



Ambulance Service Overview

Document Purpose

This document aims to give the reader a brief outline of the ambulance service including the identification of some of the major problem areas within the ambulance service. The intended audience includes members of the media and other interested individuals wishing to investigate aspects of the ambulance service.

Background Information

Road Ambulance Service Providers

There are currently four public Ambulance Service providers operating in the New Zealand 111 Emergency Ambulance Service under contract to the funders (Ministry of Health and ACC). These include:

- St John www.stjohn.org.nz
- Wellington Free Ambulance (WFA) www.wfa.org.nz
- Taranaki DHB Ambulance Service
- Wairarapa DHB Ambulance Service

St John is a national organisation but operates five separate entities under agreement to the main St John organisation through regional trust boards. This creates pay and condition variance amongst career (paid) staff throughout New Zealand.

Both St John and WFA are charitable trusts and augment their income through the provision of goods and services connected to and generated from their provider status. The two DHB services are run as departments within their respective DHB's. Taranaki uses a mixture of career and volunteer resources. Wairarapa uses a mixture of career and St John volunteers.

There are roughly 900 career staff within the Ambulance Service who provide operational service delivery. Broadly they are classified as:

- Ambulance Officers and Paramedics
- Patient Transfer Officers
- Emergency Medical Dispatchers and Emergency Call Takers

Note the term "Ambulance Driver" has **not** been used since the 1970's and is factually inaccurate.

Air Ambulance Service Providers

There are a multitude of fixed wing and rotary wing air ambulance providers around New Zealand that provide emergency response, rescue and inter-hospital aeromedical transport. In almost all emergency cases, the predominant medical crewing of these

helicopters is undertaken by Advanced Paramedics/Intensive Care Paramedics from the road ambulance service provider. The Auckland region is a notable exception with the trust employing their own permanent Advanced Paramedics. Whilst there is a functional connection between road and air ambulance providers that extends beyond crewing, this document will not explore this area further.

Funding Arrangements

Ambulance Service providers are funded through a number of income streams but generally report inadequate central government funding to meet service delivery. The main providers use charitable money and alternative income streams from the provision of related goods and services to meet the shortfall.

The main funding streams are:

- Ministry of Health bulk funding
- ACC per transported patient funding
- Individual DHB contracts for inter-hospital transfers
- Private hire charges for non emergency transport
- Medical part charges (St John predominantly)
- Charitable funds/Investment income
- Ancillary goods and service delivery e.g. medical alarms, first aid training/equipment

Qualifications

There are five qualifications (scope of practice):

- Primary Care
- Ambulance Officer
- Paramedic
- Upskilled/ALS Paramedic
- Advanced Paramedic/Intensive Care Paramedic

Each qualification carries with it more knowledge and training that allow the officer to administer more drugs and carry out additional procedures.

Specialisation

There are various levels of equipment carried on ambulances. The capability of the ambulance to provide care depends on the type of equipment it holds and the staff who crew it (through their qualification).

There are voluntary first aid vehicles, patient transfer vehicles and variable levels of emergency ambulances:

- Basic Life Support (BLS) - Ambulance Officer or less
- Intermediate Life Support (ILS) - Paramedic
- Advanced Life Support (ALS) - Advanced Paramedic/Intensive Care Paramedic

Not all vehicle types and resourcing are appropriate to manage serious medical and accident problems. St John vehicle livery does not distinguish between these types, therefore not all ambulances are alike.

Volunteer vs Career (Paid)

The training for volunteer and career staff is the same up to Paramedic level. Advanced Paramedics/Intensive Care Paramedics must attend university to obtain either the National

Diploma or Bachelor in Health Science degree. This scope of practice is almost exclusively held by career staff.

Whilst the qualification is the same up to Paramedic level, volunteers typically have less road experience, often do not make the key clinical decisions, are limited by the time constraints and knowledge boundaries of their peers and due to decreasing numbers and increasing demands are not able to make the same degree of commitment as career staff.

St John Operational Volunteers

St John began a process in 2006 to merge its volunteer first aiders with its volunteer Ambulance Officers to make a new role of Operational Volunteer. These volunteers have significantly different qualifications and were originally recruited under different regimes. Considerable resources are being deployed to support volunteers including a desire to have more volunteer involvement in the ambulance service within metropolitan Auckland.

