



MEDICAL SCHOOLS OUTCOMES DATABASE NATIONAL DATA REPORT 2017

The MSOD and Data Linkage Project is funded by the Commonwealth of Australia, Department of Health

This report was prepared with the assistance of the Australian Institute of Health and Welfare (AIHW)

Report published by Medical Deans Australia and New Zealand Inc.
September 2017
Level 3, 261 George Street, Sydney, NSW 2000
02 8084 6557

admin@medicaldeans.org.au
www.medicaldeans.org.au

Report produced by
Medical Deans
Australia and New
Zealand Inc. with
MSOD data from 2012
to 2016 graduating
medical students

Table of Contents

<u>Table 1. Number of respondents by school of completion and year 2012 to 2016</u>	3
<u>Table 2. Number of respondents by age group and year 2012 to 2016</u>	4
<u>Table 3. Median age and age range of respondents by year 2012 to 2016</u>	4
<u>Table 4. Country of birth by year for top 10 countries in 2016</u>	5
<u>Table 5. Partner status by year 2012 to 2016</u>	6
<u>Table 6. Rurality of main location for domestic students when living in Australia for more than one year by year 2012 to 2016</u>	6
<u>Graph 1a. Rurality of main location for domestic students when living in Australia for more than one year by year 2012 to 2016</u>	7
<u>Graph 1b. Rurality of main location for domestic students when living in Australia for more than one year by year 2012 to 2016</u>	7
<u>Table 7. Sources of income for education and/or living expenses for entire degree for graduates</u>	8
<u>Table 8a. Career intention: first preference of state of future practice by year</u>	9
<u>Table 8b. Number of respondents by state of completion and year 2012 to 2016</u>	9
<u>Table 9. Career intention: first preference region of future practice for students preferring to practice in Australia, by year</u>	10
<u>Graph 2a. Career intention: first preference region of future practice for students preferring to practice in Australia, by year</u>	10
<u>Graph 2b. Career intention: first preference region of future practice for students preferring to practice in Australia, by year</u>	11
<u>Table 10. Preferred country of future practice by year</u>	11
<u>Table 11. First preference area of future practice by year</u>	13, 14
<u>Table 12. Interest in teaching by year</u>	15
<u>Table 13. Interest in research by year</u>	15
<u>Table 14. Interest in Indigenous health as part of future medical career by year 2014 to 2016</u>	15
<u>Table 15. Internship acceptance state by year</u>	16
<u>Table 16. Overall level of satisfaction with the medical program at their university</u>	17
<u>Table 17a. Highest level previous degree by year 2012 to 2016 (based on data collected at commencement)</u>	17
<u>Table 17b. Highest level previous degree by year 2016 (based on data collected at graduation)</u>	18
<u>Table 18a. Discipline of highest previous degree by year 2012 to 2016 (based on data collected at commencement)</u>	19
<u>Table 18b. Discipline of highest previous degree by year 2016 (based on data collected at graduation)</u>	20
<u>Table 19. Level of influence of perceived financial prospects on choice of most preferred area of medicine by year</u>	21
<u>Table 20. Level of influence of financial costs of medical school education/debt on choice of most preferred area of medicine by year</u>	21
<u>Table 21. Level of influence of number of years required to complete training on choice of most preferred area of medicine by year</u>	22



Medical Schools Outcomes Database (MSOD)

MSOD Project Background

The Medical Schools Outcomes Database (MSOD) is a project of Medical Deans Australia and New Zealand which collects demographic, education and career intentions data on medical students. The information is obtained via an annual questionnaire which is issued to final-year medical students prior to their graduation. In the past the project has also involved surveys of commencing and postgraduate students. However since 2014 it has consisted of a single survey of final year students. The dataset is stored and managed by AIHW on behalf of Medical Deans.

A great deal has been achieved in the decade of implementation of the MSOD. The MSOD dataset contains well over 30,000 participants. It is now an established national resource that generates research outputs, provides an effective evaluation mechanism for assessing outcomes of medical education programs and is an up-to-date data source with essential information for national workforce planning and policy makers.

Medical Deans wishes to enhance the existing MSOD dataset as a workforce planning tool by linking it with other health workforce datasets in order to provide longitudinal data. This is the aim of the MSOD and Data Linkage Project which has been provided with initial funding for two years by the Commonwealth Department of Health. The Data Linkage Project is overseen by a steering committee with Medical Deans, AHPRA, AIHW and the Department of Health. Data linkage will mean better utilisation of the MSOD to investigate important policy and research issues.

This report details the responses that have been captured by the annual Medical Students Workforce Survey (MSWS) in the period from 2012 to 2016. The survey has captured the details (demographics, career intentions, rurality, course satisfaction, etc) of graduating medical students from all current medical schools across Australia.

Table 1. Number of respondents by School of completion and year, 2012 to 2016.

School of completion	2012		2013		2014		2015		2016	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Australian National University	79	2.8	53	1.8	100	4.0	36	1.8	83	3.7
Bond University	56	2.0	67	2.3	61	2.4	53	2.6	46	2.0
Deakin University	102	3.6	126	4.4	10	0.4	112	5.6	105	4.6
Flinders University	78	2.8	102	3.6	94	3.8	84	4.2	97	4.3
Griffith University	112	4.0	90	3.1	112	4.5	100	5.0	29	1.3
James Cook University	86	3.1	84	2.9	48	1.9	22	1.1	56	2.5
Monash University	316	11.2	321	11.2	230	9.2	238	11.9	242	10.7
The University of Adelaide	118	4.2	137	4.8	140	5.6	52	2.6	51	2.2
The University of Melbourne	292	10.4	293	10.2	221	8.9	159	7.9	197	8.7
The University of Newcastle / University of New England	157	5.6	160	5.6	117	4.7	103	5.1	54	2.4
The University of New South Wales	180	6.4	204	7.1	193	7.7	88	4.4	127	5.6
The University of Notre Dame (Fremantle)	98	3.5	90	3.1	93	3.7	39	1.9	60	2.6
The University of Notre Dame (Sydney)	63	2.2	76	2.6	80	3.2	8	0.4	81	3.6
The University of Queensland	390	13.9	364	12.7	326	13.1	396	19.7	491	21.6
The University of Sydney	258	9.2	252	8.8	284	11.4	190	9.5	271	11.9
University of Tasmania	103	3.7	99	3.4	108	4.3	74	3.7	81	3.6
The University of Western Australia	166	5.9	199	6.9	93	3.7	96	4.8	81	3.6
University of Western Sydney	86	3.1	84	2.9	110	4.4	97	4.8	43	1.9
University of Wollongong	74	2.6	71	2.5	73	2.9	60	3.0	73	3.2
Total	2,814	100.0	2,872	100.0	2,493	100.0	2,007	100.0	2,268	100.0

For the first time in 2016 substantial numbers have graduated from the Ochsner campus of the University of Queensland. This will directly affect some other tables as well.

