



Medical Practice in rural and remote Queensland

Queensland Minimum Data Set Report

at 30th November 2009



Health Workforce
Queensland

Health Workforce Queensland 2009

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Compiled by:

Col White – Data/Research Manager, Health Workforce Queensland
Jessica Holding – Research/Policy Officer, Health Workforce Queensland

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Health Workforce Queensland Minimum Data Set Report – 30th November 2009

1. Introduction

For the 2001-2004 triennium, as a part of their contractual agreement with the Commonwealth Department of Health and Ageing (CDoHA), Rural Workforce Agencies (RWAs) in all states and territory were required to collect and report a minimum, specified set of data in relation to the rural and remote General Practice workforce in locations classified RRMA 4 through RRMA 7.

Undertaken individually by each RWA, de-identified data were compiled nationally through Rural Health Workforce Australia (RHWA) to provide a comprehensive portrayal of the Australian rural and remote medical workforce.

The data were first compiled at a national level in December 2001 and were updated on an annual basis as at 30th November each year. Data in relation to the number of medical practitioners, country of basic medical qualification, residency status, age, gender, procedural skills and length of stay in current location are largely derived from databases maintained by each RWA. Data in relation to primary income source, models of service provision, clinical and total hours worked are largely self-reported and may be incomplete due to non-responses and/or missing data.

Each RWA normally surveys rural and remote medical practitioners in their state/territory in the latter part of each year. Core questions for the Minimum Data Set (MDS) have been developed and standardised among the states/territories. In addition, states/territories have the flexibility to incorporate additional questions should they wish. While the annual MDS survey is a major component of the data reported, all RWAs utilise additional resources to verify and validate their data. It should also be noted that the number of doctors reported reflect the more stable elements of the rural and remote medical workforce and do not include transient, short term service providers (e.g., locum tenens/Queensland Health Relievers).

Current and accurate information in relation to the rural and remote medical workforce is essential for the day to day operations of RWAs and as such, all RWAs have agreed to continue to collect MDS data.

Data provided in this report is for Queensland only and was current as at 30th November 2009.

2. Number and type of Medical Practitioner by RRMA

Data indicated that as at 30th November 2009, the number of medical practitioners currently in RRMA 4 to 7 locations was 1169. This represents an increase of 39 practitioners (3.45%) compared with numbers reported as at 30th November 2008. Table 1 presents the total number of medical practitioners working in RRMA 4 to 7 locations in Queensland by practitioner type as at 30th November 2009. Table 2 provides a breakdown of this distribution by gender and RRMA. Table 3 provides a breakdown of employment type by Division of General Practice.

Table 1: Employment type by RRMA

Employment Type	RRMA4	RRMA5	RRMA6	RRMA7	Total
ACCHS	0	5	7	4	16
General Practitioner	335	423	58	20	836
GP/Academic	0	0	1	0	1
GP/Company	0	2	0	0	2
MORPP	0	19	3	6	28
MS	2	11	2	5	20
MSRPP	1	24	3	21	49
RFDS	0	0	6	25	31
RMO	52	13	15	10	90
SMO	31	42	10	13	96
Total	421	539	105	104	1169

Legend

ACCHS	Aboriginal Community Controlled Health Service
MORPP	Medical Officer with Right of Private Practice
MSRPP	Medical Superintendent with Right of Private Practice
MS	Medical Superintendent
RMO	Resident Medical Officer (includes JHO, SHO, PHO etc.)
SMO	Senior Medical Officer
General Practitioner	General Practitioner
GP/Academic	GP where main responsibilities are teaching/administration
GP/Company	GP where main employment is with Defence Forces or company

Table 2: Gender by RRMA

RRMA	Male	Female	Total
RRMA4	288	133	421
RRMA5	342	197	539
RRMA6	64	41	105
RRMA7	72	32	104
Total	766	403	1169

Table 3: Employment type by Division – RRMA 4 to 7

Division	ACCHS	GP	GP/Ac	GP/Comp	MORPP	MS	MSRPP	RFDS	RMO	SMO	Total
CapDGP	0	75	0	0	0	0	1	0	3	10	89
CQRDGP	0	26	0	0	4	0	8	0	3	1	42
FNQDGP	12	73	0	0	1	6	3	23	19	25	162
GCDGP	0	11	0	0	0	0	0	0	0	0	11
GP Links	0	94	0	0	3	0	7	0	38	0	142
IWMDGP	0	43	0	0	5	0	2	0	0	0	50
MacDGP	0	27	0	0	0	1	0	0	2	6	36
Morton Bay GPN	0	7	0	0	0	0	0	0	0	0	7
NWQPHC	1	64	1	0	5	4	8	6	8	13	110
Rhealth	3	108	0	0	8	8	18	2	6	24	177
SunCDGP	0	262	0	0	1	1	1	0	11	17	293
ToowDGP	0	37	0	2	1	0	1	0	0	0	41
Total	16	836	1	2	28	20	49	31	90	96	1169

In May 2009, the Australian Government announced that Rural, Remote and Metropolitan Areas (RRMA) system will be replaced by the Australian Standard Geographical Classification – Remoteness Areas (ASGC-RA) system. Table 4 below displays current practitioner numbers by both RRMA (columns) and ASGC-RA (rows)

Table 4: Practitioner numbers by ASGC-RA (rows) and RRMA (columns)

					Total
ASGC-RA	RRMA4	RRMA5	RRMA6	RRMA7	
RA1 - Major Cities	169	4	0	0	173
RA2 - Inner Regional	251	283	0	0	534
RA3 - Outer Regional	0	243	68	26	337
RA4 - Remote	1	9	37	40	87
RA5 - Very Remote	0	0	0	38	38
	421	539	105	104	1169

3. Workloads

Estimates of Full Time Equivalent (FTEs) and Full Time Workload Equivalent (FWEs) as used by the Medicare Australia (MA) in calculating GP medical service provision are based solely on the number and the dollar value of claims made by a provider over a given reference period (usually 12 months). While these can be useful measures of overall service provision under Medicare, they do not reflect the number of hours worked in providing medical services, or services provided that are not claimed and/or are not claimable through Medicare. For example, a medical practitioner is classified as full-time by Medicare Australia if the Schedule fee value of services processed over a 12 month period is \$86,727¹ (2003-2004) or more for that practitioner. Similarly, a Full Time Workload Equivalent (FWE) value is calculated for each doctor by dividing the doctor's Medicare billing (Schedule fee value of claims processed by Medicare Australia during the reference period) by the mean billing of full-time doctors for reference period. For the 2002-2003 reference period, this value for vocationally registered doctors was \$221,864.¹ In 2006, this figure had risen to around \$251,000 for Vocationally Registered GPs.²

An alternative measure of service provision is number of hours worked. The Australian Bureau of Statistics (ABS) defines full-time work as being 35 hours per week or more and part-time work as less than 35 hours. It is this measure that has been chosen by Health Workforce Queensland to differentiate between full-time and part-time service provision.

