



**Submission to the House of Representatives Standing  
Committee on Health**

**Inquiry into Chronic Disease Prevention  
and Management in Primary Health Care**

## Introduction

There is a significant body of evidence demonstrating that Australians living in rural and remote locations have much to gain from better prevention and management of chronic disease.

Not only do people in rural and remote Australia display an increased level of health risk factors resulting in a higher prevalence of chronic disease, they also have poorer access to the primary care services through which these chronic conditions can be addressed.

An example of the way in which these factors interplay is found in the 2014 report *Cancer in Australia: An overview* (1) in which the Australian Institute of Health and Welfare (AIHW) reports that the incidence of cancer in Australia is highest in inner regional areas (540 new diagnoses per 100,000 people) and lowest in very remote areas (398 new diagnoses per 100,000 people).

The AIHW mortality data suggest that this lower incidence rate in very remote areas is indicative not of better health, but rather, of the fact that fewer cases are being detected before advanced presentation: 167 deaths per 100,000 in major cities, compared with 185 deaths per 100,000 in inner regional and 192 deaths per 100,000 in both remote and very remote areas<sup>1</sup>. Such disparity represents a significant inequality in access to appropriate and timely diagnostic and treatment services for people living outside the major urban centres. This example also demonstrates that the data alone do not tell the full story.

In the *Medical Journal of Australia*, Fox and Boyce (2) discuss the inequality in health for people living in regional and remote Australia and the complex circumstances that ubiquitously underlie the data: under-reporting of disease, diagnostic delays, workforce maldistribution and access to fewer diagnostic facilities. This context may be further complicated by access to suboptimal curative treatments.

While the challenges associated with addressing chronic diseases in rural and remote Australia are significant, the data suggest significant benefits can be gained where those challenges can be overcome.

In developing this paper, the National Rural Health Alliance (the Alliance) has included a range of best practice initiatives from Australia and overseas that may serve as models to guide policy development in response to the challenges described.

### ***Higher prevalence of health risk factors***

One of the major challenges to improving chronic disease outcomes is to address the range of health risks that contributes to the development of chronic diseases, such as smoking and drinking, obesity and inactivity. Compared with people living in the major cities, people in rural areas are more likely to smoke (~20 per cent versus ~15 per cent), be overweight (~70 per cent versus ~60 per cent), engage in risky alcohol consumption, and be physically inactive (~72 per cent versus 66 per cent) (3).

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<sup>1</sup> Table D8.1 in Focus on Key Population groups <http://www.aihw.gov.au/publication-detail/?id=60129550047&tab=3>

People in rural areas have poorer oral health, which has also been linked to a greater risk of developing cardiovascular disease, diabetes, and respiratory illnesses (4).

These higher levels of health risk in rural Australia can be partially explained by factors relating to the national distribution of Aboriginal and Torres Strait Islander people and their health-related risk characteristics.

- The risk factors are more prevalent among Aboriginal and Torres Strait Islander people than non-Indigenous Australians.
- Around 65 per cent of Indigenous Australians live in rural areas.
- The risk factors are more prevalent among Indigenous Australians living in rural areas than among Indigenous Australians living in the major cities (5).

For example, while 39 per cent of Indigenous Australians in Major Cities smoked in 2012-13, the proportion increased to 44 per cent and 41 per cent in Inner Regional and Outer Regional areas, and to 49 per cent and 56 per cent in Remote and Very Remote areas respectively (5).

The Alliance has prepared Fact Sheets on the rural context of the risk factors listed above, available at [www.ruralhealth.org.au/factsheets](http://www.ruralhealth.org.au/factsheets).

### ***Higher prevalence of chronic disease***

The higher levels of health risks found in rural and remote Australia have resulted in higher prevalence of chronic diseases.

The AIHW has examined the burden of chronic disease, and compared with Major Cities, the burden of disease (expressed as 'disability adjusted life years') is 9 per cent and 26 per cent higher in regional and remote areas respectively (6). These 2003 AIHW figures are in the process of being updated. Early results indicate that the fatal health burden (which is at least twice as high for Indigenous Australians as for non-Indigenous Australians), increases with remoteness by at least 50 per cent for Indigenous Australians and by up to 20 per cent for non-Indigenous Australians.

Most chronic diseases have a higher prevalence in rural areas. For example, compared with the major cities:

- the prevalence of cardiovascular disease is approximately 20 per cent higher (7);
- the incidence of bowel cancer and lung cancer in rural and remote areas is 15 per cent and 10 to 50 per cent higher respectively, while the incidence of melanoma is 20 per cent higher in rural areas (8);
- the incidence of end-stage kidney disease is roughly similar or slightly higher in rural areas, but much higher in remote areas, reflecting very high incidence among Aboriginal and Torres Strait Islander people (7);
- the prevalence of type 2 diabetes in rural areas is roughly similar, or possibly slightly higher (7);
- the prevalence of arthritis is about 20 per cent higher in rural areas (9);
- the prevalence of back pain and deafness is 25 per cent higher in rural areas (9); and
- the prevalence of mental illness in rural areas is similar or slightly higher (9) (8).

