



QRMSA Minimum Data Set Report as at 30th November 2002

Compiled by

Queensland Rural Medical Support Agency– 1st January 2003

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Queensland Rural Medical Support Agency 2003

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QRMSA Minimum Data Set Report – 30 November 2002

1. Introduction

As a part of their contractual agreement with the Commonwealth Department of Health and Ageing (CDoHA), Rural Workforce Agencies (RWA's) in all states and territory have undertaken 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, deidentified data is compiled nationally through the Australian Rural and Remote Workforce Agencies Group (ARRWAG) 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 are scheduled to be updated on a six monthly basis as at 31st May and 30th November each year. Data in relation to numbers of GPs, age, gender and length of stay in current location are largely derived from databases maintained by each RWA. Data in relation in procedural services provided, hours of work and types of practice 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 have been developed and standardised among the states/territories. In addition, states/territory have the flexibility to incorporate additional questions should they wish. While the annual MDS survey is a major component of the data reported, all RWA's 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 normally include transient, short term service providers (e.g., locum tenens).

Data provided in this report is for Queensland only and was current as at 30th November 2002. Survey response rate was 61.03% (N=545).

2. Number and type of Medical Practitioner by RRMA

Data indicated that as at 30 November 2002, the number of medical practitioners currently in RRMA 4 to 7 locations was 893. This represents an increase of 34 practitioners compared with numbers reported as at 31st May 2002. An explanation of these changes will be discussed in the summary section of this report. 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 2002. Table 2 provides a breakdown of this distribution by gender and RRMA. A more detailed analysis of gender distribution by five-year age categories is provided in Appendix 1, Figure 4.

Table 1: Employment type by RRMA

Employment Type	RRMA4	RRMA5	RRMA6	RRMA7	Grand Total
ACCHS		8	4	1	13
General Practitioner	246	315	42	24	627
GP/Academic		1	4		5
GP/Company		4	1		5
MORPP		9	2	4	15
MS	3	13	5	5	26
MSRPP		24	4	25	53
RFDS			4	10	14
RMO	42	16	24	5	87
SMO	11	17	8	12	48
Grand Total	302	407	98	86	893

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	Gender		Grand Total
	Female	Male	
4	99	203	302
5	116	291	407
6	30	68	98
7	19	67	86
Grand Total	264	629	893

3. Workloads

Estimates of Full Time Equivalents (FTE's) and Full Time Workload Equivalents (FWE's) as used by the Health Insurance Commission (HIC) 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 the HIC. For example, a medical practitioner is classified as full-time by the HIC if the Schedule fee value of services processed over a 12 month period is \$81,097 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 the HIC during the reference period) by the mean billing of full-time doctors for reference period. For the 2001-2002 reference period, this value was \$203,857.

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 ARRWAG 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 61% of the total number of GPs. Data as displayed in Table 3 indicates that 74.3% of respondents worked 35 hours a week or more in the provision of routine clinical GP services.

Table 3: Self-reported clinical hours

Hours	Frequency	Percent
< 20 hours	49	9.0
20 to 35 hours	91	16.7
35 hours plus	405	74.3
Total	545	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 40.81 hours per week (N=545).

A further breakdown of self-reported clinical hours by gender is displayed in Table 4 below.

Table 4: Self-reported clinical hours by gender

Clinical hours		Gender	
		Male	Female
< 20 hours	Count	23	26
	% within Gender	6.1%	15.5%
20 to 35 hours	Count	46	45
	% within Gender	12.2%	26.8%
35 hours plus	Count	308	97
	% within Gender	81.7%	57.7%

These data appear to in line with national trends that suggest that female practitioners tend to work less hours compared with their male counterparts (AMWAC, 2000; CDHAC, 2001). 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.

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 67.2% of practitioners. Table 5 displays self-reported total weekly hours while Table 6 displays total hours by gender. The average reported total hours were 48.15 hours per week (N=600).