An estimate of full-time/part-time medical service provision utilising ABS benchmark was undertaken based on self reported clinical hours worked. Data was available for 74.4% of the total number of practitioners. Data as displayed in Table 5 indicates that 72.5% of respondents worked 35 hours a week or more in the provision of routine clinical GP services.

Table 5: Self-reported clinical hours

Clinical hours	Frequency	Percent
<20 hours	54	7.0
20 to 35 hours	157	20.4
35 hours plus	557	72.5
Total	768	100.0

It should be noted that hours reported are for those worked in GP practice only and should not be interpreted as total hours as hospital hours, travel, teaching, supervision time etc. are not included. The average number of clinical hours reported was 39.3 hours per week (N=768).

A further breakdown of self-reported clinical hours by gender is displayed in Table 6 below.

¹ Australian Government Department of Health and Ageing. (2005). *RFT 127/0405 - Request for tender for a medical workforce profile project*. Canberra: ADoHA

² Medical Observer (2006). *Making MBS a lucrative ally*. 2nd June 2006

Table 6: Self-reported clinical hours by gender

Clinical hours	Female	Male	Total
<20 hours	28	26	54
	10.0%	5.3%	7.0%
20 to 35 hours	85	72	157
	30.4%	14.8%	20.4%
35 hours plus	167	390	557
	59.6%	79.9%	72.5%
Total	280	488	768
	100.0%	100.0%	100.0%

Self reported total hours were also explored. In addition to clinical hours, these hours may include hospital hours, time spent in travel between practices, population health, teaching, administrative or representative work. Data was available for 73.6% of practitioners. Table 7 displays self-reported total weekly hours while Table 8 displays total hours by gender. The average reported total hours were 47.2 hours per week (N=860).

Table 7: Self-reported Total hours

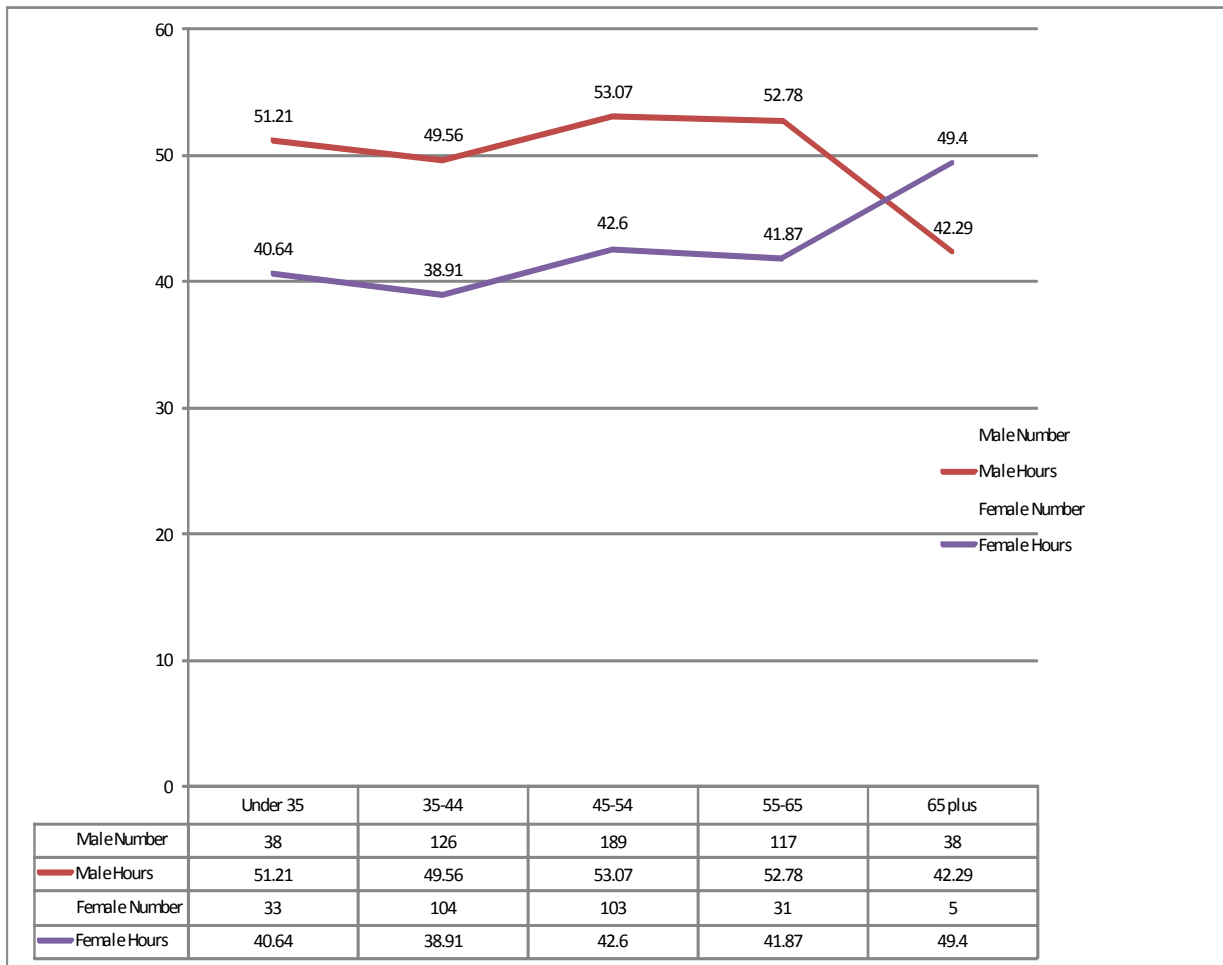
Total Hours	Frequency	Percent
<20 hours	22	2.6
20 to 35 hours	92	10.7
35 hours plus	746	86.7
Total	860	100.0

Table 8: Self-reported total hours by gender

Total Hours		Female	Male	Total
<20 hours	Count	16	6	22
	% within gender	5.3%	1.1%	2.6%
20 to 35 hours	Count	59	33	92
	% within gender	19.5%	5.9%	10.7%
35 hours plus	Count	227	519	746
	% within gender	75.2%	93.0%	86.7%
Total	Count	302	558	860
	% within gender	100.0%	100.0%	100.0%

A more refined breakdown of average total hours by gender and age categories is presented in Figure 1.