The prevalence of chronic disease among Indigenous Australians is frequently greater than among non-Indigenous people, with the additional burden of disease increasing with remoteness. For example, compared with Indigenous Australians in Major Cities:

- Indigenous Australians in rural areas are about 25 per cent more likely to have diabetes, while those in remote areas are more than twice as likely to have diabetes (5);
- low birthweight babies are 10 per cent and 25 per cent more common for Indigenous women in rural and remote areas respectively (5); and
- the incidence of end-stage kidney disease is twice as high amongst Indigenous Australians from Outer Regional areas, and about four times as high amongst Indigenous Australians from Remote areas (5).

Additionally, Indigenous Australians in Remote areas are 60 per cent more likely to have circulatory disease compared with those in non-remote (i.e. major city and rural) areas (5).

According to the AIHW 2003 *Burden of Disease* report, the leading chronic diseases are cancer, cardiovascular disease, mental illness, respiratory diseases, diabetes, and musculoskeletal diseases (6). In the case of respiratory diseases, there is a 30 per cent higher burden in remote areas; for diabetes the burden in remote areas is double what it is in the major cities; and for musculoskeletal diseases the burden in remote areas is 20 per cent higher (6). For the other leading chronic conditions, the burden of disease is around 10 per cent higher outside the major cities.

### *Access to primary care*

One of the major reasons for the challenges detailed above is limited access to quality and timely primary care through a locally based general practitioner (GP). GPs are distributed unevenly across the country (see table below) making it challenging for people in rural areas to access the person who is the gatekeeper for guiding them towards appropriate and timely diagnosis and care. Not surprisingly, there are barely half the number of GP services delivered per person in Very Remote areas as there are in Major Cities (10).

Distribution of GPs by Remoteness Area, 2013-14 (Full-Time Work Equivalent)

ASGC-RA	FWE GPs (11)	FWE GPs per 100,000 population (12)
Major Cities	16,510	99.4
Inner Regional	4,483	105.1
Outer Regional	1,858	89.3
Remote	235	72.6
Very Remote	108	51.2

Source: Australian Government Department of Health & Australian Bureau of Statistics

One of the issues inhibiting a thorough exposition of the challenges in rural health is access to comprehensive and accurate data. The two major data sources are the AIHW and Medicare Benefit Schedule (MBS) data, which are sometimes at odds. For example, the use of MBS data may indicate a specific problem area which is not supported by AIHW data. This difficulty compounds the challenges in both examining the issues in rural health and in developing policy options for consideration. There is an urgent need to develop a master data

set that provides a reliable picture of rural health that can be used by the sector and by Government, and which the rural health sector believes to be accurate.

As a consequence of there being fewer GPs in rural areas, those that are there work more hours per week on average than city GPs (see table below) (13).

GP average weekly hours worked by remoteness

ASGC-RA	Average weekly hours worked
Major Cities (13)	38.0
Inner Regional (14)	39.9
Outer Regional (14)	43.0
Remote (14)	44.6
Very Remote (14)	45.8

Rural GPs tend to work longer hours for two reasons. Firstly, there is a greater health need in rural areas due to the higher prevalence of risk factors and chronic diseases. Secondly, rural GPs are often required to perform a broader range of tasks because other health professionals are not always available.

Nurses are playing an increasingly important role in the prevention and management of chronic disease in rural areas, providing appropriate, cost-effective and high-quality primary care within their scope of practice (15). Nurses are often the backbone of rural and remote primary care. Evaluations of nurses in GP practices have suggested they have improved patient care, increased communication between health professionals, contained costs, and reduced GP workloads (16).

In many of the more remote communities, nurses provide the first point of contact for a range of primary care functions that, in metropolitan areas, would normally be provided by GPs, specialists and allied health professionals. In these communities, nurses often act as sole primary care providers and are frequently required to extend their skills due to the diverse health needs of their community and the lack of any other form of health personnel support. Not surprisingly, this equates to longer hours in Remote areas, where nurses work an average of 37 hours per week, compared with 33 in Major Cities or Regional areas where nurse to population ratios are higher (17).

In 2011, the per capita ratio of nurses to population in Remote areas (915 per 100,000) was lower than in Major Cities (1,176 per 100,000) and Regional areas (1,275 per 100,000), though not to the same extent as GPs. Unlike GPs, the ratio of nurses to population was higher in Inner Regional areas (1,328 per 100,000) than in major cities, though the ratio in Outer Regional areas (1,162 per 100,000) was lower than in Inner Regional areas and Major Cities (17).

Aboriginal Health Workers are immensely important to the health and wellbeing of Aboriginal and Torres Strait Islander people and the communities in which they live. In addition to often being the first point of contact for Indigenous Australians in the primary care setting, they are critical and integral to ensuring that Indigenous Australians receive culturally appropriate, and therefore more effective, health services.

In terms of the distribution of Aboriginal Health Workers by remoteness (full-time work equivalent per 100,000 population), they are predominantly based in Outer Regional and Remote/Very Remote areas: 3.6 and 29.7 per 100,000 people respectively (18).

Allied health professionals play a vital part in the prevention and management of chronic disease. For example, dietitians, diabetes educators, and exercise physiologists are important in supporting people to live healthier lifestyles, thereby preventing conditions such as cardiovascular disease, diabetes and arthritis. However, the per capita ratio of most allied health professionals decreases sharply with remoteness (16).

