

HOW MANY DOCTORS ARE THERE IN RURAL AUSTRALIA?

...good health and wellbeing in rural and remote Australia

Despite the focus given to GP shortages in rural and remote areas, there is still no unequivocal evidence about the scale and location of the problem. This means that policies relating to the issue may not be founded on accurate information, especially if GPs are not clearly distinguished from medical practitioners (or 'doctors').



The total number of doctors in Australia, including those who are General Practitioners (GPs), can be estimated from three different sources: the Australian Bureau of Statistics (ABS) census, Medicare data, and the Australian Institute of Health and Welfare (AIHW) survey coupled with information from the medical registration process. These three provide quite disparate numbers - and not only because they refer to different moments in time (Table 1).

Table 1: 'Headcount' of GPs per 100,000 population, from three sources

	Major Cities	Inner Regional	Outer Regional	Remote	Very Remote
2006 census	196	123	108	106	58
2010/11 COAG	122	124	118	178	281
2011/12 COAG	126	133	130	202	285
2009 (AIHW)	118	104	99		126
2011 (AIHW)	113	112	104		116

Source: AIHW 2009, AIHW 2011, AIHW 2013, COAG 2012, COAG 2013

Some of these disparities are astounding, such as the estimates of the number in very remote areas. Differences of that size need to be explained by reference to methodological matters such as exactly what is being measured, by what means and at what time - so that the implications for policy (access, equity, costs) are clear.

A simple headcount of GPs who practise in a particular area for an unspecified amount of time has limited relevance for considerations of access to general practice for the people of any particular community.

Even estimates of full-time equivalent GPs (Table 2) are only approximate indicators of access because of the different logistical and spatial nature of general practice in remote areas. And none of the estimates take health need into account.

Table 2 suggests big differences in the numbers of full-time equivalent GPs per head of population between 2011 and 2012. This is more likely to be an artefact than a reflection of reality.

Table 2: 'Full Time Equivalent GPs' per 100,000 population, from three sources

	Major Cities	Inner Regional	Outer Regional	Remote	Very Remote
2006 census	not published				
2010/11 COAG	95	87	76	66	50
2011/12 COAG	80	81	72	64	50
2009 (AIHW)	110	103	106		143
2011 (AIHW)	108	113	113		130

Source: AIHW 2009, AIHW 2011, AIHW 2013, COAG 2012, COAG 2013

Data sources

Estimates of the numbers of doctors based on the census suffer, among other things, from the 'astronaut' effect (Question: "What is your job?" Answer: "I am an astronaut!") and relate to 'place of residence' as opposed to 'place of work'.

Estimates based on Medicare data are also problematic. Many employed clinical medical practitioners are paid or receive a copayment through Medicare, and their number can therefore be gauged through the Medicare payments database. Others, however, such as those employed by State Health Departments, work at least some of their time outside the Medicare system.

There are also likely to be differences between counts based on a review of a year's worth of Medicare data and point-of-time estimates based on census or survey.

The most reliable estimate of doctor numbers appear to be from the AIHW Medical Labour Force Survey, completed during the registration process. The survey has been voluntary, and response rates have been declining over the years, falling as low as 53 per cent of those registering in 2009. The establishment of AHPRA (the Australian Health Practitioner Regulation Agency), and the transfer of a fragmented health professional registration system to a more centralised system, has resulted in a much higher response rate (85 per cent in 2011) and the promise of a much more precise understanding of the size of medical (and other health professional) workforces.

Data collected by AHPRA during the registration process are passed on to AIHW, where they are stored, cleaned and analysed. Results of analyses are released in AIHW reports.

The AIHW numbers

There were 87,790 medical practitioners registered in Australia in 2011. Of these, 78,833 were employed and, of those, 73,980 were working as clinical doctors attending to patients (as opposed to working in administration, education, etc). Of the 73,980 clinicians:

- 25,056 worked as GPs;
- 9,576 worked as hospital non-specialists (eg career medical officers and doctors finishing their training (eg interns));
- 24,475 worked as specialists;
- 12,491 worked as specialists in training; and
- 2,382 worked as 'other medical practitioner'.

