

National report on doctors five years after graduating from New Zealand medical schools in 2011-2013

August 2019

Prepared by:

The New Zealand MSOD Steering Group.

University of Otago:

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University of Auckland:

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Division of Health Sciences
Te Wāhanga Mātau Hauora



**MEDICAL AND
HEALTH SCIENCES**

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OTAGO MEDICAL SCHOOL
Te Kura Hauora o Ōtākou



**MEDICAL AND
HEALTH SCIENCES**

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EXECUTIVE SUMMARY

This report provides the findings from Medical Schools Outcomes Database (MSOD) questionnaires administered between 2016 and 2018 to doctors in their fifth postgraduate year who had graduated from a New Zealand medical school between 2011 and 2013. A total of 590 from the cohort of 1,079 doctors (54%) completed the survey. As Auckland had yet to join the MSOD project in 2011, the 2016 five-years postgraduate (PGY5) data are reported for Otago graduates only.

Over this time there has been stability in the age of the respondents (median 29 years) as well as the proportion of women (≈58%). The self-identified ethnicity of respondents has remained relatively constant. The proportion of Māori and Pacific respondents underrepresents the proportion of Māori and Pacific peoples in the New Zealand population.

Five years after graduating, 90% of respondents agree or strongly agree their internship is preparing them for work as a doctor, 85% of respondents are working as a registrar and/or are in training under supervision, and 77% are enrolled in a College training programme. The majority of those not currently in a vocational training programme intend to enter one in their PGY6 year (59%), PGY7 year (10%) or PGY8 year (13%). Only 5% of respondents intend to work in a clinical role outside New Zealand within next 3 years. In PGY5, over 90% are working full time, and a third are working in the Auckland region. In the longer term, 96% of respondents intend to work in New Zealand: over 60% in major city, 31% in a regional centre or large town, and the remainder in smaller towns.

The percentage of respondents decided on a future medical specialty is now approaching 95%. Consistently the top preference is General Practice (27%), with Internal Medicine, Anaesthesia and Surgery filling the next three top preferences. Over 60% of respondents selected one of these four specialties as their first-choice preference. Nearly three-quarters (73%) of respondents indicated an interest in medical teaching; 41% indicated an interest in research. Over 90% of respondents report being moderately or absolutely certain of practising in their most preferred specialty.

Five years after graduation, respondents indicate both external and internal factors influence their specialty preference, with the highest ranked factors being *atmosphere/work culture typical of the discipline, influence of consultants/mentors, self-appraisal of own skills/aptitudes, and intellectual content of the specialty* in addition to *interest in helping people*. By comparison, the least influential factors influencing specialty preference continue to include *financial costs of vocational training, financial costs of medical school education and/or debt, risk of litigation and associated insurance costs, and influence of parents/relatives*.

INTRODUCTION

The Medical Schools Outcomes Database and Longitudinal Tracking Project (MSOD) is an on-going collaborative longitudinal study conducted by Medical Deans Australia and New Zealand (MDANZ). The project has been operating in New Zealand (NZ) since 2005 and has appropriate ethics committee approvals. The purpose of MSOD is to gain a better understanding of the factors that influence career choices from selection to medical school, and throughout the continuum of training, to inform policy decisions of the various stakeholders in medical education and training.

In New Zealand, students are invited to complete surveys at entry to their medical school/ programme (Year 2) through the Commencing Medical Students Questionnaire (CMSQ); at the end of their final year of medical school through the Exit Questionnaire (EQ); and one, three and five year(s) after graduation (PGY1, PGY5, PGY5). From 2019, data will be collected from the first MSOD cohort who have reached eight years after graduation (PGY8).

This report presents summary and trend data for three years of those who graduated from the University of Auckland and the University of Otago five years previously, between 2011 and 2013. For more details on response rates and methods, see Appendices A and B. Note, not all respondents answered each question, so the numbers in each table vary.

