

2008 Commencing Medical Students Questionnaire

National Data Report

April 2010

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1.0 Introduction

The Medical Schools Outcomes Database and Longitudinal Tracking Project (MSOD) is an on-going longitudinal study that is conducted by Medical Deans Australia and New Zealand. The project has been operating since 2005 and is the Australian Government's main data collection tool for medical student information. Data is collected directly from students at entry to medical school (Commencing Medical Students Questionnaire [CMSQ]); in the final year of medical school (Exit Questionnaire [EQ]); and one year after completion of their medical studies (PGY1). Information on student placements and electives is collected directly from medical schools throughout the duration of the program. In coming years data will also be collected at three and five years after completion of medical studies. This report presents summary data from the 2008 CMSQ.

2.0 Method

All entry level medical students at 18 Australian medical schools were invited to join the study. A list of these medical schools is presented in Appendix A. The MSOD identified and tracked 26 groups from within these medical schools (IMU [International Medical School, Malaysia] and ERC [Extended Rural Cohort] are considered groups for the purpose of this report). A list of these groups is presented in Table 1.

The CMSQ's were distributed to students within the first month of commencing medical school. Once completed the questionnaires were returned to Medical Deans Australia and New Zealand and scanned at Educational Assessment Australia (EAA) located at the University of New South Wales. Data was then fed back to Medical Deans Australia and New Zealand in SPSS 17.0 for analysis.

2.1 Questionnaire

The 17 item (35 question) CMSQ gathers student information about basic demographic details, enrolment characteristics, previous tertiary education and plans for future practice. The majority of the questions are quantitative, with three qualitative questions (relating to scholarship source, previous university qualification and partner occupation) which have been grouped into themes. The CMSQ has been on-going since 2005 with only minor changes to the questionnaire format. A link to the 2008 CMSQ can be found in Appendix B.

2.2 Analysis

The data for this report is largely reported as frequency tables and, where possible, follows the format previously agreed by participating medical schools and endorsed by the MSOD Management Committee for predefined reports. Some questions have changed slightly and therefore parts of the report covering these sections will be slightly different from previous versions.

The overall response rate for the 2008 CMSQ was 95% (range: 86% -100% across all medical programs). The population therefore consisted of 3235 individuals enrolled at 18 Australian medical schools for which usable data was available. Some cell samples with a value of five or less have been suppressed for confidentiality reasons (indicated by x). All percentages are rounded to one decimal place, except total percentages which are rounded to the whole number.

3.0 Results

3.1 Students' characteristics

Table 1 shows the number of respondents in each group. Of these groups fourteen were graduate-entry programs, responsible for training 48% of respondents.

Table 1. Number of respondents in each group

Group	Frequency	Percentage
Australian National University (Graduate-entry)	73	2.3
Bond University (Undergraduate-entry)	90	2.8
Deakin University (Graduate-entry)	117	3.6
Flinders University (Graduate-entry)	127	3.9
Griffith University (Graduate-entry)	125	3.9
James Cook University (Undergraduate-entry)	157	4.9
Monash University (Undergraduate-entry)	244	7.5
Monash University (Graduate-entry)	52	1.6
University of Adelaide (Undergraduate-entry)	148	4.6
University of Melbourne (Undergraduate-entry)	225	7.0
University of Melbourne (Undergraduate-entry) ERC	19	0.6
University of Melbourne (Undergraduate-entry) IMU	14	0.4
University of Melbourne (Graduate-entry)	67	2.1
University of Melbourne (Graduate-entry) ERC	10	0.3
University of Newcastle (Undergraduate-entry)	126	3.9
University of New England (Undergraduate-entry)	61	1.9
University of New South Wales ((Undergraduate-entry)	253	7.8
University of Notre Dame (Fremantle [Graduate-entry])	102	3.2
University of Notre Dame (Sydney [Graduate-entry])	95	2.9
University of Queensland (Graduate-entry)	389	12.0
University of Sydney (Graduate-entry)	257	7.9
University of Tasmania (Undergraduate-entry)	122	3.8
University of Western Australia (Undergraduate-entry)	132	4.1
University of Western Australia (Graduate-entry)	55	1.7
University of Western Sydney (Graduate-entry)	96	3.0
University of Wollongong (Graduate-entry)	79	2.4
Total	3235	100

Base: All surveyed individuals (n=3235)

Consistent with results from previous CMSQ's approximately 54% of respondents were female (Table 2 below).