Table 5: Self-reported Total hours

Total hours	Frequency	Percent
< 20 hours	26	4.3
20 to 35 hours	57	9.5
35 hours plus	517	86.2
Total	600	100.0

Table 6: Self-reported total hours by gender

		Gender		Total
		Male	Female	
< 20 hours	Count	7	19	26
	% within Gender	1.7%	10.2%	4.3%
20 to 35 hours	Count	20	37	57
	% within Gender	4.8%	19.8%	9.5%
35 hours plus	Count	386	131	517
	% within Gender	93.5%	70.1%	86.2%

A more refined breakdown of average total hours by gender and age categories is presented in Figure 5, Appendix 1.

4. Length of stay in current principal practice

In Queensland, the average length of stay in current principal practice was 6.0 years. A more refined breakdown by duration and RRMA is provided in Table 7.

Table 7: Length of stay by RRMA

	Duration							Total
	< 6 mths	6-12 mths	1-3yrs	3-5yrs	5-10yrs	10-20yrs	20 yrs plus	
RRMA4	53	47	78	20	29	35	27	289
RRMA5	59	70	92	31	54	56	36	398
RRMA6	23	20	18	9	11	7	9	97
RRMA7	15	14	25	10	7	9	6	86
Total	150	151	213	70	101	107	78	870

Data indicates that while 65.4 % of respondents have practiced in their current rural and remote locations for more than a year, 34.6% are relatively new to their current practice.

5. Age and gender by RRMA

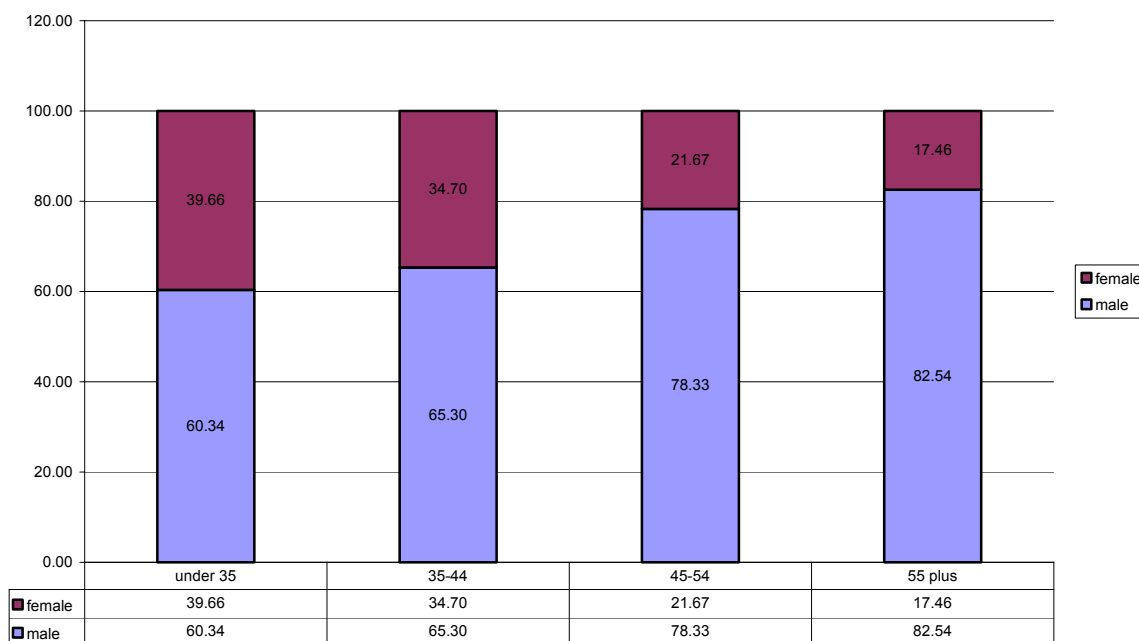
For Queensland the average age for male GP's was 45.61 years and 40.86 for females. Table 8 displays gender by age category by RRMA.

Table 8: GP ages by gender and RRMA (N=857)

			RRMA				Total
			RRMA4	RRMA5	RRMA6	RRMA7	
under 35	Gender	male	23	45	21	16	105
		female	25	24	12	8	69
Total			48	69	33	24	174
35-44	Gender	male	72	94	18	23	207
		female	37	58	10	5	110
Total			109	152	28	28	317
45-54	Gender	male	61	94	18	15	188
		female	21	25	2	4	52
Total			82	119	20	19	240
55 plus	Gender	male	33	54	7	10	104
		female	9	9	3	1	22
Total			42	63	10	11	126

Figure 1 below displays the distribution of GPs by gender across a selected number of age categories. The proportion of females within each category decreases across the categories while the proportion of males increases. For example 40% of the under 35 category are female compared with only 17.5% of the over 55 category.

