

2009 Commencing Medical Students Questionnaire

National Data Report

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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 2009 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 can be found in Appendix A. The MSOD identified and tracked 24 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 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 2009 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 2009 CMSQ was 92%. The population therefore consisted of 3161 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 enrolled in each group. Of these groups fifteen were graduate-entry programs, responsible for training 53% of the responding students.

Table 1. Number of respondents in each group

Group	Frequency	Percentage
Australian National University (Graduate-entry)	92	2.9
Bond University (Undergraduate-entry)	83	2.6
Deakin University (Graduate-entry)	134	4.2
Flinders University (Graduate-entry)	128	4.0
Griffith University (Graduate-entry)	136	4.3
James Cook University (Undergraduate-entry)	159	5.0
Monash University (Undergraduate-entry)	274	8.7
Monash University (Graduate-entry-entry)	69	2.2
University of Adelaide (Undergraduate-entry)	148	4.7
University of Melbourne (Graduate-entry)	60	1.9
University of Melbourne (Graduate-entry) ERC	13	0.4
University of Melbourne (Graduate-entry) IMU	11	0.3
University of Newcastle (Undergraduate-entry)	127	4.0
University of New England (Undergraduate-entry)	57	1.8
University of New South Wales (Undergraduate-entry)	267	8.4
University of Notre Dame (Fremantle [Graduate-entry])	97	3.1
University of Notre Dame (Sydney [Graduate-entry])	110	3.5
University of Queensland (Graduate-entry)	378	12.0
University of Sydney (Graduate-entry)	283	9.0
University of Tasmania (Undergraduate-entry)	119	3.8
University of Western Australia (Undergraduate-entry)	154	4.9
University of Western Australia (Graduate-entry)	63	2.0
University of Western Sydney (Graduate-entry)	113	3.6
University of Wollongong (Graduate-entry)	86	2.7
Total	3161	100

Base: All surveyed individuals (n=3161)

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	1444	45.7
Female	1717	54.3
Total	3161	100

Base: All surveyed individuals (n=3161)

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 95% were under the age of 25, compared with 71% of those in graduate-entry programs. The mean age was 22 years old (Standard Deviation=4.6).

Table 3. Age range of respondents

Age Group	Frequency	Percentage
<20 years	1282	40.6
20-24 years	1330	42.1
25-29 years	372	11.8
30-34 years	102	3.2
35-39 years	42	1.3
40 years and over	33	1.0
Total	3161	100

Base: All surveyed individuals (n=3161)

3.2 Admission/Entry Scheme

The majority of respondents (56%) 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 percent of students paid full fees, including both International Fee Paying (IFP) students and Australian Full-Fee Paying (FFP) students. A similar number (24%) were bonded students, including Commonwealth Medical Rural Bonded Scholarship students, Commonwealth Bonded Medical Place Scheme students and State Health Bonded Medical Scholarship students.

Table 4. Entry scheme indicated by respondents

Entry Scheme	Frequency	Percentage
Commonwealth Supported Place (CSP)	1762	56.2
Commonwealth Medical Rural Bonded Scholarship	96	3.1
Commonwealth Bonded Medical Place Scheme	611	19.5
State Health Bonded Medical Scholarship	57	1.8
Commonwealth Department of Defence Sponsored	13	0.4
Australian Full-Fee Paying	137	4.4
International Fee Paying	460	14.7
Total responses	3136	100
Missing	25	
Total	3161	

Base: All surveyed individuals (n=3161)

The majority of respondents (87%) were not in receipt of a scholarship when they commenced medical studies¹. 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 ²	128	30.4
Australian state scholarships	58	13.8
Scholarships provided by Australian universities	148	35.2
Scholarships provided by home country to international students	71	16.9
Scholarships provided by other institutions	16	3.8
Total	421	100

Base: Respondents who indicated scholarship source (n=421)

¹ 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.

