



NATIONAL RURAL
HEALTH
ALLIANCE INC.

Submission to the Rural and Regional Affairs and Transport References Committee Inquiry into Aspects of Road Safety in Australia

February 2015

*This Submission is based on the views of the National Rural Health Alliance but
may not reflect the full or particular views of all of its Member Bodies.*



Good health and wellbeing for rural and remote Australia

Introduction

The National Rural Health Alliance (the Alliance) is comprised of 37 national organisations. It is committed to improving the health and wellbeing of the more than 6.7 million people in rural and remote Australia.

Members include consumer groups (such as the Country Women's Association of Australia and the Isolated Children's Parents' Association), representation from the Aboriginal and Torres Strait Islander health sector, health professional organisations (representing doctors, nurses and midwives, allied health professionals, dentists, pharmacists, optometrists, paramedics, health students, chiropractors and health service managers) and service providers (such as the Royal Flying Doctor Service and Frontier Services of the Uniting Church in Australia). The full list of Member Bodies is at Attachment A.

Each of the Member Bodies is represented on Council of the Alliance, which guides and informs policy development and submissions. With such a broad representative base, the Alliance is in a unique position to provide input on the broader issues relating to good health and wellbeing in rural and remote areas.

The Alliance is keen to provide input into consideration of the social and economic costs of road-related deaths and injuries - particularly in rural, regional and remote parts of Australia - and the different considerations affecting road safety in urban, regional and remote areas. The Alliance would also like to highlight the health and economic opportunities of investment in improving country roads.

Overview

Australia's road safety record is comparable to that of the rest of the developed world, however it has been lagging behind in terms of improvement.¹ Between 2003 and 2012, the risk of a road crash fatality in Australia declined by 30.5 per cent. Over the same period, the OECD median rate fell by 38.9 per cent.²

The *National Road Safety Strategy 2011-2020* stipulates that Australia should aim to reduce the annual numbers of deaths and serious injuries on Australian roads by at least 30 per cent by the year 2020.³ People in rural and remote areas are significantly over-represented in the numbers of deaths and serious injuries, so if this target is to be met, road safety in these areas will need to become a particular focus for policymakers and researchers.

In Australia, the rate of serious road-related injury among those living outside major cities is nearly twice that of those living within them.⁴ Country people are also more than three times more likely to die as a result of a transport accident than their city cousins.⁵

¹ Bureau of Infrastructure, Transport and Regional Economics, 2012, *Statistical Report: International road safety comparisons 2012*, Available at: https://www.bitre.gov.au/publications/ongoing/files/irsc_2012.pdf

² Bureau of Infrastructure, Transport and Regional Economics, 2012, *Statistical Report: International road safety comparisons 2012*, Available at: https://www.bitre.gov.au/publications/ongoing/files/irsc_2012.pdf

³ Australian Government Department of Infrastructure and Regional Development, 2014, *National Road Safety Strategy 2011-2020*, Available at: http://www.infrastructure.gov.au/roads/safety/national_road_safety_strategy/

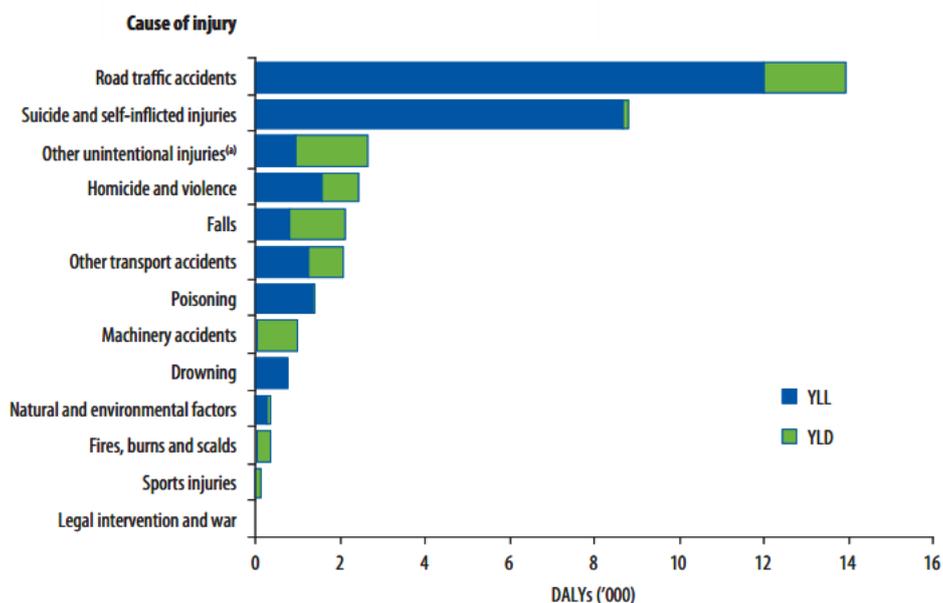
⁴ Australian Institute of Health and Welfare, 2012, *Trends in serious injury due to land transport accidents, Australia 2000-01 to 2008-09*, Available at: <http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=10737421990>