RESULTS

Demographics

Table 1. Gender of respondents

Gender	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
Female	102	61.4%	106	53.8%	136	60.4%	344	58.5%
Male	64	38.6%	91	46.2%	89	39.6%	244	41.5%
Total	166	100.0%	197	100.0%	225	100.0%	588	100.0%

*Data from University of Otago graduates only

Table 2. Age range of respondents

Age group†	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
25-29 years	47	28.3%	58	29.7%	63	28.0%	168	28.7%
30-34 years	112	67.5%	132	67.7%	145	64.4%	389	66.4%
35-39 years	7	4.2%	4	2.1%	9	4.0%	20	3.4%
40+ years and over	–	–	1	0.5%	8	3.6%	9	1.5%
Total	166	100.0%	195	100.0%	225	100.0%	586	100.0%

*Data from University of Otago graduates only;

†Age calculated at 30 November in the year surveyed, grouped into five-year age ranges

Table 3. Median age and age range of respondents

Age in years†	2016*	2017	2018
Median	29.5	29.4	29.4
Minimum	27.5	27.7	27.6
Maximum	38.5	40.3	52.7

*Data from University of Otago graduates only;

†Age calculated at 30 November in the year surveyed

Table 4. Self-identified ethnicity of respondents

Ethnicity	2016*		2017		2018		TOTAL	
	n=165		n=197		n=223		n=585	
	n	%	n	%	n	%	n	%
New Zealand European	105	63.6%	131	66.5%	145	65.0%	381	65.1%
Māori	9	5.5%	14	7.1%	14	6.3%	37	6.3%
Pacific peoples	6	3.6%	6	3.0%	3	1.3%	15	2.6%
Other	62	37.6%	68	34.5%	83	37.2%	213	36.4%

*Data from University of Otago graduates only;

Percentages total more than 100% as multiple responses were accepted

Table 5. Citizenship of respondents

Citizenship	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
New Zealand Citizen	137	82.5%	178	89.9%	205	91.5%	520	88.4%
New Zealand Permanent Resident	17	10.2%	17	8.6%	13	5.8%	47	8.0%
Australian Citizen	4	2.4%	1	0.5%	2	0.9%	7	1.2%
Visa holder	3	1.8%	–	–	2	0.9%	5	0.9%
Status other than above	5	3.0%	2	1.0%	2	0.9%	9	1.5%
Total	166	100.0%	198	100.0%	224	100.0%	588	100.0%

*Data from University of Otago graduates only

[Relationships and dependents](#)

Table 6. Relationship status of respondents

Relationship status	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
Single	43	26.1%	30	15.2%	56	24.9%	129	21.9%
In a relationship but not living with partner	23	13.9%	26	13.1%	21	9.3%	70	11.9%
Living with partner	45	27.3%	52	26.3%	64	28.4%	161	27.4%
Married	53	32.1%	88	44.4%	81	36.0%	222	37.8%
Separated	1	0.6%	1	0.5%	2	0.9%	4	0.7%
Divorced	–	–	–	–	1	0.5%	1	0.2%
Widowed	–	–	1	0.5%	–	–	1	0.2%
Total	165	100.0%	198	100.0%	225	100.0%	588	100.0%

*Data from University of Otago graduates only

Table 7. Number of children and other dependents

Dependents	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
Children								
0	144	86.7%	136	69.7%	189	84.0%	469	80.0%
1	12	7.2%	33	16.9%	24	10.7%	69	11.8%
2	8	4.8%	22	11.3%	8	3.6%	38	6.5%
3 or more	2	1.2%	4	2.1%	4	1.8%	10	1.7%
Total	166	100.0%	195	100.0%	225	100.0%	586	100.0%
Other dependents								
0	149	89.8%	172	88.2%	201	89.3%	522	89.1%
1	13	7.8%	20	10.3%	20	8.9%	53	9.0%
2	3	1.8%	2	1.0%	2	0.9%	7	1.2%
3 or more	1	0.6%	1	0.5%	2	0.9%	4	0.7%
Total	166	100.0%	195	100.0%	225	100.0%	586	100.0%

*Data from University of Otago graduates only

[Additional tertiary qualifications](#)

Table 8. Number of additional university qualifications started, continued or completed since completing medical school

Qualifications started, continued or completed	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
0	83	50.0%	104	52.3%	104	46.2%	291	49.3%
1	67	40.4%	77	38.7%	97	43.1%	241	40.8%
2	13	7.8%	17	8.5%	20	8.9%	50	8.5%
3	3	1.8%	1	0.5%	4	1.8%	8	1.4%
Total	166	100.0%	199	100.0%	225	100.0%	590	100.0%

*Data from University of Otago graduates only

[Preparation for being a doctor](#)

Table 9. “My basic medical degree prepared me for my work as a doctor”