Figure 1: Average total hours worked per week by gender and age category (N=784)



These data appear to be in line with national trends that suggest that female practitioners tend to work less hours compared with their male counterparts.^{3,4} Explanations for these differences have been well documented and reported in a considerable number of studies and will not be explored further in this analysis.

4. Length of stay in current principal practice

In Queensland, the average length of stay in current principal practice was 6.1 years. A more refined breakdown by duration and RRMA is provided in Table 9.

³ Commonwealth Department of Health and Aged Care. (2001). *The Australian Medical Workforce. Occasional Papers New Series No.12, August 2001*. Canberra: CDHAC.

⁴ Australian Medical Workforce Advisory Committee. (2005). *The General Practice Workforce in Australia: Supply and Requirements to 2013, AMWAC Report 2005.2*. Sydney.

Table 9: Length of stay in current practice by RRMA

RRMA	<6mths	6-12mths	1-2yrs	2-3yrs	3-5yrs	5-10yrs	10-20yrs	20+ yrs	Total
4	27	72	86	34	45	86	37	29	416
5	60	74	87	51	66	85	54	59	536
6	8	23	13	18	18	8	11	6	105
7	9	28	19	14	9	11	7	5	102
Total	104	197	205	117	138	190	109	99	1159

Data indicates that 74% of practitioners have practiced in their current rural and remote locations for more than a year. Approximately 26% are relatively new and have been at their current practice for less than 12 months. While these data provide a guide, they do not take into account movements between practices and RRMA.

5. Age and gender by RRMA

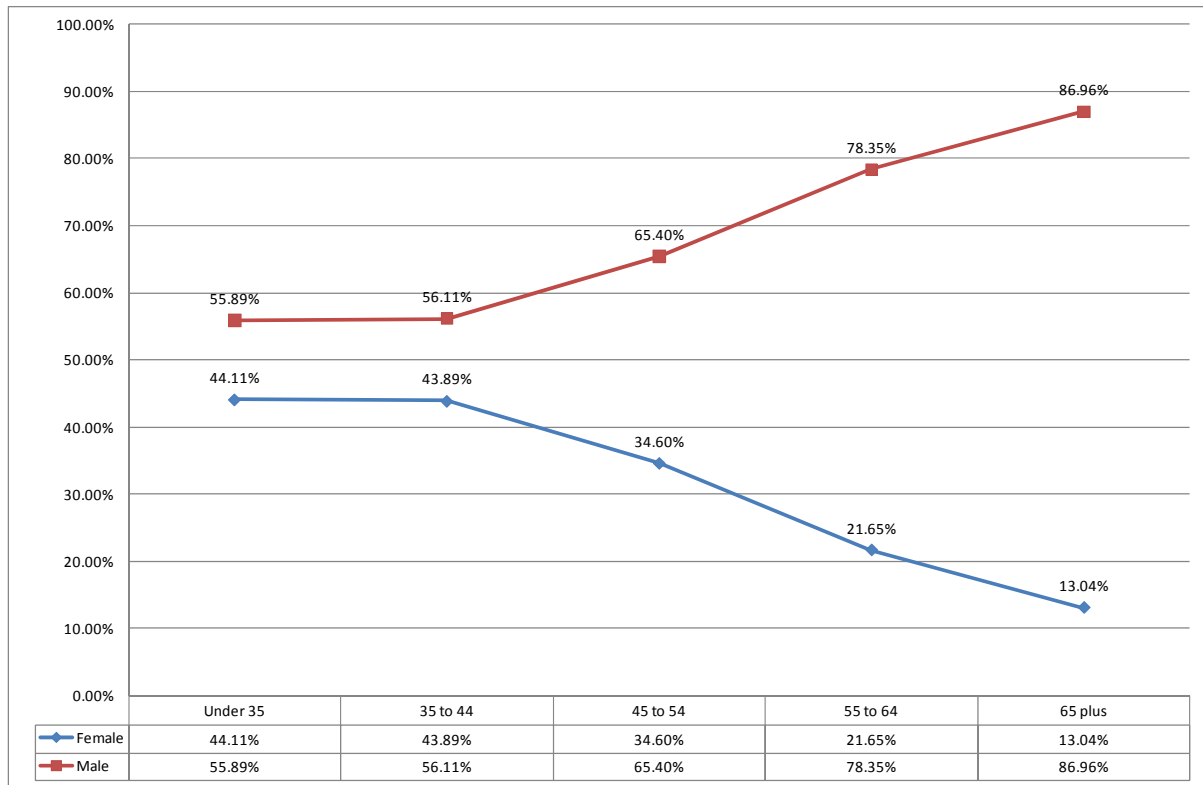
For Queensland the average age for male practitioners was 49 years (N=573) and 44.6 years for females (N=309). The overall average age was 47.5 years (N=882). Table 10 displays gender by age category by RRMA.

Table 10: GP age categories by gender and RRMA (N=882)

RRMA	Gender	Under 35	35 to 44	45 to 54	55 to 64	65 plus	Total
4	Female	15	29	34	19	1	98
	Male	16	43	76	45	16	196
	Total RRMA4	31	72	110	64	17	294
5	Female	21	67	59	11	4	162
	Male	24	69	97	58	20	268
	Total RRMA5	45	136	156	69	24	430
6	Female	5	11	14	1	1	32
	Male	7	12	15	13	2	49
	Total RRMA6	12	23	29	14	3	81
7	Female	4	8	2	3	0	17
	Male	10	23	18	7	2	60
	Total RRMA7	14	31	20	10	2	77

Figure 2 displays the distribution of GPs by gender across a selected number of age categories. These data suggest that females are more broadly represented in the under 45 age categories.