⁵ Australian Bureau of Statistics, *Health Outside Major Cities*, Available at: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Main+Features30Mar+2011>

The difference in outcomes for city and country people is particularly marked among young men and Aboriginal and Torres Strait Islander people.

Road traffic accidents account for a major proportion of years-of-lost-life (YLL) and disability-adjusted-life-years (DALYs) among young people (Figure 1), and this becomes more marked with remoteness and socioeconomic disadvantage.

Figure 1: Leading causes of injury burden (YLL and DALYs) for 15–24 year olds, 2003⁶



Source: AIHW

The death rate for transport-related accidents for young men aged 20-24 years living in the country is nearly four times higher than it is for those in the city.⁷

Indigenous Australians, of whom around 70 per cent live outside the major cities, are nearly three times more likely to die as a result of a road accident than non-Indigenous Australians and 1.4 times more likely to be seriously injured.⁸

The impacts of road crashes extend far beyond the physical injuries and often include diminished quality of life (because of an enduring injury or acquired disability), legal costs, workplace disruption, long-term care, vehicle repairs and travel delays. All these place emotional and financial strain on those involved and their families.

Crashes which occur on rural roads are not only more lethal, but evidence from New Zealand (NZ) suggests they are also costlier.⁹ In NZ, around 60 per cent of the total cost of road injuries relate to crashes that occur in rural areas, despite only 22 per cent of the population living there.

⁶ Australian Institute of Health and Welfare, 2008, *Injury among young Australians*, Available at: <http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=6442452801>

⁷ Australian Bureau of Statistics, 2011, *Health Outside Major Cities*, Available at: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Main+Features30Mar+2011>

⁸ Harrison JE, Berry JG (2008) *Injury of Aboriginal and Torres Strait Islander people due to transport, 2001-02 to 2005-06*. Canberra: Australian Institute of Health and Welfare

⁹ The annual economic cost of road crashes in Australia is estimated at \$27 billion per annum. Australian Government Department of Infrastructure and Regional Development, <https://www.infrastructure.gov.au/roads/safety/>

A fatal crash in rural NZ costs around NZ\$4 million compared with NZ\$3.5 million for an urban fatal crash. An equivalent Australian figure is not available.¹⁰

Studies by the Centre for Action Research and Road Safety - Queensland, and the Curtin-Monash Accident Research Centre have identified some underlying factors which contribute to rural Australia's poor road safety record, and a range of potential solutions to the problem. Reports on these studies are available at www.carrsq.qut.edu.au and www.c-marc.curtin.edu.au

Addressing risk-taking behaviour among country drivers

There are substantial differences in rates of risk-taking behaviour between city and country drivers. In one study, researchers found that the ratio of fatal crashes in rural areas compared with urban areas in Queensland was:

- 12.1 times higher for fatigue-related crashes;
- 5.2 times higher for crashes where the victim was not wearing a seatbelt;
- 4.7 times higher for speed-related crashes; and
- 4.3 times higher for alcohol-related crashes.¹¹

Crashes in rural areas are also more likely to involve an unlicensed driver/rider. This in part reflects lower levels of licence ownership among Aboriginal and Torres Strait Islander people.¹² They encounter a number of barriers to obtaining a driver's license, including language differences, reading and writing difficulties, distrust of police officers (in areas where licensing is overseen by local police), and apprehension about dealing with agencies (government licensing authorities).¹³ In New South Wales, for example, Aboriginal people represent only 0.4 per cent of all driver licence holders in NSW but make up 1.9 per cent of the eligible driver population.¹⁴

Addressing these risk-taking behaviours in an urban (or well-resourced) setting typically involves expansion and targeting of police presence and law enforcement; promotion, incentivising, and expansion of public transport; and raising public awareness about its potential harms. However, in rural areas such remedies as these can be particularly challenging.

