

Chapter 2

The distribution of medical, nursing and allied health professionals across Australia

2.1 This chapter provides information on the current geographic distribution of health professionals across Australia. It then considers issues arising from how the workforce is distributed across the country and how government policies that have impacted on this distribution.

Attempts to measure the adequacy of the rural health workforce

2.2 Over the last two decades there have been efforts to quantify the adequacy of the health workforce in Australia in order to ensure that policy was evidence based and accurately reflected community requirements. The task of measuring the adequacy of the medical workforce is complex; requiring more than a national headcount. Two similarly sized communities may have radically different workforce needs depending on the proximity to other centres, their respective age profiles, and various other factors. As the South Australian government noted, for example:

South Australia's geography and its dispersed population presents a particular challenge to the supply of health services, the recruitment and retention of health professionals and the management of demand in country South Australia.¹

2.3 Recent assessments of the health workforce and how it is distributed have varied in recent times. It was reported to the committee that in the 1990s the Commonwealth government was of the view that there was an oversupply of General Practitioners (GPs) and therefore would not increase medical school output and restricted GP training numbers.² This policy was reversed in the following decade when the number of doctors increased 20 per cent from 2005 to 2009.³ Recent research has suggested there is an oversupply of new graduate numbers that will severely stretch the ability of existing medical professionals to train them.⁴

2.4 Early empirical evidence of shortages in the regional workforce was provided by the Australian Medical Workforce Advisory Committee (AMWAC). In 1996 AMWAC reported that although non-metropolitan populations accounted for 27.7 per cent of the population, only 20.8 per cent of primary care practitioners and 11.8 per cent of specialists were located in rural and remote areas. The estimated shortfall in

1 South Australian Government, *Submission 111*, p. 2.

2 Rural Doctors Association of Victoria, *Submission 43*, p. 4.

3 Australian Institute of Health and Welfare, *Medical Workforce*, <http://www.aihw.gov.au/medical-workforce> (accessed on 14 August 2012).

4 Bob Birrell, *Australia's New Health Crisis – Too Many Doctors*, Melbourne, Centre for Population and Urban Research, 2011, p. iv.

non-metropolitan areas was 445 full time equivalent (FTE) for GPs, and 900 FTE for specialists.⁵

2.5 A decade later, the Productivity Commission released *Australia's Health Workforce*. The report noted:

A major theme in submissions to this study has been that access to health services in rural and remote Australia is inferior to that in the major population centres, and that these access difficulties are worsening. In a health workforce context, the primary concern is insufficient numbers of health workers – especially general practitioners, medical specialists and some allied professions.⁶

2.6 In 2008 the Department of Health and Ageing completed the *Audit of the Health Workforce in Rural and Regional Australia* (the Audit). The Audit found that although the number of FTE GPs had increased by 10.9 per cent during the decade from 1996–97 to 2006–07, there was a net decrease in the supply of medical practitioners as population grew by 13 per cent over the same time.⁷ The supply of dentists was similarly found to '[decrease] dramatically with remoteness', and the allied health workforce was found to be 'largely based within *major cities*'.⁸ The Audit noted that:

Determining where there are workforce shortages also relies upon determinations of what is adequate supply. There is not a body of work currently available for Australia that describes the population health care status and needs in terms of the numbers, proportions and mix of health professionals required to meet those needs.⁹

2.7 In March 2012 Health Workforce Australia (HWA) released the *Health Workforce 2025* report.¹⁰ The report provides a comprehensive analysis of the future supply of the Australian health workforce in a number of scenarios. It was

5 Australian Medical Workforce Advisory Committee, *The Medical Workforce in Rural and Remote Australia*, New South Wales, 1996, p. 5. Given the high proportion of casual and part-time practitioners accessing Medicare, 'head counts' of GPs generally overstate the workforce supply in Australia. Full-time Workload Equivalent (FWE) is a standardised measure used to estimate the workforce activity of GPs and adjusts for the partial contribution of casual and part-time doctors.

6 Productivity Commission, *Australia's Health Workforce*, Canberra, December 2005, p. 204.

7 Department of Health and Ageing, *Audit of the Health Workforce in Rural and Regional Australia*, Canberra, 2008, p. 27.

8 Department of Health and Ageing, *Audit of the Health Workforce in Rural and Regional Australia*, Canberra, 2008, pp 17–18.

9 Department of Health and Ageing, *Audit of the Health Workforce in Rural and Regional Australia*, Canberra, 2008, p. 21.

10 Health Workforce Australia is an initiative of the Council of Australian Governments (COAG). It was established to meet the future challenges of providing a health workforce that responds to the needs of the Australian community. Further information on HWA can be found here: www.hwa.gov.au.

demonstrated in the report that the current distribution of doctors, unlike that of midwives and nurses, remains inequitable between rural and city populations.¹¹ The report notes that poor distribution should not necessarily be confused with poor supply. As the report states: 'there is little purpose in having an adequate aggregate workforce supply unless it is distributed beyond metropolitan Australia.'¹²

2.8 Also in 2012, the Australian Institute of Health and Welfare (AIHW) released *Australia's Health 2012*, an overview of Australia's health and its medical and allied health workforce. The report noted strong growth in the health workforce: there was a 23 percent growth in health related employment between 2005 and 2010; comparing favourably with a 12 percent growth in total employment over the same period.¹³ Furthermore, the numbers of both social workers and psychologists are reported to have increased in excess of 50 percent over the period.¹⁴

2.9 Although the AIHW, HWA and the Productivity Commission have undertaken some evaluation of Australia's workforce, the AIHW noted that:

Detailed information for many health professions, particularly the smaller professions like the allied health practitioners and Aboriginal and Torres Strait Islander health workers, has not been available on a regular basis.¹⁵

2.10 In order to improve the nation's healthcare system, the Council of Australian Governments (COAG) decided at its meeting of 26 March 2010 to implement a National Registration and Accreditation Scheme (NRAS) for selected medical professions.¹⁶ This is intended to develop additional annual information on medical and allied health professionals:

The move to the national registration scheme and the agreed data flows between the three agencies will soon allow the release of annual data for [allied health professionals], a major improvement in the health workforce evidence base.¹⁷

2.11 The committee heard that far less research has been undertaken on the number and adequacy of allied health services in Australia compared to the amount of research looking at the supply of doctors. Whereas workforce data is regularly collected on the number of doctors and nurses, there is less information on allied professions.¹⁸ The Australian Psychological Society argued that:

11 AIHW, *Health Workforce 2025*, volume 1, Canberra, 2012, p. 154.

12 AIHW, *Health Workforce 2025*, volume 1, Canberra, 2012, p. 157.

13 AIHW, *Australia's Health 2012*, Canberra, 2012, p. 496.

14 AIHW, *Australia's Health 2012*, Canberra, 2012, p. 497.

15 AIHW, *Australia's Health 2012*, Canberra, 2012, p. 511.

16 Australia's Health Workforce Online, *National Registration and Accreditation Scheme*, available from: <http://www.ahwo.gov.au/natreg.asp>, accessed: 6 July 2012.

17 AIHW, *Submission 110*, p. [3].

18 AIHW, *Submission 110*, p. [3].

Collection of workforce data is currently inadequate and is a key limiting factor on the supply and distribution of health service and workforce in rural and regional Australia. In order to plan for sustainable provision of the range and intensity of all health services in an evidence based health system, collection of appropriate, detailed and comparable workforce data is required.¹⁹

2.12 Services for Australian Rural and Remote Allied Health (SARRAH) – the national peak body representing rural and remote allied health professionals working in both the public and private sector – argued that:

Difficulty also arises when grouping all health professions that are not medical or nursing under one umbrella and calling them 'allied health'. The assumption could be made that each of the difference professions known as 'allied health' has a similar profile in rural and remote communities.²⁰

2.13 The committee was provided an example by SARRAH highlighting the potential problems that can arise due to the shortage of available data on individual allied health professions:

...what has happened in pharmacy is that, because we have not had access to workforce data, we have not been able to forward plan and have instead reactively said, 'Oh dear, there are not enough pharmacists – they are very old; they are about to retire,' and opened a whole lot of new programs, and now we are looking at a surplus of pharmacists...So there is some real advantage to having ongoing discipline-specific workforce data.²¹

Current distribution of the medical workforce in Australia

2.14 It has long been acknowledged that assessing workforce imbalances is difficult.²² Data about health workforce distribution in Australia varies in quality and in the picture it presents. The committee was provided with statistics by several submitters, and from several publications, that gave at times contradictory impressions of the distribution of the health workforce. The committee accepts AIHW's point that the new national registration scheme is producing higher quality data, with more regular updates.

2.15 The 2008 *Audit of Health Workforce in Rural and Regional Australia* (the 2008 Audit) described the three main types of data available at that time. They were:

- Medicare data. This could provide a good 'indication of the relative geographic distribution of general practice services across Australia, and can be used as an indication of distribution of specialist medical services'. However, as it does not capture public sector healthcare, it cannot be used to

19 Australian Psychological Society, *Submission 87*, p. 12.

20 Services for Australian Rural and Remote Allied Health, *Submission 62*, p. 11.

21 Ms Sheila Keane, Services for Australian Rural and Remote Allied Health, *Committee Hansard*, 11 May 2012, p. 4.

22 Pascal Zurn, Mario Dal Poz, Barbara Stilwell & Orvill Adams, 'Imbalances in the health workforce', *WHO briefing paper*, World Health Organisation, 2002, p. 1.

estimate actual levels of service.²³ There is also a risk that, if the public-private case-mix in a state is different between the capital city and regional areas, the relativities in the Medicare data may also inaccurately reflect service use.

- AIHW surveys. The surveys represent the most detailed information available about the health workforce. They provide data on working hours, not just numbers of people providing services. However in most jurisdictions, completing the surveys was voluntary, and response rates have varied. The 2008 Audit's view was that 'this data should be treated as indicative rather than definitive'.²⁴
- ABS census data. Census data is valuable, but it does not capture hours worked, relies on individuals to decide how to report their occupation, and will underestimate the workforce size as in 2006, for example, the census 'did not collect information on an estimated 640 000 people'.²⁵

2.16 This picture is complicated slightly by the fact that some AIHW publications are based on its own survey data (for example, the Medical Labour Force Survey 2005), while other AIHW studies are based on ABS census data (for example, Health and Community Services Labour Force 2006).

2.17 Most importantly, the available data has been significantly improved by reforms in the health system, particularly the National Registration and Accreditation Scheme (NRAS) and the now nationally-administered workforce survey (which has seen greatly improved response rates).²⁶ The results of this work were not available when the current inquiry was first initiated, and were only released after the committee has received its submissions. As a result, submitters had to rely on earlier data, while this report has the benefit of the AIHW's latest research results.

Data and the different health professions

2.18 The most important distinction in medical workforce data is between different types of doctor. Data for "medical practitioners" generally includes general practitioners, specialists, specialists-in-training, and non-specialists who work in hospital settings or provide services not in private practice. As the figures below will demonstrate, there are marked differences between the distribution of general practitioners and specialists.

2.19 The data for other professions is less comprehensive however the committee examined the information available on the nursing and allied health workforces.

23 Department of Health and Ageing, *Report on the Audit of Health Workforce in Rural and Regional Australia*, Commonwealth of Australia, Canberra, 2008 (the 2008 Audit), p. 5.

24 2008 Audit, p. 5.

25 2008 Audit, p. 6.

26 AIHW, *Medical Workforce 2010*, AIHW, Canberra, 2012, pp 1–2, 32–39.

2.20 Finally, the committee has focussed on the data published about numbers of professionals per 100 000 population, which is the most widely-used data. Raw numbers are of little use, as they do not give any indication of the number of people being serviced by the workforce.

