



# **The Council of Ambulance Authorities**

## ***Australasian Ambulance Services Rural and Remote Service Delivery Models***

**July 2009**

## **The Council of Ambulance Authorities Inc**

The Council of Ambulance Authorities Inc. (CAA) formerly incorporated in December 2002 having operated as an informal grouping of the ambulance services of Australia, New Zealand, and Papua New Guinea since 1962. The CAA is the peak body representing the principal statutory providers of ambulance services in Australia, New Zealand and Papua New Guinea.

The CAA would like to acknowledge that contributions have been made by each member ambulance service in the development of this report.

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### Part 1 – Introduction

The Council of Ambulance Authorities (CAA) is the peak body representing the principal statutory providers of ambulance services in Australia, New Zealand and Papua New Guinea providing a platform for the exchange of information and ideas between member services.

Ambulance services provide pre-hospital and out of hospital clinical care to the sick and injured through the provision of emergency and non emergency patient care, transport; inter-hospital patient transport; specialised rescue services; response to multi casualty events; and capacity building for emergencies<sup>1</sup>.

Australia has a vast geographical area which makes providing ambulance services in rural and remote areas even more challenging than in the metropolitan areas. There is a variety of ambulance service delivery models used to ensure that communities have access to appropriate care. These systems use combinations that include community first responders, volunteer ambulance crews, paramedics, extended care paramedical services, air ambulance and rescue and the use of related agencies that provide aeromedical and rescue services all of which are supported by efficient and effective communication systems.

There are many definitions of rural and remote areas and most definitions take into account a number of factors such as service, access, size of community and distance. A commonly used definition by government agencies in developing policy and measuring performance is the Accessibility/Remoteness Index of Australia (ARIA) which is an index based on a geographical methodology in which remoteness is defined as the basis of the road distance from any point to the nearest town (service centre)<sup>2</sup>.

Australia has a land mass of 7.7 million square kilometres rated sixth out of the seven largest countries of the world with a population of approximately 21 million. Compared to other countries Australia has one of the smallest population density per square km equating just 2.7 people per square km. Population is more highly concentrated on the South Eastern Sea Border with population density highest in the city centres. Australia's topography is one of the lowest, flattest, and driest of the continents<sup>3</sup>.

In Australia, 64% of the population live in capital cities with the remaining 36% living in regional and remote areas (refer to figure 1). Population is highest in the city centres ranging from 99.9% of the Australian Capital Territories population to only 44.4% of Queensland's and 42% of Tasmania's population living in capital cities. The population in the regional and remote areas varies considerably across states and territories with Queensland having a higher proportion of the population living in regional and remote areas and all of Northern Territories population living in outer regional, remote or very remote areas (Darwin is classified as outer regional).

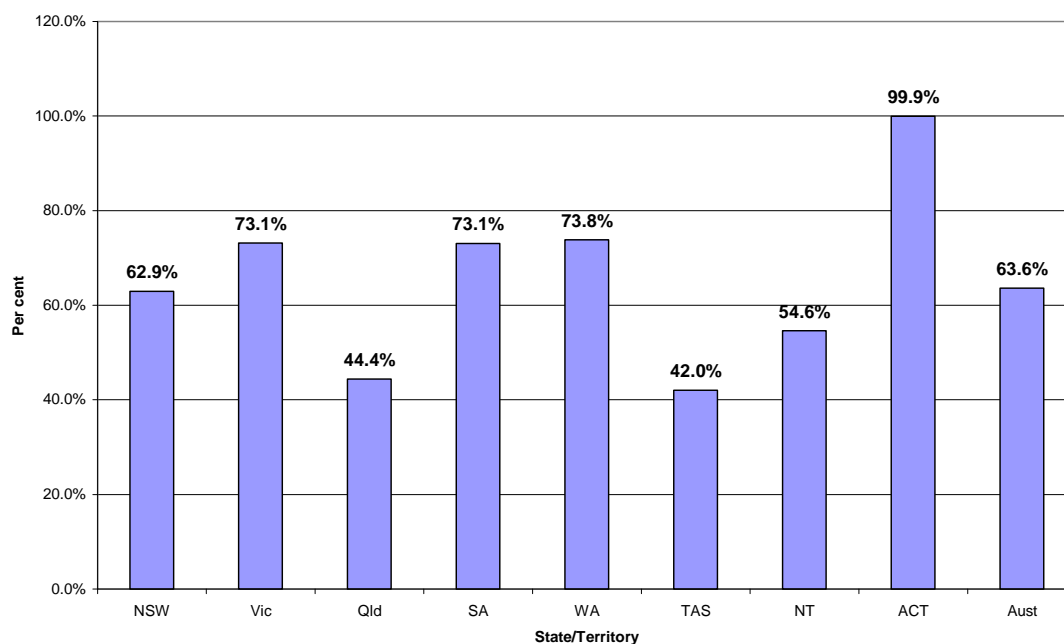
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<sup>1</sup> SCRGSP (Steering Committee for the Review of Government Service Provision). (2007). *Report on Government Services 2008*. Productivity Commission, Canberra.

<sup>2</sup> Australian Bureau of Statistics (2001). *Information Paper: ABS Views on Remoteness, 2001*. Cat. no. 1244.0, ABS, Canberra.

<sup>3</sup> Australian Bureau of Statistics (2008). *Year Book, Australia, 2008*. Cat no. 1301.0, ABS, Canberra.

Figure 1: Population Living in Capital Cities by State and Territory, 2007<sup>4</sup>



New Zealand consists of two main islands; the North and South Island with a total land area of 268,680 square kilometres. The population of New Zealand is approximately 4.2 million and the majority (72%) of the population lives in urban areas. Compared to Australia, New Zealand has a higher average population density with 14.9 people per square kilometre; however, in rural areas this is reduced to 2.2 people. The topography is varied with the North Island volcanic topography, large tracts of bush reserve and coastal plains and the South island with rugged mountainous regions, rivers and lakes, bush reserve and large coastal plains<sup>5</sup> Extreme weather conditions and communication black spots contribute to access and rescue difficulties.