In rural areas there is less police presence because it is often unjustifiably costly and impractical on low traffic volume roads. There is therefore less likelihood of prosecution and less deterrent for people to partake in risk-taking behaviour. Reducing speed limits and toughening penalties for driver misbehaviour will therefore have a far lesser impact on country roads.

¹⁰ O'Connor, T. et al, *The medical and retrieval costs of road crashes in rural and remote northern Queensland, 2004–2007: findings from the Rural and Remote Road Safety Study 2009*, available at <https://www.mja.com.au/journal/2009/190/2/medical-and-retrieval-costs-road-crashes-rural-and-remote-northern-queensland>

¹¹ ARRB Group and CARRS-Q, 2006, *Road Safety in Rural and Remote Areas of Australia*, Available at: [http://www.arrb.com.au/admin/file/content13/c6/30-Road safety in rural and remote areas of Australia.pdf](http://www.arrb.com.au/admin/file/content13/c6/30-Road%20safety%20in%20rural%20and%20remote%20areas%20of%20Australia.pdf)

¹² Edmonston, C., 2009, "It's Just the Way it is Out Here ...": *The Role of 'Remoteness' and 'Context' in Understanding and Preventing Rural Road Trauma*, Available at: <http://casr.adelaide.edu.au/rsr/RSR2009/RS090007.pdf>

¹³ Australian Government Department of Infrastructure, Transport, Regional Development and Local Government, 2008, *Aboriginal People Travelling Well: Issues of safety, transport and health*, Available at: https://www.infrastructure.gov.au/roads/safety/publications/2008/pdf/RSRG_1.pdf

¹⁴ Audit Office of New South Wales, *Improving legal and safe driving among Aboriginal people*, Available at: <http://www.audit.nsw.gov.au/news/improving-legal-and-safe-driving-among-aboriginal-people>

Another major challenge is the lack or non-existence of public transport.¹⁵ The proportion of people outside major cities who travel to work or study via public transport is only 1.7 per cent, compared to 19.1 per cent of those living in capital cities.¹⁶

Recommendations:

- There should be a nationally consistent and linked classification and data system for rural road crashes to enable accurate data collection and comparison of effectiveness of countermeasures. This would guide the newly established Primary Health Networks - which have been tasked with coordinating primary care and health promotion programs in their localities - in monitoring performance and developing effective programs.
- There is a need to develop alternative culturally-relevant licensing pathways for Aboriginal and Torres Strait Islander people.
- There is a need for expansion of State-funded community transport services, including through targeted small grants programs.
- There is a need to expand police presence in rural areas through State-funded provision of relocation benefits and retention incentives. The Police Federation of Australia has outlined a number strategies to attract and retain police officers to rural areas in its *Submission to the Productivity Commission's Geographic Labour Mobility Issues Paper*.
- There should be a rigorous analysis of the impact of the Northern Territory open speed trial on the incidence of road-related deaths and injuries once there is sufficient data to do so.
- There is a need for more rest opportunities for drivers. The Queensland Government has produced a document titled '[Guideline - Rest Areas and Stopping Places – Location, Design and Facilities \(2014\)](#)' which includes a suite of recommendations for expanding these.

Improving the drivability of rural roads

In rural areas, road conditions are particularly varied. Compared with urban areas, there are more dirt roads, more hazardous roadsides, and generally 'more challenging' road geometry. There is a greater likelihood of colliding with livestock and wildlife, and more heavy agriculture and mining vehicles on the road.

People in rural areas also tend to travel longer distances than city people, and this places them at higher risk of fatigue-related accidents. They generally travel at higher speeds and, as a consequence, have a greater risk of serious injury or fatality in the event of a crash.^{17,18}

They also tend to travel in vehicles that are not as safe as those used by city people. The lower socio-economic status of people in rural areas means they are likely to own older vehicles (meaning fewer safety features), and to give vehicle maintenance a lower priority. The poorer condition of country roads also contributes to faster rates of deterioration of vehicles.