Selected Allied Health Professionals (Full-Time Equivalent) by Remoteness Area 2012  
(Speech Pathologists 2011 data)

Allied Health (18)	FTE per 100,000 Population			
	MC	IR	OR	R/VR
Pharmacists	95	75	72	56
Psychologists	99	57	45	34
Podiatrists	16	14	10	5
Physiotherapists	91	56	48	44
Optometrists	19	15	10	6
Occupational Therapists	48	40	27	17
Medical Radiation Practitioners	49	35	21	13
Chiropractors	17	15	11	7
Chinese Medicine Practitioners	17	6	4	2
Osteopaths	8	5	np	np
Speech Pathologists (19)	26	20	17	10

People living in rural areas have significantly poorer oral health and limited access to dental services compared with those living in major cities. The number of dentists per 100,000 people decreases sharply with remoteness. For example, in 2012 the number of dentists in Major Cities was 64 per 100,000 compared with 42 in Inner Regional areas, 36 in Outer Regional areas, and 22 in Remote/Very Remote areas (20).

Dental Professionals by Remoteness Area

Dental Professionals (20)	FTE per 100,000 Population			
	MC	IR	OR	R/VR
Dentists	64	42	36	22
Dental Hygienists	5.8	2.7	2.8	1.7
Dental Therapists	3.4	4.3	5.6	4.5
Dental Prosthetists	5.6	6.4	3.2	0.5
Oral Health Therapists	2.6	2.8	2.6	1.4

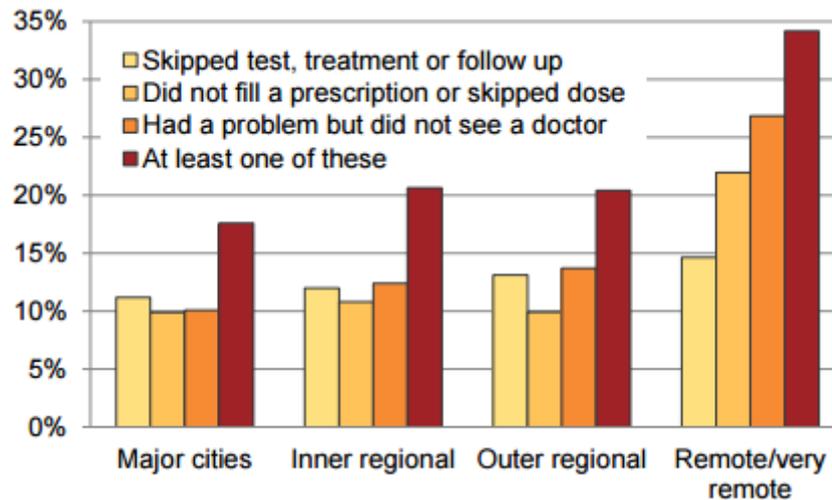
A major consequence of these workforce shortages across many health professional groups is that people are frequently unable to access the health care they need at the time they need it – if at all. The 2014 General Social Survey (ABS) shows that the proportion of people who encounter difficulty in accessing service providers increases with remoteness: 3.7 per cent in

Major Cities, 8.2 per cent in Inner Regional areas, and 11.7 per cent in Outer Regional/Remote areas (21).

### *Greater socio-economic disadvantage*

There is a well-established relationship between the social determinants of health (which include factors such as income, employment, education, and housing conditions), the prevalence of risk factors and subsequent development of chronic disease (22).

**Proportion of people who reported access barriers due to cost in the last year, by remoteness, 2010**



Source: Grattan Institute, Access all areas: New solutions for GP shortages in rural Australia (2013)

The social determinants of health provide a relevant framework to consider in analyzing the challenges in rural health. Briefly, applying a social determinants approach requires an analysis of how employment, education and access to basic infrastructure can effect health.

In rural areas:

- incomes are lower (~15 per cent lower than average incomes in major cities) (23), which limits people's capacity to afford basic goods and services, such as nutritious food, health care and medicine;
- education levels are lower (over 80 per cent of children in metropolitan areas are still in schooling at age 16, compared with 74 per cent of children in Outer Regional areas, 65 per cent of children in Rural areas and only 52 per cent of children in Very Remote areas (24); this tends to translate to lower levels of health literacy and lower labour force participation rates (17);
- employment opportunities are fewer in rural areas, and there is a strong correlation between employment and better health (23); and
- people in rural areas are more likely to be living in poorer housing, overcrowded homes and to experience homelessness (21).

In rural communities the health effects of this disadvantage are compounded by poor access to communications (such as high speed broadband, mobile phone coverage, public transport) and environmental challenges (such as drought, floods and bushfire).

There is also evidence that the social determinants of health have a greater impact on Indigenous Australians as remoteness increases. For example, the socioeconomic percentile rank for Indigenous people is most favourable in the major cities at about 20 per cent,

worsening with remoteness to around 50 per cent in rural towns, and 80 per cent in Indigenous towns and remote settlements (5).