Historical data on medical practitioners

2.21 Medicare data shows the number of 'full-time work equivalent' (FWE)²⁷ general practitioners accessing the Medicare system (Table 2.1) in 2006–07.

Table 2.1 General practitioners FWE per 100 000 population, 2006–07²⁸

	Major cities	Inner regional	Outer regional	Remote and very remote ²⁹	All Australia
GPs	97.0	83.1	74.2	58.1	91.3

2.22 As the 2008 Audit noted, Medicare data for the remotest areas should be treated with caution, as it does not include services provided by publicly funded healthcare services such as Royal Flying Doctor Service and the Aboriginal Medical Services.³⁰ The 2008 Audit provided long-term time series for data (dating back to 1984–85), which showed gradual improvement in the levels of service in regional and remote areas over the two decades, though remaining below that in major cities.³¹

2.23 The 2008 Audit reported the results from AIHW's 2005 survey of the workforce for *all* medical practitioners (not only GPs). These were calculated as FTE, which is slightly different to the measure used by Medicare. Their survey figures are shown in table 2.2.³²

Table 2.2 Medical practitioners FTE per 100 000 population, 2005³³

	Major cities	Inner regional	Outer regional	Remote and very remote	All Australia

27 FWE 'is a measure of service provision that takes into account doctors' carrying workloads. It is generally considered to provide a good overall indicator of medical workforce supply. FWE is calculated by dividing each doctor's Medicare billing by the average billing of full time doctors for the reference period'. 2008 Audit, p. 47.

28 Department of Health and Ageing, *Report on the Audit of Health Workforce in Rural and Regional Australia*, Commonwealth of Australia, Canberra, 2008, p. 8.

29 This figure combines data for 'remote' and 'very remote' categories, presented separately in the 2008 Audit, p. 8.

30 2008 Audit, p. 12.

31 2008 Audit, pp 9–13.

32 The regional rates are underestimates, as 1809 respondents (around 3 per cent of all doctors) said they worked outside the major cities, but did not report the regional classification in which they worked. See 2008 Audit, p. 15.

33 2008 Audit, p. 15.

All doctors	335	181	153	148	287
Primary care (mostly GPs)	100	88	84	92	98

2.24 The Medicare data suggests that the number of GPs in the most remote areas is around 60 per cent of those in major cities, while the AIHW survey data shows very little drop-off. This appears to confirm that the Medicare data is not capturing as much of the care being provided in more remote areas, because that care is not funded through Medicare.

2.25 The Department of Health and Ageing and the National Health and Hospitals Network both drew on workforce data presented by AIHW and based on the 2006 Census of Population and Housing (the census). This data presents a different picture of the distribution of health professionals (table 2.3)

Table 2.3 Persons employed as medical practitioners per 100 000 population, 2006³⁴

	Major cities	Inner regional	Outer regional	Remote	Very remote	All Australia
All medical practitioners	324	184	148	136	70	275
Generalist medical practitioners	196	123	108	106	58	171

2.26 There is a range of possible reasons that the AIHW's analysis of census data on 'generalist medical practitioners' is so at odds with other sources. Noting that the number of generalist medical practitioners is far higher than in any other source, it seems likely that the ABS classified individuals as generalist medical practitioners who were not GPs, such as researchers and doctors who had not yet met the requirements for admission to specialisms. The census figures are a headcount, and therefore do not reflect different numbers of hours worked. This may have served to underestimate the service levels in regional and remote areas. The AIHW's analysis of the census data was based on place of residence. As such it would not reflect those cases where doctors were resident in major cities, but provided services in regional or remote areas. Finally, more recent figures³⁵ show that only around 85 per cent of registered medical practitioners are actually in clinical practice. If a large proportion of doctors who don't currently practice medicine are in the major cities, this could affect the census figures by showing more doctors in cities than are actively providing health care in those locations.

34 AIHW, *Health and community services labour force*, AIHW, Canberra, March 2009, p. 42.

35 AIHW, *Medical workforce 2010*, AIHW, Canberra, 2012, p. 6.

Current data on medical practitioners

2.27 All of the above data sources have limitations, and most of the data is over five years old. On 28 March 2012, the AIHW released *Medical workforce 2010*. This landmark study builds for the first time on data available through the NRAS and is the most comprehensive survey results in recent times. Although some of the figures exclude Queensland and Western Australia (because the registration period in those states closed after the deadline for the data collection), they nevertheless present the most up-to-date information on the health workforce. This most recent data gives the following results for medical practitioners.³⁶

Table 2.4 Employed medical practitioners per 100 000 population, 2010³⁷

	Major cities	Inner regional	Outer regional	Remote and very remote	All Australia
All doctors	375.7	213.7	174.5	242.0	345.0
GPs	105.2	105.6	103.1	124.0	109.6
Hospital non-specialist	41.1	18.7	18.3	50.3	38.7
Specialist ³⁸	219.5	85.5	47.6	59.3	188.1

2.28 The 2010 data shows very little variation in the age profile of doctors by region, though GPs in the major cities were slightly older than those outside cities.

2.29 This most recent information shows an even distribution of GPs across the population, a clustering of hospital-based non-specialists in the major cities and in remote areas, and a dramatic decline in the availability of specialists outside the capitals.

2.30 During the 2000s there was a significant increase in the numbers of all doctors per 100 000 people which includes specialists, hospital non-specialists and GPs. Table 2.5 illustrates the changes since 2002.

Table 2.5 All medical practitioners, FTE (40 hours per week), 2002–2009³⁹

	Major city	Inner regional	Outer regional	Remote/Very remote
2002	351	198	164	158

36 Data excludes Queensland and Western Australia. The committee understands these states will be included in subsequent reports.