Respondents by Age Group

The five year trend shows the majority of graduates were 29 years or younger, with those aged between 25 and 29 making up approximately 45% and those aged under 25 approximately 40% from each graduating year (Table 2). The 2016 figures show a more mature cohort with only 35% of graduates being aged under 25, nearly 48% between 25 and 29 years old and 12.3% falling within the 30 to 34 age group. Those students aged 45 years old on graduation comprised less than 1% of each annual cohort. The median graduating age of all years was 25, with the largest age range (youngest being 18 years old, oldest being 63) coming from the 2014 cohort (Table 3).

Table 2. Number of respondents by Age group and year, 2012 to 2016.

Age	2012		2013		2014		2015		2016	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
<25	1,149	40.9	1,191	41.7	1,002	40.5	807	40.4	796	35.2
25-29	1,299	46.2	1,312	45.9	1,114	45.0	905	45.3	1,085	47.9
30-34	251	8.9	218	7.6	242	9.8	194	9.7	279	12.3
35-39	63	2.2	79	2.8	71	2.9	60	3.0	60	2.7
40-44	28	1.0	34	1.2	26	1.1	17	0.9	29	1.3
45+	20	0.7	25	0.9	18	0.7	17	0.9	15	0.7
Total	2,810	100.0	2,859	100.0	2,473	100.0	2,000	100.0	2,264	100.0

Table 3 Median age and age range of respondents by year, 2012 to 2016.

Age	2012	2013	2014	2015	2016
Median	25	25	25	25	25
minimum	21	20	18	20	20
maximum	60	57	63	60	55

Respondents by Country of Birth

In terms of country of birth (Table 4), Australia remains the largest with well over 60% of all graduating respondents being born here. In 2015 this figure hit a five year high of 64% before dropping back to 60.7% in 2016. Aside from Australia, prior to 2016 the next five largest contributing countries of birth were Canada, Singapore, Malaysia, New Zealand and India. In the majority of cases, there have been only slight fluctuations of the proportions of birth country for graduating medical students from year to year, although it is worth noting that Canada increased from 2.2% in 2013 to 4.4% in 2015, whereas Malaysia saw a drop from 5.2% in 2014 to 2.7% in 2016. The biggest change was a large rise in graduates born in the USA from a figure of 1.2% in 2012, to 1.6% in 2015, to 4.8% in 2016. This is attributable to the first substantial group graduating in 2016 from the US-based Ochsner campus of the University of Queensland.

Table 4. Country of birth by year for top 10 countries in 2016, from 2012 to 2016.

Birth Country	2012		2013		2014		2015		2016	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Australia	1,521	60.3	1,646	63.4	1,538	62.9	1,283	63.9	1,377	60.7
Singapore	84	3.3	107	4.1	98	4.0	80	4.0	111	4.9
United States of America	30	1.2	32	1.2	33	1.3	32	1.6	108	4.8
Canada	109	4.3	57	2.2	65	2.7	89	4.4	88	3.9
Malaysia	136	5.4	109	4.2	126	5.2	69	3.4	62	2.7
India	84	3.3	77	3.0	67	2.7	37	1.8	59	2.6
New Zealand	49	1.9	59	2.3	62	2.5	57	2.8	55	2.4
England	40	1.6	46	1.8	43	1.8	49	2.4	45	2.0
China (excludes SARs and Taiwan)	70	2.8	88	3.4	61	2.5	52	2.6	43	1.9
Sri Lanka	56	2.2	39	1.5	40	1.6	21	1.0	34	1.5
Other	344	13.6	335	12.9	313	12.8	238	11.9	286	12.6
Total	2,523	100.0	2,595	100.0	2,446	100.0	2,007	100.0	2,268	100.0

The increase in numbers of people born overseas and especially in the United States in 2016 is contributed to by 2016 being the first year substantial numbers have graduated from the Ochsner campus of the University of Queensland.

Relationship Status

Regarding relationship status (Table 5), the number of graduates who declared themselves as 'partnered' experienced a significant increase from 42.4% in 2012 to 47.6% in 2013. Subsequently the trend over the last four years has remained remarkably stable with those listed as partnered hovering around the 48% mark.

Table 5. Partner status by year, 2012 to 2016.

Marital status	2012		2013		2014		2015		2016	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Not partnered	1,614	57.6	1,500	52.6	1,281	51.7	1,025	51.1	1,188	52.4
Partnered	1,188	42.4	1,350	47.4	1,199	48.3	982	48.9	1,080	47.6
Total	2,802	100.0	2,850	100.0	2,480	100.0	2,007	100.0	2,268	100.0

Due to a change in the order of possible responses on the form, a number of respondents from 2013 onwards chose 'In a relationship but not living with partner' when previously they may have chosen 'single'.