Figure 2: Proportion of male and female practitioners across age categories (N=882)



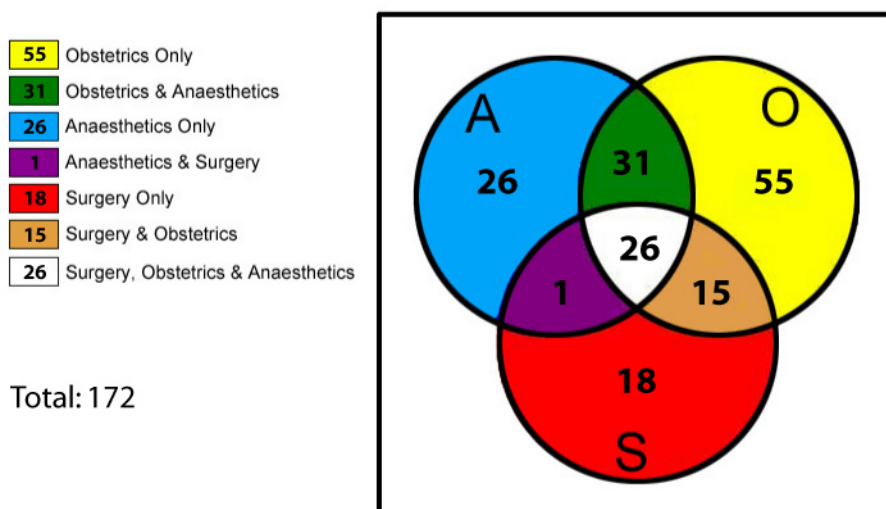
6. Known number of procedural practitioners

Data in relation to the provision of procedural services in rural and remote Queensland may be incomplete due to non-respondents, although the number of proceduralist GPs in rural and remote Queensland is fairly well known. Senior Medical Officers (Generalists) employed by Queensland Health and providing procedural services in Maryborough, Hervey Bay and Mount Isa are not included in the data shown below. The known number of practitioners providing specified procedural services as at 30th November 2009 is detailed in Table 11. In many cases it is possible for a practitioner to perform a number of procedures e.g., Anaesthetics and Obstetrics or Obstetrics and Surgery for example. The number of known procedural practitioners as detailed in Table 11 (N=172) is therefore less than the total number of procedures documented (N=271). A Venn diagram illustrating practitioners undertaking single and/or multiple procedures is displayed in Figure 3.

Table 11: Number of practitioners undertaking procedural work by type and RRMA

	RRMA4	RRMA5	RRMA6	RRMA7	Total
Obstetrics Normal Delivery	23	63	21	20	127
Anaesthetics General	15	49	6	14	84
Operative surgery	17	29	6	8	60
Known Proceduralists	35	84	25	28	172
Total Practitioners	421	539	105	104	1169
Percent procedural	8.31%	15.58%	23.81%	26.92%	14.71%

Figure 3: Venn diagram illustrating numbers undertaking single and/or multiple procedures (N=172)



7. Emergency Care and Aboriginal Health provision

Practitioners were also asked if they provided regular Emergency care or Aboriginal Health care services. The number of respondents indicating that they provide these services by RRMA is detailed in Table 12 below.

Table 12: Number of practitioners providing regular Emergency Care or Aboriginal Health services

Services	RRMA4	RRMA5	RRMA6	RRMA7	Total
Emergency Care	155	324	66	69	614
Aboriginal Health	93	212	61	64	430

8. Type of practice

Type of practice by RRMA was also explored. There were 367 doctored practices in rural and remote Queensland. Table 13 displays the number of solo and group practices by RRMA for the period ending 30th November 2009.

Table 13: Practice type by RRMA

Practice Type	RRMA4	RRMA5	RRMA6	RRMA7	Grand Total
Group	81	121	23	19	244
Solo	21	63	11	28	123
Grand Total	102	184	34	47	367

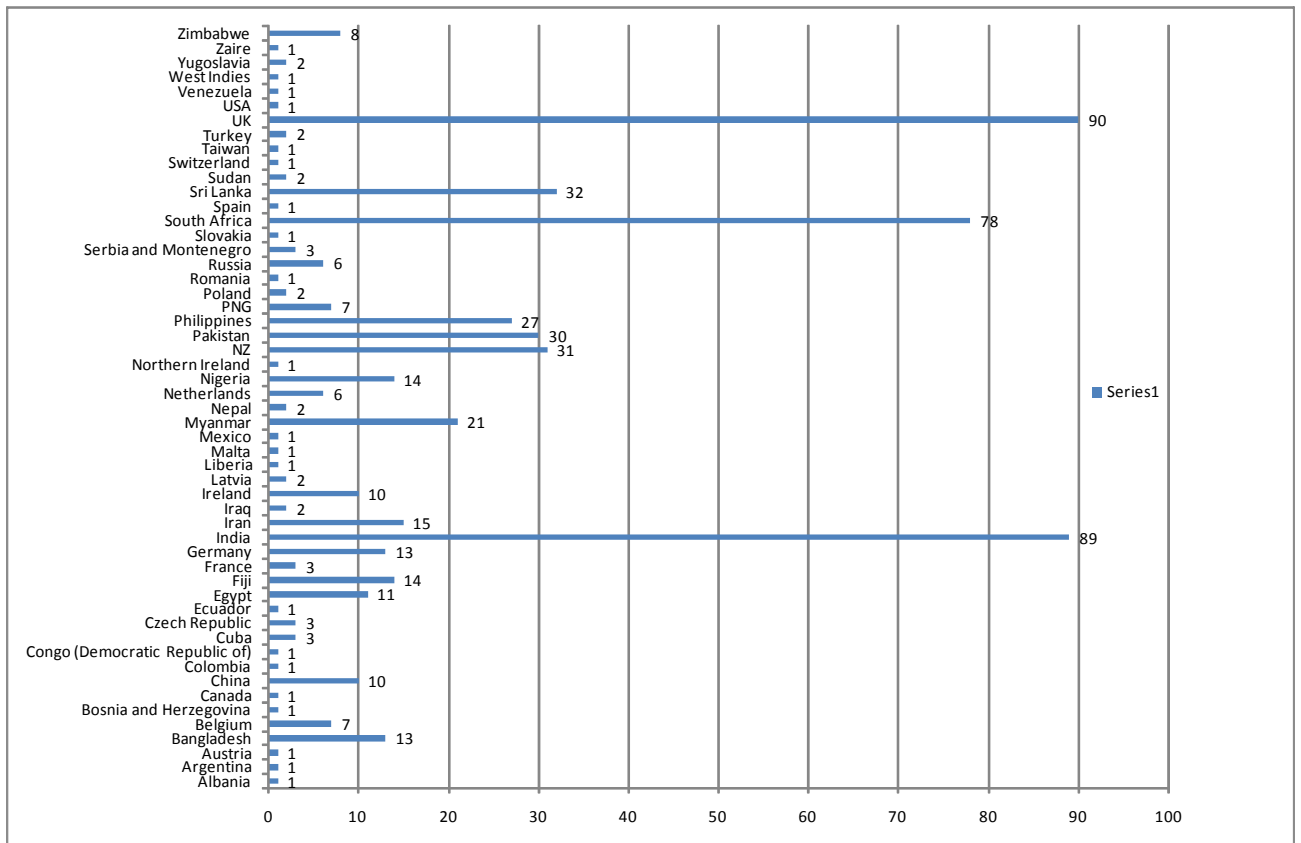
9. Country of basic medical qualification