37 AIHW, *Medical workforce 2010*, AIHW, Canberra, 2012, pp 23–29.

38 Includes specialists-in-training.

39 National Rural Health Alliance Inc., *Submission 95*, p. 6.

2006	374	207	173	215
2009	392	224	206	246

2.31 In 2011 research from Monash University suggested that Australia was not facing a shortage of doctors, but an oversupply.⁴⁰ Dr Birrell argued that:

Australia is awash with GPs. Signs of oversupply are showing up in competition for place in the GP registrar program, in the difficulties that [International Medical Graduates (IMGs)] are facing in finding hospital jobs, in regional communities where new clinics based on IMGs are sprouting and in the statistics which show a sharp improvement in the population-to-FWE-GP ratios through much of non-metropolitan Australia since 2003–4.⁴¹

2.32 Dr Birrell conceded that this view is not shared by most stakeholders:

This diagnosis is sharply at odds with the accepted wisdom in government, medical and media circles on the issue. Widely reported stories about continuing shortages of GPs in remote locations continue to feed the dominant paradigm, which is that there is a continuing shortage of doctors, including GPs.⁴²

2.33 Although Australia does have a higher number of doctors and other medical practitioners relative to population numbers when compared to some OECD countries including Canada, the United States of America, the United Kingdom and New Zealand,⁴³ Dr Birrell's findings were not supported by other submitters to the inquiry. The view expressed by the National Rural Health Alliance Inc. is representative of the majority opinion that argued that there is a shortage of medical professionals in regional areas, even if there are a sufficient number of professionals in Australia overall:

Rural and remote Australia is not awash with doctors, and there are as yet no certain signs that the shortage of GPs in the bush will be mitigated by the greater number of medical graduates in the pipeline.⁴⁴

Nurses and midwives

2.34 Nurses and midwives⁴⁵ represent by far the largest portion of Australia's health workforce comprising 62.7 per cent of all health workers.⁴⁶

40 Bob Birrell, *Australia's New Health Crisis – Too Many Doctors*, Melbourne, Centre for Population and Urban Research, 2011, p. iv.

41 Bob Birrell, *Australia's New Health Crisis – Too Many Doctors*, Melbourne, Centre for Population and Urban Research, 2011, p. 21.

42 Bob Birrell, *Australia's New Health Crisis – Too Many Doctors*, Melbourne, Centre for Population and Urban Research, 2011, p. 21.

43 AIHW, *Australia's Health 2012*, Canberra, 2012, p. 519.

44 National Rural Health Alliance Inc., *Submission 95*, p. 9.

2.35 The Royal College of Nursing Australia (RCNA) explained the role and importance of nurses in healthcare:

Nurses and midwives are the 'agents of connectivity' within our healthcare system. They have the unique role of providing essential linkages between the system's many users, health professionals and service arrangements...Nurses can play a pivotal role in reducing service gaps and in progressing the aims of a health system focussed on health promotion and disease prevention.⁴⁷

2.36 There are two main types of nurses in Australia: registered and enrolled. In 2009, registered nurses made up 81 per cent of the nursing labour force. Enrolled nurses typically work alongside registered nurses to provide basic nursing care, undertaking less complex tasks.⁴⁸ The Australian Institute of Health and Welfare recently reported that:

In 2009 there were 321 000 nurses registered or enrolled to practise, of whom 86 [per cent] were employed in nursing. The supply of employed nurses was highest in *Very Remote* areas (1,240 FTE nurses per 100,000 population) and lowest in *Major Cities* (997).⁴⁹

2.37 In 2008 the Audit reported that: 'The nursing workforce, considered as a ratio of nurses to area population, is relatively evenly available throughout rural and regional Australia.'⁵⁰ However, the report did go on to note:

[A]lthough the distribution of nurses is relatively even when considered at the national level, there are considerable variations across states and territories and across Remoteness Areas within most jurisdictions.⁵¹

Allied Health Professionals

2.38 The distribution problems of the health workforce are not confined to the doctors. It was reported to the committee that allied health professions (AHPs) also show strong signs of what has termed throughout the inquiry as maldistribution.

2.39 The health professions that are considered as part of the Australian allied health workforce, according to the Australian Health Workforce Advisory Committee, include:

[A]udiology; dietetics and nutrition; occupational therapy; orthoptics; orthotics and prosthetics; hospital pharmacy; physiotherapy; podiatry;

45 Hereafter the report will use the term 'nurses' to denote both nurses and midwives unless specification is required.

46 AIHW, *Australia's Health 2012*, 2012, p. 502.

47 Royal College of Nursing, Australia, *Submission 82*, pp 1, 3.

48 AIHW, *Australia's Health 2012*, 2012, p. 505.

49 AIHW, *Australia's Health 2012*, 2012, p. 498.

50 Department of Health and Ageing, *Report on the Audit of Health Workforce in Rural and Regional Australia*, Commonwealth of Australia, Canberra, 2008, p. 3.

51 2008 Audit, p. 16.

psychology; radiography; speech pathology; and social work. There also remain health professions that seem to fit most definitions of allied health but which are not usually included in listings of allied health professions, for example chiropractors and optometrists.⁵²

2.40 Allied Health Professionals form approximately 17 per cent of Australia's health workforce according to figures from the Australian Institute of Health and Welfare (AIHW).⁵³ DoHA stated that the majority of allied health workers practice in metropolitan locations,⁵⁴ and the Pharmaceutical Society of Australia reported: '[I]n common with other health professions, pharmacists are maldistributed across different parts of the country with 72 per cent located in the major cities.'⁵⁵

2.41 There is a similar trend among the allied health professions as there is for doctors. The availability of services decreases the further an area is from major metropolitan centres. It was reported to the committee that only 0.8 per cent of psychologists, for example, work in remote areas compared to the 79.5 per cent working in metropolitan and major regional centres.⁵⁶ Furthermore, of the few psychologists practicing in remote locations, most are comparatively professionally inexperienced.⁵⁷

2.42 Even in professions that have an adequate supply of qualified workers, such as pharmacy, there are often shortages in rural areas. The Australian Dental Association (ADA) noted that although there does not appear to be an undersupply of dentistry professionals in Australia, there is an issue of maldistribution of the current supply.⁵⁸ As noted by the ADA:

[T]here remains a considerable maldistribution of dental professionals whereby smaller regional and rural centres still lack adequate access to dental practitioners.⁵⁹

2.43 Following a similar distribution pattern as other medical professions, the number of dentists is in excess of three times higher for major cities compared to remote areas.⁶⁰

2.44 The committee heard from the Australian Physiotherapy Association (APA) that the present distribution of physiotherapists means that:

52 Australian Health Workforce Advisory Committee, *The Australian Allied Health Workforce: an overview of planning issues*, 2006, p. 14.