The St John uniform is identical across all operational aspects (except for a qualification mark) yet the skills, aptitudes and appropriateness vary. There are concerns that the public may be misled by this branding into assuming a certain level of care. FAOUNZ is concerned at the over-focus on volunteers and the potential for the public to be misled and believes career Ambulance Officers should be uniquely identified.

Registration

Ambulance Officers (all qualifications) are not currently registered under the Health Practitioners Competency Assurance Act. FAOUNZ requested inclusion before enactment but this was not granted. There are problems associated with the high level of volunteers, cost implications and possibly concerns about the adequacy of qualifications.

Irrespective of this, the issue of registration remains a concern, with high levels of clinical risk in this largely unregulated environment.

Clinical Governance

Regional Medical Directors provide the authority under which Paramedics perform procedures and administer drugs. There is a simple audit system and process to validate competence that is administered by each service provider. Clinical competence issues and complaint management is handled internally unless complaints go to the Health and Disability Commissioner.

Contractual Accountability

The contracts under which the service providers work are not publicly accessible other than through the Official Information Act. This includes response time indicators, resourcing requirements and crewing qualification requirements. Additionally no key performance indicators are published publicly. FAOUNZ has concerns that there is inadequate central government monitoring of service provider performance and the lack of transparency in the processes.

Legislative Framework

The Ambulance Service is mentioned briefly in a small number of acts. There is no Ambulance Service Act that defines the role, expectations, governance and rights of Paramedics. This is in contrast to most other western nations. The lack of an act defaults the relationship between the government and its obligations to the public to provide an emergency ambulance service to one of a confidential contract.

Ambulance Standards

The first iteration of the standard provided some guidance in multiple areas related to response times, qualifications, expectations of crewing mix, equipment and education. However it was not mandatory to comply. Service providers utilised a best endeavours approach. The second iteration of the standard is currently being developed and there are issues associated with response times and the appropriateness of a single crewed response.

Mass Casualty Incidents & Disaster Preparedness

There is limited additional capacity in the ambulance service to manage with mass casualty situations or disasters. There is a high reliance on external suppliers for drugs, stores and equipment. There are relatively few spare vehicles available at any one time and it is likely that there would be resourcing problems (people and equipment) if these were needed to be deployed rapidly. Few stations have disaster resources, general vehicle stocks are not adequate to meet busy daily need without restocking and the fleet is generally designed for sealed road work. There are relatively few true 4WD capable vehicles in the national fleet. Additionally there is a lack of preparedness for disasters amongst career staff and doubts exist as to how effective call back processes would be in the case of major disaster.

Main Issues within the Ambulance Services

Problem Areas

- Single crewing
- Inadequate coverage
- Insufficient vehicles, equipment and resources
- Inadequate education
- Lack of higher level clinicians nationally
- Lack of governance and transparent accountability
- Lack of guiding legislation
- Lack of professional regulation
- Overuse of Volunteers
- Service provider distraction on augmented income stream activity
- Poor integration into the wider health system
- Lack of integration with Air Ambulance industry

Manifestations

- Prolonged response and transport times (including scene delays)
- Single crewing
- Presumably increased patient morbidity and mortality
- Reliance on volunteers in urban and rural areas

Problems of Single Crewing

- Response, scene and transport delays
- Inability to physically use some equipment
- Potential for drug dose or procedural errors
- Paramedic safety
- Inability to manage multiple patients
- Not able to monitor for deterioration
- Not able to adjust treatment according to effectiveness
- Unable to lift properly

Myths

1. It is often stated that the use of single crewed rapid response vehicles to determine the need for transport, meet response times and perform time critical life saving interventions is justified.

Whilst there is some sense in having a scarce resource (such as an Advanced Paramedic) in a response vehicle that allows them to have maximum impact over a number of calls rather than being tied to transporting low acuity patients, this suggestion does not extend to rural or provincial emergency ambulances as has been suggested by certain stakeholders. These vehicles are the only resource - the ambulance itself.