Rurality

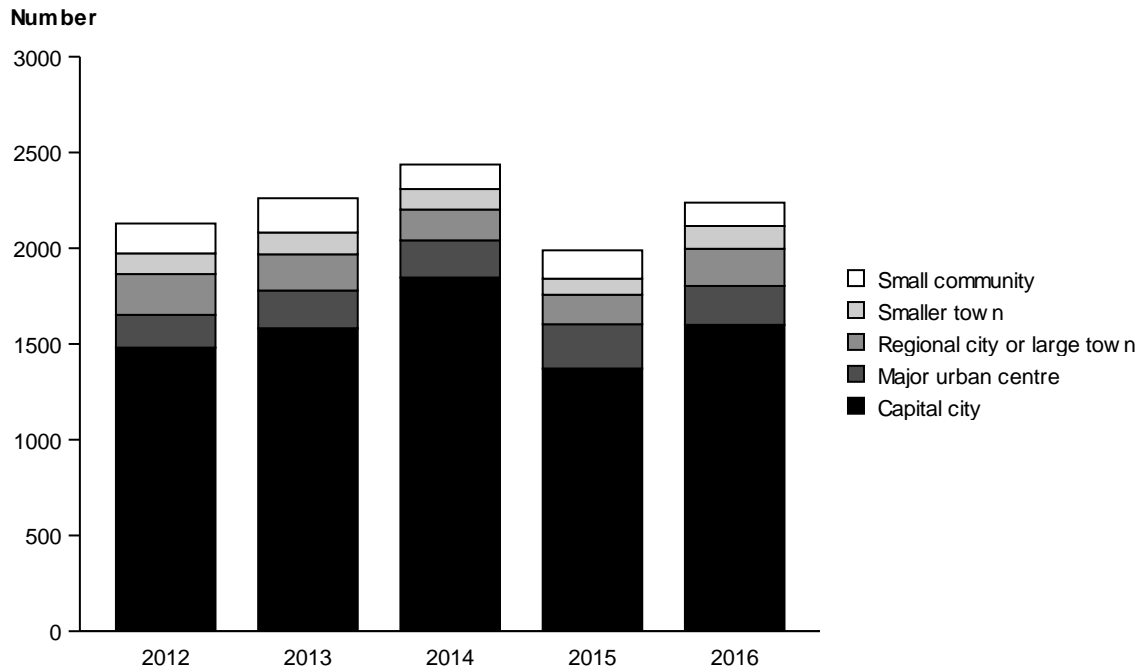
For 2016, 71.5% of graduating domestic students reported living in capital cities (Table 6). The statistical raw numbers are illustrated graphically in Graph 1a and proportionally in Graph 1b.

Table 6. Rurality of main location for domestic students when living in Australia for more than one year by year, 2012 to 2016.

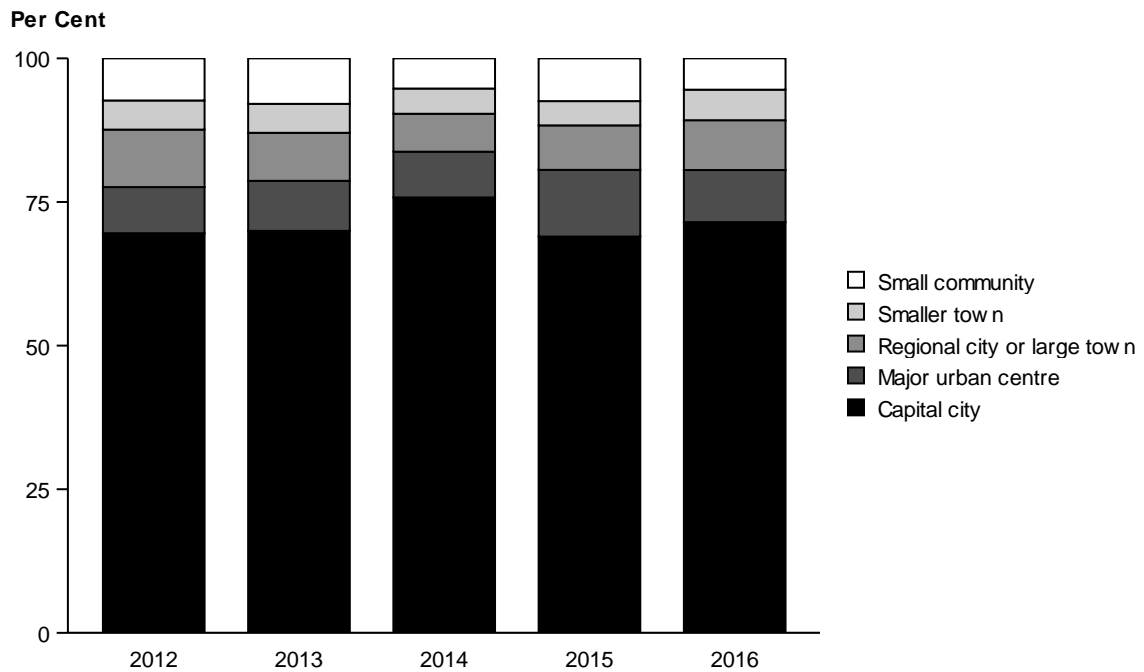
Main location rurality*	2012		2013		2014		2015		2016	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Capital city	1,481	69.6	1,582	70.0	1,847	75.8	1,372	69.0	1,600	71.5
Major urban centre	171	8.0	197	8.7	194	8.0	231	11.6	203	9.1
Regional city or large town	213	10.0	189	8.4	161	6.6	154	7.7	194	8.7
Smaller town	108	5.1	114	5.0	107	4.4	84	4.2	119	5.3
Small community	156	7.3	179	7.9	128	5.3	148	7.4	122	5.5
Total	2,129	100.0	2,261	100.0	2,437	100.0	1,989	100.0	2,238	100.0

Major urban centre – (>100,000 population size) e.g. Cairns, Geelong, Gold Coast–Tweed Heads, Gosford, Newcastle, Townsville, Wollongong, Wyong
 Regional city or large town (25,000 - 99,999 population size) e.g. Alice Springs, Ballarat, Bunbury, Dubbo, Launceston, Mount Gambier
 Smaller town (10,000 – 24,999 population size)
 Small community (<10,000 population size)

Graph 1a. Rurality of main location for domestic students when living in Australia for more than one year by year, 2012 to 2016.



Graph 1b. Rurality of main location for domestic students when living in Australia for more than one year by year, 2012 to 2016.



Sources of Income

From 2013, graduates were asked about their sources of income for education and living expenses over the entire course of their medical degrees. It's clear that students need several funding sources when embarking on their medical education and over the last three years the top four reported income streams (Family, Government, Paid Employment and HECS/FEE/OS HELP loan) have not altered with similar percentages being seen on an annual basis. Table 7 illustrates the figures for all reported income sources over the past five years.

Table 7. Sources of income for education and/or living expenses for entire degree for graduates, 2013 to 2016.