The health of Australian's is comparable to other developed countries with one of the highest life expectancies at birth. The leading causes of death are cardiovascular diseases, cancers and respiratory diseases with injury the leading cause of death in the first half of life. Australian's living in rural and remote areas experience higher rates of illness and disease and a shorter life expectancy compared to those who live in the major cities. Rural and remote Australian's are more likely to be admitted to hospital for potentially preventable conditions that may be caused by a lack of primary and specialist medical professions in these areas. The proportion of primary care practitioners in outer regional, remote and very remote areas is only 7%<sup>6</sup>.

Australia's indigenous population represents 2.5% of the population. The life expectancy of indigenous Australians is significantly lower than the general population and indigenous Australians are hospitalised at five times the rate of non indigenous for potentially treatable conditions. The five leading causes of death for indigenous people are; diseases of the circulatory system, injury, cancer, endocrine, metabolic and nutritional disorders (including diabetes), and respiratory disease.

<sup>4</sup> Australian Bureau of Statistics (2007). *Population by Age and Sex, Regions of Australia 2007*. Cat. no. 3235.0, ABS, Canberra.

<sup>5</sup> New Zealand Geography. (2008) *Environment and Demographics*. Accessed 3<sup>rd</sup> June 2008: [http://en.wikipedia.org/wiki/New\\_Zealand](http://en.wikipedia.org/wiki/New_Zealand)

<sup>6</sup> Australian Institute of Health and Welfare (2008). *Australia's Health 2008*. Cat no. AUS 99, Canberra.

Long term health conditions include musculoskeletal conditions, kidney disease, and eye and ear problems<sup>7</sup>. The lower life expectancy and poorer health of people living in remote areas can be partly attributed to a higher proportion of Indigenous Australians residing in these locations.

The Australian government recognises rural health care is lagging behind metropolitan areas. The National Health and Hospitals Reform Commission (NHHRC) was established in February 2008 by the Federal Government to provide advice on the design of Australia's future health system. Three particular elements of its focus are the improved provision of health services in rural areas, improved Indigenous health outcomes and provision of a well qualified and sustainable health workforce into the future<sup>8</sup>.

In New Zealand, the leading causes of death are cancer, ischemic heart disease and cerebrovascular disease. Chronic or long term health conditions such as diabetes, cardiovascular disease, respiratory conditions, and mental health conditions are the leading causes of preventable morbidity, mortality and inequity in health outcomes<sup>9</sup>. The Maori population represents 14.6% of the population with 87% living in the South Island. Whilst most Maori are urban based, specific rural areas have a high proportion in the local population i.e. Gisbourne, Bay of Plenty and Northland<sup>10</sup>. Although the gap is gradually closing, Maori have nearly 10 years lower than the average life expectancy. The major causes of death are; ischemic heart disease, lung cancer and diabetes<sup>11</sup>. New Zealand has a growing ethnic minority population of Pacific Islanders and Asian people.

Whilst in overall world terms, Australasia has a "youthful growing population" by contrast rural areas in Australia and New Zealand alike are experiencing long term and gradual depopulation with an ageing population where young adults are less likely to return to settle.

The small population density in rural and remote locations makes it difficult for these communities to access the same level of health care as in capital cities and areas with a higher population density. For this reason ambulance service providers often have different models of care depending on the population density with volunteers often providing pre-hospital care in smaller communities.

In some outer regional, remote or very remote areas, historically volunteers have provided the community with an ambulance service. Whereas in other states such as New South Wales and Queensland, there has been predominantly salaried staff providing the ambulance service in these locations. These historical differences have shaped service delivery models in rural and remote areas today.

Today across Australia service delivery in rural and remote areas ranges from volunteer models, salaried staff models or a mixture of both. Ambulance volunteers throughout Australia are primarily involved in providing front line care in the delivery

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<sup>7</sup> Australian Bureau of Statistics (2008). *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples, 2008*. Cat no. 4704.0, ABS, Canberra.

<sup>8</sup> National Health and Hospitals Reform Commission (2008). Terms of Reference. Accessed 8<sup>th</sup> December 2008 <http://www.nhhrc.org.au/internet/nhhrc/publishing.nsf/Content/terms-of-reference>

<sup>9</sup> World Health Organisation. (2007). New Zealand Health Situation and Trend. Accessed 17<sup>th</sup> December 2008: <http://www.wpro.who.int/NR/rdonlyres/B6093CA6-01B1-49EA-B749-1342FB69FA79/0/25NewZealand08.pdf>

<sup>10</sup> Statistics New Zealand. (2006). *2006 Census of Population and Dwelling*. Wellington.

<sup>11</sup> Ministry of Social Development. (2008). *The Social Report 2008*. Wellington.

of ambulance services often on an on-call basis. Many ambulance services use volunteers as first responders where the volunteer responds to an emergency and provides first aid care pre the ambulance arrival. Volunteers are also used to provide a wide range of administrative support roles. In New Zealand, service delivery is primarily provided by volunteers. In Victoria, volunteers are remunerated for some of their time (response and training), but not for other time (on-call). It should be noted that Victoria also has a number of unremunerated ambulance community first responders.

Services that rely largely on volunteers have a lower expenditure per capita compared to services that use predominantly salaried staff. For these services, the volunteer model ensures communities are provided with an ambulance service where case load is not high enough to support a salaried staff member.

There are a number of factors impacting the sustainability of volunteers in rural and remote locations. As the overall population ages, it would be expected that the age of the volunteer population will also age. In 2002, 60% of Volunteer Ambulance Officer's (VAO's) were in their 30's and 40's with only 13% in their 20's<sup>12</sup>. The age distribution within these communities is predicted to continue to age and this in turn may result in a higher utilisation of health services including ambulance services.

Ambulance service providers have to seriously consider how sustainable volunteer models are in these areas to ensure the community has access to ambulance services into the future. If VAO's are a significant component of service delivery, the impact of this model not being sustainable could result in a significant increase in the cost per capita.