53 AIHW, *Australia's Health 2012*, 2012, p. 509.

54 Australian Government Department of Health and Ageing, *Submission 74*, p. 6.

55 Pharmaceutical Society of Australia, *Submission 83*, p. 3.

56 Australian Psychological Society, *Submission 87*, p. 5. Definitions of 'remote', 'metropolitan' and 'major regional' taken from the revised ARIA+ classification system.

57 Australian Psychological Society, *Submission 87*, p. 5.

58 Australian Dental Association, *Submission 73*, p. 2.

59 Australian Dental Association, *Submission 73*, p. 5.

60 AIHW, *Submission 110*, p. [3].

...a significant proportion of the Australian population is unable to access the physiotherapy services they require. Obviously, the most critical area of under servicing is in rural and remote Australia where there are significantly more potentially preventable hospitalisations for chronic conditions than in the metro areas.⁶¹

2.45 The committee was cautioned against regarding AHPs as optional extras that are secondary to providing sufficient numbers of doctors and nurses. The importance of AHPs to patient welfare was put to the committee by SARRAH:

There can be a perception that allied health services are 'discretionary' in nature. This may be true in some circumstances and not in others, not unlike the medical equivalent...Few would argue that the work of Optometrists is discretionary, or Exercise Physiologists conducting cardiac rehabilitation or Speech Pathologists treating life threatening swallowing disorders in acute hospitals. The diagnostic professions in radiography and medical technology provide doctors with information vital to medical treatment, and a person whose spinal cord was cut in a car accident would not consider rehabilitation services to be optional.⁶²

2.46 Similarly, several peak bodies representing the allied health professions argued that access to AHPs was important for community and patient health outcomes.⁶³ For example, the Pharmaceutical Society of Australia noted that:

[N]umerous studies which demonstrate and confirm that pharmacist interventions in all populations result in improved patient health outcomes, improved medication adherence, reduced hospitalizations and reduced healthcare costs.⁶⁴

Aboriginal Health Workers

2.47 One area where the numbers do not reduce with an increase in remoteness is Aboriginal Health Workers (AHW). According to 2006 census data analysed by AIHW, the number of Aboriginal and Torres Strait Islander health workers increases from 1 per 100 000 in the major cities, to 50 per 100 000 in remote areas and 190 per 100 000 in very remote areas of Australia.⁶⁵

2.48 Aboriginal Health Workers are unique in the services they deliver, and how they deliver them. They perform a typical health care role in that they deliver primary health care services including "clinical assessment, monitoring and intervention

61 Australian Physiotherapy Association, *Committee Hansard*, 5 June 2012, p. 52.

62 Services for Australian Rural and Remote Allied Health, *Submission 62*, p. 10.

63 Australian Physiotherapy Association, *Submission 71*, p. 4; Australian Psychological Society, *Submission 87*, p. 3; Australian Association of Social Workers, *Submission 96*, p. 1.

64 Pharmaceutical Society of Australia, *Submission 83*, p. 2.

65 AIHW, *Health and community services labour force 2006*, AIHW, Canberra, March 2009, p. 42.

activities; and...health promotion and illness prevention programs and chronic disease management"⁶⁶, however they also provide:

...culturally safe health care to Aboriginal and Torres Strait Islander people (such as advocating for Aboriginal and Torres Strait Islander clients to explain their cultural needs to other health professionals, and educating or advising other health professionals on the delivery of culturally safe health care.⁶⁷

2.49 Despite the predictable increase in numbers of AHWs as remoteness increases there is still an issue with supply in remote areas according to the Central Australian Aboriginal Congress (Congress). Congress suggested that supply problems are as a result of inconsistencies in the educational pathways to become an Aboriginal Health Worker. They explained that currently in the Northern Territory there are two types of AHW: registered and unregistered. The registered AHWs have obtained a Certificate IV in Aboriginal and/or Torres Strait Islander Primary Health Care and work mainly in clinical settings. The unregistered AHW have not necessarily obtained formal qualifications. This situation is changing with the rollout of the national curriculum for AHW that will require all AHWs to obtain a Certificate IV. However this mandatory requirement will be introduced over a 12-18 month period and in the meantime will result in a two-tier workforce.⁶⁸ The other issue discussed by Congress was that there is only one training provider in the Northern Territory and the number of students graduating is only one or two per year.⁶⁹

Committee view

2.50 The figures available present a picture of contrasts across the health workforce. Although statistics show that GPs and nurses are spread evenly across the remoteness categories on a per capita basis, access to this workforce is inconsistent. In the most remote areas, hospital-based non-specialists and Aboriginal Health Workers are present in significant numbers compared to both major cities and regional centres. However, medical specialist numbers plummet outside the major cities, to levels as low as one-sixth of those in the large capitals.⁷⁰ Other health professions, such as dentistry, also show large discrepancies in numbers according to location, and there is a general decline in the availability of AHPs with increasing remoteness. The committee believes that the issues around the registration of Aboriginal Health Workers is a result of a period of transition while the national curriculum is rolled out,

66 National Aboriginal and Torres Strait Islander Health Worker Association, *The Profession*, <http://www.natsihwa.org.au/the-profession> (accessed on 14 August 2012).

67 National Aboriginal and Torres Strait Islander Health Worker Association, *The Profession*, <http://www.natsihwa.org.au/the-profession> (accessed on 14 August 2012).

68 Ms Stephanie Bell, Dr John Boffa, Central Australian Aboriginal Congress, *Committee Hansard*, 20 February 2012, pp 10–11.