Response	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
Strongly agree	14	8.4%	13	6.7%	14	6.3%	41	7.0%
Agree	107	64.5%	124	63.6%	167	75.2%	398	68.3%
Neutral	31	18.7%	45	23.1%	26	11.7%	102	17.5%
Disagree	12	7.2%	10	5.1%	11	5.0%	33	5.7%
Strongly disagree	2	1.2%	3	1.5%	4	1.8%	9	1.5%
Total	166	100.0%	195	100.0%	222	100.0%	583	100.0%

*Data from University of Otago graduates only

Table 10. “My internship is preparing me for my work as a doctor”

Response	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
Strongly agree	51	30.7%	60	30.8%	62	27.9%	173	29.7%
Agree	101	60.8%	111	56.9%	141	63.5%	353	60.5%
Neutral	12	7.2%	16	8.2%	13	5.9%	41	7.0%
Disagree	2	1.2%	6	3.1%	4	1.8%	12	2.1%
Strongly disagree	–	–	2	1.0%	2	0.9%	4	0.7%
Total	166	100.0%	195	100.0%	222	100.0%	583	100.0%

*Data from University of Otago graduates only

[Situation four years after graduation \(the PGY4 year\)](#)

Table 11. Main activity four years after graduation

Main activity during the PGY4 year	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
A Registrar and/or training under supervision	129	77.7%	151	76.6%	186	83.8%	466	79.7%
House officer	20	12.0%	19	9.6%	17	7.7%	56	9.6%
Vocationally registered†	–	–	–	–	1	0.5%	1	0.2%
Other clinical work	5	3.0%	10	5.1%	4	1.8%	19	3.2%
Not working clinically as a doctor	12	7.2%	17	8.6%	14	6.3%	43	7.4%
Total	166	100.0%	197	100.0%	222	100.0%	585	100.0%

*Data from University of Otago graduates only; †Option added 2017

Table 12. Situation of those not working clinically as a doctor in PGY4

Situation of those not working clinically as a doctor	2016*		2017		2018		TOTAL	
	n=12		n=17		n=14		n=43	
	n	%	n	%	n	%	n	%
Doing medical work in New Zealand that is non-clinical	–	–	2	11.8%	2	14.3%	4	9.3%
Primary carer/parental leave	–	–	1	5.9%	–	–	1	2.3%
Home duties / childcare	2	16.7%	1	5.9%	–	–	3	7.0%
Enrolled as a student	1	8.3%	5	29.4%	1	7.1%	7	16.3%
Extended leave	4	33.3%	1	5.9%	–	–	5	11.6%
Working outside New Zealand in a clinical role	3	25.0%	1	5.9%	2	14.3%	6	14.0%
Working outside New Zealand in a non-clinical, but medical role	2	16.7%	1	5.9%	–	–	3	7.0%
Doing non-medical work in New Zealand	2	16.7%	–	–	–	–	2	4.7%
Have permanently left the medical profession	1	8.3%	–	–	–	–	1	2.3%

*Data from University of Otago graduates only;
Percentages total more than 100% as multiple responses were accepted

Table 13. Region of hospital based at when working as a Registrar/House officer/Intern in PGY4

Region	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
Auckland	28	19.9%	54	34.2%	68	34.7%	150	30.3%
Bay of Plenty	13	9.2%	12	7.6%	9	4.6%	34	6.9%
Canterbury	27	19.1%	22	13.9%	24	12.2%	73	14.7%
Gisborne	–	–	2	1.3%	4	2.0%	6	1.2%
Hawke's Bay	9	6.4%	5	3.2%	13	6.6%	27	5.5%
Manawatu-Wanganui	10	7.1%	11	7.0%	9	4.6%	30	6.1%
Nelson	–	–	4	2.5%	5	2.6%	9	1.8%
Northland	5	3.5%	7	4.4%	7	3.6%	19	3.8%
Otago	11	7.8%	9	5.7%	8	4.1%	28	5.7%
Southland	8	5.7%	2	1.3%	7	3.6%	17	3.4%
Taranaki	4	2.8%	4	2.5%	3	1.5%	11	2.2%
Tasman	–	–	1	0.6%	–	–	1	0.2%
Waikato (incl. Taupo)	4	2.8%	6	3.8%	10	5.1%	20	4.0%
Wellington Region	22	15.6%	19	12.0%	29	14.8%	70	14.1%
Total	141	100.0%	158	100.0%	196	100.0%	495	100.0%