Table 2. Gender of respondents

Gender	Frequency	Percentage
Male	1493	46.2
Female	1742	53.8
Total	3235	100

Base: All surveyed individuals (n=3235)

Respondent ages were grouped into 5-year age ranges and are presented in Table 3. Eighty three percent of the sample was under the age of 25. Among the respondents commencing undergraduate-entry programs 96% were under the age of 25, compared with 68% of those in graduate-entry programs. The mean age was 21 years (Standard Deviation=4.9).

Table 3. Age range of respondents

Age Group	Frequency	Percentage
<20 years	1436	44.4
20-24 years	1236	38.2
25-29 years	380	11.8
30-34 years	107	3.3
35-39 years	39	1.2
40 years and over	36	1.1
Total responses	3234	100
Missing	1	
Total	3235	

Base: All surveyed individuals (n=3235)

3.2 Admission/Entry Scheme

The majority of respondents (54%) were attending medical school under the Commonwealth Supported Place (CSP) scheme (Table 4). Rural scheme students (including Commonwealth Medical Rural Bonded Scholarship students and scholarships provided by the Queensland or South Australia health departments) totaled 5%. Twenty three percent of students paid full fees, including both International Fee Paying (IFP) students and Australian Full-Fee Paying (FFP) students.

Table 4. Entry scheme indicated by respondents

Entry Scheme	Frequency	Percentage
Commonwealth supported (CSP)	1733	53.9
Commonwealth Medical Rural Bonded Scholarship	106	3.3
Commonwealth Bonded Medical Places Scheme	567	17.6
State Health Bonded Medical Scholarship	46	1.4
Commonwealth Department of Defence Sponsored	9	0.3
Australian Full-Fee Paying	279	8.7
International Fee Paying	469	14.6
University funded	6	0.2
Total responses	3215	100
Missing	20	
Total	3235	

Base: All surveyed individuals (n=3235)

The majority of respondents (85%) were not in receipt of a scholarship when they commenced medical studies*. For those who were, the sources indicated by students are summarised in Table 5 below. These sources included those provided by the Commonwealth Government, by State Governments, by governments outside Australia, by Australian universities and by other institutions.

Table 5. Source of scholarship indicated by respondents

Scholarship Source	Frequency	Percentage
Australian Commonwealth scholarships**	183	38.6
Australian state scholarships	47	9.9
Scholarships provided by Australian universities	153	32.3
Scholarships provided by home country to international students	76	16
Scholarships provided by other institutions	13	2.8
Unnamed	2	0.4
Total	474	100

Base: Respondents who indicated scholarship source (n=474)

* RAMUS and John Flynn scholarship outcomes are generally not known at this stage. The information for both these scholarships is collected via the medical schools data collection.

** Including MRBS, RAMUS and Defence

3.3 Participants Background and Place of Birth

Just over 1% of respondents identified themselves as having Aboriginal and/or Torres Strait Islander descent (Table 6 below).

Table 6. Indigenous status of respondents

Indigenous Status	Frequency	Percentage
Neither Aboriginal or Torres Strait Islander origin	3180	98.8
Aboriginal origin	31	1.0
Torres Strait Islander origin	x	x
Both Aboriginal and Torres Strait Islander origin	x	x
Total responses	3217	100
Missing	18	
Total	3235	

Base: All surveyed individuals (n=3235)

Eighty six percent of respondents were either Australian or New Zealand citizens, or Australian permanent residents. The remainder of respondents held a temporary entry permit or indicated 'other' status (Table 7).

Table 7. Citizenship of respondents

Citizenship Status	Frequency	Percentage
Australian citizen	2612	81.1
New Zealand citizen	74	2.3
Australian permanent resident status	69	2.1
Temporary entry permit	451	14.0
Status other than one of the above	15	0.5
Total responses	3221	100
Missing	14	
Total	3235	

Base: All surveyed individuals (n=3235)

Sixty-two percent of all respondents reported being born within Australia. A breakdown of states of birth for these respondents is presented in Table 8. Of these Australian born respondents, more than one-third (35%) were born in NSW, followed by Victoria (23%) and Queensland (19%).

Table 8. State of birth within Australia

State	Frequency	Percentage
NSW	706	35.1
Victoria	461	22.9
Queensland	375	18.6
South Australia	155	7.7
Western Australia	181	9.0
Tasmania	74	3.7
Northern Territory	17	.8
ACT	43	2.1
Total	2012	100

Base: Respondents who reported being born within Australia (n=2012)

Tables 9 and 10 report the most frequent country of birth for those respondents who reported being born overseas. The distribution of birth place differed between citizenship categories. Among Australian and New Zealand citizens and Australian permanent residents (Table 9), the most frequent place of birth was India (12%) followed by China (11%). For those holding temporary or 'other' entry permits (Table 10), Singapore was most frequently reported (25%), followed by Malaysia (24%) and Canada (22%).