69 Ms Stephanie Bell, Dr John Boffa, Central Australian Aboriginal Congress, *Committee Hansard*, 20 February 2012, pp 10–11.

70 AIHW, *Submission 110*, p. 3.

however the committee would like the situation to be closely monitored to ensure that adverse outcomes do not result from the roll out.

2.51 The committee notes that providing equal numbers of health professionals per 100 000 people is not a solution in itself. It is a very important starting point, but other factors need to be considered. Accessibility, particularly in remote areas, is an issue. Health care needs amongst populations may also vary, and the committee is aware of data showing higher disease burdens and poorer health outcomes in regional and remote areas for some conditions (see below). Nevertheless, the data outlined above provides critical information for targeting effort where it is most needed.

2.52 The committee accepts AIHW's view that the new national registration scheme is producing higher quality data for the numbers and types of medical and health practitioners. However the committee has heard repeatedly that there are data issues limiting the ability to analyse the factors affecting health service delivery in rural areas. These issues include problems with determining the numbers of rural medical students. The committee thinks that this is a key area of responsibility for the Department of Health and Ageing's Rural and Regional Health Australia and should be prioritised in the forthcoming review into rural health. The committee is also aware of a need for better targeting and synthesis of research to support rural health service reform. Rural and Regional Health Australia should play a role in using research results to assess current gaps in knowledge. Rural and Regional Health Australia will need to build its capacity to ensure that up-to-date knowledge informs the key strategic decisions required in rural health service delivery.

Recommendation 1

2.53 The committee recommends that Rural and Regional Health Australia, as part of the Department of Health and Ageing, prioritise the collection of robust and meaningful data on rural health as part of the forthcoming review of rural health programs.

Recommendation 2

2.54 The committee recommends that Rural and Regional Health Australia, as part of the Department of Health and Ageing, review the current literature from key stakeholders and universities and develop a strategy to address the gaps in research and knowledge affecting rural health service delivery.

Impacts of the maldistribution of the medical workforce

2.55 The significant health impacts of the maldistribution of the medical and allied health workforce are evidenced by the poor health outcomes reported for people living in those areas. The committee heard from the Rural Doctors Association of Australia (RDAA) that:

Australians living in rural and remote areas have much poorer access to local health services, significantly worse health outcomes and a

significantly shorter life expectancy than Australians living in metropolitan areas.⁷¹

2.56 Although there may be similar numbers of GPs and nurses per head of population, access in rural areas is very different to the cities:

Many people living in rural and remote areas are unable to access even the most basic primary care medical services in their local communities, and have to travel significant distances just to see a GP for a basic consultation, or have to wait many weeks to be seen close to where they live.⁷²

2.57 The Royal Australian College of General Practitioners (RACGP) highlighted some of the health outcomes reported for non-metropolitan populations:

National health status and disease burden research data shows life expectancy is 1 to 2 years lower in regional areas and up to 7 years lower in remote areas compared with major cities. The prevalence of chronic disease data shows the incidence of cancer is about 4 per cent higher than those major cities with significantly higher incidence rates for preventable cancers. Lifestyle risk factors or health behaviours are attributed to the burden of disease in these communities with people in remote areas found to be engaging in more behaviours that carry risks.⁷³

2.58 Professor Koczwara from the Clinical Oncological Society of Australia (COSA) stated that there are different health outcomes for cancer depending on a person's location:

...we know that the outcomes for rural Australians when it comes to cancer are worse than for those in metropolitan areas...this is really a major problem in Australia.⁷⁴

2.59 Professor Koczwara also pointed that the situation is further complicated by the different treatment requirements for different cancers:

I would advise patients that bone marrow transplants will be given in large metropolitan areas forever because the complexity of care and the frequency of need is such that we are going to have much better outcomes if we do it in that area. It would just be too expensive to do it in small community areas. It is a little bit different for other cancer types and maybe not as clear-cut. But we are beginning to recognise that, if we really want to have the best outcomes and often the most cost-effective care delivery, we need to triage, so to speak, the work that we are doing. Some work will be done in highly specialised areas. Some cancer types might require one centre for the entire country. At the other end of the spectrum there will be

71 Rural Doctors Association of Australia, *Submission 67*, p. 5.

72 Rural Doctors Association of Australia, *Submission 67*, p. 5.

73 Royal Australian College of General Practitioners, *Submission 41*, p. 10.

74 Professor Bogda Koczwara, Clinical Oncological Society of Australia, *Committee Hansard*, 11 May 2012, p. 46.

a type of care that should be delivered close to home pretty much under most circumstances or all circumstances.⁷⁵

2.60 Statistics from the AIHW further highlight the health disparity between metropolitan and non-metropolitan Australians. When regional, rural and remote communities are compared with their city counterparts they tend to exhibit:

- 10 percent higher levels of mortality;
- 20 percent higher rates of injury and disability;
- 32 percent higher rates of risky alcohol consumption; and
- 10–70 percent higher rates of peri-natal death.⁷⁶

2.61 Furthermore, it was put to the committee by the Royal Australian College of Physicians that the maldistribution of the medical workforce carries significant, potentially unsustainable, fiscal costs for both individuals and the medical system:

Rural patients with complex illnesses may need to see multiple specialists, entailing multiple trips to distant urban facilities. The associated cost is tremendous and not sustainable. NSW Health Isolated Patient's Travel and Accommodation Assistance Scheme (IPTAAS), for example, reports the need for an additional \$28 million in supplementary funding, over four years. In 2011/12 forecast expenditure is \$18 million, a \$7 million increase on the previous year.⁷⁷

2.62 Due to the present maldistribution in the medical workforce, patients may also have to regularly travel significant distances for medical attention. For example, Ms Johnson from the Rural Doctors Association of Australia noted:

[P]eople are coming to the doctor and it is beyond the doctor's capacity or it is going to take too much time, so they are given a letter to go to casualty in the regional centre 100 kilometres away. To me, that is a major problem.⁷⁸

2.63 The committee also heard that workforce shortages present specific challenges for patients suffering from conditions that may carry a social stigma:

...some consumers in rural areas opt to travel...in order to avoid family/social contacts potentially finding out about their HIV status and any associated HIV-related stigma.⁷⁹

75 Professor Bogda Koczwara, Clinical Oncological Society of Australia, *Committee Hansard*, 11 May 2012, p. 48.

76 AIHW, *Health Workforce 2025*, volume 1, Canberra, 2012, pp 157–158.

77 Royal Australasian College of Physicians, *Submission 76*, p. 2.

78 Ms Jenny Johnson, Rural Doctors Association of Australia, *Committee Hansard*, 11 May 2012, p. 22.

79 Australian Federation of AIDS Organisations, *Submission 28*, p. 2.

Causal factors leading to workforce shortages in non-metropolitan areas

2.64 The causal factors that have contributed to medical workforce shortages in rural and regional areas are many and varied. Rural Health Workforce Australia's (RHWA) submission to the inquiry summarised some of the factors leading to workforce shortages:

...an ageing workforce, fewer health professionals following generalist pathways and inadequate number of GPs and health professionals choosing rural practice. Causes of GPs, as well as health professionals more generally, not taking up rural practice include inadequate remuneration and professional development opportunities, heavy workload and on-call hours, loss of anonymity, lack of opportunities for spouses and children and professional isolation.⁸⁰

2.65 Although RHWA was speaking specifically in relation to GPs, the bulk of their observations extend to the medical workforce at large. There are obvious parallels between the evidence received from RHWA and that received from the APA and the Australian Psychological Society (APS). The latter noted:

There are factors at each stage in the 'life cycle' of the psychological workforce which limit supply to small regional communities. Limited training opportunities, restricted career progression opportunities, poor recruitment and retention, challenges in accessing professional development, inflexible funding models and inadequate workforce data all contribute to limiting the supply and appropriate distribution of psychologists to small regional communities.⁸¹

2.66 While the former argued:

There are also well documented barriers to rural and remote recruitment and retention in the allied health professions...the lack of a career path, the lack of professional and peer support including networking, isolation, the lack of access and support to attend continuing professional development activities and postgraduate study, and a lack of remuneration and recognition, staff shortages and a lack of locum availability.⁸²

2.67 The committee received evidence about both personal and professional factors affecting career choices of those working in health professions.

Personal Factors

2.68 Personal preferences and barriers were cited as a key problem to be overcome in attracting sufficient numbers of medical and allied health professionals to non-metropolitan areas. The principal personal barriers that need to be addressed in order to attract the necessary medical workforce were succinctly summarised by

80 Rural Health Workforce Australia, *Submission 107*, p. 4.

81 Australian Psychological Society, *Submission 87*, p. 3.

82 Australian Physiotherapy Association, *Committee Hansard*, 5 June 2012, p. 52.

Professor Humphreys: 'every doctor requires an adequate housing structure, adequate schooling and adequate employment for spouse.'⁸³

2.69 The committee was informed that access to affordable, safe and comfortable housing was an importance consideration in attracting medical professionals. Dr Mourik reported to the committee at its hearing in Albury-Wodonga that '[w]hen doctors come to a country town, they do not want to be given a fleapit of an accommodation.'⁸⁴ Similarly, Rural Health Workforce Australia (RHWA) argued that the challenge of finding appropriate accommodation is more acute for allied health professionals:

Lack of appropriate housing is also an issue...The lack of housing can often be an even bigger issue in trying to place allied health professionals, nurses and GP registrars.⁸⁵

2.70 The availability of childcare was also cited as important consideration for attracting and retaining an adequate rural medical workforce. Dr Kirkpatrick related to the committee her experience as a rural obstetrician:

When I went bush I was a single parent with an 11-year-old child who I used to take out of town to get overnight care when I was on call. That was a one-in-two on call...It was also a problem if I had an unexpected delivery and was called out – but you are never off call in a rural community...⁸⁶

2.71 Despite the image of rural communities enjoying a relaxed lifestyle, available statistics indicate that non-metropolitan professionals work longer hours and have more demanding rosters than their metropolitan peers. Over time, the increased burden of long hours with limited professional support can become a disincentive to remain in rural practice. The President of the Rural Doctors Association of Australia reported a personal example for the committee:

I work with my wife and we are on call seven days a week, 24 hours a day, and that has been the case for many, many years and often for months at a time. We are just finishing a shift that has gone on for over 28 days straight. When you are called out to the hospital after hours, after 10 o'clock at night, for four nights a week, that starts to become a burden after 30 years in practice.⁸⁷

2.72 The committee heard that to address many of these issues solutions need to include:

83 Professor John Humphreys, Centre of Research Excellence in Rural and Remote Primary Health Care, *Committee Hansard*, 5 June 2012, p. 19.

84 Dr Pieter Mourik, private capacity, *Committee Hansard*, 5 June 2012, p. 57.

85 Rural Health Workforce Australia, *Submission 107*, p. 16.

86 Dr Kathryn Kirkpatrick, Royal Australian College of General Practitioners, *Committee Hansard*, 5 June 2012, p. 35.

87 Dr Paul Mara, Rural Doctors Association of Australia, *Committee Hansard*, 11 May 2012, pp 13-14.

...excellent relocation support to assist with employment for spouses and schooling for children and with finding appropriate housing, which is often a difficulty, as well as providing introductions to local communities.⁸⁸

Professional Factors

2.73 One of the reasons put forward to explain the maldistribution of the medical workforce in Australia is that, unlike the United Kingdom and some Scandinavian countries that use a salary-based model for GPs, General Practice in Australia is based on a model of private practice. Medical professionals are free to choose in which geographical location they would like work and as a result the government has significantly fewer policy levers available to distribute the workforce to areas of greatest need.⁸⁹

2.74 Many medical professionals, such as dentists, require high capital outlays to establish a practice. This is only viable, particularly for the non-government sector, in areas of consistently high demand. Many regional and remote communities do not have the 'critical mass' necessary to support resident medical specialists in terms of both population and infrastructure requirements.⁹⁰ In addition, the potentially higher incomes available in private practice in metropolitan areas act as a disincentive for specialists to consider rural practice.⁹¹