Figure 1: Gender distribution across age categories - percentages



6. Known number of proceduralists

Data in relation to the provision of procedural services in rural and remote Queensland may be incomplete due to non-respondents. The known number of practitioners providing specified procedural services as at 30 November 2002 is detailed in Table 9.

Table 9: Number of practitioners undertaking procedural work by type and RRMA

	RRMA4	RRMA5	RRMA6	RRMA7	Total
Anaesthetics Regional	40	89	29	31	189
Anaesthetics General	16	41	12	9	78
Obstetrics Normal Delivery	24	62	23	23	132
Surgery Operative	12	30	9	5	56

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 10 below.

Table 10: Number of practitioners providing regular Emergency Care or Aboriginal Health services

	RRMA4	RRMA5	RRMA6	RRMA7	Total
Emergency care	95	210	55	56	416
Aboriginal Health	36	119	45	47	247

8. Types of practice

The Number of GPs working in each practice type by RRMA was also explored, while many of these data were self-reported, in some instances categories were assigned by individual RWA's. Table 11 displays the number of doctors working in each practice type by RRMA for the period ending 30/11/02.

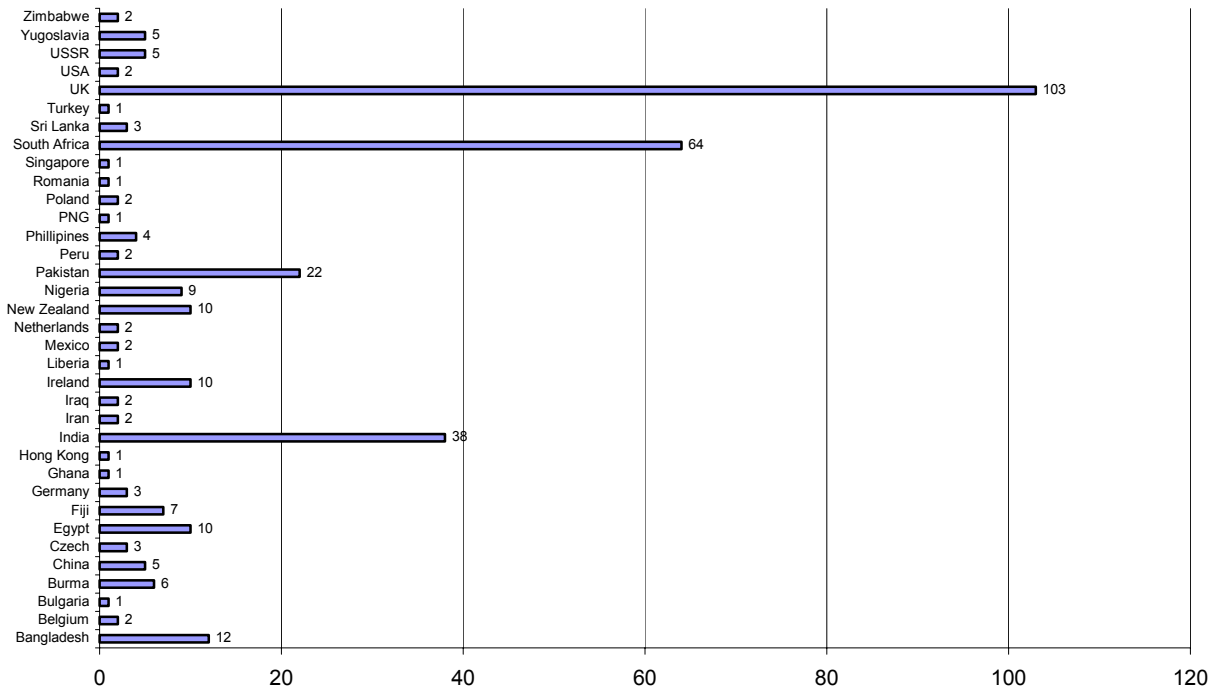
Table 11: Practice type by RRMA

No of practices	RRMA				Total Practitioners
	RRMA4	RRMA5	RRMA6	RRMA7	
Solo (149)	22	84	18	25	149
Group (167)	224	278	44	38	584
Hospital (37)	56	45	36	23	160
Total (353)	302	407	98	86	893

