - Scripted computer program, AMPDS
- Calls allocated a determinant
 - Approximately 1900
 - Each allocated a preferred response
- Incident sent through to dispatcher
 - Dispatchers look after discrete areas





Dispatch

- Priority of response
 - Purple: suspected cardiac arrest
 - Red: immediately life threatening
 - Orange: serious, not immediately life threatening
 - Green: minor, not life threatening
 - Grey: suitable for telephone call back
- Details sent to mobile data terminal in vehicle







Things are changing

No longer the 'three Ps'

Things are changing

- No longer the 'three Ps'
 - Pick them up
 - Put them in the back
 - Piss off to hospital
- Now the 'three Ts'
 - Triage
 - Treatment
 - Transport
- 111 calls are increasing at approximately 5-7% a year
 - Funding is increasing at approximately 1-2% a year
 - Unsustainable
- We have to change what we do
 - More efficient and more effective
 - New service delivery model



New Service Delivery Model

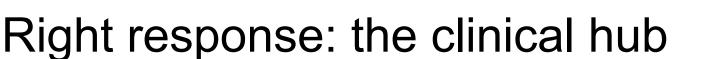
- Right response
- Right workforce
- Right destination
- Injury prevention, health promotion and screening
- Utilising technology and information
- Improve patient outcomes



Right response

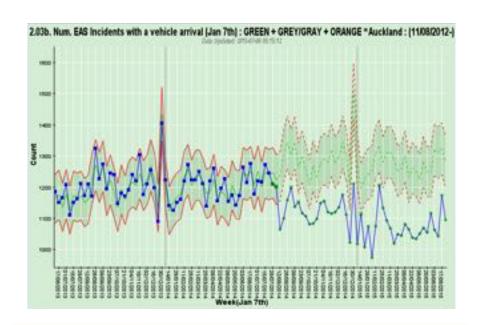
- Up to a third of people who call 111 do not need an ambulance
- Introduction of the 111 Clinical Hub
 - Nurses and Paramedics calling people back to determine most appropriate response







- Paramedics and registered nurses
- Clinical telephone assessment of low acuity calls, using a decision aid
- Assign the most appropriate response: priority and skill mix required
- Approximately 30% have not required an ambulance
- Big culture change: dialling 111 no longer means you will automatically get an ambulance
- Now expanded nationally





Right workforce

- In 2016 we completed a five year transition
 - Multiple practice levels with multiple names and multiple way of 'getting there'
- Four practice levels and a clear way of 'getting there'
 - First responder: four day course
 - Emergency Medical Technician: diploma
 - Paramedic: degree
 - Intensive Care Paramedic: post graduate
- Goal is to have a Paramedic on every ambulance crewed by paid personnel
- Single crewed responses still a big issue
 - Up to 40,000 a year
 - Unsafe, plan is to eliminate them
- Registration expected in 2019/2020



Right destination

- High acuity
 - Major trauma destination policy, March 2017
 - Stroke destination policy, September 2017
 - STEMI destination policy, second half 2018
- Lower acuity
 - Falls
 - Concussion