Data indicates that 50.4% (N=588) of the current rural and remote medical workforce in Queensland are Australian trained. The other 49.6% (N=579) have obtained their basic medical qualification overseas. Data was unavailable for two practitioners. The largest proportion of Overseas Trained Doctors (OTDs) obtained their basic training from the United Kingdom (15.5%) followed by India (15.4%) and South Africa (13.5%). It also needs to be acknowledged that many Overseas Trained Doctors are Australian citizens or Permanent Residents and have practiced medicine in this country for many years. Temporary Resident Doctors (TRDs) comprise 19.0% (N=222) of the current Queensland rural and remote medical workforce. Table 14 provides a breakdown by citizenship status and number of Australian/Overseas Trained Doctors. Figure 4 provides a breakdown of country of basic medical qualification for overseas trained doctors.

Table 14: Citizenship status and number of Australian/Overseas Trained Doctors

RRMA	Citizenship			Total	% Temporary
	Australian	Permanent	Temporary		
4	250	78	93	421	22.1%
5	338	103	98	539	18.2%
6	54	28	23	105	21.9%
7	74	20	8	102	7.8%
	716	229	222	1167	19.0%
				Number	Percent
Aust Trained Doctors				588	50.4%
Overseas Trained Doctors				579	49.6%
				Number	Percent
Overseas Trained and Australian citizens or permanent residents				357	61.7%
Overseas Trained and temporary residents				222	38.3%

Figure 4: Country of basic medical qualification for non-Australian trained doctors (N=579)



10. University and year of graduation for Australian trained doctors

As of 30th November 2009, there were 588 Australian trained doctors working in rural and remote locations in Queensland: 440 (74.8%) obtained their basic medical degree from Queensland universities; 148 (25.2%) obtained their basic medical qualification from other Australian Universities. Data was unavailable for two practitioners. University and year of graduation for Australian trained doctors is displayed in Table 15.

Table 15: University and year of graduations for Australian trained doctors (RRMA 4-7)

YBQ	Flinders	JCU	Monash	Adelaide	Melbourne	Newcastle	Sydney	Tasmania	UNSW	UQ	UWA	Total
1953	0	0	0	0	0	0	0	0	0	1	0	1
1954	0	0	0	0	1	0	0	0	0	0	0	1
1959	0	0	0	0	0	0	2	0	0	1	0	3
1962	0	0	0	0	1	0	0	0	0	0	1	2
1963	0	0	0	0	1	0	0	0	0	2	0	3
1964	0	0	0	1	0	0	0	0	0	2	0	3
1965	0	0	0	0	1	0	0	0	0	3	0	4
1966	0	0	0	0	0	0	0	0	0	3	0	3
1967	0	0	0	0	1	0	0	0	0	4	0	5
1968	0	0	1	0	0	0	2	0	0	7	0	10
1969	0	0	0	0	0	0	0	0	1	4	0	5
1970	0	0	0	0	0	0	0	0	1	0	0	1
1971	0	0	0	0	0	0	1	0	0	3	0	4
1972	0	0	0	0	1	0	0	0	1	6	0	8
1973	0	0	3	2	0	0	1	0	0	6	1	13
1974	0	0	0	1	2	0	0	1	1	9	0	14
1975	0	0	1	0	1	0	0	0	0	14	1	17
1976	0	0	0	1	0	0	0	0	1	15	0	17
1977	0	0	2	0	0	0	0	0	2	15	0	19
1978	0	0	0	1	2	0	0	0	0	20	0	23
1979	0	0	0	0	1	0	0	0	1	13	0	15
1980	0	0	0	1	0	0	0	0	0	16	0	17
1981	0	0	1	0	1	0	0	0	0	13	0	15
1982	0	0	0	2	1	0	0	0	0	16	0	19
1983	0	0	0	1	2	0	1	1	0	12	1	18
1984	0	0	1	1	0	1	0	0	2	8	0	13
1985	0	0	0	1	1	0	2	0	2	14	1	21
1986	1	0	2	0	0	0	0	1	1	17	0	22
1987	0	0	2	0	1	0	1	0	0	10	0	14
1988	0	0	0	2	0	0	0	1	1	8	0	12
1989	0	0	2	0	0	1	1	0	2	5	0	11
1990	1	0	0	0	1	2	2	0	0	7	0	13
1991	0	0	0	1	0	1	0	0	1	6	1	10
1992	1	0	0	0	0	0	0	0	1	10	0	12
1993	0	0	0	0	0	0	1	0	0	10	0	11
1994	0	0	0	2	0	2	0	0	0	5	0	9
1995	0	0	2	0	1	0	0	0	0	6	1	10
1996	0	0	1	2	0	1	0	0	1	9	0	14
1997	0	0	0	0	0	0	2	1	0	4	0	7
1998	0	0	0	1	0	0	0	0	2	10	0	13
1999	0	0	0	0	0	0	0	0	2	9	0	11
2000	0	0	2	0	0	0	0	0	1	11	1	15
2001	1	0	1	0	0	2	1	0	0	12	1	18
2002	0	0	0	0	0	0	0	1	0	11	0	12
2003	2	0	1	1	1	0	0	0	0	13	1	19
2004	0	0	0	3	1	0	0	0	0	27	0	31
2005	0	8	0	0	1	1	0	1	0	16	0	27
2006	0	2	0	0	1	1	0	2	0	11	0	17
2007	0	5	0	0	0	0	0	0	0	0	0	5
2008	0	0	0	0	0	0	0	0	0	1	0	1
Total	6	15	22	24	24	12	17	9	24	425	10	588

11. Registration categories, District of Workforce Shortage, Area of Need

Due to changes in the provider number legislation introduced in 1996, overseas trained medical practitioners are usually required to work in a District of Workforce Shortage (DOWS) for a specified period of time (normally 10 years). These DOWS are normally, but not exclusively in rural and remote locations. There are in addition, other medical workforce regulations that limit locations where some Permanent Resident and Australian trained doctors must practice in order to access Medicare. Data indicate that there are 218 practitioners (18.7%) registered under Section 135 of the Medical Practitioners Registration Act 2001 who must practice in an area of need/DOWS. Data was not available for two practitioners. It is not possible to determine the number of General and other category registrants who are subject to area of need/district of workforce shortage restrictions. Table 16 provides a breakdown of registration categories by RRMA.