Table 9. Overseas place of birth for Australian and New Zealand citizens and Australian permanent residents

Country of Birth	Frequency	Percent
India	85	11.5
China (excluding SARs and Taiwan)	81	10.9
Sri Lanka	66	8.9
New Zealand	51	6.9
Hong Kong	50	6.7
England	46	6.2
South Africa	36	4.9
Malaysia	28	3.8
USA	26	3.5
Taiwan	21	2.8
Singapore	20	2.7
Korea, Republic of (South)	18	2.4
Canada	14	1.9
Egypt	13	1.8
Vietnam	11	1.5
All other (where n≤10)	175	23.6
Total responses	741	100
Missing	8	
Total	749	

Base: Australian and New Zealand citizens and Australian permanent residents reporting overseas birth (n=749)

Table 10. Overseas place of birth for respondents holding temporary or 'other' entry permits

Country of Birth	Frequency	Percentage
Singapore	115	25.1
Malaysia	108	23.5
Canada	99	21.6
Korea, Republic of (South)	18	3.9
USA	15	3.3
Brunei Darussalam	13	2.8
Indonesia	12	2.6
All other (where n≤10)	79	17.2
Total responses	459	100
Missing	7	
Total	466	

Base: Holders of temporary or 'other' entry permits who reported overseas birth (n=466)

N.B. 8 respondents who indicated they were born overseas did not state their citizenship (Table 7)

Almost one third (32%) of respondents spoke a language other than English at their permanent home address (Table 11). Individuals who held a temporary visa were more likely to report speaking a language other than English at home (67%), compared with Australian and New Zealand citizens and Australian permanent residents born overseas (61%), and all Australian and New Zealand citizens and Australian permanent residents, regardless of place of birth (26%).

Table 11. Language spoken by respondents other than English

Language Spoken other than English	Frequency	Percentage
No	2188	67.8
Yes	1041	32.2
Total responses	3229	100
Missing	6	
Total	3235	

Base: All surveyed individuals (n=3235)

Table 12 shows the most frequently reported languages among respondents who reported speaking a language other than English at home. The most frequently reported was Mandarin (19%), followed by Cantonese (13%) and Malay (8%).

Table 12. Most frequently spoken languages other than English

Language	Frequency	Percentage
Mandarin	193	18.9
Cantonese	132	12.9
Malay	77	7.5
Tamil	59	5.8
Vietnamese	51	5.0
Hindi	44	4.3
Sinhalese	43	4.2
Korean	43	4.2
Arabic	39	3.8
Bengali	23	2.2
Chinese, nec	23	2.2
All other (where n≤20)	296	28.9
Total responses	1023	100
Missing	18	
Total	1041	

Base: All surveyed individuals who reported speaking a language other than English (n=1041)

Table 13 is limited to those respondents who are Australian or New Zealand citizens and Australian permanent residents who reported speaking a language other than English at home. Again Mandarin was the most frequently reported (16%), followed again by Cantonese (15%), followed by Vietnamese (7%).

Table 13. Most frequently spoken languages other than English for Australian and New Zealand citizens and Australian permanent residents

Language	Frequency	Percentage
Mandarin	113	16.0
Cantonese	105	14.9
Vietnamese	48	6.8
Tamil	43	6.1
Hindi	41	5.8
Sinhalese	40	5.7
Arabic	37	5.2
Korean	25	3.5
All other (where n<20)	254	36.0
Total responses	706	100
Missing	17	
Total	723	

Base: Australian and New Zealand citizens and Australian permanent residents who reported speaking a language other than English (n=723)

Table 14 shows the number of languages spoken by Australian and New Zealand citizens and Australian permanent residents, and temporary and 'other' permit holders. The majority (67%) of temporary and 'other' permit holders spoke at least one other language other than English, while the majority (74%) of Australian and New Zealand citizens and Australian permanent residents spoke no other languages. More temporary and 'other' permit holders spoke at least one other language other than English, compared with Australian and New Zealand citizens and Australian permanent residents (67% and 26% respectively).