2.75 The committee also heard that a lack of access to professional development opportunities in non-metropolitan areas can act as a barrier in recruiting and retaining staff. The Royal College of Nursing noted that:

A significant barrier to addressing the nursing and midwifery workforce development challenges has been the difficulties for rural and regional nurses and midwives in maintaining continuing professional development activities as required by the National Registration and Accreditation Scheme.⁹²

2.76 SARRAH made the point that GPs in non-metropolitan areas are often required to undertake work that in a metropolitan setting would be carried out by other health professionals. This creates an additional burden on the GP that can have a significant impact:

[W]hen you are a rural practitioner you see everything. There is no social worker near you so you, as a physio, need to address their problems with Centrelink payment access or with carer support...What ends up happening then is that you operate outside of your normal scope of practice. That has

88 Dr Deborah Cole, Dental Health Services Victoria, *Committee Hansard*, 5 June 2012, p. 35.

89 Rural Health Workforce Australia, *Submission 107*, p. 8.

90 Productivity Commission, *Australia's Health Workforce*, Canberra, December 2005, p. 206.

91 Rural Doctors Association of Australia, *Submission 67*, p. 19.

92 Royal College of Nursing, *Submission 82*, p. 1.

been associated with job dissatisfaction, because people do not feel adequately prepared for that extended scope of practice.⁹³

2.77 Professional isolation was frequently listed as a barrier to practicing in non-metropolitan areas. As explained by the Executive Director of the National Rural Health Alliance:

GPs and other health professionals do not want to work alone in rural areas; they prefer to have peers with whom responsibilities can be shared and a range of other health professionals with whom they can work.⁹⁴

2.78 The potential lack of professional support was cited as a key impediment in attracting AHPs to non-metropolitan areas, stating that 'a lack of nursing and allied health staff within a community is likely to influence the decision of other professions whether to practise in that community.'⁹⁵ Similarly, the APS noted the importance of access to a variety of professionals arguing that: 'particularly in rural and regional communities, inter-professional or multidisciplinary practice is essential for efficient, effective and appropriate delivery of service to the community.'⁹⁶

2.79 Another key barrier in attracting health professionals was the absence of clear career paths in non-metropolitan areas. The committee heard from SARRAH that young professionals typically 'will stay one or two years and then leave for metropolitan areas because of the opportunities for specialist career advancement.'⁹⁷

2.80 In addition to the barriers discussed above that apply to the entire medical workforce, the committee heard that allied health professionals face additional barriers. Funding models, according to the Dietitians Association of Australia, do not support AHPs to work outside metropolitan areas:

Funding models do not support allied health to work outside the public health system anywhere [in Australia] but this is particularly problematic in rural areas. Most rural areas have a lower socioeconomic profile therefore direct payment for allied health services [are] limited.⁹⁸

2.81 Peak bodies representing allied health professions suggested the committee that lack of access to Medicare rebates for allied health services means that viable private practice in non-metropolitan areas is extraordinarily difficult stating that '[t]he very limited access to Medicare rebates for allied health services cannot support viable

93 Ms Sheila Keane, Services for Australian Rural and Remote Allied Health, *Committee Hansard*, 11 May 2012, p. 2.

94 Mr Gordon Gregory, National Rural Health Alliance, *Committee Hansard*, 11 May 2012, p. 23.

95 Rural Health Workforce Australia, *Submission 107*, p. 22.

96 Australian Psychological Society, *Submission 87*, p. 11.

97 Ms Sheila Keane, Services for Australian Rural and Remote Allied Health, *Committee Hansard*, 11 May 2012, p.3.

98 Dietitians Association of Australia, *Submission 86*, p. [2].

practice in rural areas.⁹⁹ It was pointed out by SARRAH that the issue of Medicare rebates become more important with increasing levels of isolation, noting that: 'It is more of an issue the further out you go into remote areas. For example, in Broken Hill there are literally no private allied health services.'¹⁰⁰

2.82 The Australian Association of Social Workers (AASW) argued that many programs established to improve rural health outcomes that include the use of social workers have short-term funding cycles. This creates significant uncertainty for the professionals filling those positions as ongoing employment is not guaranteed.¹⁰¹ The APA also reported difficulties caused by some current funding mechanisms, using the following example:

A single physiotherapist may work under a number of different funding streams for the same employer. They might be employed under a full time equivalent (FTE) 1.5 day position funded under a chronic disease funding stream and a FTE 3 day position under an aged outreach stream. In many instances, both of these funding streams would have separate and inconsistent reporting requirements.¹⁰²

2.83 The APA went on to comment that:

...complex funding arrangements are not transparent, and country health services suffer from onerous, multiple level reporting requirements. This means that the complexity and level of administration required takes time from clinical service delivery.¹⁰³

Committee view

2.84 Based on the evidence received it appears that AHPs do face additional challenges in delivering services to non-metropolitan populations. This is attributable to current Medicare and other funding arrangements, social barriers, access to appropriate, affordable and secure accommodation, and is exacerbated by lower remuneration than doctors. Further, more effort needs to be expended in ensuring that appropriate policies are in place to promote the development and retention of multidisciplinary health teams in non-metropolitan areas.

99 Dietitians Association of Australia, *Submission 86*, p. [2]; cf. Australian Psychological Society, *Submission 87*, p. 10; Pharmaceutical Society of Australia, *Submission 83*, p. 3; Australian Physiotherapy Association, *Submission 71*, p. 7.

100 Ms Sheila Keane, Services for Australian Rural and Remote Allied Health, *Committee Hansard*, 11 May 2012, p. 3.

101 Australian Association of Social Workers, *Submission 96*, p. 2.

102 Australian Physiotherapy Association, *Submission 71*, p. 5.

103 Australian Physiotherapy Association, *Submission 71*, p. 5.