In the current environment of scarce health resources, the future of rural and remote health care requires a coordinated and collaborative approach between all health care professionals to ensure rural and remote communities are provided with better health outcomes. Recent developments for ambulance service providers have seen the workforce redesign of salaried staff in some remote locations to provide communities with health services that otherwise would not exist and include primary health care, prevention, and support of volunteer staff.

This document provides an overview of existing service delivery models for Australian and New Zealand ambulance services in rural and remote areas. It also outlines the main issues that are impacting the sustainability of rural and remote service delivery. The document provides an overview of recruitment and retention strategies and describes the links CAA has with other industry peak bodies, and international organisations to ensure ambulance services are kept informed around rural and remote issues and to also provide opportunities to collaborate on common areas.

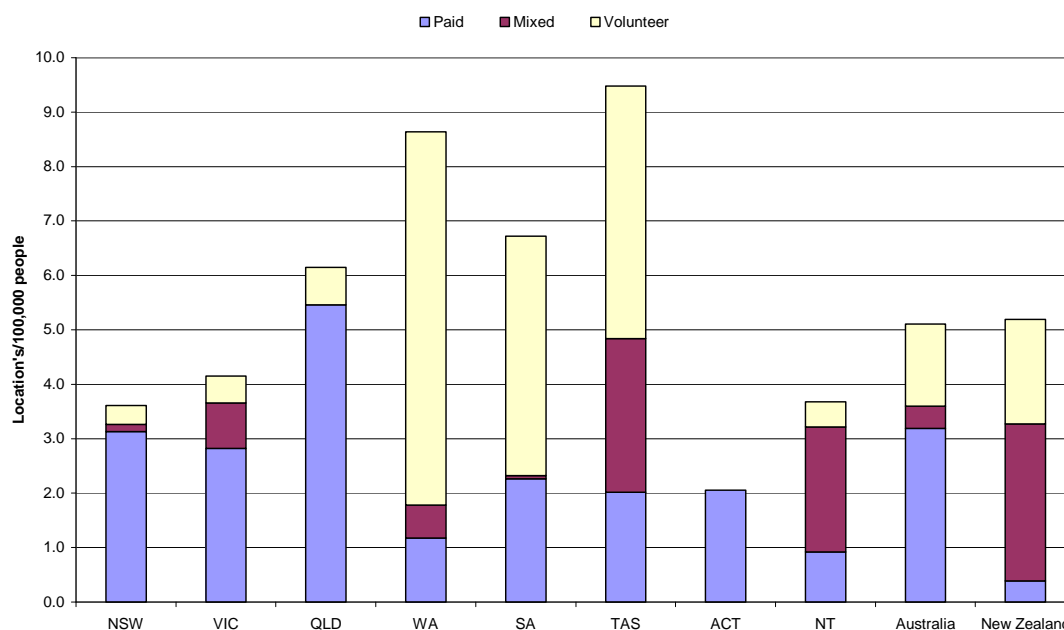
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<sup>12</sup> Fahey, C., & Walker, J. (2002). *Emergency Services in Australia and New Zealand: Problems and Prospects for Volunteer Ambulance Officers*. University Department of Rural Health, University of Tasmania.

## Part 2 Service delivery models

Service delivery models in rural and remote locations vary across services, with some salaried staff locations, a mixture of salaried staff or volunteer staff or wholly volunteer stations. However this distribution varies with services in Western Australia, South Australia, Tasmania, and New Zealand primarily relying on the services of volunteers in country and rural areas.

**Figure 2: Ambulance Stations and locations by staff type per 100,000 people, 2007/08**



In 2007/08 across Australia, there are 1081 ambulance response locations, 62.5% are salaried staff units, 29.5% wholly volunteer, and 7.9% mixed stations. In New Zealand, there are 189 ambulance response locations, 7.4% are salaried staff units, 37% are wholly volunteer, and 55.5% mixed stations.

### 2.1 Volunteers and first responders

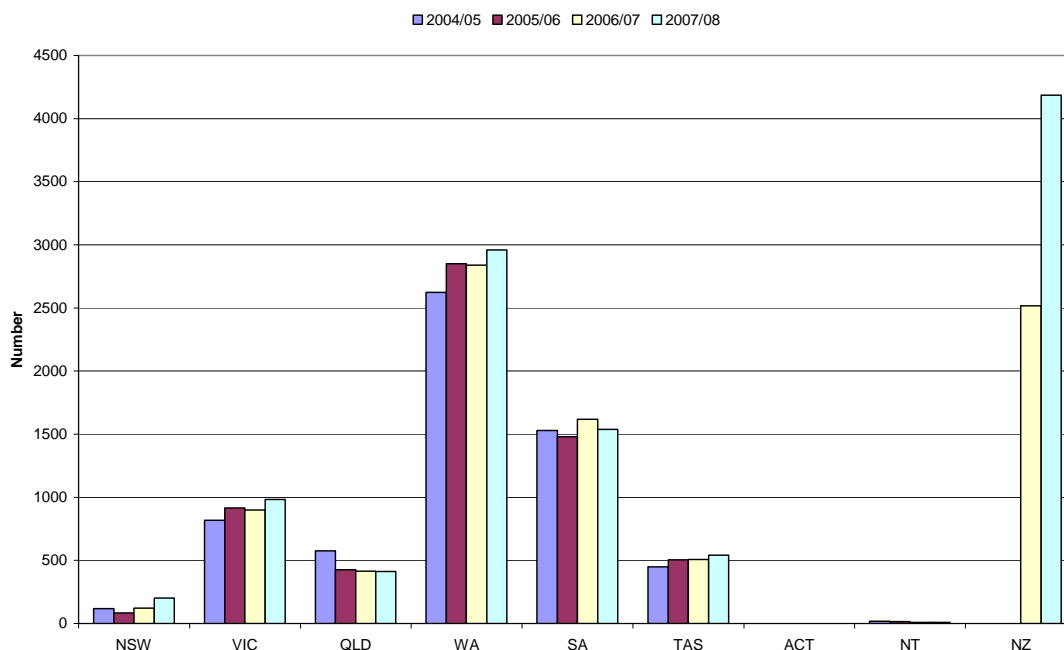
Volunteers are an essential part of ambulance service delivery in Australia and New Zealand. Volunteers throughout Australasia are primarily involved in providing front line care in the delivery of ambulance services often on an on-call basis. Many ambulance jurisdictions use volunteers as first responders where the volunteer responds to an emergency and provides first aid care pre the ambulance arrival. Volunteers are also used to provide a wide range of administrative support roles.