Table 14. Languages spoken other than English by respondents

Number of Languages Spoken other than English	Australian and New Zealand Citizens and Australian Permanent Residents		Temporary and 'Other' Entry Holders		Missing	Total	
	n	%	n	%		n	n
1 other language	629	22.9	228	48.9	4	861	26.7
2 other languages	94	3.4	85	18.2	1	180	5.6
No other language	2028	73.7	153	32.8	7	2188	67.8
Missing	4		0		2	6	
Total	2755	100	466	100	14	3235	100

Base: All surveyed individuals (n=3235)

3.4 Rural/Urban Background

Respondents were asked to indicate the type of geographical location they had lived in the longest within Australia (Table 15). More than two-thirds of respondents (67%) reported they had lived in a capital city or major urban centre the longest. A further 8% had lived mainly in a regional city, while 12% reported living mainly in either a small town or small community. Thirteen percent had lived in Australia for less than a year.

Table 15. Location of longest residency within Australia

Location within Australia	Frequency	Percentage
Capital city	1887	59.0
Major urban centre (>100,000)	250	7.8
Regional city or large town (25,000-100,000)	252	7.9
Smaller town (10,000-24,999)	157	4.9
Small community (<10,000)	226	7.1
Not applicable, lived in Australia for <12 months	427	13.3
Total responses	3199	100
Missing	36	
Total	3235	

Base: All surveyed individuals (n=3235)

Table 16 shows the number of years that respondents had lived outside a capital city or major urban centre from birth to 18 years of age (school years). The majority of respondents had not lived outside a capital city or major urban centre (68%). Nineteen percent of respondents reported living outside of a capital city or major urban centre for longer than 13 years, followed by 1-3 years (5%) and 4-6 years (4%).

Table 16. Number of school years (from birth to 18 years of age) outside a capital city or major urban centre within Australia

Number of School Years	Frequency	Percentage
0 years	2047	68.2
1-3 years	144	4.8
4-6 years	114	3.8
7-9 years	59	2.0
10-12 years	78	2.6
13 or more years	561	18.7
Total responses	3003	100
Missing	232	
Total	3235	

Base: All surveyed individuals (n=3235)

Just over one fifth (22%) of all respondents perceive themselves to be from a rural background (Table 17).

Table 17. Self-perception of rural background

Perception of Rural Background	Frequency	Percentage
Yes, from rural origin	632	21.7
No rural origin	2277	78.3
Total responses	2909	100
Missing	326	
Total	3235	

Base: All surveyed individuals (n=3235)

Rural perception corresponded well with the type of location an individual had lived in the longest. As seen in Table 18 the majority of Australian and New Zealand citizens and Australian permanent residents who had spent most of their time in a capital city or major urban centre did not consider themselves to be rural. This pattern was reversed for those from smaller towns. The overall pattern of increased rural perception with decreasing urban centre size was significant ($\chi^2 [12, 2430] = 1663.0, p < 0.001$).

Table 18. Cross tabulation of self-perception of rural background and classification of location lived in the longest

Location Lived in the Longest by Respondents	Self-perception		
	Yes	No	Total
Capital city (frequency)	62	1571	1633
<i>% within location</i>	<i>10.6%</i>	<i>85.1%</i>	
Major urban centre (frequency)	27	196	223
<i>% within location</i>	<i>4.6%</i>	<i>10.6%</i>	
Regional city (frequency)	176	54	230
<i>% within location</i>	<i>30.1%</i>	<i>2.9%</i>	
Smaller town (frequency)	124	12	136
<i>% within location</i>	<i>21.2%</i>	<i>0.7%</i>	
Smaller community (frequency)	195	13	208
<i>% within location</i>	<i>33.4%</i>	<i>0.7%</i>	
Total	584	1846	2430
Total %	100%	100%	

Base: All Australian and New Zealand citizens and Australian permanent residents stating their location and rating their rural background (n=2430)

More than three-quarters (79%) of respondents indicated they had not attended a secondary school / college / senior high school outside of a capital city or major urban centre within Australia. Of the remaining individuals 16% spent 1-3 years outside a capital city or major urban centre, while 84% spent 4-6 years outside a capital city or major urban centre (Table 19).

Table 19. Length of time schooled outside a capital city or major urban centre

Length of Time	Frequency	Percentage
1-3 years	103	<i>16.0</i>
4-6 years	540	<i>84.0</i>
Total responses	643	100
Missing	19	
Total	662	

Base: All surveyed individuals reporting schooling outside a capital city or major urban area (n=662)

Respondents were asked to state the name and postcode of the school where they spent their final year of secondary education. This information was used to indicate state of secondary

school. Table 20 shows that just over a third (34%) of respondents indicated that they had attended secondary school in NSW, followed by Victoria (23%) and Queensland (22%).