Income sources	2013		2014		2015		2016	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Government	1,711	59.6%	1,499	60.1%	1,205	60.0%	1,413	62.3%
Family	1,944	67.7%	1,688	67.7%	1,412	70.4%	1,593	70.2%
Paid employment	1,436	50.0%	1,219	48.9%	1,019	50.8%	1,117	49.3%
Scholarship	696	24.2%	631	25.3%	605	30.1%	640	28.2%
HECS/FEE/OS HELP loan	1,193	41.5%	1,036	41.6%	799	39.8%	979	43.2%
Savings/Trust fund	441	15.4%	357	14.3%	293	14.6%	418	18.4%
Personal Loan	285	9.9%	270	10.8%	245	12.2%	320	14.1%
Other	68	2.4%	..	..	..	..	..	..

Question first asked in 2013 and participants can pick more than one option. Option for 'Other' not included from 2014.

Career Intentions

Together, New South Wales, Queensland and Victoria have consistently combined to make up more than 75% of all first preference of state choices. However in 2016 those graduates who indicated having a first state of preference other than Australia leapt from a previously consistent 5% to 8.4%. This is likely to be as a result of the addition of the US-based Ochsner cohort in 2016.

The results can be analysed with respondent state of study (Table 8b) and actual intern acceptance by state (Table 14) for comparative purposes.

Table 8a. Career intention: first preference of state of future practice by year, 2012 to 2016.

First preference State of future practice	2012		2013		2014		2015		2016	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
NSW	813	29.2	827	29.0	826	33.9	546	27.2	623	27.5
VIC	759	27.3	771	27.0	537	22.0	549	27.4	590	26.0
QLD	553	19.9	560	19.6	481	19.7	505	25.2	481	21.2
SA	154	5.5	192	6.7	162	6.6	79	3.9	112	4.9
WA	238	8.6	262	9.2	187	7.7	137	6.8	136	6.0
TAS	37	1.3	44	1.5	53	2.2	40	2.0	57	2.5
NT	33	1.2	34	1.2	29	1.2	24	1.2	22	1.0
ACT	40	1.4	44	1.5	51	2.1	30	1.5	56	2.5
Country other than Australia	154	5.5	117	4.1	114	4.7	97	4.8	191	8.4
Total	2,781	100.0	2,851	100.0	2,440	100.0	2,007	100.0	2,268	100.0

Low numbers of responses from some states in 2015 will affect results, particularly NSW, Western Australia, South Australia and the ACT. The increase in numbers of people preferring to practice in countries other than Australia and New Zealand in 2016 is contributed to by 2016 being the first year substantial numbers have graduated from the Ochsner campus of the University of Queensland.

Table 8b. Number of respondents by state of completion and year, 2012 to 2016.

State of completion	2012		2013		2014		2015		2016	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
NSW	818	29.1	847	29.5	857	34.4	546	27.2	649	28.6
VIC	710	25.2	740	25.8	461	18.5	509	25.4	544	24.0
QLD	644	22.9	605	21.1	547	21.9	571	28.5	622	27.4
SA	196	7.0	239	8.3	234	9.4	136	6.8	148	6.5
WA	264	9.4	289	10.1	186	7.5	135	6.7	141	6.2
TAS	103	3.7	99	3.4	108	4.3	74	3.7	81	3.6
ACT	79	2.8	53	1.8	100	4.0	36	1.8	83	3.7
Total	2,814	100.0	2,872	100.0	2,493	100.0	2,007	100.0	2,268	100.0

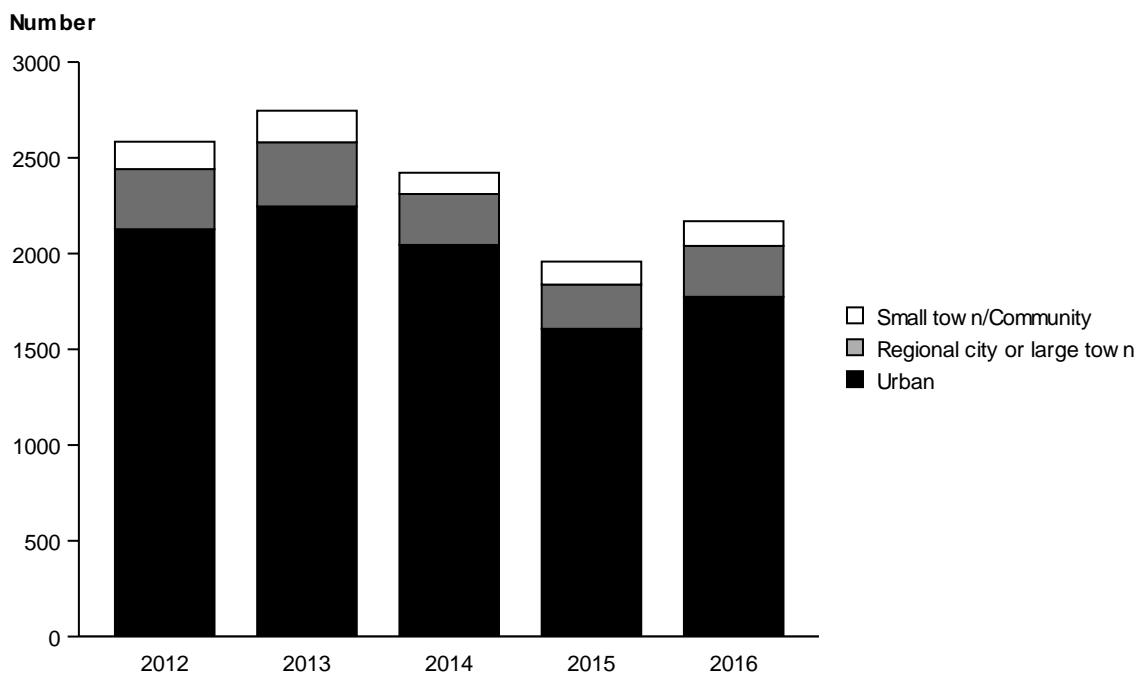
Low numbers of responses from some states in 2015 will affect results, particularly NSW, Western Australia, South Australia and the ACT.