*Data from University of Otago graduates only

Table 14. Working full time or part time in PGY4

Work hours	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
Full-time	147	97.4%	157	89.7%	193	92.8%	497	93.1%
Part-time	4	2.6%	18	10.3%	15	7.2%	37	6.9%
Total	151	100.0%	175	100.0%	208	100.0%	534	100.0%

*Data from University of Otago graduates only

Table 15. Medical work/placements by geographical location in PGY4

Location	2016		2017		2018		TOTAL	
	n=307		n=339		n=403		n=1049	
	n	%	n	%	n	%	n	%
Major city	101	60.8%	119	59.8%	141	62.7%	361	61.2%
Regional centre	49	29.5%	49	24.6%	61	27.1%	159	26.9%
Small town/ community	157	94.6%	171	85.9%	201	89.3%	529	89.7%

*Data from University of Otago graduates only;

Percentages total more than 100% as multiple responses were accepted where work was conducted in more than one region.

Table 16. Enrolment in a College training programme in PGY4

Enrolled	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
Yes	97	58.8%	130	67.4%	137	62.8%	364	63.2%
No	68	41.2%	63	32.6%	81	37.2%	212	36.8%
Total	165	100.0%	193	100.0%	218	100.0%	576	100.0%

* Data from University of Otago graduates only

Table 17. College training programme enrolments in PGY4

College programme	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
Adult Medicine/ Internal Medicine/ Physician	30	30.9%	36	28.8%	35	26.7%	101	28.6%
Dual Vocational Training programme	1	1.0%	–	–	–	–	1	0.3%
Emergency Medicine	8	8.2%	4	3.2%	6	4.6%	18	5.1%
Intensive Care Medicine	1	1.0%	1	0.8%	1	0.8%	3	0.8%
Paediatrics and Child Health	14	14.4%	14	11.2%	13	9.9%	41	11.6%
General Practice	13	13.4%	35	28.0%	38	29.0%	86	24.4%
Obstetrics and Gynaecology	4	4.1%	2	1.6%	6	4.6%	12	3.4%
Pathology	1	1.0%	2	1.6%	7	5.3%	10	2.8%
Public Health Medicine	1	1.0%	6	4.8%	1	0.8%	8	2.3%
Radiation Oncology	–	–	–	–	1	0.8%	1	0.3%
Radiology	6	6.2%	2	1.6%	1	0.8%	9	2.5%
Rural and Remote Medicine	1	1.0%	4	3.2%	3	2.3%	8	2.3%
Sport and Exercise Medicine	–	–	–	–	1	0.8%	1	0.3%
Surgery	–	–	2	1.6%	–	–	2	0.6%
Psychiatry	5	5.2%	5	4.0%	3	2.3%	13	3.7%
Anaesthesia	9	9.3%	9	7.2%	13	9.9%	31	8.8%
Not declared	3	3.1%	3	2.4%	2	1.5%	8	2.3%
Total	97	100.0%	125	100.0%	131	100.0%	353	100.0%

* Data from University of Otago graduates only

Variation in vocational enrolments will reflect training positions available, entrance criteria and interest

[Situation five years after graduation \(the PGY5 year\)](#)

Table 18. Main activity five years after graduation

Main activity during the PGY5 year	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
A Registrar and/or training under supervision	142	85.5%	161	83.0%	194	87.4%	497	85.4%
House officer	11	6.6%	5	2.6%	4	1.8%	20	3.4%
Vocationally registered†	–	–	–	–	2	0.9%	2	0.3%
Other clinical work	4	2.4%	11	5.7%	6	2.7%	21	3.6%
Not working clinically as a doctor	9	5.4%	17	8.8%	16	7.2%	42	7.2%
Total	166	100.0%	194	100.0%	222	100.0%	582	100.0%

*Data from University of Otago graduates only

†Option added in 2018

Table 19. Current situation of those not working clinically as a doctor in PGY5

Situation of those not working clinically as a doctor	2016*		2017		2018		TOTAL	
	n=9		n=17		n=16		n=42	
	n	%	n	%	n	%	n	%
Doing non-clinical medical work in New Zealand	–	–	3	17.6%	4	25.0%	7	16.7%
Doing non-medical work in NZ Zealand	1	11.1%	1	5.9%	–	–	2	4.8%
Primary carer/parental leave	–	–	2	11.8%	–	–	2	4.8%
Home duties / childcare	1	11.1%	–	–	–	–	1	2.4%
Enrolled as a student	2	22.2%	1	5.9%	1	6.3%	4	9.5%
Extended leave	1	11.1%	–	–	–	–	1	2.4%
Working in a clinical role outside New Zealand	2	22.2%	–	–	2	12.5%	4	9.5%
Working in a non-clinical, but medical role outside New Zealand	1	11.1%	2	11.8%	–	–	3	7.1%
Working in a non-medical role outside New Zealand	2	22.2%	2	11.8%	–	–	4	9.5%
Have permanently left the medical profession	1	11.1%	–	–	–	–	1	2.4%