Table 20. Location of secondary school

State	Frequency	Percentage
New South Wales	843	33.6
Victoria	577	23.0
Queensland	541	21.6
Western Australia	215	8.6
South Australia	178	7.1
Tasmania	82	3.3
Australian Capital Territory	58	2.3
Northern territory	15	0.6
Total responses	2509	100
Missing	220	
Total	2729	

Base: All individuals who attended an Australian secondary school during their final year (n=2729)

3.5 Previous Higher Education

More than half (51%) of individuals reported having previously completed at least one university qualification. As expected, almost all respondents in graduate-entry programs reported a previous university qualification (99%). Seven percent of those enrolled in undergraduate-entry programs also reported at least one former university qualification.

Table 21 illustrates the discipline in which the highest qualification was completed by respondents who held a previous university qualification. Thirty eight percent of respondents' highest qualification was in science, followed by medical science (23%) and health/allied health (21%).

Table 21. Discipline within which previous HIGHEST qualification was completed

Discipline	Frequency	Percentage
Science	629	38.2
Medical Science	370	22.5
Health/Allied Health	343	20.8
Humanities	104	6.3
Commerce/Business/Law	79	4.8
Physical Sciences	38	2.3
Other/Unknown	84	5.1
Total responses	1647	100
Missing	1	
Total	1648	

Base: All individuals who reported previous qualifications (n=1648)

For those respondents who reported a previous university qualification, the category of their highest qualification is presented in Table 22. Almost three-quarters of respondents' (73%) highest qualification was a bachelor degree, while 18% held either an honours degree or a postgraduate certificate. Six percent held a master's degree and 2% of respondents held a PhD.

Table 22. Category of HIGHEST qualification

Highest Qualification	Frequency	Percentage
Bachelor	1201	72.9
Honours	232	14.1
Postgraduate Diploma/ Certificate	71	4.3
Master's	104	6.3
PhD	32	1.9
Other/Unknown	8	0.5
Total	1648	100

Base: All individuals who reported previous qualifications (n=1648)

3.6 Marital Status and Dependents

The majority of respondents were single (78%). Eleven percent reported being in a relationship but not living with partner and a further 11% reporting either being married or living with a partner. Eight respondents reported being divorced or separated and no respondent reported that they were widowed.

Respondents were asked to state the occupation of their partner (if applicable). These answers were grouped into 14 major categories* which is presented in Table 23. The respondents reported a range of partner occupations. The majority of respondents (37%) reported their

partners' occupation to be *student*, followed by *non health professional* (27%); followed by *other health professional* (8%) and *Technicians and Trade workers* (8%).

Table 23. Occupation of respondents' partner

Partner Occupation	Frequency	Percentage
Medical practitioners	10	2.0
Other Health Professional	41	8.3
Non Health Professional	135	27.4
Managers	22	4.5
Self-employed	4	0.8
Technicians and Trades Workers	41	8.3
Community Service Workers	27	5.5
Clerical	12	2.4
Sales Workers	6	1.2
Machinery Operators and Drivers	1	0.2
Labourers	2	0.4
Student	184	37.4
Unemployed outside home	2	0.4
Other	5	1.0
Total	492	100

Base: Individuals who reported partner occupation (n=492)

**Occupation categories based on:*

ABS Australian and New Zealand Standard class of occupations, First edition (cat.no.1220.0), revision 1

"Career decision making by postgraduate doctors" AMWA, Dec 2005

The number of respondents with children under the age of 16 is shown in Table 24. Ninety eight percent of individuals reported having no children, while 2% reported having one or two children, and 0.5% reported having three or more.

Similarly 98% of respondents reported having no dependents (people who are financially dependent on them excluding children under the age of 16 [Table 25]). Those respondents who reported having either or both children and dependents were almost exclusively Australian citizens or Australian permanent residents (100% of those with children and 96% of those with other dependents).

Table 24. Number of children reported by respondents

Number of Children	Frequency	Percentage
0	3147	97.3
1	33	1.0
2	38	1.2
3 or more	17	.5
Total	3235	100

Base: All surveyed individuals (n=3235)

Table 25. Number of dependents reported by respondents

Number of Dependents	Frequency	Percentage
0	3179	98.3
1	36	1.1
2 or more	20	.6
Total	3235	100

Base: All surveyed individuals (n=3235)

Respondents were asked to indicate their source of income for education and/or living expenses (Table 26). As this is a multiple response question (respondents could mark all answers that were relevant) the percentages in the table do not add to 100%. Table 26 shows there were some differences between those enrolled in undergraduate-entry and graduate-entry programs. Government assistance was reported far more commonly for those in graduate-entry programs than those in undergraduate-entry programs (39% and 16% respectively), as was part-time work (53% and 33% respectively). However those respondents in undergraduate-entry programs were more likely to report being supported by parents, partners or other family members, than those in graduate-entry programs (83% and 55% respectively). More undergraduate-entry students reported holding scholarships compared with graduate-entry students (17% and 11% respectively).