Table 3 describes the number and prevalence of medical practitioners in each of the remoteness areas.

Prevalence is lower in Inner regional areas than the Major cities, and lower again in Outer regional areas. These are the two regions in which the bulk of people outside the Major cities live (6.2 of the 6.7 million). There appear to be more GPs and

'Hospital non-specialists' in Remote and Very remote areas than in Major cities, but a lot fewer specialists. Longer hours worked by doctors in regional and remote areas inflate FTE such that 'access' as expressed by FTE appears higher in regional and remote areas than in Major cities.

The reported higher prevalence of GPs in remote areas runs contrary to the experiences of patients, would-be patients and interested observers. It is unclear whether this is due to the degree of subjectivity of those interested parties, whether the greater demand and more difficult logistics add greatly to GPs' workloads, or whether the statistics in remote areas are actually in error.

AIHW has previously issued cautions about its estimates of doctor numbers in remote areas. In the light of higher recent response rates, their caution for the 2011 is limited to the following: "Care should be taken in interpreting the Medical Workforce Survey data for Remote/Very remote areas due to the relatively small number of employed medical practitioners who stated that their main job was located in this RA (see 'Data issues' section in Appendix A)."

Table 3: All doctors, by remoteness, 2011

	Major Cities	Inner Regional	Outer Regional	Remote/Very Remote		Major Cities	Inner Regional	Outer Regional	Remote/Very Remote
	Doctors per 100,000 population					FTE doctors per 100,000 population			
GP	113	112	104	116	GP	108	113	113	130
Hosp non-specialist	47	32	31	50	Hospital non-specialist	55	37	36	60
Specialist	134	63	43	31	Specialist	149	73	49	37
Specialist in training	70	25	24	16	Specialist in training	85	31	30	19
Other clinician	12	7	8	11	Other clinician	12	8	9	13
Total clinicians	376	239	211	224	Total clinicians	407	261	237	258
Non-clinician	27	10	11	15	Non-clinician	26	9	11	16
All medical practitioners	403	249	222	239	All medical practitioners	433	270	247	274

* The estimates in this table should be taken as indicative, rather than absolute, especially in remote areas. Medical practitioners are here defined as employed clinicians and non-clinicians. FTE is here based on a 40 hour week. Source: AIHW 2013

Implications for policy

While the total number of medical practitioners in Australia may be adequately understood, their distribution is not - at least for that part of it working in remote areas. This is despite the fact that people there have the greatest health need and those areas are the ones in which the challenges of delivering health services are greatest.

In the past, AIHW collected information on main, secondary and tertiary work locations (including hours worked there) but, except in specific rural, regional and remote publications, this information was not used to advise and adjust analysis of data for regional and remote areas. This therefore provided the opportunity for false conclusions about access to primary care in more remote areas.

Rural and, especially, remote areas have quite different work environments for GPs compared with the Major cities. In the cities there are ample opportunities for work in private practice, private or corporate practices, salaried hospital positions, and salaried or Medicare-billing Aboriginal Medical Services. The differences in work environments and practices between more remote areas and the cities make comparison of available GPs very difficult.

The move to a single coordinating body for registration (AHPRA) appears to have resulted in more accurate enumeration, at least as a result of much higher response rates for the surveys. In addition, the use of a single identifying number for each medical practitioner, issued by AHPRA and applied to survey and Medicare records, may at last allow for an accurate appraisal of just what is happening in rural and remote areas, providing (for the first time) an accurate comparison of supply and need in these areas.

Adequacy of GP supply in rural and remote areas is a complex notion. As well as simple headcounts and FTE numbers, a number of other factors need to be considered. They include:

- the underlying need for greater quantities of primary care, given poorer health status in rural and remote areas;
- the need for rural and remote GPs to have a broad scope of practice; and
- the need for many rural GPs to spend time travelling between different worksites and patients (and therefore having less time to spend with patients).

Various aspects of these complex matters are addressed in several of the Alliance's publications.