*Data from University of Otago graduates only;

†Percentages total more than 100% as multiple responses were accepted

Table 20. Region of hospital based at when working as a Registrar/House officer/Intern in PGY5

Region	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
Auckland	38	25.7%	38	22.1%	91	47.2%	167	32.6%
Bay of Plenty	7	4.7%	9	5.2%	6	3.1%	22	4.3%
Canterbury	25	16.9%	36	20.9%	19	9.8%	80	15.6%
Gisborne	2	1.4%	3	1.7%	1	0.5%	6	1.2%
Hawke's Bay	12	8.1%	5	2.9%	10	5.2%	27	5.3%
Manawatu-Wanganui	11	7.4%	11	6.4%	9	4.7%	31	6.0%
Nelson	3	2.0%	4	2.3%	–	–	7	1.4%
Northland	2	1.4%	5	2.9%	5	2.6%	12	2.3%
Otago	11	7.4%	17	9.9%	10	5.2%	38	7.4%
Southland	2	1.4%	4	2.3%	6	3.1%	12	2.3%
Taranaki	2	1.4%	5	2.9%	3	1.6%	10	1.9%
Tasman	–	–	2	1.2%	–	–	2	0.4%
Waikato (incl. Taupo)	4	2.7%	7	4.1%	11	5.7%	22	4.3%
Wellington Region	29	19.6%	26	15.1%	22	11.4%	77	15.0%
Total	148	100.0%	172	100.0%	193	100.0%	513	100.0%

*Data from University of Otago graduates only

Table 21. Working full time or part time in PGY5

Work hours	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
Full-time	148	94.9%	154	86.0%	199	92.1%	501	90.9%
Part-time	8	5.1%	25	14.0%	17	7.9%	50	9.1%
Total	156	100.0%	179	100.0%	216	100.0%	551	100.0%

*Data from University of Otago graduates only

Table 22. Medical work/placements by geographical location in PGY5

Location	2016*		2017		2018		TOTAL	
	n=166		n=199		n=225		n=590	
	n	%	n	%	n	%	n	%
Major city	111	66.9%	125	62.8%	154	68.4%	390	66.1%
Regional centre	43	25.9%	50	25.1%	51	22.7%	144	24.4%
Small town/community	8	4.8%	19	9.5%	17	7.6%	44	7.5%

*Data from University of Otago graduates only

Percentages total more than 100% as multiple responses were accepted

Table 23. Enrolment in a College training programme during PGY5

Enrolled	2016		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
Yes	126	76.4%	157	80.9%	161	72.9%	444	76.6%
No	39	23.6%	37	19.1%	60	27.1%	136	23.4%
Total	165	100.0%	194	100.0%	221	100.0%	580	100.0%

*Data from University of Otago graduates only

Table 24. College training programme enrolments in PGY5

College programme	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
Adult Medicine/Internal Medicine /Physician	30	24.0%	31	20.1%	31	19.3%	92	20.9%
Anaesthesia	13	10.4%	14	9.1%	14	8.7%	41	9.3%
Dermatology	–	–	1	0.6%	1	0.6%	2	0.5%
Dual Vocational Training programme	2	1.6%	1	0.6%	–	–	3	0.7%
Emergency Medicine	7	5.6%	5	3.2%	6	3.7%	18	4.1%
General Practice	20	16.0%	48	31.2%	50	31.1%	118	26.8%
Intensive Care Medicine	–	–	–	–	1	0.6%	1	0.2%
Obstetrics and Gynaecology	7	5.6%	10	6.5%	11	6.8%	28	6.4%
Ophthalmology	2	1.6%	2	1.3%	1	0.6%	5	1.1%
Paediatrics and Child Health	14	11.2%	12	7.8%	15	9.3%	41	9.3%
Pathology	1	0.8%	2	1.3%	6	3.7%	9	2.0%
Psychiatry	5	4.0%	6	3.9%	3	1.9%	14	3.2%
Public Health Medicine	4	3.2%	5	3.2%	1	0.6%	10	2.3%
Radiation Oncology	–	–	–	–	1	0.6%	1	0.2%
Radiology	10	8.0%	5	3.2%	4	2.5%	19	4.3%
Rural and Remote Medicine	1	0.8%	4	2.6%	2	1.2%	7	1.6%
Sport and Exercise Medicine	–	–	–	–	2	1.2%	2	0.5%
Surgery	6	4.8%	4	2.6%	9	5.6%	19	4.3%
Other	3	2.4%	4	2.6%	3	1.9%	10	2.3%
Total	125	100.0%	154	100.0%	161	100.0%	440	100.0%