¹⁵ Australian Bureau of Statistics, 2008, *Public transport use for work and study*, Available at: www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Chapter10102008

¹⁶ Australian Bureau of Statistics, 2008, *Public transport use for work and study.*, Available at: www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Chapter10102008

¹⁷ ARRB Group and CARRS-Q, 2006, *Road Safety in Rural and Remote Areas of Australia*, Available at: [http://www.arrb.com.au/admin/file/content13/c6/30-Road safety in rural and remote areas of Australia.pdf](http://www.arrb.com.au/admin/file/content13/c6/30-Road%20safety%20in%20rural%20and%20remote%20areas%20of%20Australia.pdf)

¹⁸ Australian Government: Bureau of Infrastructure, Transport and Regional Economics, *Cost of road crashes in Australia 2006*, Report 118, http://www.bitre.gov.au/publications/2010/files/report_118.pdf

Physical infrastructural improvements to rural roads have been proven to reduce crash risk. Monash University's Crash Research Centre has undertaken a literature review (*[Cost Effective Infrastructure Measures on Rural Roads](#)*) to assess the current state of knowledge in regard to road infrastructure and how it can be improved to reduce the frequency and severity of rural road crashes. The report identifies a number of measures which have been shown to reduce the incidence and severity of crashes in rural areas, including clearing of roadside hazards, introducing roadside barriers, converting undivided roads to divided roads, and road shoulder sealing.¹⁹

To cite some examples:

- Treatments for roadside hazards in rural settings have been found to reduce pole and other fixed roadside casualty crashes by 68 per cent.
- Clearer road markings (which 'channel' vehicles safely at rural intersections) have been found to reduce crash frequency by 36 per cent.
- Crash rates can be reduced by 20 per cent for every one metre increase in bitumen seal width ('shoulder sealing') of an existing road.
- Roundabouts at rural intersections can reduce casualty crash risks at intersections by 70-80 per cent; when such crashes occur, the roundabout reduces the cost of accident by around 90 per cent.²⁰

Recommendation:

- There is a need to collate research on cost-effective rural road infrastructure improvements (such as that described above) and commission their implementation.

Improving access to health services

Investment in better rural roads has the potential to have a direct impact on rural people's access to the health system, and improve their health and wellbeing. With better roads people in rural areas would be able to access primary care and rehabilitation services more freely, and this may lead to improved prevention and management of chronic conditions.

Improving road infrastructure also has the potential to make it easier for health professionals to travel to and from rural areas (eg locums and drive-in, drive-out workers), helping to alleviate chronic workforce shortages. It also has the potential to improve the distribution of medicines, blood and other supplies to pharmacies and health facilities.

Largely because of the greater distances, when accidents or acute health episodes do occur in rural areas, emergency responses are slower and retrieval times longer, worsening crash survival rates.²¹ This is illustrated by the concept of 'the Golden Hour' - the idea that trauma patients have significantly better survival rates if they receive medical attention within one hour of their injury or episode. The time from trauma to first provider input is the most important interval in the rural trauma chain of survival, there being a 19 per cent increased risk of death per hour.²²

¹⁹ Monash University Accident Research Group, 2004, *Cost-Effective Infrastructure on Rural Roads*, Available at: <http://www.monash.edu.au/miri/research/reports/muarc217.pdf>

²⁰ The Australian Rural Roads Group, 2010, *Going Nowhere: The rural local road crisis - Its national significance and Proposed reforms*, Available at: http://www.infrastructureaustralia.gov.au/publications/files/Australian_Rural_Roads_Group_Report.pdf

²¹ Centre for Accident Research and Road Safety - Queensland (CARRS-Q), 2008, *Rural and Remote Road Safety Research Program: Major Recommendations*, Available at: http://www.carrsq.qut.edu.au/documents/RRRSS_recommendations.pdf

²² Fatovich D.M. et al, 2011, *Major Trauma Patients Transferred From Rural and Remote Western Australia by the Royal Flying Doctor Service*, Available at: http://www.flyingdoctor.org.au/ignitionSuite/uploads/docs/I%20Trauma%20Major%20Trauma%20Transfer%20Rural%20Remote%20WA%20RFDS_%20Fatovich%20et%20al%202011%20trauma_RFDS.pdf

In many cases, there are no ambulances or emergency departments within feasible proximity to the crash site, often necessitating aeromedical retrieval. This in part explains the higher costs of rural crashes.