Employment and incomes for Indigenous people tend to be lower in more remote areas than in major cities. Again, this impacts on the ability of Indigenous people to access health and community services, including transport and communication.

#### Aboriginal and Torres Strait Islander Labour Force Rates by Remoteness, 2011(25)

Labour Force Rate	Major Cities Regional (%)	Inner Regional (%)	Outer Regional (%)	Remote (%)	Very Remote (%)
Labour force participation	61.3	55.8	53.7	51.8	48.2
Unemployment	14.7	17.6	20.4	18.2	17.9

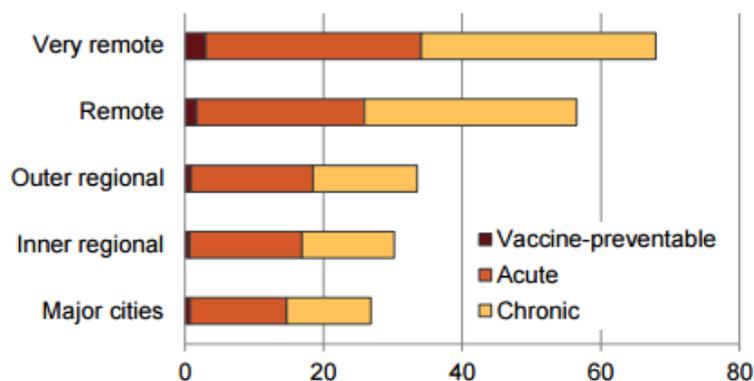
Services such as sewerage, and facilities for food preparation and washing, are more likely not to be working as remoteness increases, while overcrowding in Indigenous households increases with remoteness (5).

Because people in regional and remote areas had less access to primary care and specialist and diagnostic services in 2006-2007 than the people who lived in Major Cities, they had in total 12.6 million fewer services, and government MBS outlays were \$661 million less than if Major Cities rates had applied. MBS payments for in-hospital services in rural areas also fell short by over \$150 million, bringing the total MBS shortfall in 2006-2007 to \$811m (which, taking four years' price and population changes into account, would be in excess of \$1 billion today.)

#### *More frequent potentially preventable hospitalisation*

The result of the combination of greater health need, socioeconomic disadvantage and poorer access to primary care can be seen in the fact that the proportion of potentially preventable hospitalisations also increases with remoteness.

#### Potentially preventable hospitalisations per 1,000 population, by remoteness, 2011-12



Source: Australian Institute of Health and Welfare

Because people living in rural Australia are significantly overrepresented in the number of preventable hospitalisations and the hospital expenditure associated with them, they arguably have the most to gain from better prevention and management of chronic disease through primary care.

### *Health expenditure by remoteness*

The AIHW report *Australian health expenditure by remoteness* (2011) shows that people in rural and remote Australia have substantially less equitable access to the health services it is currently possible to measure by geographical region. In particular, they have less than their fair share of government outlays on:

- primary care, diagnostic, specialist services and other out of hospital services;
- PBS scripts; and
- non-acute hospital care and same-day hospital services.

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The same people who experienced this deficit in primary care also had around 11 million less PBS scripts compared with Major Cities usage, taking into account the higher number of concession card holders in regional Australia (45 per cent compared with 30 per cent in Major Cities). Government outlays were about \$500 million less than would have been the case if Major Cities rates applied (26).

The AIHW should be tasked with updating and maintaining information on MBS and PBS expenditure by remoteness so that those areas where there is an underspend against the Major City usage can be identified. Given the relationship between poor access to primary care and high prevalence of chronic diseases, up-to-date data will allow Government to target its expenditure on prevention and management more effectively.

## **Examples of best practice in chronic disease prevention and management, both in Australia and internationally**

### *Australia*

Australia spends less on prevention and public health services than most other Organisation for Economic Co-operation and Development (OECD) countries. For example, in 2010–11, approximately 1.7 per cent of total health expenditure in Australia was spent on prevention and public health services, ranking it in the lowest third of OECD nations. New Zealand led the way with 7 per cent of total health expenditure spent on prevention and public health, followed by Canada with 5.9 per cent (27).

Despite our lowly ranking among OECD nations, Australia has had some success in the field of preventive health. Notable examples include smoking cessation, skin cancer prevention,

and reducing road-related deaths and injury. These successes, however, have not always been so marked in rural as in city areas.

For example, health promotion, regulation and increased taxation have all contributed to lower smoking rates in Australia: for males, they have fallen from around 70 per cent in the 1950s to 18 per cent, and for females from around 30 per cent to 14 per cent (27). Death rates from smoking-related diseases have also fallen from the high levels of the 1970s and 1980s; lung cancer deaths, for example, have fallen by 40 per cent and chronic obstructive pulmonary disease deaths by 60 per cent.

In rural areas, however, smoking rates are falling much more slowly. A significantly higher proportion of people in rural areas still smoke: 22.4 per cent in outer regional and remote areas and 18.4 per cent in inner regional areas, compared with 14.7 per cent in metropolitan areas. People living in remote/very remote areas are around 1.7 times more likely to smoke than those in major cities (28).

Another example is in skin cancer prevention. While the 'SunSmart' campaigns were considered a success, the incidence of new cases of melanoma is still significantly higher in regional areas than in major cities (29).