Nationally for Australia in 2007/08 ambulance services consisted of 5,836 volunteers (4,515 operational, 1,321 support staff) with the majority involved in operations (77.4%) and 809 community first responders. Ambulance service volunteers and first responders have increased minimally across Australia by 3.7% varying across jurisdictions with some seeing a decrease in numbers. New Zealand has 4,050 volunteers (4,039 operational, 11 support staff) and 137 first responders.

As demonstrated in figure 3, volunteer/first responder numbers vary considerably between ambulance jurisdictions with Western Australia, South Australia, Victoria and New Zealand having the largest number.

Volunteers are not counted by full time equivalence, so in order to provide a more accurate picture of the dedication and service these volunteers provide to the Australian community it is estimated that ambulance service volunteers are on-call approximately 6.3 million hours per year. In New Zealand, ambulance volunteers are on call approximately 2.1 million hours per year.

**Figure 3: Ambulance service volunteers/first responders**



The clinical skill sets of volunteers vary across volunteer type as well as across jurisdictions along with differing models of education and training. Ambulance jurisdictions across Australasia recognise their volunteers through various means mainly through awards, medals, and certificates for length of service and completion of training.

Australia has a long tradition of volunteer involvement in emergency services in rural areas including ambulance, fire, State Emergency Services, coastal patrols, road rescue services and in community recovery and support roles during large scale incidents, bushfires, floods and other natural disasters. Factors such as Australia's huge land mass, low population density, the numbers of people living in small rural towns and the distances from many towns to larger regional centres in combination have necessitated volunteer involvement in emergency services to ensure cost effective service provision.

Volunteers are and will remain an essential part of ambulance service delivery in Australia and New Zealand. The CAA recognises and values the significant contribution volunteers make to Australasian communities and the many sacrifices and challenges volunteers face in their duties particularly in rural and remote areas. In fact the first large scale project undertaken by CAA involved collaborative research on issues affecting the recruitment, retention, training and support of volunteer ambulance officers in Australia and New Zealand<sup>13</sup>.

<sup>13</sup> Fahey, C., & Walker, J. (2002). *Emergency Services in Australia and New Zealand: Problems and Prospects for Volunteer Ambulance Officers*. University Department of Rural Health, University of Tasmania.

In the field of volunteer ambulance service provision in rural areas thousands of volunteers serve their local communities with distinction, selflessly preparing themselves for their important emergency response role through a strong commitment to initial and ongoing training to national standards. The dedication of ambulance volunteers is unquestioned and many have extensive periods of on call. An added feature of being a volunteer in a rural community is that when they are called out to respond to incidents they often know the person who is injured or ill which adds to the challenges they face providing services in small close knit communities.

For areas of small population the volunteer model ensures communities are provided with an ambulance service where case load is not high enough to support a salaried staff member. While many rural volunteer ambulance units do not have large ambulance caseloads the reality is their challenges are often very considerable on a case by case basis. Rural Australians on average are sicker than their urban counterparts and many of Australia and New Zealand's worst trauma cases involve high speed collisions in rural areas at some distance (and time) from major receiving hospitals able to provide definitive care. Added to those challenges are farming, forestry and mining accidents in rural areas and injuries associated with recreational pursuits and tourism.

Clearly voluntary unpaid contributions by these thousands of volunteers are significant inputs in this field of essential emergency service provision. In most cases Australian States and Territories and areas of New Zealand could not provide the same levels of emergency services in the absence of volunteer contribution. There is no economically viable alternative to a volunteer model of service delivery in many areas of emergency services, particularly in rural and remote areas where caseload/incident levels are low, but community safety needs are high because of various risk factors ranging from health risks of rural populations, risks involved in some rural industries (farming, forestry, mining) as well as risks from natural hazards – fires, floods, cyclones and earthquakes (which are a significant risk factor in New Zealand).

A common public misconception is that volunteer emergency services are 'free', which clearly is not the case. Emergency services have high infrastructure costs including costs of vehicles and equipment, stations, and communications networks as well as recurrent costs for training and ongoing skills maintenance, uniforms and reimbursement of minor expenses. Often rural services also have higher recurrent costs for fuel, consumables and supplies and equipment maintenance due to higher rural pricing (e.g. fuel) or freight costs.

Services that have high reliance on volunteers in rural areas tend to have a lower expenditure per capita compared to services that use predominantly salaried staff in rural areas such as Queensland and New South Wales. In Victoria there is high expenditure per capita relative to many jurisdictions but this is in part due to remuneration to volunteer ambulance officers (for time spent responding to incidents) and a high level of distribution of paramedics in rural areas.

The models of service delivery involving volunteers have in fact been increasing through the development of first response units. The advent of Automated External Defibrillators and their significant drop in price have contributed to the development of first response units with a new "breed" of volunteers targeting improved survival rates for cardiac arrests.

The government and the Australian public recognises the significant contribution volunteers make to Australian communities and that Australia's capacity to respond to disasters and emergency incidents is largely based on a range of specialised volunteer-based organisations. Although volunteers are recognised as making a valuable contribution, they are not cost free to governments and the volunteer employer that provide funds and support to volunteer organisations.