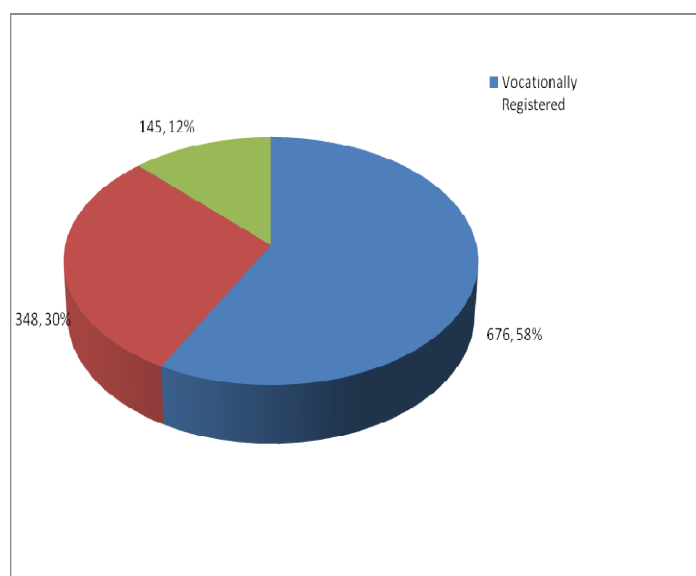
Table 16: Registration categories by RRMA

	RRMA 4	RRMA 5	RRMA 6	RRMA 7	Total
General	286	394	70	82	832
General & Specialist	0	1	1	0	2
Sect 132/133	1	0	0	1	2
Sect 135	95	88	27	8	218
Sect 138	39	56	7	11	113
Total	421	539	105	102	1167

12. Vocational Status

Current data indicates that 58% per cent of medical practitioners in rural and remote Queensland are vocationally registered. Registrars undertaking training comprise a further 12%. Approximately 30% of the rural and remote medical workforce in RRMA 4 to 7 locations do not have vocational registration. Figure 5 displays known vocational status.

Figure 5: Vocational Status



13. Doctor Turnover

As at 30th November 2008, there were 1130 medical practitioners working in RRMA 4 to 7 locations in Queensland. By 30th November 2009, 211 of these practitioners were no longer working in RRMA 4 to 7 locations. Changes consisted of 142 GPs and 69 Queensland Health practitioners

As at 30th November 2009, there were 1169 medical practitioners working in RRMA 4 to 7 locations in Queensland. Two hundred and forty eight of these practitioners were new and not working in RRMA 4 to 7 locations as at 30th November 2008. Changes consisted of 179 GPs and 69 Queensland Health practitioners.

14. Changes by RRMA and employment type 2003 to 2009

Tables 17 and 18 detail the overall changes in numbers by RRMA and employment type for the 7 year period 2003 to 2009.

Table 17: Changes by RRMA 2003-2009

RRMA	2003	2009	Change	% Change
RRMA 4	344	421	77	22.38
RRMA 5	411	539	128	31.14
RRMA 6	99	105	6	6.06
RRMA 7	77	104	27	35.06
Total	931	1169	238	25.56

Table 18: Change by employment type 2003 to 2009

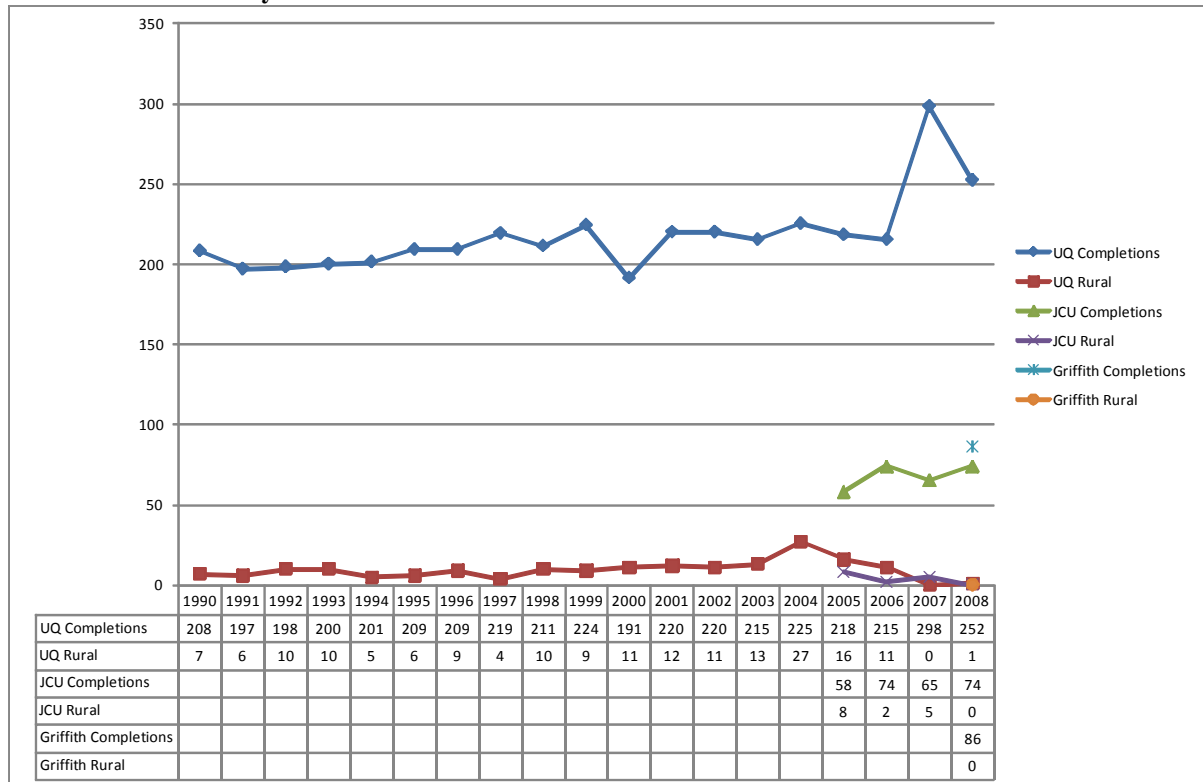
Employment Type	2003	2009	Change	% Change
ACCCHS	11	16	5	45.45
General Practitioner	661	836	175	26.48
GP/Academic	2	1	-1	-50.00
GP/Company	4	2	-2	-50.00
MORPP	15	28	13	86.67
MS	29	20	-9	-31.03
MSRPP	53	49	-4	-7.55
RFDS	13	31	18	138.46
RMO	92	90	-2	-2.17
SMO	51	96	45	88.24
Total	931	1169	238	25.56