Not only does public and community transport provide people with lower-risk transport options, it is also beneficial in terms of improving access to education, health services and reducing social isolation (which is often linked to poor mental health).²³

Aboriginal and Torres Strait Islander people encounter particular challenges around transport to health services. Over one-quarter of Indigenous Australian adults nationally have no access to motor vehicles, and nearly one-third in remote areas. Nearly three-quarters of Aboriginal and Torres Strait Islander adults living in remote areas have no public transport, with 15 per cent unable to reach places when needed due to lack of transport.²⁴

Recommendations:

- First-aid and resuscitation training should be made part of the driver licensing requirements to increase the pool of 'helpers' at rural crash scenes and to ameliorate slower response times of emergency services in rural and remote areas.²⁵
- Given the critical importance of retrieval services in country areas, funding should be maintained and extended where possible.
- There is a need for expansion of State-funded community transport services including through the establishment of small grants programs.

Opportunities for rural industries

The economic benefits of investment in rural roads extend beyond that of reducing the costs associated with road related deaths and injuries. Regional Australia contributes 67 per cent of Australia's export earnings,²⁶ and better roads can enhance the productive potential of industries such as tourism, agriculture and mining on which many rural communities are largely reliant.

The sustainability and growth of Australia's export earnings is largely influenced by primary producers' competitiveness in international markets. Not only is this impacted by tariffs and production subsidies for competitors, but Australian producers are also becoming increasingly challenged by drought, flooding and other extreme weather conditions attributable to climate change. Greater efficiency in transport infrastructure represents a significant opportunity for primary producers to reduce costs and thereby maintain competitiveness in international markets. For example, rural roads upgraded to carry B-double trucks rather than only traditional semi-

²³ Australian Government Department of Infrastructure and Regional Development, 2014, *Trends: Infrastructure and Transport to 2030*, Available at:

http://www.infrastructure.gov.au/infrastructure/publications/files/Trends_Infrastructure_and_Transport_to_2030.pdf

²⁴ Australian Bureau of Statistics, 2011, *4704.0 - The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples, Oct 2010*, Available at:

<http://www.abs.gov.au/AUSSTATS/abs@.nsf/lookup/4704.0Chapter960Oct+2010>

²⁵ Fatovich, D.M. et al, 2011, *Major Trauma Patients Transferred From Rural and Remote Western Australia by the Royal Flying Doctor Service*, Available at:

http://www.flyingdoctor.org.au/ignitionSuite/uploads/docs/J%20Trauma%20Major%20Trauma%20Transfer%20Rural%20Remote%20WA%20RFDS_%20Fatovich%20et%20al%202011%20trauma_RFDS.pdf

²⁶ Regional Australia Institute analysis based on ABS data for 2011

trailers allow each truck to transport around 50 per cent more freight on one vehicle – lowering farm freight costs significantly.²⁷

Better rural road networks are also vital to the sustainability of rural tourism. The Australian tourism industry comprises almost 280,000 enterprises (or 13 per cent of all enterprises in the Australian economy), contributes \$41 billion to Australia's GDP, directly employs over 500,000 people and contributes \$26 billion or over 8 per cent of total national export income. It is Australia's largest service industry and is significant for rural Australia where 45 cents in every tourist dollar is spent.²⁸

Indigenous tourism is a key segment of the tourism industry. In 2009, spending by Indigenous tourism visitors was estimated at \$7.2 billion. There are over 300 Indigenous tourism businesses in operation in Australia, of which 247 operate on a regular basis. Over half of all Indigenous tourism businesses are located in remote or very remote areas.²⁹

The availability of fresh food and vegetables declines with remoteness, and the cost of basic nutritious food is about 30 per cent higher outside metropolitan areas. As a consequence, remote communities are at heightened risk of food insecurity. Better transport links present opportunities to improve remote people's access to fresh, affordable and nutritious food which will in turn enable them to improve their health and wellbeing.

Recommendations:

- The health benefits of improved local transport infrastructure should be added to the equation when the costs and benefits of public, private and mixed investment in such infrastructure is being considered. Local authorities and the private sector should be involved with state and federal governments in the development of mutually-beneficial local transport infrastructure.

Conclusion

The recommendations put forward in this Submission are consistent with the strategies prescribed in the *National Road Safety Strategy 2011-2020*, specifically:

- improve road user behaviour;
- improve safety of roads;
- greater equity among road users;
- improve trauma, medical and retrieval services;
- improve road safety policy and programs through research of safety outcomes; and
- encourage alternatives to motor vehicle use.