Table 26. Source of income reported by respondents

Source of Income	Undergraduate-entry		Graduate-entry	
	Frequency	%	Frequency	%
Government assistance	270	16.0	602	38.9
Parents/other family	1385	82.1	850	54.9
Paid employment	548	32.5	806	52.1
Scholarship	290	17.2	161	10.4
HECS/FEE/OS HELP loan	608	36.0	411	26.6
Savings/Trust fund	173	10.3	309	20.0
Personal loan	22	1.3	122	7.9
Other	5	0.3	23	1.5
Total	3301		3284	
Total number of students	1687		1548	

Base: All surveyed individuals (n=3235), N.B. Multiple response question.

3.7 Location of Future Medical Practice

Table 27 shows respondents' first, second and third preferences for location of practice on completion of their basic medical degree. Eighty eight percent of those responding to this question reported that their **first preference** was within Australia. When preferences for only Australian and New Zealand citizens and Australia permanent residents were examined, 94% reported that their first preference for location of future practice was within Australia. For those on temporary entry permits, 55% reported that their first preference was within Australia. The preferred states for these respondents was Victoria (39%) followed by NSW (37%).

Table 27. Reported first, second and third preferred location of future practice

Preferred Location	1 st Preference		2 nd Preference		3 rd Preference	
	n	%	n	%	n	%
NSW	988	30.9	817	27.0	533	18.4
Victoria	741	23.2	835	27.6	579	20.0
Queensland	563	17.6	478	15.8	588	20.3
South Australia	164	5.1	162	5.4	162	5.6
Western Australia	232	7.3	142	4.7	200	6.9
Tasmania	66	2.1	83	2.7	104	3.6
Northern Territory	32	1.0	101	3.3	116	4.0
ACT	36	1.1	77	2.5	115	4.0
Overseas	371	11.6	329	10.9	494	17.1
Total responses	3193	100	3024	100	2891	100
<i>Missing</i>	42		211		344	
Total	3235		3235		3235	

Base: All surveyed individuals (n=3235)

Capital cities were the most preferred geographical location for future practice within Australia (66%). The percentage of individuals reporting a particular location decreased as the population of the centre decreased, with just 5% preferring smaller towns and 3% small communities (Table 28).

Table 28. Preferred geographical location of future practice

Location within Australia	Frequency	Percentage
Capital city	1829	58.9
Major urban centre (>100,000)	321	10.3
Regional city or large town (25,000-100,000)	326	10.5
Smaller town (10,000-24,999)	150	4.8
Small community (<10,000)	102	3.3
Not applicable, lived in Australia for <12 months	379	12.2
Total responses	3107	100
Missing	128	
Total	3235	

Base: All surveyed individuals (n=3235)

The preference for a particular location was significantly influenced by past exposure to that location. As presented in Table 29, 78% of those who did not consider themselves as coming from a rural background reported that they would prefer to practice in capital cities. Those perceiving their background as rural were more likely to consider increasingly rural locations as a preferred option for future practice ($\chi^2 [12, 2475] = 729.8, p < 0.001$).

Table 29. Cross tabulation of self-perception of rural background and preferred location for future practice

Preferred Location of Future Practice	Self-perception		Total
	Yes	No	
Capital city (frequency)	142	1508	1650
<i>% within location</i>	26.3%	77.9%	
Major urban centre (frequency)	67	222	289
<i>% within location</i>	12.4%	11.5%	
Regional city or large town (frequency)	176	121	297
<i>% within location</i>	32.6%	6.3%	
Smaller town (frequency)	88	55	143
<i>% within location</i>	16.3%	2.8%	
Small community (frequency)	67	29	96
<i>% within location</i>	12.4%	1.5%	
Total	540	1935	2475
Total %	100%	100%	

Base: All surveyed individuals nominating a preferred location and rating their rural background (n=2475)

Twelve percent of all individuals indicated that their **first preference** was to practice overseas (n=371 [Table 27]). Table 30 shows the preferred overseas country indicated by temporary permit holders whose first preference is to practice overseas. The most frequently reported country was Canada (37%), followed by Singapore (21%).

Table 31 shows the preferred location reported by Australian and New Zealand citizens and Australian permanent residents whose first preference is to practice overseas. The majority of respondents (18%) reported England as their first preference, followed by the USA (14%).