15. Tracking

Over the past several years, Health Workforce Queensland has been actively tracking the number of Queensland trained doctors who are currently working in rural and remote locations. Data indicates that of the 4487 graduates from the University of Queensland, James

Cook and Griffith Universities between 1990 and 2008 only 193 (4.3%) are currently working in RRMA 4 to 7 locations. We acknowledge that over this period, many Queensland graduates may have served in rural and remote areas; however the numbers currently working in RRMA 4 to 7 is disappointing. Figure 6 displays the number of Queensland medical graduates by year from 1990 to 2008 and the number currently working in RRMA 4 to 7 locations as at November 2009.

Figure 6: Number of Queensland medical graduates currently working in rural and remote locations as at November 2009 for years 1990 to 2008



16. Notes on Queensland data

Queensland data includes 206 state salaried doctors (Residential Medical Officers, Senior Medical Officers and Medical Superintendents) who do not have the right of private practice. However, due to the differing nature of medical service provision in Queensland, it is estimated that 60 to 70 percent of these doctors provide primary care/GP type services in their communities. In the absence of a reliable method of differentiating their degree of primary care provision, they have been included in the current dataset. The negative aspect of this inclusion is that it probably does provide an overestimate of primary care/GP type services currently available in rural and remote Queensland. The data do not include Senior Medical Officers (Generalists) employed by Queensland Health in Maryborough, Hervey Bay or Mount Isa. Due to the size and nature of these hospitals, it is considered that these SMOs are providing specialist type services. Additionally, RFDS Medical Officers working from the Cairns base have been reclassified as RRMA 7 due to the remoteness of communities they service.

17. Summary

The data provided in this report have been based on elements considered essential to understand the composition and workforce attributes of the Queensland rural and remote medical workforce. While the data may differ to that produced by Medicare Australia, we believe that it is probably more valid and current as numbers reported reflect 'on ground' realities and are based on local knowledge of medical provision in communities. Measures such as FTE and FWE are based on the number and value of claims processed by Medicare and often do not capture the full extent of medical service provision in rural and remote communities. Health Workforce Queensland is satisfied that the collated data provides an accurate portrayal of medical service provision in rural and remote communities as at the 30th November 2009 reporting date. Trends and changes since November 2003 are detailed in Appendix 1.

As indicated in the introduction, many aspects of the data contained in this report are not solely dependent on survey response but are derived from known working data maintained by Health Workforce Queensland. Survey responses are largely used to validate and update known data. Survey response rate for the current data collection period to 30th November 2009 was 52.2%.

Trends evident in this report include:

- A 3.45% increase in practitioner numbers between 30th November 2008 and 30th November 2009 (N=39).
- A relatively high number of solo doctor practices – 33.5% (N=123)
- A small decrease in the number/percentage of overseas trained and temporary resident doctors in RRMA 4 to 7 locations.
- A continuation of national trends with increasing number of female practitioners in lower age groups.
- A continuation of trends that suggest that female practitioners tend to work less hours compared with their male counterparts.
- Enumeration of known procedural practitioners.

18. Terminology

ABS	Australian Bureau of Statistics
ACCHS	Aboriginal Community Controlled Health Service
AGDoHA	Australian Government Department of Health and Ageing
AMWAC	Australian Medical Workforce Advisory Committee
CDHAC	Commonwealth Department of Health and Aged Care (now Australian Department of Health and Ageing)
CDoHA	Commonwealth Department of Health and Ageing
FTEs	Full-time equivalents (calculated on HIC billings of \$86,727 or more) for 2003-2004
FWEs	Full-time workload equivalents (calculated on average HIC billings for full-time doctors - (\$221,864 for 2002-2003 reference period)
MA	Medicare Australia (formerly Health Insurance Commission)
RFDS	Royal Flying Doctor Service
RRMA	Rural Remote and Metropolitan Area Classification
RHWA	Rural Health Workforce Australia
RWA	Rural Workforce Agency
MSRPP	Medical Superintendent with Right of Private Practice
MORPP	Medical Officer with Right of Private Practice

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Appendix 1

Trends/changes between November 2003 and November 2009

	2003	2004	2005	2006	2007	2008	2009
Total practitioners	931	965	993	1015	1081	1130	1169
Percent female	30.6	30.7	31.6	31.5	33.4	33.9	34.5
Percent male	69.4	69.3	68.4	68.5	66.6	66.1	65.5
Average age female	41.7	42.5	43.2	43.4	43.9	44.4	44.6
Average age male	46.2	47.2	46.7	47.2	47.9	48.4	49.0
Average GP clinical hours	40.8	40.6	40.5	39.9	39.0	39.2	39.3
Average total hours	48.9	49.0	48.9	48.2	47.2	47.1	47.2
Average length of stay in current practice (years)	5.8	5.9	5.9	6.0	6.0	6.0	6.1
Overseas trained doctors	388	406	433	476	540	591	579
Temporary Resident doctors (included above)	177	189	185	197	229	266	222
Proceduralists General Anaesthetics	77	84	80	84	86	88	84
Proceduralists Obstetrics (Normal delivery)	118	125	125	129	125	132	127
Proceduralists Operative surgery	69	67	60	68	68	67	60
Known Proceduralists (practising in at least one procedural field)	168	170	165	183	177	186	172
Proportion Proceduralists	18.0%	17.6%	16.6%	18.0%	16.4%	16.5%	14.7%
Proportion vocationally registered	56%	56%	55%	54%	52%	54%	58%
Proportion non-vocationally registered	34%	34%	34%	33%	35%	34%	30%
Proportion Registrars	10%	10%	11%	13%	13%	12%	12%
Number of GPs working in solo practices (123)	118	132	135	135	112	110	123
Number of GPs working in group practices (244)	813	833	858	880	969	1020	1046