When surveyed about first preferred region of future practice (Table 9), the majority of graduates across the last five years choose an urban location with approximately two-thirds of students opting for a capital city. Small towns/communities rose from 4.4% in 2011 to a high of 6% in both 2013 and 2015. Those stating a first preference of Regional city or large town have remained consistent at the 11-12% mark. The small fluctuations can be seen in raw numbers (Graph 2a) and proportionally (Graph 2b).

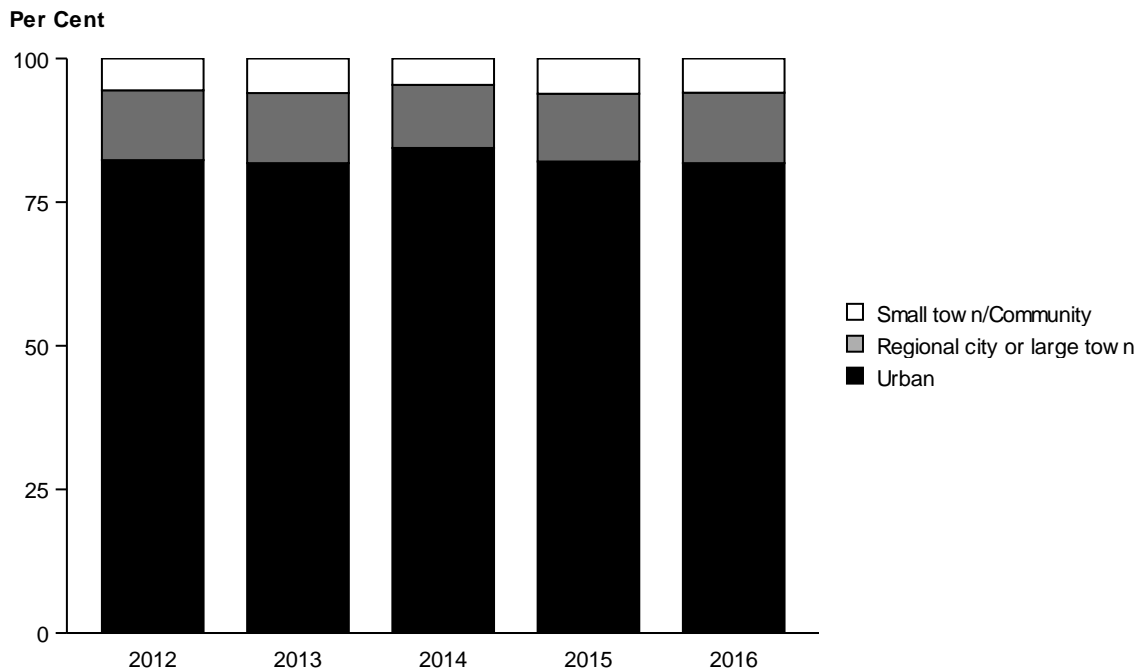
Table 9. Career intention: first preference region of future practice for students preferring to practice in Australia, by year, 2012 to 2016.

First preference region of future practice	2012		2013		2014		2015		2016	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Capital city	1,744	67.5	1,819	66.2	1,693	69.9	1,240	63.3	1,413	65.1
Major urban centre	383	14.8	427	15.5	352	14.5	367	18.7	361	16.6
Reg city or large town	314	12.2	335	12.2	266	11.0	231	11.8	266	12.3
Smaller town	115	4.5	111	4.0	78	3.2	84	4.3	97	4.5
Small community	28	1.1	54	2.0	33	1.4	36	1.8	32	1.5
Total	2,584	100.0	2,746	100.0	2,422	100.0	1,958	100.0	2,169	100.0

Graph 2a. Career intention: first preference region of future practice for students preferring to practice in Australia, by year, 2012 to 2016.



Graph 2b. Career intention: first preference region of future practice for students preferring to practice in Australia, by year, 2012 to 2016.



The preferred country of future practice is illustrated in Table 10. Until 2016, figures across the previous few years for the three options - 'Australia', 'New Zealand' and 'Others' – had remained remarkably stable with Australia being the preferred country of future practice for 95% of graduates. In 2016 this figure dropped to 91.6% primarily due to the effect of the University of Queensland's Ochsner cohort opting to practice in the USA upon graduation.

Table 10. Preferred country of future practice by year, 2012 to 2016.

Preferred Country of future practice	2012		2013		2014		2015		2016	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
	Australia	2,627	94.5	2,734	96.1	2,326	95.3	1,910	95.2	2,077	91.6
New Zealand	5	0.2	4	0.1	17	0.7	7	0.3	13	0.6
Other	149	5.4	108	3.8	97	4.0	90	4.5	178	7.8
Total	2,781	100.0	2,846	100.0	2,440	100.0	2,007	100.0	2,268	100.0

The increase in numbers of people preferring to practice in countries other than Australia and New Zealand in 2016 is contributed to by 2016 being the first year substantial numbers have graduated from the Ochsner campus of the University of Queensland.

The top six intended areas of future practice (Table 11) across the last five years have remained relatively stable with Adult Medicine/Internal Medicine/Physician, General Practice, Surgery, Paediatrics and Child Health, Emergency Medicine and Anesthesia proving to be consistently popular amongst each cohort. The leading area of future practice saw almost 20% of graduates indicate Adult Medicine/Internal Medicine/Physician as their first preference in 2016 which corresponded very closely to similar responses in 2011, 2014 and 2015. Graduates opting for General Practice careers rank second in 2016 as they did in 2015. Together with those selecting Adult Medicine/Internal Medicine/Physician they annually make up about a third of all medical school graduates. Surgery remains the third most popular preference in 2016 although this has declined in percentage terms from a high of 18.1% in 2011 to 15.4% in 2016.

In terms of pure numbers, single digit responses were recorded in 2016 for Addiction Medicine, Medical Administration, Occupational and Environmental Medicine, Pain Medicine, Public Health Medicine, Radiation Oncology, Rehabilitation Medicine and Sexual Health Medicine.

Table 11. First preference area of future practice by year, 2012 to 2016.