9. Country of basic medical qualification

Data indicates that 61.37 per cent of the current rural and remote medical workforce in Queensland are Australian trained. 38.63% per cent have obtained their basic medical qualification overseas. The largest proportion of Overseas Trained Doctors (OTDs) is from the United Kingdom (11.53%), followed by South Africa (7.17%). 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. Figure 4 provides a breakdown of county of basic medical qualification. Temporary Resident Doctors (TRDs) comprise 17.69% (N158) of our current rural and remote medical workforce.

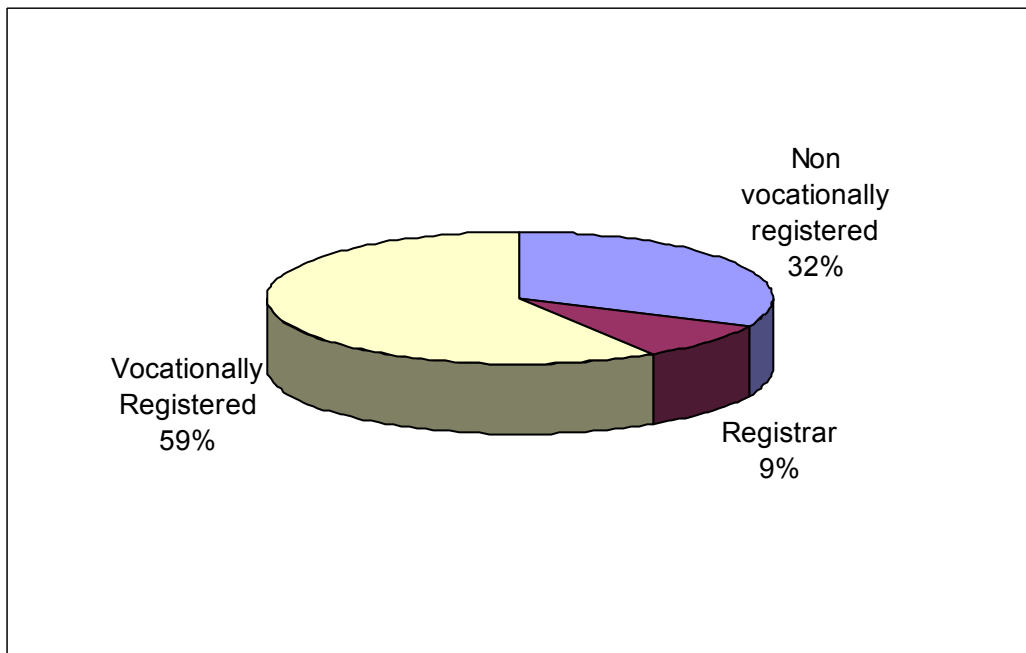
Figure 2: Country of basic medical qualification (non-Australian trained doctors N345)



10. Vocational Status

Current data indicates that 59 per cent of medical practitioners in rural and remote Queensland are vocationally registered. Vocational Registrars undertaking training comprise a further 9 per cent. Thirty two per cent of the medical workforce in RRMA 4 to 7 locations does not have vocational registration. Figure 3 displays known vocational status

Figure 3: Vocational Status



11. Practitioner mobility

Medical practitioners in rural and remote Queensland tend to be relatively mobile. Between the 31st May 2002 and 30th November 2002, there were 163 arrivals into RRMA 4 to 7 locations and 129 departures from RRMA 4 to 7 locations. Tables 12 and 13 detail these arrivals and departures by origin. Queensland Health employee's account for a substantial proportion of this turnover.