Road-related injuries and death rates have fallen significantly across the country in response to a variety of road safety measures, yet people in rural areas remain significantly over-represented in these numbers. The rate of serious road-related injury among those living outside major cities is nearly twice that of those living within them (30). Country people are also more than three times as likely to die as a result of a transport accident than their city cousins (31).

These examples suggest that any new preventive health measure should undergo 'rural proofing' to ensure that it will be just as effective in rural areas as in major cities. Rural proofing is a process that requires health policy-makers to genuinely understand and assess the impact of any proposed health programs and policies on a rural community's healthcare needs and on existing rural health services. It provides an opportunity for health policy-makers to make upfront adjustments to policies and programs to ensure the health services will be appropriate for individual rural and remote settings. It also enables rural communities and health consumers to provide input that ensures services not only recognise the complexity of health in the bush, but also provides opportunities to address issues relating to health service delivery in specific locations.

Rural communities are highly diverse, meaning that there is no 'one-size-fits-all' solution to any problem for rural and remote Australia. As a consequence, health promotion measures need to be developed that meet local needs and characteristics. Another way of doing this, in addition to rural proofing, is to ensure that rural people, particularly those most at risk of chronic diseases, are engaged in the development of health promotion measures. This will allow them to provide advice on the specific challenges they face in accessing prevention and treatment services and will provide them with opportunities to suggest solutions to these challenges. Engaging rural people in the design of health promotion programs and initiatives will also help build a sense of community and individual ownership, both of which will increase the chances of success.

In some cases, effective health measures have been identified but not rolled out in rural areas, challenging the universality of Australia's health care system. For example, fluoridation of drinking water is widely regarded by public health experts as one of the most effective and cost-effective public health interventions (32). However some 24 per cent of the Australian population, including many Indigenous communities, do not have access to this proven health measure (33). In 2010-11 there were over 60,000 preventable hospitalisations related to dental conditions, with children between the ages of five and nine having the highest number of hospital stays for such conditions (34).

### *Internationally*

The World Health Organization (WHO) has suggested a number of 'best buy' policy interventions as well as individual interventions that may assist in the prevention of chronic disease. WHO suggests that these best buys should be implemented in primary care settings in all countries to produce rapid results in terms of lives saved, diseases prevented and large costs avoided. They include:

- protecting people from tobacco smoke and banning smoking in public places;
- warning about the dangers of tobacco use;
- restricting or enforcing bans on tobacco and alcohol advertising, promotion and sponsorship;
- excise tax increases on tobacco and alcohol;
- restricting access to retailed alcohol;
- reducing salt intake and salt content of food;
- replacing trans-fats in food with unsaturated fats;
- promoting public awareness about diet and physical activity, including through mass media;
- drug therapy and counselling to individuals who have had a heart attack or stroke and to persons with high risk of a cardiovascular event;
- administering acetylsalicylic acid for acute myocardial infarction;
- prevention of liver cancer through hepatitis B immunisation; and
- prevention of cervical cancer through screening, linked with timely treatment of pre-cancerous lesions (27).

The Alliance encourages the Committee to examine how other countries have met the health needs of their rural populations (see New Zealand, for example) and recommends the trialling of those policy responses that have been shown to be cost-effective.

## **2. Opportunities for the Medicare payment system to reward and encourage best practice and quality improvement in chronic disease prevention and management**

The gross underspend on primary care in rural areas means that the opportunities to reward and encourage best practice and quality improvement in chronic disease prevention and management through the Medicare payment system will be fewer in rural areas than in the major cities.

### *Current limitations of the Medicare payment system*

Because it largely funds medical care, not health care, Medicare's capacity to improve the quality of chronic disease prevention and management is limited.

It is well established that the effective prevention and management of most chronic diseases requires input from a range of health care professionals (35). While Medicare provides some benefits for non-medical services, such as nursing and allied health care, these benefits are quite limited in number. In addition, there are often restrictions in place that limit access to non-medical MBS items. There are, for example, caps on the number of services funded in a given period for some allied health services, and strict criteria that specify which health professionals are able to deliver certain services (for example, psychological services). Clinical pharmacy services also are not currently funded by Medicare, limiting their potential involvement in the prevention and management of chronic disease.

Unless there are substantial changes to the range and extent of nursing, allied health, pharmacy and dentistry services funded under Medicare, it will continue to be difficult to ensure that patients with chronic diseases, or at risk of them, receive the best possible care. This is particularly the case for patients in rural areas where it is often difficult to access the full range of health professionals. Because the existing rules are quite prescriptive about which services can be provided by which types of health professionals, there is very little scope for substituting providers under the Medicare system. This means that if a certain service provider is not available in a rural area – there is no physiotherapist or psychiatrist in town, for example – people are likely to miss out on the services traditionally provided by these health professionals, and do not receive optimal chronic disease prevention and management care.

The Royal Flying Doctor Service, which provides general practitioner care in remote and very remote locations, is grant-funded by the Commonwealth. As a result, it does not bill Medicare and referrals/pathways to other follow up services are difficult to facilitate, particularly for patients that need to be bulk billed and cannot afford gap payments.