² 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	3113	98.8
Aboriginal origin	32	1.0
Torres Strait Islander origin	4	0.1
Both Aboriginal and Torres Strait Islander origin	2	0.1
Total responses	3151	100
Missing	10	
Total	3161	

Base: All surveyed individuals (n=3161)

Eighty five 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	2545	80.5
New Zealand citizen	93	2.9
Australian permanent resident status	63	2.0
Temporary entry permit	450	14.2
Status other than one of the above	10	0.3
Total	3161	100

Base: All surveyed individuals (n=3161)

Sixty one 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 (36%) were born in NSW, followed by Victoria (21%) and Queensland (19%). The final column of figures in Table 8 presents the proportion of the population residing in each jurisdiction according to ABS (Australian Bureau of Statistics) figures. This will allow comparisons to be made between MSOD figures and national data.

Table 8. State of birth within Australia

State	Frequency	Percentage	ABS Data³
NSW	692	36.0	32.5
Victoria	407	21.2	24.8
Queensland	370	19.3	20.2
South Australia	141	7.3	7.4
Western Australia	172	9.0	10.2
Tasmania	66	3.4	2.3
Northern Territory	18	0.9	1.0
ACT	54	2.8	1.6
Total	1920	100	100

Base: Respondents who reported being born within Australia (n=1920)

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 (14%) followed by New Zealand and China (both 8%). For those holding temporary or 'other' entry permits (Table 10), Canada was most frequently reported (25%), followed by Singapore (23%) and Malaysia (18%).

³ Statistics from the ABS, based on 2009 data. www.abs.gov.au/ausstats

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

Country of Birth	Frequency	Percent
India	107	13.8
New Zealand	61	7.9
China (excluding SARs and Taiwan)	60	7.7
Hong Kong	57	7.3
Sri Lanka	56	7.2
England	48	6.2
South Africa	37	4.8
Malaysia	26	3.4
Taiwan	22	2.8
Canada	21	2.7
Singapore	21	2.7
USA	21	2.7
Korea, Republic of (South)	19	2.4
Egypt	13	1.7
Iran	11	1.4
Vietnam	11	1.4
All other (where n≤10)	185	23.8
Total responses	776	100
Missing	5	
Total	781	

Base: Australian and New Zealand citizens and Australian permanent residents reporting overseas birth (n=781)

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

Country of Birth	Frequency	Percentage
Canada	113	24.7
Singapore	104	22.7
Malaysia	82	17.9
USA	28	6.1
Korea, Republic of (South)	15	3.3
All other (where n≤10)	116	25.3
Total responses	458	100
Missing	2	
Total	460	

Base: Holders of temporary or 'other' entry permits who reported overseas birth (n=460)

Almost one third (31%) 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 (66%), compared with Australian and New Zealand citizens and Australian permanent residents born overseas (58%), and all Australian and New Zealand citizens and Australian permanent residents, regardless of place of birth (25%).

Table 11. Language spoken by respondents other than English

Language Spoken other than English	Frequency	Percentage
No	2194	69.4
Yes	967	30.6
Total	3161	100

Base: All surveyed individuals (n=3161)

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 (12%) and Malay (6%).

Table 12. Most frequently spoken languages other than English

Language	Frequency (if n>20)	Percentage
Mandarin	186	19.2
Cantonese	116	12.0
Malay	58	6.0
Tamil	50	5.2
Korean	48	5.0
Arabic	43	4.4
Sinhalese	40	4.1
Vietnamese	39	4.0
Chinese, nec	20	2.1
All other (where n≤20)	367	38.0
Total	967	100

Base: All surveyed individuals who reported speaking a language other than English (n=967)

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 (15%), followed again by Cantonese (14%), followed by Hindi (8%).

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

Language	Frequency	Percentage
Mandarin	96	14.5
Cantonese	94	14.2
Hindi	51	7.7
Tamil	42	6.3
Vietnamese	36	5.4
Arabic	35	5.3
Sinhalese	33	5.0
Korean	31	4.7
All other (where n<20)	246	37.0
Total	664	100

Base: Australian and New Zealand citizens and Australian permanent residents who reported speaking a language other than English (n=664)

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 (66%) of temporary and ‘other’ permit holders spoke at least one other language other than English, while the majority (75%) 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 (66% and 25% 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		Total	
	n	%	n	%	n	%
1 other language	570	21.1	228	49.6	798	25.2
2 other languages	94	3.5	75	16.3	169	5.3
No other language	2037	75.4	157	34.1	2194	69.4
Total	2701	100	460	100	3161	100

Base: All surveyed individuals (n=3161)

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 (66%) 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 11% reported living mainly in either a small town or small community. Fourteen percent had lived in Australia for less than a year.