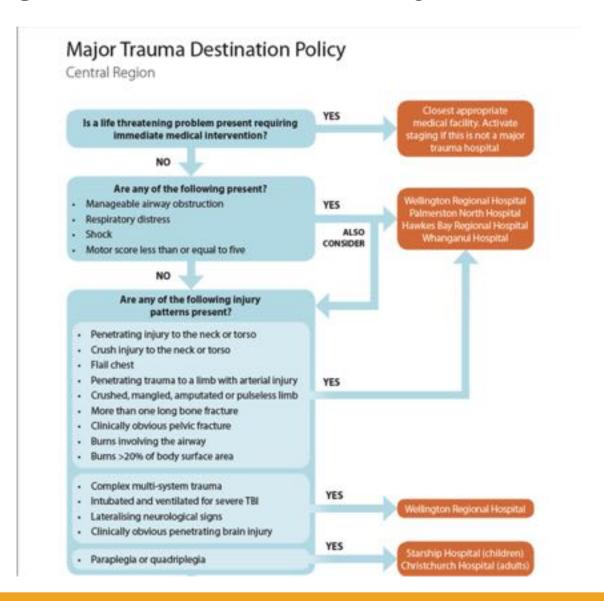
Right destination: major trauma

4.12 Major trauma triage Life-threatening problem requiring O Transport to the closest immediate medical intervention? appropriate medical facility Activate staging if this is not a major trauma hospital Intubated and ventilated for severe TBI or O Transport to a major trauma hospital with Lateralising neurological signs or neurosurgical facilities whenever feasible and safe Clinically obvious penetrating brain injury? Any of the following present? Complex multi-system trauma? Manageable airway obstruction Respiratory distress Shock Transport to a tertiary Motor score <5 major trauma hospital Penetrating trauma to the neck or torso whenever feasible and safe · Crush injury to the neck or torso Flail chest Penetrating trauma to a limb with arterial injury More than one long bone fracture Crushed, mangled, amoutated or pulseless limb Clinically obvious pelvic fracture Paraplegia or quadriplegia* O Transport to the most Burns involving the airway appropriate major Burns > 20% body surface area trauma hospital ? Transport to the most appropriate Additional risk factors present? major trauma hospital Note O Transport to the most appropriate medical facility See 'spinal cord injury' pg52.

SHOCK AND TRAUMA



Right destination: major trauma





Right destination: falls

11.2 Falls



RED FLAGS

- Clinically significant injury.
- · Clinically significant pain.
- Abnormal vital signs.
- · Signs of stroke.
- · Seizure without history of epilepsy.
- Headache.
- New onset of visual disturbance.
- · Unable to mobilise.
- · Unstable medical condition contributing to the fall.



ORANGE FLAGS - SHOULD SEE A DOCTOR WITHIN 24 HOURS

- · More than one fall in the last week.
- Postural hypotension.
- Seizure with history of epilepsy.
- Recent change in medication.
- · Minor injury requiring non-urgent treatment.
- · New reduction in mobility but able to weight bear.



GREEN FLAGS

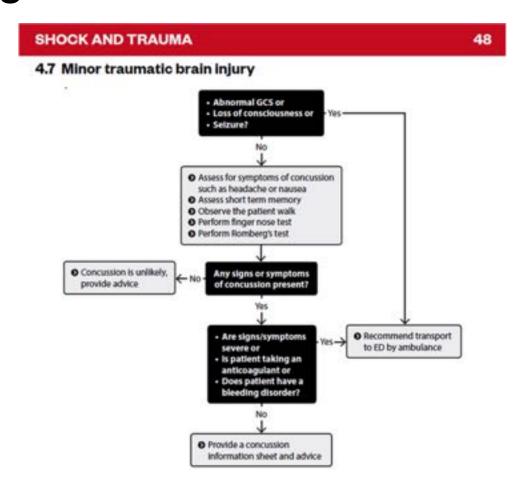
- Minor soft tissue injury not requiring medical treatment.
- · Able to mobilise in a manner that is normal for the patient.

Right destination: falls

- Falls screening undertaken if patient aged over 65 years and not transported
 - History
 - Assessing balance (Romberg's test)
 - Assessing mobility (timed up and go test)
- Referred to DHB for follow up if screening positive
 - Intervention to reduce risk of falling
 - Reduced risk of fracture and admission.



Right destination: concussion





Health promotion and screening

- Health promotion and screening
- Annual blood pressure campaign
- Screening in the home (safe and well), examples:
 - Smoking
 - Immunisation
 - Diabetes
 - Mental health
- Subsequent referral to GP or DHB

The future



- Increased focus on right destination
 - Significant capacity to improve efficiency and effectiveness
 - Injury requiring ortho surgery probably 'next cab off the rank'
- Increased use of telephone triage
 - Mental health telephone advice/referral service an example
- Increased involvement in screening
 - With subsequent referral
- Further development of the workforce
- Likely to be a fundamental change to the role of the Intensive Care Paramedic, for example:
 - Administration of blood
 - Ultrasound
 - Inter-hospital transfer of some patients

Summary



- Things are changing
 - We are evolving
- New service delivery model
 - Right response
 - Right workforce
 - Right destination
 - Injury prevention and health promotion
 - Utilising technology and information
 - Improve patient outcomes
- Not just focussed on high acuity



Thank you