2. It has been stated that the communications system; particularly ProQA/AMPDS; has sufficiently refined systems in place to allow them to determine whether a call should be answered by a single crewed vehicle first. This is not the purpose of the system nor an inherent ability it provides. Ironically AMPDS (the telephone triage system) was designed in the USA for multiple vehicle and multiple agency responses. It would never have been considered for use in a system that allows single crewed ambulances.
3. It has been stated that single crewed rural resources are not ideal and are backed up as soon as possible. Unfortunately this is factually inaccurate. Single crewed ambulances in rural and provincial centres are single crewed by roster design. If they happen to be double crewed, this will generally only occur with volunteers and is by good luck more than good management.

Single crewed vehicles are not routinely backed up. These officers are expected to cope and transport single crewed. They only call for a driving officer or higher skills when the patient is critical or serious. This backup can take 30 minutes or more to arrive, subsequently delaying transport and negatively impacting on patient care.

Inadequate Rural & Provincial Resources

Single crewing still dominates in rural and provincial centres throughout the North Island. Even around the hinterland of metropolitan Auckland station rosters are designed as single crewed and rarely is there any volunteer.

These stations include:

- Wellsford
- Warkworth
- Helensville
- Waiheke
- Waiuku

Even in larger centres like Rotorua, Gisbourne and Hamilton, lack of funding for career Paramedics and over reliance on volunteers results in single crewed shifts.

Expectations

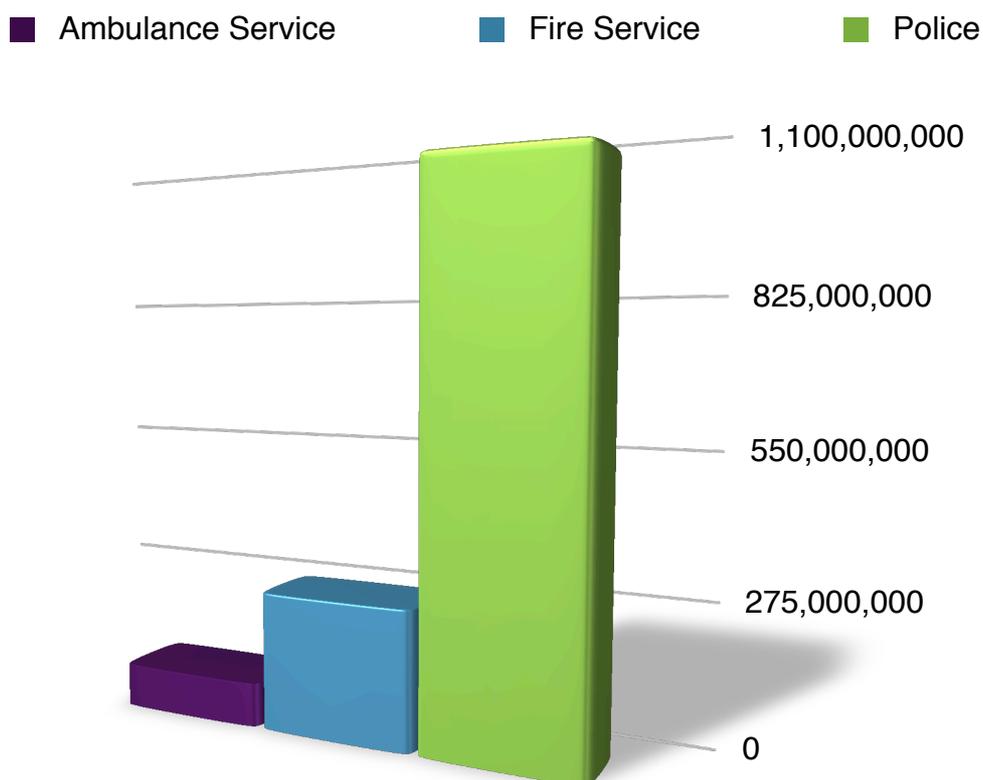
If the following three components were adequately answered a large proportion of the problems in the ambulance service would be addressed.

1. The ambulance arrived in a reasonable time.
2. The ambulance had two people on board.
3. The ambulance crew were appropriately skilled to assess and treat.