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 (3.3%).

Table 15. Location of longest residency within Australia

Location within Australia	Frequency	Percentage
Capital city	1837	58.9
Major urban centre (>100,000)	235	7.5
Regional city or large town (25,000-100,000)	242	7.8
Smaller town (10,000-24,999)	154	4.9
Small community (<10,000)	202	6.5
Not applicable, lived in Australia for <12 months	447	14.3
Total responses	3117	100
Missing	44	
Total	3161	

Base: All surveyed individuals (n=3161)

Table 16. Number of school years spent outside a capital city or major urban centre within Australia

Number of School Years	Frequency	Percentage
0 years	1692	68.1
1-3 years	121	4.9
4-6 years	83	3.3
7-9 years	58	2.3
10-12 years	64	2.6
13 or more years	467	18.8
Total responses	2485	100
Missing	676	
Total	3161	

Base: All surveyed individuals (n=3161)

Just over one fifth (21%) 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	593	21.0
No rural origin	2232	79.0
Total responses	2825	100
Missing	336	
Total	3161	

Base: All surveyed individuals (n=3161)

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 ($\chi^2 [12, 2352] = 1587.4, p < 0.001$).

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)	64	1562	1626
<i>% within location</i>	11.9	86.2	
Major urban centre (frequency)	24	176	200
<i>% within location</i>	4.4	9.7	
Regional city (frequency)	157	45	202
<i>% within location</i>	29.1	2.5	
Smaller town (frequency)	121	20	141
<i>% within location</i>	22.4	1.1	
Smaller community (frequency)	174	9	183
<i>% within location</i>	32.2	0.5	
Total	540	1812	2352
Total percent	100	100	

Base: All Australian and New Zealand citizens and Australian permanent residents stating their location and rating their rural background (n=2352)

The majority (81%) 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 if any

Length of Time	Frequency	Percentage
1-3 years	92	15.6
4-6 years	499	84.4
Total	591	100

Base: All surveyed individuals reporting schooling outside a capital city or major urban area (n=591)

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 (36%) of respondents indicated that they had attended secondary school in NSW, followed by Queensland (21%) and Victoria (20%). The final column of figures in Table 20 presents the proportion of the population residing in each jurisdiction according to ABS figures to allow comparisons to be made with MSOD data.

Table 20. Location of secondary school

State	Frequency	Percentage	ABS Data⁴
New South Wales	865	36.1	32.5
Victoria	476	19.9	24.8
Queensland	495	20.7	20.2
Western Australia	236	9.9	7.4
South Australia	166	6.9	10.2
Tasmania	73	3.1	2.3
Australian Capital Territory	64	2.7	1.0
Northern territory	18	0.8	1.6
Total responses	2393	100	100
Missing	312		
Total	2705		

Base: All individuals who attended an Australian secondary school (n=2705)

3.5 Previous Higher Education

More than half (55%) of individuals reported having previously completed at least one university qualification. As expected, almost all respondents in graduate-entry programs reported a

⁴ Statistics from the ABS, based on 2009 data. www.abs.gov.au/ausstats

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. Forty five percent of respondents' highest qualification was in science, followed by medical science (22%) and health/allied health (18%).

Table 21. Discipline within which previous HIGHEST qualification was completed

Discipline	Frequency	Percentage
Science	780	44.7
Medical Science	382	21.9
Health/Allied Health	310	17.8
Humanities	101	5.8
Commerce/Business/Law	69	4.0
Physical Sciences	32	1.8
Other/Unknown	71	4.1
Total responses	1745	100
Missing	4	
Total	1749	

Base: All individuals who reported previous qualifications (n=1749)

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	1282	73.3
Honours	246	14.1
Postgraduate Diploma/ Certificate	66	3.8
Master's	105	6.0
PhD	40	2.3
Other/Unknown	10	0.6
Total	1749	100

Base: All individuals who reported previous qualifications (n=1749)

3.6 Marital Status and Dependents

The majority of respondents were single (76%). Thirteen percent reported being in a relationship but not living with partner and a further 10% reporting either being married or living with a partner. Sixteen respondents (0.5%) reported being divorced or separated.