Volunteering also often comes at a financial cost to the individual to cover direct costs such as; petrol, food and drink, clothing, training and education; and in-kind contributions such as; use of own phone, office equipment, motor vehicle repairs and maintenance, etc. A report on a National Survey of Emergency Management Sector Volunteers found that the average combined cost of both direct costs and in-kind contributions was \$950 per volunteer per annum. The average cost varied depending on employment status with those who were self employed experiencing a much higher average of \$3282 per annum<sup>14</sup>.

To cover the cost of volunteering, a tax rebate option for volunteers has been proposed to the government. The Attorney-General's Department in consultation with key stakeholders including members of the Australian Emergency Management Volunteer Forum and the Australian Emergency Management Committee, is currently undertaking work to develop options for the attraction, support and retention of emergency management volunteers. Reimbursement of out of pocket expenses will be reviewed as part of this work.

### 2.2 Aeromedical services

Aero-medical services are provided through a variety of arrangements, some State/Territory ambulance services provide these services entirely; some ambulance services use subcontractors; some are provided externally to the State; and other arrangements involve a mixture of the above.

The Australian Government provides some capital and recurrent funding through the Royal Flying Doctor Service which is mainly used for primary health services to rural and remote communities but in some States/Territories this service is also used to transfer high acuity patients.

### 2.3 Workforce redesign

Across Australia the paramedics' role is expanding both formally and informally to provide primary health care, improve emergency response capabilities and strengthen community healthcare collaborations in rural and remote communities<sup>15</sup>.

The paramedic is a well placed health professional to take a key role in contributing to better health outcomes of Australians particularly in rural and remote areas where the paramedics' services are often underutilised. Ambulance services can play a key role in contributing to service and health outcome improvements in rural and remote Australia through workforce redesign of its rural and remote workforce and in turn contribute positively to the sustainability and social capital of these communities.

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<sup>14</sup> King, S., Bellamy, J., and Donato-Hunt C. (2006). *The cost of volunteering; a report on a National Survey of Emergency Management Sector Volunteers*. Australian Emergency Management Volunteer Forum. Anglicare, Sydney.

<sup>15</sup> Stirling, C.M., O'Meara P., Pedler, D., Tourle, V., and Walker, J. (2007). Engaging rural communities in health care through a paramedic expanded scope of practice. *Rural and Remote Health*. 7: 839. Accessed 17<sup>th</sup> December 2007. <http://www.rrh.org.au>

A survey of ambulance jurisdictions in 2007 found that in rural and remote locations paramedics' roles are being redeveloped to provide services in the following<sup>16</sup>:

- Assisting nurses in hospital emergency departments;
- coordinator roles primarily aimed at supporting ambulance volunteers; and
- to promote injury and disease prevention and provide integrated health services in partnership with other health professionals.

These roles are primarily developing as a response to a lack of available health services and health workforce in rural and remote locations and there are a number of health professional initiatives developing to address this problem. Such initiatives include the expanded role paramedic, nurse practitioner and physicians' assistant which are all designed to provide the community with access to a wider range of health services. Multidisciplinary training that provides the core competencies for all practitioner models could be the next step in this development, which is already occurring in the UK.

### 2.4 Private providers

There are a number of private ambulance service providers and services vary across States and Territories in both metropolitan and rural and remote areas. Private ambulance service providers generally deliver non emergency inter-facility transfers usually in a contractual arrangement with hospitals. Industrial companies in the areas of mining, oil rigs, and car manufacturers also may employ individuals to provide paramedical services outside of the principal state providers, although in some States/Territories the principal ambulance service contracts Paramedics to mining companies.

Other private paramedical services provide emergency pre-hospital care to events such as; motor sports, concerts, film and television productions, major public events and any other event which paramedical services are required. There are also a number of private providers specifically designed for delivering workplace health and injury management covering businesses.

### 2.5 Patient coordination

Ambulance services are routinely called upon to move patients between various health service facilities. In rural and remote areas this can place a significant burden on local ambulance resources. A CAA survey of services in July 2008 was conducted to identify strategies employed by ambulance jurisdictions across Australasia in respect of patient movement and clinical coordination<sup>17</sup>.

The results are as follows:-

For non emergency transport ambulance services use a range of vehicles and types of staff varying from patient transport officers to paramedics' dependant on the location of the patient. Some jurisdictions do not operate patient transport services in rural areas and fully equipped ambulances are used. Aeromedical services are used for long distance transports.

A number of factors impact the scheduling of transfers including; availability of staff/volunteers or vehicles, the distance of the transport in relation to the availability of crews, fatigue issues, and environmental hazards. The high demand for these

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<sup>16</sup> Council of Ambulance Authorities Inc. (2007). *CAA expanded scope of practice: An Australasian overview of emerging paramedic models of care* – unpublished internal document.

<sup>17</sup> Council of Ambulance Authorities (2008). *Clinical Coordination and Patient Movement Survey*. Unpublished.

services or emergency responses due to hospital access block or increased patient call outs can also impact the availability of these resources.

The effects of regionalisation of health service provision or structure in regional or rural and remote areas has resulted in longer transport times for the patients and decreases the availability of ambulance resources as a single transfer can take an entire shift length. This can decrease the services ability to respond to core emergency calls. Regionalisation of specialty health services to larger population centres can result in the requirement for ambulance services to provide an increased frequency of patient transfers to access these services.

A main barrier to improvement of patient coordination identified by a number of services was the complexity or availability of funding for both health services and ambulance service resources. As the cost of the infrastructure to provide aeromedical and road based transport is high, enhancements come at a significant cost. Other barriers identified include:

- Fragmented health services with individual rules within the organisations that may conflict with other organisations and lack of central direction.
- The diminishing numbers of facilities with no well thought out alternatives.
- Lack of integration of the ambulance services in the overall health service annual funding.
- Bed availability in referral and tertiary hospitals.
- Loss of autonomy and control of resources.

A main theme arising from the survey was for better coordination across the whole health system or various components of the system in order to provide patients with the most appropriate care in a timely manner.