Table 30. Preferred overseas country of practice for temporary permit holders

Country	Frequency	Percent
Canada	76	36.9
Singapore	44	21.4
Malaysia	41	19.9
United States of America	14	6.8
Brunei Darussalam	9	4.4
Other (where n<9)	22	10.6
Total	206	100

*Base: Temporary permit holders whose **first preference** is to practice overseas (n= 206)*

Table 31. Preferred overseas country of practice for Australian and New Zealand citizens and Australian permanent residents

Country	Frequency	Percent
England	27	18.4
United States of America	20	13.6
New Zealand	12	8.2
Canada	9	6.1
Singapore	x	x
Sudan	x	x
Other (where n<5)	69	46.9
Total responses	147	100
Missing	12	
Total	159	

*Base: Australian and New Zealand citizens and Australian permanent residents whose **first preference** is to practice overseas (n=159)*

N.B. 14 respondents who reported they were not intending to work in Australia did not state their citizenship status (Table 7).

3.8 Preferred medical practice

Respondents were asked whether they had decided in what area of medicine they would prefer to practice on completion of their basic medical degree. Table 32 shows 70% of respondents had not yet decided.

Table 32. Participant's immediate decision on area of medicine they are interested in pursuing

Decision on Which Area of Medicine to Pursue	Frequency	Percentage
Yes	960	29.9
No	2248	70.1
Total responses	3208	100
Missing	27	
Total	3235	

Base: All surveyed individuals (n=3235)

The following three tables show the first preferred area of medicine respondents reported being most interested in on completion of their basic medical degree for three groups: those who indicated they had decided on the area of medicine they are interested in pursuing (Table 33); those who had not (Table 34); and all respondents regardless of whether they indicated they have decided on what area of medicine they would pursue (Table 35).

Table 33 shows that one-third of respondents, who stated they **had decided** what area they would pursue, indicated surgery as their first preference (35%). The next most commonly selected areas were paediatrics/child health (14%) and general practice (12%). More male than female respondents selected surgery as their first preference (47% compared to 23%), while more females than males selected paediatrics/child health (19% compared with 9%) and general practice (15% compared to 9%). The leading choices for males were surgery (47%), adult/internal medicine (10%), and paediatrics/child health and general practice (both 9%). The leading choices for females were surgery (23%), paediatrics/child health (19%), general practice (15%) and obstetrics/gynaecology (11%).

Table 33. Preferred area of practice for respondents who indicated they HAVE decided on which area of medicine to pursue

Area of Medicine	Male		Female		Total	
	n	%	n	%	n	%
Adult medicine/Internal medicine	47	9.8	34	7.2	81	8.5
Anaesthesia	10	2.1	8	1.7	18	1.9
Dermatology	5	1.0	14	3.0	19	2.0
Emergency medicine	32	6.6	20	4.2	52	5.4
General practice	44	9.1	71	15.0	115	12.0
Intensive care medicine	2	0.4	4	0.8	6	0.6
Medical administration	0	0	1	0.2	1	0.1
Non-specialist hospital practice	0	0	3	0.6	3	0.3
Obstetrics and gynaecology	8	1.7	53	11.2	61	6.4
Ophthalmology	14	2.9	12	2.5	26	2.7
Paediatrics and child health	45	9.3	89	18.8	134	14.0
Pathology	14	2.9	6	1.3	20	2.1
Psychiatry	10	2.1	15	3.2	25	2.6
Public health medicine	2	0.4	6	1.3	8	0.8
Radiology	2	0.4	4	0.8	6	0.6
Rehabilitation medicine	1	0.2	3	0.6	4	0.4
Rural and remote medicine	12	2.5	18	3.8	30	3.1
Surgery	226	46.9	111	23.5	337	35.3
Other	8	1.7	1	0.2	9	0.9
Total responses	482	100	473	100	955	100
Missing	3		2		5	
Total	485		475		960	

Base: Respondents who have decided on area of future practice (n=960)

Those who stated they **had not decided** what area of medicine they would pursue were still asked to rank the areas in terms of their interest (Table 34). The leading choices were surgery (24%), paediatrics/child health (16%) and adult/internal medicine and general practice (both 12%). Males were most interested in surgery (29%), adult/internal medicine (16%), emergency medicine (12%) and general practice (10%). While females were most interested in paediatrics/child health (21%), surgery (20%) and general practice (13%).