Respondents were asked to state the occupation of their partner (if applicable). These answers were grouped into 14 major categories⁵ which are presented in Table 23. The respondents reported a range of partner occupations: the majority (39%) reported their partners' occupation to be *student*; followed by *non health professional* (25%); followed by *other Technicians and Trade workers* (11%) and *health professional* (8%).

Table 23. Occupation of respondents' partner

Partner Occupation	Frequency	Percentage
Medical practitioners	13	2.7
Other Health Professional	39	8.1
Non Health Professional	118	24.5
Managers	16	3.3
Self-employed	4	0.8
Technicians and Trades Workers	53	11.0
Community Service Workers	18	3.7
Clerical	9	1.9
Sales Workers	16	3.3
Machinery Operators and Drivers	3	0.6
Labourers	2	0.4
Student	188	39.0
Unemployed outside home	0	0
Other	3	0.6
Total	482	100

Base: Individuals who reported partner occupation (n=482)

The number of respondents with children under the age of 16 is shown in Table 24. Ninety seven percent of individuals reported having no children, while 3% reported having one or two children, and 0.7% reported having three or more.

⁵ *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" AMWAC, Dec 2005*

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 (97% of those with children and 91% of those with other dependents).

Table 24. Number of children reported by respondents

Number of Children	Frequency	Percentage
0	3053	96.6
1	54	1.7
2	33	1.0
3 or more	21	0.7
Total	3161	100

Base: All surveyed individuals (n=3161)

Table 25. Number of dependents reported by respondents

Number of Dependents	Frequency	Percentage
0	3081	98.3
1	30	1.0
2 or more	24	0.8
Total responses	3135	100
Missing	26	
Total	3161	

Base: All surveyed individuals (n=3161)

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 (40% and 17% respectively), as was paid employment (51% and 31% 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 (80% and 57% respectively). More undergraduate-entry students reported holding scholarships compared with graduate-entry students (17% and 10% respectively).

Table 26. Source of income reported by respondents

Source of Income	Undergraduate-entry		Graduate-entry	
	Frequency	%	Frequency	%
Government assistance	254	16.9	663	39.9
Parents/other family	1196	79.7	942	56.7
Paid employment	461	30.7	850	51.2
Scholarship	252	16.8	164	9.9
HECS/FEE/OS HELP loan	536	35.7	486	29.3
Savings/trust fund	146	9.7	322	19.4
Personal loan	18	1.2	148	8.9
Other	9	0.6	23	1.4
Total	2872		3598	
Total number of students	1501		1660	

Base: All surveyed individuals (n=3161), 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, 95% reported that their first preference for location of future practice was within Australia. For those on temporary entry permits, 48% reported that their first preference was within Australia. The preferred states for all respondents reporting Australia as their first preference for location of future practice was NSW (33%) followed by Victoria (20%). The final column of figures in Table 27 presents the proportion of the population residing in each jurisdiction according to ABS figures so that comparisons can be made with MSOD data.

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

Preferred Location	1 st Preference		2 nd Preference		3 rd Preference		ABS Data ⁶
	n	%	n	%	n	%	
NSW	1026	32.7	736	24.9	523	18.9	32.5
Victoria	640	20.4	793	26.8	598	21.6	24.8
Queensland	554	17.7	528	17.8	509	18.4	20.2
South Australia	173	5.5	148	5.0	166	6.0	7.4
Western Australia	241	7.7	150	5.1	181	6.5	10.2
Tasmania	55	1.8	77	2.6	139	5.0	2.3
Northern Territory	29	0.9	96	3.2	91	3.3	1.0
ACT	29	0.9	101	3.4	146	5.3	1.6
Overseas	387	12.3	332	11.2	414	15.0	-
Total responses	3134	100	2961	100	2767	100	100
Missing	27		200		394		
Total	3161		3161		3161		

Base: All surveyed individuals (n=3161)

Capital cities were the most preferred geographical location for future practice within Australia (65%). 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	1947	64.5
Major urban centre (>100,000)	397	13.2
Regional city or large town (25,000-100,000)	327	10.8
Smaller town (10,000-24,999)	156	5.2
Small community (<10,000)	97	3.2
Not applicable, lived in Australia for <12 months	94	3.1
Total responses	3018	100
Missing	143	
Total	3161	

Base: All surveyed individuals (n=3161)

⁶ Statistics from the ABS, based on 2009 data. www.abs.gov.au/ausstats

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 ($\chi^2 [12, 2635] = 702.8, p < 0.001$).