### ***Opportunities to encourage best practice under the existing Medicare payment system***

Despite the limitation of the existing Medicare system, there are some important ways of modifying it so that it better rewards best practice chronic disease prevention and management. Some options are outlined below.

1. Establishing a system that links payment under the MBS to adherence to clinical pathways and best practice guidelines.
  - This might involve delaying payment for services delivered until the end of a course of care, and demonstrating (for example, through the use of an electronic health record) that the course of care provided complied with clinical guidelines or best practice chronic disease management.
2. Introducing bundled payments for the prevention and management of common chronic diseases. Consideration should also be given to expanding this to some of the less common chronic diseases.
  - This may take the form of providing a single, lead provider (for example, a GP) with a single payment to cover the costs of providing a course of care (for example, management in the first year of a newly diagnosed diabetic).

Bundling payments along these lines would give the lead provider the flexibility to fund the chronic disease care required by an individual patient. One patient may, for example, need intensive treatment from a dietitian and only occasional visits from a podiatrist. Another may need the support of a diabetes educator and treatment for an exercise physiologist. Bundled payments encourage team based care and collaboration among health professionals, which is vital to providing best practice chronic disease care.

3. Expanding the eligibility criteria for 'Group Allied Health Group Services under Medicare for people with Type 2 Diabetes' to allow access for people diagnosed with pre-diabetes (at present, only those who have type 2 diabetes are eligible).
  - Type 2 diabetes and its complications are the highest cause of preventable hospitalisations in Australia.
  - Aboriginal and Torres Strait Islander people, of whom 70 per cent live in rural areas, are over three times as likely as non-Indigenous Australians to have diabetes, in particular type 2 diabetes (33).
  - People in the lowest socioeconomic status (SES) groups were more likely to have diabetes compared with people in the highest SES groups (9).
  - People living outside Major Cities were more likely to have diabetes compared with living within them (9).
4. There are a number of services which can be provided cost-effectively via telehealth but which are not eligible for Medicare rebates. Two examples include psychology and speech pathology services. There should be a review of telehealth trials of those services not currently eligible for Medicare rebates to identify those services which can be provided cost-effectively and are justifiable additions to the Medicare Benefits Schedule.
5. It would be useful to consider additional flexibility enabling communities to pool population-based funding for chronic disease care to ensure that pro-rata funding more closely matches funding available in metropolitan areas.

### **3. Opportunities for the Primary Health Networks to coordinate and support chronic disease prevention and management in primary health care**

One of the major roles of the Primary Health Networks (PHNs) will be to customise health promotion and chronic disease prevention programs for local communities. It is important that governments facilitate knowledge sharing about the success or otherwise of various programs so that the PHNs can learn from one another. This might be done through an existing national agency (for example the National Health Performance Authority), and could take the form of an online hub where evaluations of the successes and failures of programs are collated. This would allow the PHNs to focus their funding on those programs which have had proven success and prevent wasteful duplication of those which have not.

Given the well-established relationship between socioeconomic disadvantage, health risk behaviours and chronic diseases, governments should also be facilitating opportunities for agencies in housing, employment, and education to work together, to share knowledge and jointly develop policy solutions.

While programs will take time to take effect, the PHNs should be required to report publicly on the prevalence of a broad spectrum of health risk behaviours and chronic diseases, as well as the cost-effectiveness of programs implemented to address them. This also highlights the important role of organisations like the National Health Performance Authority in providing impartial, comparable information about performance across the PHNs. It also highlights the need for comprehensive and accurate data to enable PHNs to undertake their planning.

Given the large size of some of the new PHNs, there is considerable uncertainty about how they will co-ordinate care at the local level. Their chances of success will be greatly enhanced if they work collaboratively with existing Multi-Purpose Services (MPSs) (information on MPSs in Section 7 below). Many MPSs have over 20 years' experience co-ordinating health and other services in local communities. PHNs should identify ways of working with existing MPSs and enhancing the work they are already doing to prevent and manage chronic disease. One option could be for PHNs to establish a hub and spoke model, with the MPSs acting as a spoke. Alternatively, PHNs could consider commissioning MPSs to be service providers in areas where they are already operating.

The PHNs collect information on chronic illness which would be very useful to rural health services. It is important that governments facilitate opportunities to share this information. Ideally, this would be through a new master Rural Health data set coordinated by the AIHW.

The PHNs should earmark funding for community programs such as support groups and walking groups. These can have proven health benefits at minimal costs. Examples include:

- Men's Sheds, which are ideally placed to reach some priority populations for health intervention. 55 per cent of Shed members live in regional Australia. Direct means of health intervention include organised health checks, the distribution of leaflets and information and health talks. Indirect health interventions include members "looking out" for one another; the recognition of symptoms and mutual advice (36).
- Exercise Sports Science Australia's HEAL program, which is an evidence-based eight-week lifestyle modification program designed to promote lifelong healthy habits around diet and exercise. Each weekly session incorporates an hour of group-based healthy living education with an hour of supervised physical activity at a low to moderate intensity. The program is facilitated by university-qualified health professionals, and held in local facilities such as community halls or clubs (or in one case the local pub, which opened free of charge to provide the program with a venue). National Heart Foundation is invited to each program to assist in setting up a walking group following completion of the program.