First preference area of future practice	2012			2013			2014		
	Number	Per cent	Rank (in year)	Number	Per cent	Rank (in year)	Number	Per cent	Rank (in year)
Addiction Medicine	6	0.2	19	3	0.1	25	3	0.1	21
Adult Medicine/ Internal Medicine/ Physician	444	17.7	1	456	16.6	2	474	19.5	1
Anesthesia	213	8.5	5	193	7.0	6	183	7.5	6
Dermatology	48	1.9	13	44	1.6	14	42	1.7	12
Emergency Medicine	211	8.4	6	229	8.3	5	185	7.6	5
General Practice	370	14.7	3	469	17.0	1	392	16.1	3
Indigenous Health	7	0.3	18	4	0.1	23	.	.	.
Intensive Care Medicine	53	2.1	10	59	2.1	10	64	2.6	10
Medical Administration (eg managing a hospital)	5	0.2	22	1	0.0	27	2	0.1	22
Non-Specialist Hospital Practice (eg career as a medical officer in a hospital)	1	0.0	26	5	0.2	21	4	0.2	18
Obstetrics and Gynecology	170	6.8	7	167	6.1	7	181	7.4	7
Occupational and Environmental Medicine	.	.	.	1	0.0	28	1	0.0	24
Ophthalmology	51	2.0	12	55	2.0	12	69	2.8	9
Oral and Maxillofacial Surgery	10	0.4	16	8	0.3	20	.	.	.
Paediatrics and Child Health	256	10.2	4	264	9.6	4	249	10.2	4
Pain Medicine	2	0.1	25	2	0.1	26	2	0.1	23
Palliative Medicine	8	0.3	17	13	0.5	17	6	0.2	16
Pathology	13	0.5	14	15	0.5	15	18	0.7	13
Psychiatry	67	2.7	8	82	3.0	9	74	3.0	8
Public Health Medicine	5	0.2	23	11	0.4	19	6	0.2	17
Radiation Oncology	4	0.2	24	14	0.5	16	12	0.5	14
Radiology	53	2.1	11	51	1.9	13	54	2.2	11
Rehabilitation Medicine	1	0.0	27	5	0.2	22	4	0.2	19
Rural and Remote Medicine	56	2.2	9	57	2.1	11	.	.	.
Sexual Health Medicine	6	0.2	20	4	0.1	24	4	0.2	20
Sport and Exercise Medicine	11	0.4	15	13	0.5	18	9	0.4	15
Surgery	436	17.3	2	440	16.0	3	393	16.2	2
Other	6	0.2	21	90	3.3	8	.	.	.
Total	2,513	100.0	378	2,755	100.0	406	2,431	100.0	300

First preference area of future practice	2015			2016		
	Number	Per cent	Rank (in year)	Number	Per cent	Rank (in year)
Addiction Medicine	1	0.1	22	2	0.1	19
Adult Medicine/ Internal Medicine/ Physician	391	19.8	1	428	19.3	1
Anesthesia	160	8.1	6	221	9.9	4
Dermatology	22	1.1	12	24	1.1	12
Emergency Medicine	168	8.5	5	206	9.3	6
General Practice	351	17.8	2	357	16.1	2
Indigenous Health	.	.	.	.	.	.
Intensive Care Medicine	39	2.0	10	53	2.4	9
Medical Administration (eg managing a hospital)	2	0.1	20	2	0.1	20
Non-Specialist Hospital Practice (eg career as a medical officer in a hospital)	6	0.3	18	11	0.5	14
Obstetrics and Gynecology	122	6.2	7	148	6.7	7
Occupational and Environmental Medicine	.	.	.	1	0.0	23
Ophthalmology	29	1.5	11	43	1.9	10
Oral and Maxillofacial Surgery	.	.	.	.	.	.
Paediatrics and Child Health	189	9.6	4	219	9.9	5
Pain Medicine	.	.	.	1	0.0	24
Palliative Medicine	11	0.6	15	13	0.6	13
Pathology	17	0.9	13	11	0.5	14
Psychiatry	74	3.7	8	74	3.3	8
Public Health Medicine	12	0.6	14	7	0.3	17
Radiation Oncology	5	0.3	19	2	0.1	21
Radiology	53	2.7	9	39	1.8	11
Rehabilitation Medicine	2	0.1	21	6	0.3	18
Rural and Remote Medicine	.	.	.	.	.	.
Sexual Health Medicine	8	0.4	17	2	0.1	22
Sport and Exercise Medicine	11	0.6	16	10	0.4	16
Surgery	303	15.3	3	343	15.4	3
Other	.	.	.	.	.	.
Total	1,976	100.0	253	2,223	100.0	300

The figures for students showing an interest in becoming involved in teaching remains very high with 85.2% indicating this in 2016 (Table 12). Those students indicating no interest in teaching accounted for only 3.1%. Both figures are typical of the five year trend.

Table 12. Interest in teaching by year, 2012 to 2016.

Interest in teaching	2012		2013		2014		2015		2016	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
No	102	3.9	84	3.0	67	2.7	72	3.6	69	3.1
Yes	2,110	79.9	2,400	84.3	2,112	85.1	1,672	83.6	1,922	85.2
Undecided	429	16.2	363	12.8	304	12.2	256	12.8	266	11.8
Total	2,641	100.0	2,847	100.0	2,483	100.0	2,000	100.0	2,257	100.0

With regards to interest in research (Table 13), the 2016 figure showed a slight increase from 2015 (62.2% compared to 61.5% in the previous year). The overall five year trend points to an increase in this specific area particularly since 2012 where 55.5% indicated an interest. Those students who stated that they are undecided has remained virtually unchanged over the past three years at approximately 23%.

Table 13. Interest in research by year, 2012 to 2016.

Interest in research	2012		2013		2014		2015		2016	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
No	414	15.7	402	14.2	320	12.9	305	15.3	340	15.1
Yes	1,463	55.5	1,702	60.0	1,585	64.0	1,229	61.5	1,404	62.2
Undecided	759	28.8	734	25.9	571	23.1	466	23.3	513	22.7
Total	2,636	100.0	2,838	100.0	2,476	100.0	2,000	100.0	2,257	100.0

Table 14 indicates the degree of interest amongst graduates in becoming involved in Indigenous health as part of their medical career. The question was first asked in 2014 so trend results are still at an early stage. However, the interest from 2016 students is 38.8% which is a 1.7% increase from the previous year.

Table 14. Interest in Indigenous health as a career by year, 2014 to 2016.