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	1617	1759
<i>% within location</i>	25.8	77.6	
Major urban centre (frequency)	97	260	357
<i>% within location</i>	17.6	12.5	
Regional city or large town (frequency)	166	125	291
<i>% within location</i>	30.1	6.0	
Smaller town (frequency)	90	51	141
<i>% within location</i>	16.3	2.4	
Small community (frequency)	56	31	87
<i>% within location</i>	10.2	1.5	
Total	551	2084	2635
Total %	100	100	

Base: All surveyed individuals nominating a preferred location and rating their rural background (n=2635)

Twelve percent of all individuals indicated that their **first preference** was to practice overseas (n=387 [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 (42%), followed by Singapore (25%).

Table 31 shows the preferred location reported by Australian and New Zealand citizens and Australian permanent residents whose first preference is to practice overseas. Respondents most frequently reported England (21%) as their first preference, followed by the USA (16%).

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

Country	Frequency	Percent
Canada	97	41.5
Singapore	59	25.2
Malaysia	40	17.1
United States of America	20	8.5
Other (where n<10)	18	7.7
Total responses	234	100
Missing	2	
Total	236	

Base: Temporary permit holders whose first preference is to practice overseas (n=236)

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

Country	Frequency	Percent
England	30	21.0
United States of America	23	16.1
New Zealand	12	8.4
Canada	11	7.7
Other (where n<10)	67	46.9
Total responses	143	100
Missing	4	
Total	147	

Base: Australian and New Zealand citizens and Australian permanent residents whose first preference is to practice overseas (n=147)

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 69% 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	986	31.5
No	2144	68.5
Total responses	3130	100
Missing	31	
Total	3161	

Base: All surveyed individuals (n=3161)

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 (32%). The next most frequently selected areas were paediatrics/child health (15%) and general practice (12%). More male than female respondents selected surgery as their first preference (41% compared to 24%), while more females than males selected paediatrics/child health (19% compared with 10%) and general practice (13% compared to 10%). The leading choices for males were surgery (41%), adult/internal medicine (12%), and paediatrics/child health and general practice (both 10%). The leading choices for females were surgery (24%), paediatrics/child health (19%) and general practice (13%).

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	58	12.4	42	8.3	100	10.3
Anaesthesia	10	2.1	8	1.6	18	1.8
Dermatology	4	0.9	15	2.9	19	1.9
Emergency medicine	27	5.8	30	5.9	57	5.8
General practice	48	10.3	65	12.8	113	11.6
Intensive care medicine	6	1.3	3	0.6	9	0.9
Medical administration	3	0.6	0	0.0	3	0.3
Non-specialist hospital practice	0	0.0	1	0.2	1	0.1
Obstetrics and gynaecology	5	1.1	42	8.3	47	4.8
Occupational medicine	1	0.2	0	0.0	1	0.1
Ophthalmology	10	2.1	17	3.3	27	2.8
Paediatrics and child health	48	10.3	94	18.5	142	14.6
Pathology	7	1.5	14	2.8	21	2.2
Psychiatry	16	3.4	15	2.9	31	3.2
Public health medicine	3	0.6	9	1.8	12	1.2
Radiology	18	3.9	14	2.8	32	3.3
Rehabilitation medicine	1	0.2	1	0.2	2	0.2
Rural and remote medicine	6	1.3	16	3.1	22	2.3
Surgery	192	41.2	120	23.6	312	32.0
Other	3	0.6	3	0.6	6	0.6
Total responses	466	100	509	100	975	100
Missing	8		3		11	
Total	474		512		986	

Base: Participants who have decided area of future practice (n=986)

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 (22%), paediatrics/child health (16%), general practice (13%) and adult/internal medicine (12%). Males were most interested in surgery (33%), adult/internal medicine (12%), general practice (12%), paediatrics/child health (11%) and emergency medicine (11%). While females were most interested in paediatrics/child health (20%), surgery (14%) and general practice (14%).