#### **4. The role of private health insurers in chronic disease prevention and management**

The potential for private health insurers to be involved in chronic disease prevention and management in rural areas is relatively limited because the rate of private health insurance decreases with remoteness. In 2007-08, rates of private health insurance (using self-reported data) was 57 per cent in major cities, 48 per cent in inner regional areas, and 41 per cent in other areas (which includes outer regional, remote and very remote areas) (37).<sup>2</sup>

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<sup>2</sup> See Table 8.3

For those people in rural and remote areas who do have private health insurance, opportunities to benefit from it can also be limited. Programs that rely on internet connectivity – for example, health coaching programs – can be difficult to use for people in rural and remote areas where there is poor connectivity. Similarly, programs that rely on face-to-face access to health professionals or other health workers can be problematic for people in some rural and remote areas.

Because the uptake of private health insurance is lower in rural and remote areas, the Alliance urges governments to give priority to publicly-funded, evidence based, chronic disease prevention and management programs. If investment is made in privately-funded programs, many people in rural and remote Australia – the people who tend to have the greatest need for them – will be unable to access them. The consequence will be greater disparities in health outcomes between city and country people.

## **5. The role of State and Territory Governments in chronic disease prevention and management**

Just like the Commonwealth government, state and territory governments (referred to hereafter as states) currently play a major role in the prevention and management of chronic diseases. State governments, for example, fund and deliver chronic disease prevention and management services (including public dental services) through community health centres, Multi-Purpose Services (MPSs), public hospitals (through outpatient units, outreach programs and inpatient services) and Aboriginal Community Controlled Health Services (ACCHS).

Because state governments own, operate and majority fund public hospitals, they have a major stake in preventing and managing chronic diseases. Whilst these arrangements continue, state governments will continue to have strong incentives to effectively prevent and manage chronic diseases. The Commonwealth, too, will continue to have a strong incentive to invest in chronic disease care because of its role in funding primary care (through Medicare and other programs), pharmaceuticals (through the Pharmaceutical Benefits Scheme), and public hospitals (through agreements with the states and territories).

The respective roles of the Commonwealth and states in health care are currently under review as part of the Commonwealth Government's Reform of the Federation. The Alliance will consider and respond to any specific reform proposals as part of this process. In doing so, we will be looking to support any options that lead to better access to quality care for people in rural and remote Australia.

Given that the prospects of major reform – that is, reform that sees the complete removal of any overlap between Commonwealth and state governments – is limited, the Alliance will also continue to advocate strongly for policies, initiatives and programs that result in effective collaboration and cooperation between Commonwealth and state governments. Examples of such initiatives include MPSs (described in more detail in Question 7) and ACCHS.

People in rural and remote Australia (and indeed many other areas of Australia) do not care how services are funded. Services such as MPSs and ACCHS that pool funding from both levels of government are welcomed by people in rural and remote Australia because they provide them with access to essential chronic disease prevention and management services. In addition to considering how the roles of government can be clarified, governments should

also consider expanding services such as MPSs and ACCHS that have proven to be effective in chronic disease prevention and management.

## **6. Innovative models which incentivise access, quality and efficiency in chronic disease prevention and management**

For people in rural and remote Australia to receive high quality chronic disease prevention and management services they must have access to the full range of health professionals. This is not innovative, but it is essential to redressing existing inequities in access to care.

There are many innovative chronic disease prevention and management programs being trialled or run in rural Australia that could complement initiatives to increase workforce supply. Some examples are outlined below.

- Pulmonary rehabilitation for patients with chronic lung disease
  - Researchers from NSW found that training local staff, usually nurses, so that they were able to provide pulmonary rehabilitation to local patients was an effective model (38).
  - Local staff were trained initially at a face-to-face workshop and subsequently provided with written material, online and telephone support.
  - As a result of this project, rural and remote patients with chronic lung disease were able to access treatment that they previously could not. The researchers found that patient outcomes improved, indicating that the upskilling program was effective.
  
- Telephone/smart technology support for rural and remote patients with chronic disease:
  - Researchers from Monash University in Melbourne found that rural and remote patients with heart failure benefited when they received telephone support to help them manage their condition, along with follow-up from a trained cardiac nurse. These patients had fewer hospitalisations than patients who did not receive telephone support, which suggests this relatively low-cost intervention might be a valuable adjunct to face-to-face care for rural and remote patients (39).
  - In 2013, the Royal Flying Doctor Service (RFDS) Victoria commenced its Diabetes Telehealth Service. The Service is based in Mildura where there is no resident diabetes specialist. Like most, if not all, of country Victoria, there is a growing incidence of diabetes in the region. Hosted by Monash School of Rural Health in Mildura, local diabetes patients are connected with endocrinologists from Baker IDI Heart and Diabetes Institute in Melbourne. Trial appointments began in November 2013, with the full Service launched in May 2014. Fifty-one appointments were completed before the end of the financial year.
  - The RFDS' 24/7 remote consultations service compliments face-to-face services. RFDS medical practitioners provide a 24 hours per day, 7 days per week telephone and radio medical consultation service to people living, working or travelling in remote and rural Australia. Over 85,000 consultations are conducted nationally each year. Advice is given to rural doctors, remote area nurses, allied health staff, Aboriginal and Torres Strait Islander health workers and patients, their carers and family members.