Comparison with NZ Police and NZ Fire Service

The Police and Fire Service have recently had reviews. Both have legislation defining their role and whilst the funding streams are different (central government vs. insurance premiums) they are essentially both government managed emergency services using a commission model to provide governance. Funding for ambulance services by contrast is competitive and is taken from the health related expenditure rather than a unique funding stream.

Information gathered from the government reveals how small the funding to the ambulance service is by way of comparison with Police and Fire.



The Ambulance Service has a call volume 3 to 4 times that of the Fire Service.

Report

The most recent government response to Union pressure concerning the adequacy of funding and the ambulance service generally resulted in the Sustainable Funding Review. This is available via the Ministry of Health website (www.moh.govt.nz).

Whilst this report failed to address the critical issue of whether the current level of service provision is adequate, it did provide some useful analysis based on the data the service providers were prepared to release.

*In terms of sustainability at current levels of service, **the review has not identified a need for a material correction in funding levels** for ambulance services.*

*Rough estimates of the cost of implementing **full crewing range from \$17.5 million to \$4.8 million or less.** The appropriate place for costing a move to universal full crew levels will be with the assessment of the Standards.*

International Comparisons

In the UK, ambulance services are coordinated by regional trusts under the government funded National Health Service. In Australia all states except Western Australia and the Northern Territory directly provide their ambulance service through state funded and run services.

Urgent Areas for Review

FAOUNZ believes that the government needs to fully review the current problems within the ambulance service. The best way to achieve this is a through a wide ranging government inquiry into the ambulance service. We have highlighted areas of concern and potential focus areas, but there is a considerable body of work to be undertaken before any meaningful change can occur. Any review should consider what level of service provision the government (and the voting public) need and what can reasonably be achieved. It should also consider whether the ambulance service should be state run as one national ambulance service, rather than relying on charities or individual DHB's to provide this essential emergency service.

Some Suggested Questions

1. How many actively **practicing** Advanced Paramedics/Intensive Care Paramedics are currently employed (specifically exclude those not predominantly working on a response role)?
2. What is your survival rate to discharge from hospital from sudden cardiac arrest?
3. What are your key performance indicators relating to your service contract with the Ministry of Health and ACC?
4. What are your urban, rural and remote response time KPI's and how have you been performing over the last three months?
5. How many rosters are designed as single crewed by default i.e. there is only a second person if a volunteer turns up?
6. If the Auckland metropolitan area is removed from the statistics, how many responses proportionately are undertaken with only one person on the ambulance?
7. How many hours/days are ambulances not available in rural areas due to a lack of staff?
8. Are your service statistics based on calls received or hours of standby when determining the level of single crewing?
9. What are the minimum requirements to volunteer to work on the ambulance?
10. What are the clinical educational requirements to meet the Primary Care qualification?
11. What is the preferred crewing for an emergency ambulance (qualification wise)?
12. Should the Ambulance Service utilise volunteers to man emergency ambulances in our major cities and large provincial centres?
13. What is the proportion of workload undertaken by career staff?
14. Is St John trying to bring volunteers back into the Auckland metropolitan area as a means to man ambulances?
15. St John removed the different uniform for the Ambulance Service a number of years ago and now Paramedics and first aiders all wear the same uniform. Why did St John remove the ability to determine between those staff who provide emergency ambulance services and those who undertake voluntary first aid duties?
16. All St John vehicles look the same. Are they all the same in terms of equipment, use and skill levels?
17. Why are career ambulance staff paid different amounts depending on where they work in New Zealand?
18. What continuing clinical education and governance exists for career Paramedics outside of formal qualifications?
19. The 1975 Telethon raised money for the establishment of the National Ambulance Officers Training School that provided standardised training for all Ambulance Officers irrespective of who they worked for. This is no longer operational. Is the current education system working? Is Ambulance Officer training better or worse now?
20. Should the government run the Ambulance Service as a nationally consistent third emergency service?
21. Have the mobile data terminals been installed and begun operation with the new communications centres?
22. Are NorthComm and CentralComm fully staffed?
23. Can any of the Communications Centres **completely** take over dispatch and call taking functions for another centre if one goes offline?
24. What is the average call taking time?
25. What is the average time between call received (the first pick up during call taking) to the ambulance arriving on scene?
26. Were call taking times less or more before the introduction of AMPDS/ProQA?