Appendix 2

Rural, Remote and Metropolitan Area Classification (RRMA) and Accessibility/Remoteness Index of Australia (ARIA)⁵

Many regional programs are targeted at areas of geographic disadvantage and the convenient label of being 'rural' areas often refers to these areas. However, there is not a generally accepted or generally applicable definition for the Australian context that can be used to identify rural areas. As a result, the RRMA classification has been widely used to determine eligibility of an area for program funding. The RRMA classification was used to assign each SLA (based on 1991 boundaries) to one of 7 categories that were further aggregated into three basic zones (Metropolitan, Rural, and Remote).

The seven RRMA categories are:

1. Capital Cities (Metropolitan Zone)
2. Other Metropolitan Centres (Metropolitan Zone)
3. Large Rural Centres (Rural Zone)
4. Small Rural Centres (Rural Zone)
5. Other Rural Areas (Rural Zone)
6. Remote Centres (Remote Zone)
7. Other Remote Areas (Remote Zone)

The use of the word 'rural' in several of the category names of the RRMA classification was not originally intended to be a definition of rurality. However, over time, RRMA category names have evolved into a simple and convenient way of interpreting rurality. Many programs that have to make decisions on eligibility for assistance are constrained by legislation and policy to using RRMA categories that 'define' rural areas. Within the Commonwealth Department of Health and Ageing administration of regional assistance will move from the use of the RRMA classification to use of ARIA over time.

In May 2009, the Australian Government announced that Rural, Remote and Metropolitan Areas (RRMA) system will be replaced by the Australian Standard Geographical Classification – Remoteness Areas (ASGC-RA) system. The ASGC-RA has been developed by the Australian Bureau of Statistics, uses 2006 Census data, and is widely used by Commonwealth and state agencies. Most importantly, moving to the ASGC-RA will improve incentives for attracting health services to areas of genuine need. The new classification system will be phased in from July 2009.⁶ Full implementation is planned from 1st July 2010.

ASGC-RA is derived from the ARIA+ classification developed by GISCA. ARIA+ like its predecessor ARIA, is an unambiguously geographical approach to defining remoteness. ARIA+ is a continuous varying index with values ranging from 0 (high accessibility) to 15 (high remoteness), and is based on road distance measurements from 11,879 populated localities to the nearest service centres in five size categories based on population size. It is a purely geographic measure of remoteness, which excludes any consideration of socio-economic status, rurality and populations size factors (other than the use of natural breaks in the population distribution of Urban Centres to define the service centre categories).⁷

Service Centres - are populated localities where the population is greater than 1000 persons. The Urban Centre/Locality Structure of the 2001 ASGC has been used to define the areal extent and population of these areas. The table below shows the population break points that were used to group Urban Centres into the five Service Centre categories. The ARIA+ analysis considers about 730 service centres in determining remoteness values across Australia. These service centres are a subset of the 11,879 populated localities. In instances where the ABS defined Urban Centres are split by a state boarder, such as in the case of Albury and Wodonga, the population and spatial extents for each of these Urban Centres have been combined and treated as one service centre.

⁵ Commonwealth Department of Health and Aged Care (2001). Measuring Remoteness: Accessibility/Remoteness Index of Australia (ARIA). Occasional Papers: New Series Number 14.

⁶ Australian Government Department of Health and Ageing (2009) Rudd Government Confronts the Rural Health Challenge. Available: <http://www.health.gov.au/internet/budget/publishing.nsf/Content/budget2009-hmedia04.htm>

⁷ GISCA(u.d.) About ARIA+ (Accessibility/Remoteness Index of Australia). Available http://www.gisca.adelaide.edu.au/products_services/ariav2_about.html

Service Centre Category	Urban Centre Population
A	250,000 persons or more
B	48,000 – 249,999 persons
C	18,000 – 47,999 persons
D	5,000 – 17,999 persons
E	1,000 – 4,999 persons

The ARIA+ methodology regards services as concentrated into Service Centres. Populated localities with populations of greater than 1000 persons are considered to contain at least some basic level of services (for example health, education, or retail), and as such these towns and localities are regarded as Service Centres. Those Service Centres with larger populations are assumed to contain a greater level of service provision. A total of 738 Service Centres, classified by their population into five categories, were used in the ARIA+ methodology.

From ARIA, the department of Health and Ageing developed its five-level classification (also called ARIA), and from ARIA+, the Australian Bureau of Statistics developed its six-level classification, the Australian Standard Geographic Classification (ASGC) Remoteness Structure.⁸ A broad comparison of these systems is displayed below.

Remoteness classifications

Broad Category	RRMA			DoHA ARIA			ASGC Remoteness		
	Fine Category	Population (000,000)	%	Category	Population (000,000)	%	Category	Population (000,000)	%
Metropolitan	Capital Cities	11.6	64	Highly Accessible	14.9	81	Major Cities	12.1	66
	Other Metropolitan centres	1.4	8						
Rural	Large Rural centres	1.1	6	Accessible	2.2	12	Inner Regional	3.8	21
	Small Rural centres	1.2	7						
	Other Rural centres	2.4	13	Moderately Accessible	0.8	4	Outer Regional	2.0	11
Remote	Remote centres	0.2	1	Remote	0.2	1	Remote	0.3	0.3
	Other Remote areas	0.3	2	Very Remote	0.2	1	Very Remote Migratory	0.2	0.2
								<0.1	

Note: This table is a rough guide only; the various classes in each classification are not equivalent.

Source: AIHW Population Estimates; AIHW Australia's Health 2002.⁹

⁸ Australian Bureau of Statistics (2001). *Outcomes of ABS views on remoteness consultation, Australia*. ABS Cat No 1244.0.00.001. Canberra, ABS.

⁹ Australian Institute of Health and Welfare (2002). *Australia's health 2002*. Canberra: AIHW.