## Part 3 Recruitment and retention

The majority of Australian ambulance services have large geographic areas with low population density within their State or Territory. For some services with vast rural and remote areas, volunteers make up a significant component of the workforce providing services to their communities that otherwise would not be available. Rural and remote areas often have a very low case load which would not provide enough work or training opportunities for a salaried paramedic. Ambulance services like other health areas have identified that recruiting health professionals to these areas is problematic. This section describes current staffing strategies used by individual ambulance services as investigated through a CAA survey in 2007.

### 3.1 Volunteers

Ambulance services have specific strategies to attract and retain salaried and volunteer staff to rural and remote locations.

#### 3.1.1 Training and development

Providing flexible quality initial and ongoing training is an effective tool for recruiting and retaining volunteers. Ambulance education and training for volunteers is provided through a variety of methods across Australasia. For example SA Ambulance Service has improved the flexibility of the delivery of education making it easier for volunteers to undertake the training to suit their needs and pace. This also involves increasing the number of exit points in training to enable those who don't want to undertake training to the highest level to undertake a lesser level and still provide a resource to their communities.

#### 3.1.2 Professional and career support

Strategies to foster professional and career support involve establishing effective communication channels, understanding the differences between rural and metropolitan areas, making volunteering enjoyable, not wasting volunteers time, stressing the rewards of volunteering, building a sense of 'exclusivity', providing tangible evidence, using performance based awards, providing information kits, and by raising the profile of volunteers<sup>18</sup>.

Some services provide reimbursement to volunteers for out of pocket expenses. St John New Zealand also uses recognition programs and attempts to keep duty hours at a reasonable level as retention strategies.

Ambulance jurisdictions across Australasia recognise their volunteers through various means mainly through awards, medals, and certificates for length of service and completion of training. Professional support is also provided through conferences and volunteer forums to gain feedback. Other support strategies involve providing resources such as vehicles, equipment, and uniforms. Support is also provided from salaried paramedics/ambulance officers who work in the area.

#### 3.1.3 Marketing

Specific marketing campaigns designed for promoting rural and remote areas can assist in recruiting volunteers. A common strategy used throughout Australasia is recruiting volunteers from within the local community. Local recruitment strategies include a number of measures including local advertising, word of mouth,

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<sup>18</sup> Rural Ambulance Victoria – Centre for Regional Innovation and Competiveness (CRIC). (2004). *Literature Review: Recruitment and Retention in Rural and Remote Areas*. University of Ballarat, Australia.

participating in local events and through team members being active in the community.

### **3.2 Salaried staff**

Services have developed specific strategies to attract and retain salaried staff to rural and remote areas.

#### *3.2.1 Education (pre-employment)*

Education strategies can be used to expose potential recruits to rural locations, attract recruits from local rural areas, or by providing training and mentoring in the local rural environment and providing opportunities for those who live in these areas to participate in university training which may otherwise be inaccessible to them.

SA Ambulance Service has introduced a regional sponsored degree student program where students are recruited from the local area into a supported degree program where recipients undertake part time degree studies via distance education and work part time in their town service.

#### *3.2.2 Training and development (post-employment)*

Training and development strategies can be used to provide context specific training and development according to community needs, access to professional development, flexible training delivery modes and in particular on-line training programs.

SA Ambulance Service provides intensive care paramedic training programs for rural paramedics where students undertake the didactic and internship components of their studies in the metropolitan area but are given a break mid course allowing them to return to their families and communities to work on roster, and also maintaining a connection with their colleagues.

Providing training and opportunities for secondment is a common retention strategy amongst services. Flexible training delivery models are provided through E-learning opportunities to enable access to training wherever staff is situated. Expanded roles can provide paramedics with a wider range of skills specifically chosen to assist the local community which can assist in the retention of staff to rural and remote areas.

#### *3.2.3 Financial incentives*

Financial incentives range from allowances or subsidies, retention grants based on length of tenure, student loans or attraction packages and are used in the majority of services to recruit and retain staff.

#### *3.2.4 Social and community support*

Social and community support strategies focus on providing support to the partner or family of the recruit, providing information about quality housing and community facilities, local community involvement, and industry/employer involvement.

#### *3.2.5 Professional and career support*

Professional and career support include strategies that involve the development of multidisciplinary teams, providing on-call relief arrangements, providing up to date equipment and facilities, and information about the benefits of working and living in these locations.

Queensland Ambulance Service has a term transfer policy that guarantees officers undertaking service in rural and remote locations a right of return to the station of

origin. Ambulance Service of New South Wales has created town profiles to promote advantages of living in rural locations.

### *3.2.6 Marketing*

Specific marketing campaigns designed for promoting rural and remote areas can assist in recruiting to the area.

In St John Western Australia paid staff working in rural and remote areas of WA are generally recruited from within ranks of metropolitan staff through an internal advertising campaign. SJWA are also working towards using direct intake recruits from overseas to work in these areas. Ambulance Victoria promotes the tree and sea change aspects of working in rural and remote locations to qualified staff from Metro settings.

## Part 4 Rural and Remote Issues

There are a number of issues specifically impacting service delivery in rural and remote locations. Ambulance services have identified the main challenge facing services is the changing dynamics of workforce resulting in:

- an increasing numbers of female recruits that the traditional roster does not easily accommodate;
- an ageing workforce leading to higher rates of attrition and overall a less experienced workforce;
- younger recruits who demand better work/life balance and the option to work part-time; and
- difficulties in recruiting and retaining staff in rural and remote areas.

### 4.1 Recruitment and retention

A survey of key issues impacting workforce planning identified that services are having increasing difficulty in retaining both salaried staff and volunteers in rural and remote areas<sup>19</sup>. Services are finding that the majority of paramedic graduates and experienced paramedics prefer to work in the major cities and students may have an unrealistic view as to the location of job opportunities in certain states.

Recruiting staff who already live in rural and remote areas has been demonstrated as a more successful recruitment strategy as the students already understand the life style and are better prepared for the challenges faced in these areas. Many young students are unaware that their job opportunities are skewed toward rural areas in some states. Another issue is the trend towards increased mobility of employees across states and countries making it particularly challenging to retain staff in remote areas.