Table 12: Number of arrivals by RRMA since 31 May 2002

Origin	RRMA				Total
	4	5	6	7	
Urban(within state)	5	13	1	1	20
Interstate	1	1	1	1	4
Overseas	2	6	2	0	10
Trainee	9	12	4	2	27
Leave	1	0	0	2	3
Maternity	0	2	0	0	2
Locum	0	1	0	0	1
Retired	0	1	0	0	1
Queensland Health	43	10	18	12	83
Unknown	-	-	-	-	12
Total					163

Table 13: Number of departures by RRMA since 31 May 2002

Destination	RRMA				Total
	4	5	6	7	
Urban(within state)	2	4	1	3	10
Interstate	3	1	1	1	6
Overseas	3	5	0	4	12
Trainee	7	8	3	2	20
Leave	4	5	2	2	13
Maternity	1	1	0	1	3
Locum	2	1	0	0	3
Retired	3	0	0	0	3
Queensland Health	34	4	15	6	59
Unknown	-	-	-	-	-
Total					129

12. State/Territory variations

Queensland data includes 160 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 Queensland.

13. Summary

The data provided in this report has been based on elements requested by the General Practice Branch of the Commonwealth Department of Health and Ageing. While the data may differ to that produced by the HIC, we believe that it is probably more valid 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 the HIC and often do not capture the full complexity of medical service provision in rural and remote communities. State/Territory Rural Workforce Agencies are satisfied that the collated data provides an accurate portrayal of medical service provision in their areas as at the 30th November reporting date.

Changes in practitioner numbers since 31st May 2002 reporting period have been reflected almost exclusively in RRMA 5 locations. There has been an increase of 26 General Practitioners working in these locations since 31st May. Additionally, there has been an increase of 4 Queensland Health employees and 3 Aboriginal Community Controlled Health Service employees in RRMA 5 locations. The number of practitioners in RRMA 4, 6 and 7 locations have remained essentially unchanged.

Trends evident in this report include:

- A 3.9% increase in practitioner numbers between 31st May 2002 and 30th November 2002
- A relatively large number of rural and remote practitioners working in sole practice situations (16.69%).
- 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 level of procedural practitioners.

14. Terminology

ABS	Australian Bureau of Statistics
ACCHS	Aboriginal Community Controlled Health Service
AMWAC	Australian Medical Workforce Advisory Committee
ARRWAG	Australian Rural and Remote Workforce Agencies Group
CDHAC	Commonwealth Department of Health and Aged Care (now Department of Health and Ageing)
CDoHA	Commonwealth Department of Health and Ageing
FTE's	Full-time equivalents (calculated on HIC billings of \$81,097 or more)
FWE's	Full-time workload equivalents (calculated on average HIC billings for full-time doctors - (\$203,857 for 2001-2002 reference period)
HIC	Health Insurance Commission (Medicare)
RFDS	Royal Flying Doctor Service
RRMA	Rural Remote and Metropolitan Area Classification
RWA	Rural Workforce Agency

15. References

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

Commonwealth Department of Health and Aged Care. (2001). *Measuring remoteness: accessibility/remoteness index of Australia (ARIA). Occasional Papers: New Series Number 14, October 2001*. Canberra: CDHAC.

Australian Medical Workforce Advisory Committee. (2000). *The General Practice Workforce in Australia: AMWAC Report 2000.2*. Sydney.

Appendix 1

Figure 4: Proportion of male and female practitioners in five-year age categories (N=857)