There must be continued efforts by the whole range of agencies to reduce risk-taking behaviour, particularly among young men and Aboriginal and Torres Strait Islander people. Education programs relating to transport and personal safety should be tailored to the specific needs of rural people, and delivered through channels by which they uniquely receive their messages.

²⁷ The Australian Rural Roads Group, 2010, *Going Nowhere: The rural local road crisis - Its national significance and Proposed reforms*, Available at:

http://www.infrastructureaustralia.gov.au/publications/files/Australian_Rural_Roads_Group_Report.pdf

²⁸ Australian Government Department of Infrastructure and Regional Development, *Resources, Energy and Tourism*, Available at: <http://www.regional.gov.au/department/statements/2013-14/ministerial-statement-2013-14/resources-energy-tourism.aspx>

²⁹ Australian Government Department of Resources Energy and Tourism, 2010, *Indigenous tourism in Australia: Profiling the domestic market. Tourism Research Australia*, Available at: http://www.waitoc.com/wp-content/uploads/2011/06/Indigenous_Tourism_in_Australia_FINAL.pdf

Expanding public and community transport would provide lower risk transport options for many people who are currently without any choice. It would also help build social connectedness and improve access to health services, education and other essential services.

Better roads have the potential to improve timeliness of care, not only for those unfortunate enough to be involved in an accident, but also for rural people generally.

Addressing the physical features of rural roads is not only important in reducing the incidence and severity of road crashes, but also for fostering growth of rural industries such as tourism, agriculture and mining.

The Alliance is keen to contribute its expertise and contacts to the important cause of reducing the incidence of road-related deaths and injuries and their social and economic costs, particularly in rural, regional and remote areas.

ATTACHMENT A

Member Bodies of the National Rural Health Alliance

ACEM (RRRC)	Australasian College of Emergency Medicine (Rural, Regional and Remote Committee)
ACHSM	Australasian College of Health Service Management
ACM (RRAC)	Australian College of Midwives (Rural and Remote Advisory Committee)
ACN (RNMCI)	Australian College of Nursing (Rural Nursing and Midwifery Community of Interest)
ACRRM	Australian College of Rural and Remote Medicine
AGPN	Australian General Practice Network
AHHA	Australian Healthcare and Hospitals Association
AHPARR	Allied Health Professions Australia Rural and Remote
AIDA	Australian Indigenous Doctors' Association
ANMF	Australian Nursing and Midwifery Federation (rural members)
APA (RMN)	Australian Physiotherapy Association Rural Member Network
APS	Australian Paediatric Society
APS (RRPIG)	Australian Psychological Society (Rural and Remote Psychology Interest Group)
ARHEN	Australian Rural Health Education Network Limited
CAA (RRG)	Council of Ambulance Authorities (Rural and Remote Group)
CRANaplus	CRANaplus – the professional body for all remote health
CWAA	Country Women's Association of Australia
ESSA (NRRC)	Exercise and Sports Science Australia (National Rural and Remote Committee)
FRAME	Federation of Rural Australian Medical Educators
FS	Frontier Services of the Uniting Church in Australia
HCRRRA	Health Consumers of Rural and Remote Australia
IAHA	Indigenous Allied Health Australia
ICPA	Isolated Children's Parents' Association
NACCHO	National Aboriginal Community Controlled Health Organisation
NRF of RACGP	National Rural Faculty of the Royal Australian College of General Practitioners
NRHSN	National Rural Health Students' Network
PA (RRSIG)	Paramedics Australasia (Rural and Remote Special Interest Group)
PSA (RSIG)	Rural Special Interest Group of the Pharmaceutical Society of Australia
RDAA	Rural Doctors Association of Australia
RDN of ADA	Rural Dentists' Network of the Australian Dental Association
RFDS	Royal Flying Doctor Service
RHWA	Rural Health Workforce Australia
RIHG of CAA	Rural Indigenous and Health-interest Group of the Chiropractors' Association of Australia
ROG of OAA	Rural Optometry Group of the Australian Optometrists Association
RPA	Rural Pharmacists Australia
SARRAH	Services for Australian Rural and Remote Allied Health
SPA (RRMC)	Speech Pathology Australia (Rural and Remote Member Community)