The main factor that influences recruitment and retention in rural and remote areas is professional factors including ability to gain recreational leave and family leave, emergency leave, and relief to complete training programs<sup>20</sup>. Rural doctors identified the top three issues impacting the length of their practice in remote areas as; on-call arrangements, professional support and variety of practice.

Issues that have been identified as barriers to recruitment and retention for ambulance career or salaried personnel include personal, professional, social and community factors<sup>21</sup>. Personal barriers include negative perceptions of working in rural and remote areas and the majority of university students do not have a rural or remote background which is a predictor of willingness to work in these locations. Professional barriers include issues with education and training availability and opportunities and lack of professional and peer support.

Working conditions that result in being on call 24 hours a day, and inability to gain personal time off for various reasons are significant barriers to recruitment and retention. Social barriers identified include a partner's level of happiness and the availability of social and cultural activities for both the employee and their family as well as employment opportunities for family members. Community barriers include

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<sup>19</sup> Council of Ambulance Authorities. (2007). *Workforce planning survey*. Unpublished.

<sup>20</sup> Humphreys, S.J., Jones, M.P., Jones, J.A., & Mara, P.R. (2002). Workforce retention in rural and remote Australia: determining the factors that influence the length of practice. *Medical Journal of Australia*, Vol 176: 472-476.

<sup>21</sup> Rural Ambulance Victoria – Centre for Regional Innovation and Competiveness (CRIC). (2004). *Literature Review: Recruitment and Retention in Rural and Remote Areas*. University of Ballarat, Australia.

availability of quality schooling, availability of adequate resources including housing, supermarkets and other facilities, community acceptance and loss of privacy and anonymity.

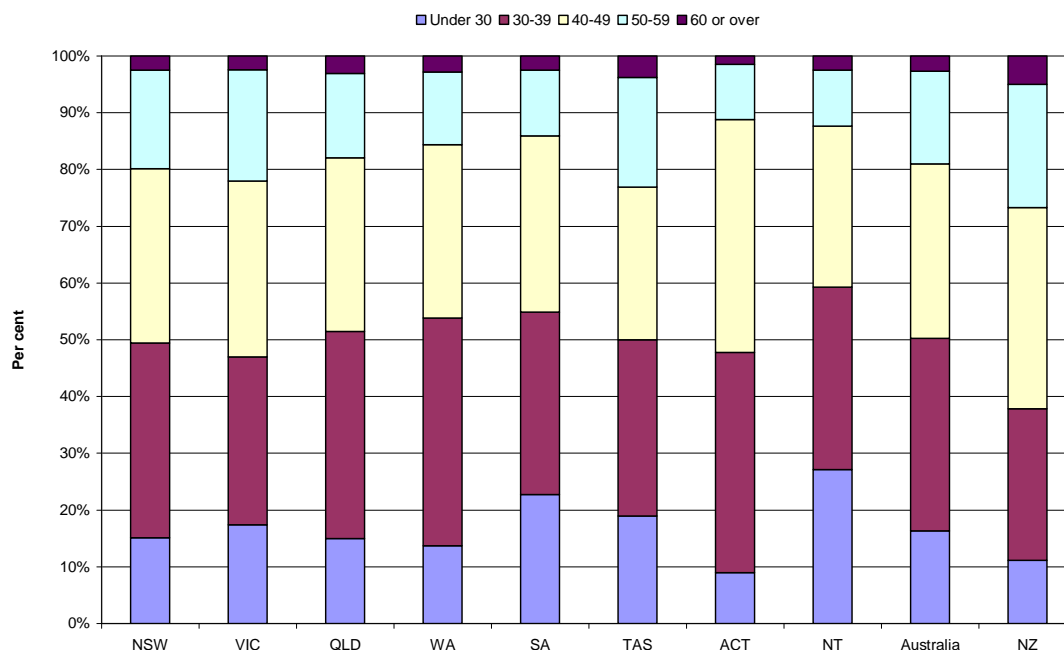
For volunteer ambulance officers who are recruited from within the local community there are specific issues that impact the retention of these staff including: relations with local government and professional personnel, level of formality, training barriers, level of time commitment, and their relationship with clients and acceptance of new volunteers<sup>22</sup>.

### 4.2 Ageing workforce

The ageing of the workforce was identified as a key issue impacting the sustainability of the workforce across services. It was identified that an aging population of higher skilled Paramedic staff which are undergoing higher than normal levels of turnover is resulting in a diminishing skill level of the workforce as less experienced staff are employed as replacements.

There is no data available on the age of salaried staff in rural and remote areas. However there is data on the whole operational workforce that demonstrates in Australia 81% of the workforce is aged under 50, New Zealand has a smaller proportion with 73% of the workforce aged under 50.

**Figure 4: 2007/08 Salaried Operational ambulance workforce by age group**

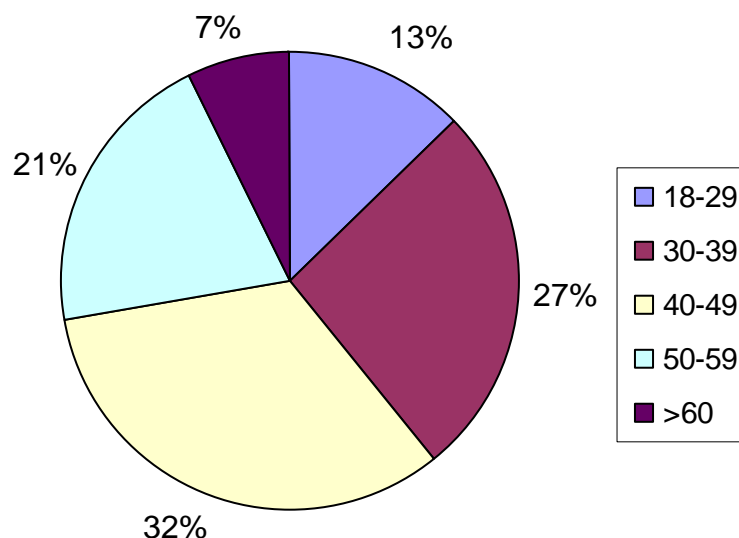


As the general population ages so will the age of the volunteers in rural and remote locations. The Stand Up and Be Counted Report surveyed over 2,500 Volunteer Ambulance Officers (VAO) from Western Australia, South Australia, Victoria, Tasmania, Queensland, Northern Territory, and New Zealand with a response rate of

<sup>22</sup> Rural Ambulance Victoria – Centre for Regional Innovation and Competiveness (CRIC). (2004). *Literature Review: Recruitment and Retention in Rural and Remote Areas*. University of Ballarat, Australia.