Interest in Indigenous health	2014		2015		2016	
	Number	Per cent	Number	Per cent	Number	Per cent
No	574	23.3	472	23.6	585	25.9
Yes	936	37.9	741	37.1	876	38.8
Undecided	957	38.8	787	39.4	796	35.3
Total	2,467	100.0	2,000	100.0	2,257	100.0

Table 15, which illustrates Internship acceptance by state, shows the top three of Queensland, New South Wales and Victoria as the most popular choices with graduates. This trend has been maintained over the course of the last five years with three-quarters of all graduates selecting their internships within these states. It should be noted there is a proportionally higher response rate in 2016 from students accepting internships from a country other than Australia. This is due to the effect of the University of Queensland's Ochsner cohort opting to practice in the USA upon graduation.

Table 15. Internship acceptance state by year, 2012 to 2016.

Internship acceptance state	2012		2013		2014		2015		2016	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
NSW	739	28.1	741	27.9	749	32.1	498	26.5	571	27.5
VIC	613	23.3	686	25.8	461	19.8	481	25.6	519	25.0
QLD	552	21.0	537	20.2	502	21.5	510	27.2	506	24.4
SA	203	7.7	238	9.0	199	8.5	94	5.0	101	4.9
WA	263	10.0	268	10.1	191	8.2	139	7.4	128	6.2
TAS	66	2.5	54	2.0	66	2.8	52	2.8	65	3.1
NT	26	1.0	46	1.7	28	1.2	25	1.3	22	1.1
ACT	76	2.9	64	2.4	85	3.6	41	2.2	80	3.9
Country other than Australia	94	3.6	24	0.9	50	2.1	38	2.0	83	4.0
Total	2,632	100.0	2,658	100.0	2,331	100.0	1,878	100.0	2,075	100.0

Low numbers of responses from some states in 2015 will affect results, particularly NSW, Western Australia, South Australia and the ACT. The increase in numbers of people accepting internships to practice in countries other than Australia in 2016 is contributed to by 2016 being the first year substantial numbers have graduated from the Ochsner campus of the University of Queensland.

Medical School Experience

The level of student satisfaction with their medical program at university was ranked from 1 (Very Satisfied) to 5 (Very Dissatisfied). The average level of satisfaction for all medical school programs across Australia has remained remarkably constant at 2.2 as can be observed in Table 16. These figures are also reflected in the median satisfaction score of 2 (satisfied) which has remained unaltered over the last half-decade. Those students indicating that they felt unsatisfied or very unsatisfied remain under the 10% mark.

Table 16. Overall level of Satisfaction with the Medical program at their university, 2012 to 2016.

	Satisfaction	2012	2013	2014	2015	2016
Average satisfaction		2.2	2.2	2.1	2.2	2.2
Median satisfaction		2	2	2	2	2
Per cent satisfied or very satisfied		75.5	74.9	81.0	74.2	74.8
Per cent unsatisfied or very unsatisfied		8.4	9.5	6.5	9.4	9.5

Prior Education

Nearly sixty percent (1353) of all graduating medical students in 2016 had undertaken their medical school programs as post-graduates. Of these students who had previous tertiary education prior to undertaking their medical program (based on commencement data, Table 17a), over 90% had completed at least a Degree/Certificate across all five years. Those who had previously completed a Masters fluctuated from 4.3% in 2013 to a high of 7.2% in both 2014 and 2016. Previous PhD graduates consistently hover around the 1-2% mark.

Table 17a. Highest level previous degree by year, 2012 to 2016 (based on data collected at commencement).

Previous degree highest degree level	2012		2013		2014		2015		2016	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Degree/Certificate	1,304	92.5	1,224	92.7	1,185	91.3	987	91.6	1,231	91.0
Masters	73	5.2	57	4.3	94	7.2	70	6.5	98	7.2
PHD	33	2.3	40	3.0	19	1.5	21	1.9	24	1.8
Total	1,410	100.0	1,321	100.0	1,298	100.0	1,078	100.0	1,353	100.0

Looking at Table 17b, the highest level of previous degree (based on exit data from the last three years only) is split further, illustrating Bachelor Degree and Bachelor Degree (Honours) as the two dominant options. It is worth noting that Bachelor Degree increased from 59.9% in 2014 to 62.2% in 2016, whereas Bachelor Degree (Honours) dropped from 26.3% in 2014 to 21.3% this year. Students holding previous postgraduate degrees on commencement are stable at approximately the 10% mark.

Table 17b. Highest level previous degree by year, 2014 to 2016 (based on data collected at graduation).

Previous degree highest degree level	2014		2015		2016	
	Number	Per cent	Number	Per cent	Number	Per cent
Postgraduate degree	146	10.1	107	8.8	145	9.6
Graduate diploma or graduate certificate level	48	3.3	38	3.1	56	3.7
Bachelor degree (honours)	372	25.7	275	22.7	323	21.3
Bachelor degree	843	58.3	748	61.7	943	62.2
Diploma	13	0.9	24	2.0	18	1.2
Certificate	24	1.7	21	1.7	31	2.0
Total	1,446	100.0	1,213	100.0	1,516	100.0

Prior to 2014 a slightly different question was asked at commencement.
See table above for data collected at commencement.

As with previous years, the majority of 2016 graduates had completed their earlier degrees in the fields of Science, Medical Science or Health/Allied Health (Table 18a). The highest proportion was Science at 39.2%. Medical Science had shown a steady but marked year-on-year increase from 23.4% in 2011 to 27.4% in 2015 but that figure dropped in 2016 to 24.6%. Those students with previous Health/Allied Health degrees also dropped in 2016 to 17.1% having previously remained remarkably stable at approximately 20% over the preceding four years.

Table 18a. Discipline of highest previous degree by year, 2012 to 2016 (based on data collected at commencement)

Discipline of highest previous degree	2012		2013		2014		2015		2016	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Science	576	40.9	518	39.2	439	33.8	395	36.6	531	39.2
Medical science	332	23.5	313	23.7	347	26.7	295	27.4	333	24.6
Health/Allied health	268	19.0	267	20.2	266	20.5	216	20.0	232	17.1
Humanities	114	8.1	113	8.6	103	7.9	84	7.8	112	8.3
Commerce/Business/Law	61	4.3	54	4.1	69	5.3	34	3.2	54	4.0
Physical sciences	45	3.2	33	2.5	57	4.4	39	3.6	41	3.0
Other/Unknown	14	1.0	23	1.7	18	1.4	15	1.4	50	3.7
Total	1,410	100.0	1,321	100.0	1,299	100.0	1,078	100.0	1,353	100.0

Prior to 2014 this question was asked at commencement, hence the data have been matched to End year, resulting in more missing data for earlier years.