- There are a number of 'off the shelf' Chronic Disease Self-Management Programs from around the world, some of which may be suitable for rural patients in Australia. Given the great diversity of rural and remote settings, and the various health conditions experienced by people in them, a careful approach needs to be taken in which a particular 'program' needs to be proved as fit-for-purpose before it is applied.
  - The Stanford Program (37) has been trialled in a rural setting in Western Australia and evaluated by researchers. The evaluation methods used were not ideal, but it may be useful to note that the research found that participating in the self-management program tended to be beneficial for patients.
- Involving Aboriginal people in land management
  - Australian researchers have found that actively involving Aboriginal people in land management has the potential to improve health outcomes and reduce the costs of primary care (40). Land management activities include burning of annual grasses, gathering food and medicinal resources, protecting sacred areas and producing artworks.
  - Using multivariate modelling, researchers compared health outcomes for nearly 300 Aboriginal people from remote communities, some of whom were involved in land management.
  - After adjusting for relevant socio-demographic factors and health behaviours, the researchers found that Aboriginal people who were involved in land management has significantly less chance of developing diabetes, kidney disease and high blood pressure. The health gains associated with this were estimated to have led to savings for that community alone were in the order of \$270,000 a year.
  - This research is important because it shows that there can be significant health benefits to be gained through interventions or activities outside the health system.

As recommended earlier, governments should facilitate knowledge sharing about the success or otherwise of various programs so that the PHNs (who will be coordinating these programs) can learn from one another. This might be done through an existing national agency (for example the National Health Performance Authority), and could take the form of an online hub where reports on the successes and failures of programs are collated. This would allow the PHNs to focus their funding on those programs which have had proven success and prevent wasteful duplication of those which have not.

## **7. Best practice of Multidisciplinary teams chronic disease management in primary health care and Hospitals**

A collaborative, multidisciplinary approach is needed to effectively tackle rural health workforce issues. The MPS program supports such an approach. The MPS program is a joint initiative of the Australian and state/territory governments. By pooling state and Commonwealth program funds, MPSs deliver integrated health and aged care services to small rural communities that would otherwise be too small to sustain stand-alone hospitals or residential aged care facilities.

The range of services offered by each MPS varies according to local need, but may include: residential aged care, acute care, subacute care (including respite and palliative care), emergency, allied health, oral health, primary health, and community services.

A key feature of the MPS program is that it allows smaller communities to consolidate services, better match services to community needs, recruit and retain staff, and minimise administration overheads.

The Multi-Purpose Service (MPS) program should be expanded and strengthened by:

- Commonwealth Government capital funding to establish new MPSs across rural Australia (a large proportion of this should be used to assist existing state-owned health facilities to transition to the MPS model); and
- tasking the Rural Health Standing Committee of Australian Health Ministers' Advisory Council to:
  - develop nationally consistent eligibility criteria for MPS;
  - make recommendations to improve the financial sustainability of existing MPS; and
  - develop a plan for better integrating services provided through MPS, Primary Health Networks, the National Disability Insurance Scheme, and state-based community and primary health care services.

Best practice multi-disciplinary care must be supported by multi-disciplinary training and learning. The Alliance has long supported the shift to multi-professional learning across the healthcare disciplines. Multi-disciplinary learning introduces practitioners to team management at an early stage, at the undergraduate level, and continues through to the postgraduate level. Learning in such a way equips students for multi-disciplinary practice once they graduate.

The University Departments of Rural Health (UDRH) are currently involved in developing and implementing inter-professional education programs for health students in rural and remote Australia. Approaches vary between UDRHs but all have a strong multidisciplinary focus in their education and training programs.

UDRHs have three roles: (1) teaching inter-professional practice to students and placing them in services to enhance chronic disease management; (2) researching chronic disease to provide rural health services with local level data on key health needs; (3) health service development of appropriate models for managing chronic disease (local control and flexibility here is key).

The Alliance is concerned that workforce initiatives tend to focus simplistically on student placement and training opportunities and would urge the need to consider a more broad approach in which the wider rural health sector, including consumers, is engaged.

## **8. Models of chronic disease prevention and management in primary care which improve outcomes for high end frequent users of medical and health services**

A recent report from the King's Fund in England summarises the evidence on various options for improving the care of elderly frail people and those with complex needs. It explains that

the evidence base in this area is relatively limited, but it suggests that the effective options that can be delivered in primary care or community settings include:

- case management for patients with heart failure;
- education and self-management programs for people with asthma, diabetes and cardiovascular disease;
- exercise and rehabilitation for patients with chronic lung disease;
- co-ordinating care for frail older people;
- targeted preventive health checks for frail older people; and
- telemedicine.

All of these interventions have been shown to reduce unplanned admissions to hospitals. The response to Question 6 above shows that there is evidence to suggest that some of these interventions also work well in rural and remote settings.

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**ATTACHMENT****Member Bodies of the National Rural Health Alliance**

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