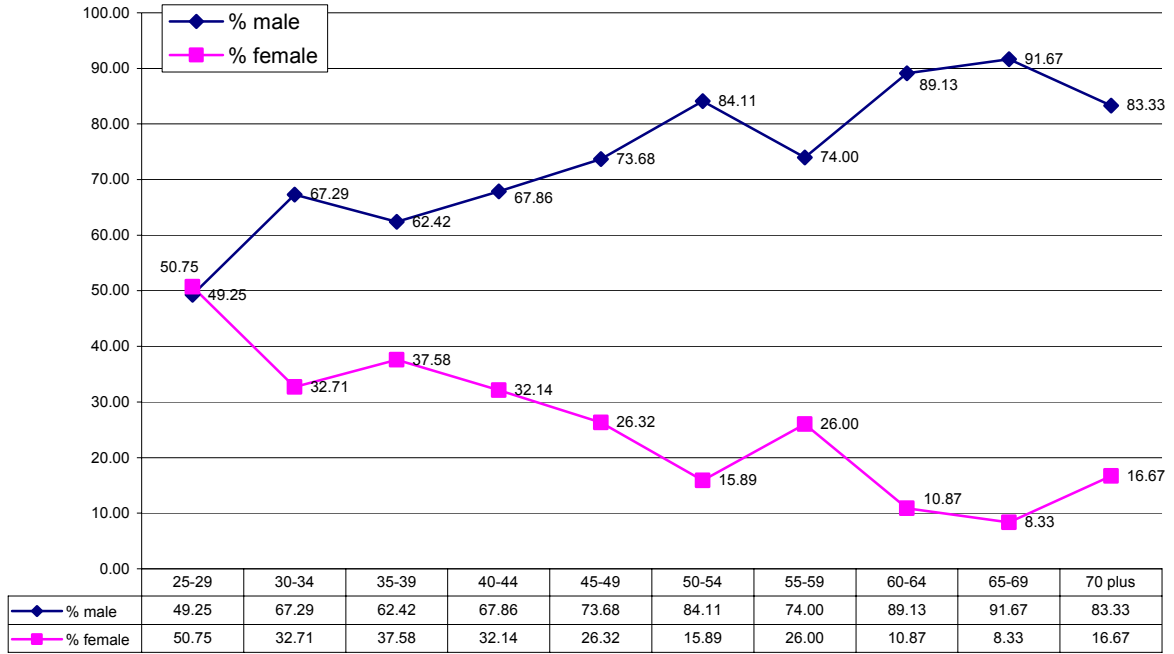
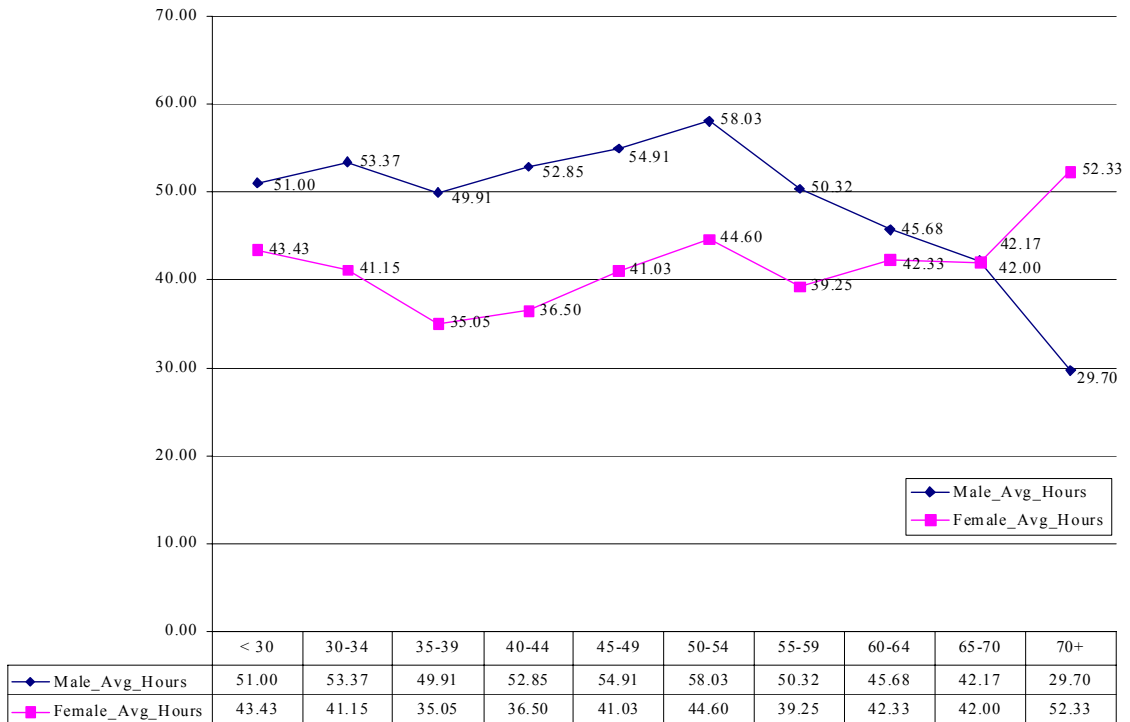


Figure 5: Average total hours by gender and age categories



Appendix 2

Rural, Remote and Metropolitan Area Classification (RRMA) and Accessibility/Remoteness Index of Australia (ARIA)¹

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.