Derived from collection of up to 4 degree names prior to 2014 at commencement. From 2014 data collected at graduation rather than commencement with different categories below.

Data for commencement years 2013 and 2014 only limited analysis was done to code text to fields resulting in higher numbers of unknowns.

From 2014 the survey now captures the discipline of highest previous degree data on the exit survey (Table 18b). The largest majority of 2016 students who had completed a previous degree had done so in Natural and Physical Sciences (46.4%), whilst nearly 40% had previously completed a Health-related degree. The top three Health-related fields of degrees are Medical Studies (15.4% in 2014, 14.1% in 2015, 16.2% in 2016), Pharmacy (5.9% in 2014, 5.7% in 2015, 5.1%) and Rehabilitation Therapies (6.2% in 2014, 5.4% in 2015, 4.8% in 2016). Away from the health sphere, students with previous Society and Culture degrees also feature prominently with 9.3% in 2014, 7.4% in 2015, and 8% in 2016.

Table 18b. Discipline of highest previous degree by year, from 2014 to 2016 (based on data collected at graduation).

Discipline of highest previous degree	2014		2015		2016	
	Number	Per cent	Number	Per cent	Number	Per cent
Natural and Physical Sciences	680	48.2%	568	47.7%	691	46.4%
Information Technology	19	1.3%	12	1.0%	18	1.2%
Engineering and Related Technologies	67	4.7%	46	3.9%	60	4.0%
Architecture and Building	7	0.5%	3	0.3%	2	0.1%
Agriculture, Environmental and Related Studies	5	0.4%	8	0.7%	10	0.7%
Health Total*	558	39.5%	485	40.8%	590	39.6%
-- Medical studies	218	15.4%	169	14.2%	241	16.2%
-- Complementary Therapies	4	0.3%	5	0.4%	8	0.5%
-- Dental Studies	9	0.6%	13	1.1%	9	0.6%
-- Nursing / Midwifery	28	2.0%	31	2.6%	46	3.1%
-- Optical Science	13	0.9%	4	0.3%	1	0.1%
-- Pharmacy	84	5.9%	68	5.7%	76	5.1%
-- Rehabilitation Therapies	88	6.2%	63	5.3%	72	4.8%
-- Radiography	16	1.1%	20	1.7%	12	0.8%
-- Public Health	23	1.6%	31	2.6%	39	2.6%
-- Veterinary Studies	10	0.7%	9	0.8%	4	0.3%
-- Other Health	57	4.0%	54	4.5%	66	4.4%
Education	21	1.5%	10	0.8%	21	1.4%
Management and Commerce	59	4.2%	37	3.1%	65	4.4%
Society and Culture	131	9.3%	88	7.4%	119	8.0%
Creative Arts	39	2.8%	33	2.8%	48	3.2%
Food, Hospitality and Personal Services	3	0.2%	4	0.3%	5	0.3%
Mixed Field Programmes	10	0.7%	18	1.5%	21	1.4%

Prior to 2014 a slightly different question was asked at commencement.

See table above for data collected at commencement.

*Due to the structure of the question Health total includes those who ticked a row titled 'Health, please specify' and did not specify an area as well as those who specified at least one health area.

Influences on Career Choice

Table 19 illustrates how the perceived financial prospects of a graduates' choice of discipline came to influence that decision. Of those students who claimed 'Not at all', there has been a rise in the percentage figures from 22.5% in 2014 to 27.9% in 2016. This continues the gradual increase that has been witnessed over the last five years. Conversely, those students selecting '4 or a great deal' has dropped to 26.5% in 2012 to a figure of 21.8% in 2016.

Table 19. Level of influence of perceived financial prospects on choice of most preferred area of medicine by year, 2012 to 2016

Perceived financial prospects influenced choice	2012		2013		2014		2015		2016	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Not at all	468	17.0	617	21.7	559	22.5	487	24.4	628	27.9
4 or a great deal	729	26.5	683	24.1	626	25.2	478	24.0	490	21.8

Scale: 1 = Not at all to 5 = A great deal.
2015 Data may be influenced by change to web based reporting.

The majority of students reported that the financial costs of medical school education/debt (Table 20) did not influence their preferred choice of medicine upon graduating. In 2016 well over half of all students (54.6%) indicated that financial costs had "Not at all" affected their decision. This is a rise of nearly 8% from the figure of 46.4% in 2012. However, those graduates indicating that the financial costs of medical school/debt did influence their career pathway choice rose slightly to 10.9% in 2016.

Table 20. Level of influence of financial costs of medical school education/debt on choice of most preferred area of medicine by year, 2012 to 2016.

Financial costs of medical school education/debt influenced choice	2012		2013		2014		2015		2016	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Not at all	1,281	46.4	1,409	49.6	1,190	48.0	1,067	53.6	1,228	54.6
4 or a great deal	245	8.9	220	7.7	239	9.6	204	10.2	245	10.9

Scale: 1 = Not at all to 5 = A great deal.
2015 Data may be influenced by change to web based reporting.

Regarding the level of influence of the number of years required to complete training in the preferred area of medicine, 32.5% of respondents indicated '4 or a great deal'. As Table 21 shows, this is generally consistent with the five year results where the lowest figure is 33.5% (2012) and the highest is 36.6% (2014). For those graduates who indicated 'Not at all' the figure continued on a general upward trend (2014 excepted) and recorded its highest result of 18%. This is a marked increase on 2012's 12.7% figure.

Table 21. Level of influence of number of years required to complete training on choice of most preferred area of medicine by year, 2012 to 2016.

Factor - number of years required to complete training	2012		2013		2014		2015		2016	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Not at all	348	12.7	423	15.0	360	14.5	348	17.5	405	18.0
4 or a great deal	922	33.5	961	34.0	907	36.6	702	35.3	730	32.5

Scale: 1 = Not at all to 5 = A great deal.

2015 Data may be influenced by change to web based reporting.