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	66	12.3	87	11.2	153	11.7
Anesthesia	16	3.0	18	2.3	34	2.6
Dermatology	14	2.6	18	2.3	32	2.4
Emergency medicine	57	10.7	58	7.5	115	8.8
General practice	66	12.3	109	14.0	175	13.3
Intensive care medicine	7	1.3	9	1.2	16	1.2
Medical administration	4	0.7	0	0.0	4	0.3
Non-specialist hospital practice	2	0.4	3	0.4	5	0.4
Obstetrics and gynaecology	5	0.9	84	10.8	89	6.8
Ophthalmology	13	2.4	11	1.4	24	1.8
Paediatrics and child health	58	10.8	152	19.5	210	16.0
Pathology	8	1.5	27	3.5	35	2.7
Psychiatry	10	1.9	31	4.0	41	3.1
Public health medicine	4	0.7	13	1.7	17	1.3
Radiology	11	2.1	14	1.8	25	1.9
Rehabilitation medicine	2	0.4	4	0.5	6	0.5
Rural and remote medicine	9	1.7	21	2.7	30	2.3
Surgery	178	33.3	112	14.4	290	22.1
Other	5	0.9	7	0.9	12	0.9
Total responses	535	100	778	100	1313	100
Missing	421		410		831	
Total	956		1188		2144	

Base: Participants who have not decided on area of future practice (n=2144)

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 (26%), paediatrics/child health (15%), general practice (13%) and adult/internal medicine (11%). Males were most interested in surgery (37%) and adult/internal medicine (12%). Females were most interested in paediatrics/child health (19%), surgery (18%), 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	125	12.4	131	10.1	256	11.1
Anaesthesia	26	2.6	26	2.0	52	2.3
Dermatology	18	1.8	33	2.5	51	2.2
Emergency medicine	84	8.3	89	6.8	173	7.5
General practice	115	11.4	177	13.6	292	12.6
Intensive care medicine	13	1.3	12	0.9	25	1.1
Medical administration	7	0.7	0	0.0	7	0.3
Non-specialist hospital practice	2	0.2	4	0.3	6	0.3
Obstetrics and gynaecology	11	1.1	128	9.8	139	6.0
Occupational Medicine	2	0.2	0	0.0	2	0.1
Ophthalmology	23	2.3	28	2.2	51	2.2
Paediatrics and child health	107	10.6	247	19.0	354	15.3
Pathology	15	1.5	41	3.2	56	2.4
Psychiatry	26	2.6	47	3.6	73	3.2
Public health medicine	7	0.7	22	1.7	29	1.3
Radiology	29	2.9	28	2.2	57	2.5
Rehabilitation medicine	3	0.3	5	0.4	8	0.3
Rural and remote medicine	16	1.6	38	2.9	54	2.3
Surgery	373	36.9	234	18.0	607	26.3
Other	9	0.9	10	0.8	19	0.8
Total responses	1011	100	1300	100	2311	100
Missing	433		417		850	
Total	1444		1717		3161	

Base: All surveyed individuals (n=3161)

When asked if they were interested in becoming involved with medical teaching, 45% of respondents said that they would be interested while 44% were undecided (Table 36). When asked if they were interested in becoming involved with research, 35% 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	1415	45.0
No	333	10.6
Undecided	1395	44.4
Total responses	3143	100
Missing	18	
Total	3161	

Base: All surveyed individuals (n=3161)

Table 37. Respondent's interest in research

Interest in Research	Frequency	Percentage
Yes	1103	35.1
No	680	21.7
Undecided	1356	43.2
Total responses	3139	100
Missing	22	
Total	3161	

Base: All surveyed individuals (n=3161)

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

Link to the 2009 CMSQ:

http://www.medicaldeans.org.au/MSOD_Webpages/Docs_Website/Questionnaires%20and%20Data%20Collection/2009%20CMSQ.pdf