Table 34. Preferred area of practice for respondents who indicated they HAVE NOT decided on which area of medicine to pursue

Area of Medicine	Male		Female		Total	
	n	%	n	%	n	%
Adult medicine/Internal medicine	91	16.2	74	8.9	165	11.9
Anesthesia	15	2.7	16	1.9	31	2.2
Dermatology	7	1.2	23	2.8	30	2.2
Emergency medicine	67	11.9	71	8.6	138	9.9
General practice	57	10.1	106	12.8	163	11.7
Intensive care medicine	13	2.3	11	1.3	24	1.7
Medical administration	3	0.5	2	0.2	5	0.4
Non-specialist hospital practice	2	0.4	1	0.1	3	0.2
Obstetrics and gynaecology	6	1.1	72	8.7	78	5.6
Ophthalmology	24	4.3	13	1.6	37	2.7
Paediatrics and child health	47	8.4	172	20.7	219	15.7
Pathology	10	1.8	18	2.2	28	2.0
Psychiatry	17	3.0	32	3.9	49	3.5
Public health medicine	4	0.7	9	1.1	13	0.9
Radiology	15	2.7	6	0.7	21	1.5
Rehabilitation medicine	6	1.1	4	0.5	10	0.7
Rural and remote medicine	13	2.3	32	3.9	45	3.2
Surgery	163	29.0	166	20.0	329	23.6
Other	2	0.4	2	0.2	4	0.3
Total responses	562	100	830	100	1392	100
Missing	428		428		856	
Total	990		1258		2248	

Base: Participants who have not decided on area of future practice (n=2248)

When all first preferences were examined, regardless of whether the respondent had decided what area of medicine they would pursue (Table 35), the most commonly selected areas were surgery (28%), paediatrics/child health (15%), general practice (12%) and adult/internal medicine (11%). Males were most interested in surgery (37%) and adult/internal medicine (13%). Females were most interested in surgery (21%), paediatrics/child health (20%), and general practice (14%).

Table 35. Preferred area of practice for ALL students

Area of Medicine	Male		Female		Total	
	n	%	n	%	n	%
Adult medicine/Internal medicine	141	13.3	108	8.2	249	10.5
Anaesthesia	26	2.5	24	1.8	50	2.1
Dermatology	12	1.1	37	2.8	49	2.1
Emergency medicine	99	9.3	93	7.1	192	8.1
General practice	102	9.6	177	13.5	279	11.8
Intensive care medicine	15	1.4	15	1.1	30	1.3
Medical administration	3	0.3	3	0.2	6	0.3
Non-specialist hospital practice	2	0.2	4	0.3	6	0.3
Obstetrics and gynaecology	14	1.3	125	9.5	139	5.9
Ophthalmology	38	3.6	25	1.9	63	2.7
Paediatrics and child health	95	9.0	263	20.1	358	15.1
Pathology	26	2.5	24	1.8	50	2.1
Psychiatry	27	2.5	48	3.7	75	3.2
Public health medicine	6	0.6	15	1.1	21	0.9
Radiology	17	1.6	10	0.8	27	1.1
Rehabilitation medicine	7	0.7	7	0.5	14	0.6
Rural and remote medicine	25	2.4	50	3.8	75	3.2
Surgery	394	37.2	279	21.3	673	28.4
Other	10	0.9	3	0.2	13	0.5
Total responses	1059	100	1310	100	2369	100
Missing	434		432		866	
Total	1493		1742		3235	

Base: All surveyed individuals (n=3235)

When asked if they were interested in becoming involved with medical teaching, 42% of respondents said that they would be interested while 46% were undecided (Table 36). When asked if they were interested in becoming involved with research, 31% of respondents said that they would be interested while 43% were undecided (Table 37).

Table 36. Respondent's interest in Medical teaching

Interest in Medical Teaching	Frequency	Percentage
Yes	1347	41.9
No	403	12.6
Undecided	1462	45.5
Total responses	3212	100
Missing	23	
Total	3235	

Base: All surveyed individuals (n=3235)

Table 37. Respondent's interest in research

Interest in Research	Frequency	Percentage
Yes	1001	31.2
No	838	26.1
Undecided	1369	42.7
Total responses	3208	100
Missing	27	
Total	3235	

Base: All surveyed individuals (n=3235)

Appendix

Appendix A

List of Australian medical schools:

The University of Adelaide
Australian National University
Bond University
Deakin University
Flinders University
Griffith University
James Cook University
The University of Melbourne
Monash University
The University of Newcastle/The University of New England
The University of New South Wales
The University of Notre Dame
The University of Queensland
The University of Sydney
The University of Tasmania
The University of Western Australia
The University of Western Sydney
The University of Wollongong

Appendix B

A link to the 2008 CMSQ:

http://www.medicaldeans.org.au/MSOD_Webpages_05_08/2008_questionnaire.pdf