38%<sup>23</sup>. The age profile of volunteers ranges from 18 years of age up to over 60 years of age with the majority (60%) in the 30's and 40's. 21% of VAO's were in the 50-59 age group with only 7% over 60 which demonstrates that VAO's only generally volunteer up to the age of 60. As this large proportion of VAO's retires, ensuring the sustainability of the volunteer model will be an important focus of those ambulance services that rely on volunteers.

**Figure 5: Age profile of Volunteer Ambulance Officers**



### 4.3 Workforce feminisation

Ambulance services have identified an increase in female recruits as a significant workforce planning issue. It was identified that this increase of female employees could potentially lead to increased proportion of staff who are pregnant and therefore require additional coverage during safe duties and increased demand for parental leave and part time employment which traditional rosters do not easily support.

There is no data on the gender of rural and remote salaried staff, females consist of approximately 30% of the Australian ambulance workforce. However there is data available on the volunteer workforce. The Stand Up and Be Counted Report found that 55% of VAO's are female.

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<sup>23</sup> Fahey, C., & Walker, J. (2002). *Emergency Services in Australia and New Zealand: Problems and Prospects for Volunteer Ambulance Officers*. University Department of Rural Health, University of Tasmania.

## **Part 5 CAA activities and collaboration**

The CAA collaborates with various organisations in order to provide its members with information on current best practice for the education, training and delivery of pre-hospital emergency care in rural and remote locations. In order to facilitate this process the CAA has a Rural and Remote Group with the primary purpose of providing a national focus and acting as the key advisory group to the CAA on matters relating to the strategic direction and development of ambulance related services in rural and remote areas with particular reference to models of service delivery and strategic issues related to delivery of volunteer ambulance services. The CAA holds a Rural and Remote Symposium once per year to facilitate information sharing across services.

The CAA is also a delegate of the International Round table on Community Paramedicine and Rural Health Care Delivery, an organisation of delegates from various countries and regions to promote the exchange of information and experience related to the provision of flexible and reliable health care services to residents of rural and remote areas.

The IRCP meet regularly by teleconference and hold an annual meeting which is sometimes held in collaboration with the CAA's Annual Rural and Remote Symposium. These events provide an opportunity for participants from Australia, Canada, USA and the UK to share information and learning's on the most important challenges that face ambulance services internationally. The professional relationships developed through these international events will continue to assist Australasian ambulance services to understand international drivers of practice and the breadth of the future challenges ahead.

The CAA's Rural and Remote Group is also a member of the National Rural Health Alliance (NRHA) which is the peak body working to improve the health of Australians in rural and remote areas. It is comprised of 28 member bodies including representatives from both health consumers and service providers in non-metropolitan areas. Membership of this group provides an excellent opportunity to raise the profile of ambulance services and the developing expanded role of the paramedic particularly in rural and remote regions.

The CAA is also represented on the Australian Emergency Management Volunteer Forum, a national forum representative on the volunteer emergency management sector, to facilitate better communication between the organisations within it, and to provide advocacy for the sector. The government provides the National Emergency Volunteer Support Fund to provide funding for projects related to recruitment and retention within the volunteer emergency management sector including training strategies and the acquisition of equipment that specifically supports recruitment, retention, and training. The Australian government has funded a number of ambulance service volunteer initiatives.

## **Part 6 Conclusion**

This document provides an overview of ambulance service delivery in rural and remote areas of Australia and New Zealand and identifies challenges to providing services in these locations. Although it is recognised by the health sector that providing services in these areas will always be challenging due to geography and availability of resources, ambulance services strive to provide these communities with access to quality health care.

The ambulance industry has extended their support of the health care system by broadening paramedic expertise to provide pre-hospital clinical care for patients with chronic and mental health conditions as well as extending care to work closely with the local medical programs to support the health care needs of the rural and remote community.

Rural and remote ambulance services would not be provided in a number of locations without the support and dedication of ambulance volunteers. These volunteers selflessly provide their communities with an ambulance service that would otherwise cease to exist.

The CAA will continue to provide an opportunity for members to share information on rural and remote service delivery in order to provide the community with appropriate health care access, care and treatment.

## **Reference websites**

Council of Ambulance Authorities [www.ambulance.com.au](http://www.ambulance.com.au)

Emergency Management Australia <http://www.ema.gov.au/>

International Round table on Community Paramedicine <http://ircp.ncemsi.org/>

Report on Government Services <http://www.pc.gov.au/gsp>

National Rural Health Alliance <http://nrha.ruralhealth.org.au>

Volunteering Australia [http://www.volunteeringaustralia.org/html/s01\\_home/home.asp](http://www.volunteeringaustralia.org/html/s01_home/home.asp)

Volunteer ambulance association of Tasmania  
<http://www.tasmanianambulancevolunteers.asn.au/>

Stand up and be counted report <http://www.ruralhealth.utas.edu.au/band-aid/>

Australian Institute of Health and Welfare <http://www.aihw.gov.au/>

Australian Bureau of Statistics <http://www.abs.gov.au/>

Statistics New Zealand <http://www.stats.govt.nz/default.htm>

National Health and Hospitals Reform Commission  
<http://www.nhhrc.org.au/internet/nhhrc/publishing.nsf/Content/home-1>