ARIA stands for Accessibility/Remoteness Index of Australia. During 1998, the Commonwealth Department of Health and Aged Care commissioned a project to measure and classify the remoteness of populated localities in relation to 'service centres' of various sizes (based on the 1996 Census). The result was the ARIA index developed by the National Key Centre for Social Applications of Geographical Information Systems (GISCA) at the University of Adelaide. ARIA uses Geographic Information System (GIS) technology to provide a measure of remoteness (from service centres) for all places and points in Australia.

The development of the ARIA index deliberately avoided defining 'rural' areas. In many cases the term 'rural' is used when people are really referring to regional or non-metropolitan Australia. In these situations regional or non-metropolitan areas can be interpreted based on the degree of remoteness of an area (as measured in ARIA by accessibility to service centres). However in other situations a pure remoteness measure may not be the preferred approach. It may be more appropriate to take into account the population size of nearby urban centres and the use of RRMA categories is an accepted way of doing this. Thus it is acknowledged that some program areas rely on RRMA categories to determine eligibility for funding and there is a need to overlay the RRMA categories to current geographic boundaries and use this approach in conjunction with ARIA. To meet the need for programs being able to identify the RRMA-like categories, each of the 1996

¹ Measuring Remoteness: Accessibility/Remoteness Index of Australia (ARIA). Occasional Papers: New Series Number 14, Commonwealth Department of Health and Aged Care. Further information is available from the department website <http://www.health.gov.au/ari/aria.htm>

SLAs have been allocated a RRMA category code, with categories 6 and 7 being collapsed into a single group for the remote zone.

ARIA defines **five categories** of remoteness based on road distance to service centres, and is available for a variety of geographical units including localities, Census Collection districts (CCDs), Statistical Local Areas (SLAs) and postcodes. The five categories are:

1. **Highly Accessible** (ARIA score 0 - 1.84) - relatively unrestricted accessibility to a wide range of goods and services and opportunities for social interaction
2. **Accessible** (ARIA score >1.84 - 3.51) - some restrictions to accessibility of some goods, services and opportunities for social interaction
3. **Moderately Accessible** (ARIA score >3.51 - 5.80) - significantly restricted accessibility of goods, services and opportunities for social interaction
4. **Remote** (ARIA score >5.80 - 9.08) - very restricted accessibility of goods, services and opportunities for social interaction
5. **Very Remote** (ARIA score >9.08 - 12) - very little accessibility of goods, services and opportunities for social interaction

Until recently, rurality has been described almost exclusively by the seven level Rural, Remote and Metropolitan Areas (RRMA) classification. This classification is based on the size of the local population centre as well as a measure of remoteness.²

Work by the National Key Centre for the Social Applications of Geographical Information Systems (GISCA) from 1996 saw the development of improved measures of remoteness: the Accessibility/Remoteness Index of Australia (ARIA), a continuous variable with a remoteness score of 0-12; and its successor, ARIA+ (similar to ARIA, but with a remoteness score of 0-15).

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.³

Remoteness classifications

Broad Category	RRMA			DoHA ARIA			ASGC Remoteness		
	Fine Category	Population (000,000)	%	Category	Population (000,000)	%	Category	Population (000,000)	%
Metropolitan	Captital Cities	11.6	64	Highly Accessible	14.9	81	Major Cities	12.1	66
	Other Metropoliotan 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	0.2	0.2
							Remote Migatory	<0.1	

Note: This table is a rough guide only; the various classes in each classification are not equivalent.
Sources: AIHW Population Estimates; AIHW Australia's Health 2002.

² Australian Institute of Health and Welfare (2002). Australia's health 2002. Canberra: AIHW.

³ Australian Bureau of Statistics (2001). Outcomes of ABS views on remoteness consultation, Australia. ABS Cat No 1244.0.00.001. Canberra, ABS.