*Data from University of Otago graduates only

[Intentions for year six after graduation \(the PGY6 year\)](#)

Table 25. Intentions for PGY6

Intention for PGY6 year	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
Continue a vocational training programme	109	66.9%	132	67.3%	141	64.4%	382	66.1%
Do non-clinical/non-medical work	1	0.6%	5	2.6%	3	1.4%	9	1.6%
Enrol as a student in another course	–	–	–	–	2	0.9%	2	0.3%
Enter a vocational training programme	28	17.2%	21	10.7%	37	16.9%	86	14.9%
Go on a vacation/leave/taking a break	4	2.5%	7	3.6%	5	2.3%	16	2.8%
Leave medicine as a career	–	–	2	1.0%	3	1.4%	5	0.9%
Parental leave/home duties/childcare	4	2.5%	9	4.6%	5	2.3%	18	3.1%
Undertake an additional year as a medical officer, not in a vocational training programme	–	–	–	–	13	5.9%	13	2.2%
Undertake an additional year as a junior medical officer	3	1.8%	6	3.1%	–	–	9	1.6%
Undertake research	2	1.2%	3	1.5%	5	2.3%	10	1.7%
Work outside New Zealand in a clinical role	5	3.1%	3	1.5%	2	0.9%	10	1.7%
Change role within the medical profession	2	1.2%	5	2.6%	2	0.9%	9	1.6%
Other	5	3.1%	3	1.5%	1	0.5%	9	1.6%
Total	163	100.0%	196	100.0%	219	100.0%	578	100.0%

*Data from University of Otago graduates only

Table 26. Medical specialty of those intending to **continue** a vocational training programme in PGY6 (ranked by Total column)

Medical specialty of vocational training programme	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
General Practice	19	17.4%	43	32.8%	46	32.6%	108	28.3%
Adult Medicine / Internal Medicine / Physician	22	20.2%	26	19.8%	24	17.0%	72	18.9%
Anaesthesia	13	11.9%	13	9.9%	10	7.1%	36	9.4%
Paediatrics and Child Health	11	10.1%	9	6.9%	14	9.9%	34	8.9%
Obstetrics and Gynaecology	5	4.6%	7	5.3%	11	7.8%	23	6.0%
Radiology	11	10.1%	5	3.8%	4	2.8%	20	5.2%
Surgery	8	7.3%	2	1.5%	7	5.0%	17	4.5%
Emergency Medicine	5	4.6%	2	1.5%	4	2.8%	11	2.9%
Psychiatry	3	2.8%	5	3.8%	3	2.1%	11	2.9%
Public Health Medicine	4	3.7%	4	3.1%	2	1.4%	10	2.6%
Pathology	1	0.9%	2	1.5%	5	3.5%	8	2.1%
Other	2	1.8%	2	1.5%	3	2.1%	7	1.8%
Rural and Remote Medicine	1	0.9%	4	3.1%	2	1.4%	7	1.8%
Ophthalmology	2	1.8%	3	2.3%	1	0.7%	6	1.6%
Dual Vocational Training Programme	2	1.8%	2	1.5%	–	–	4	1.0%
Dermatology	–	–	2	1.5%	1	0.7%	3	0.8%
Sport and Exercise Medicine	–	–	–	–	2	1.4%	2	0.5%
Intensive Care Medicine	–	–	–	–	1	0.7%	1	0.3%
Radiation Oncology	–	–	–	–	1	0.7%	1	0.3%
Total	109	100.0%	131	100.0%	141	100.0%	381	100.0%

*Data from University of Otago graduates only

Table 27. Medical specialty of those intending to **enter** a vocational training programme in PGY6 (ranked by Total column)

Medical specialty of vocational training programme	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
Surgery	9	33.3%	6	28.6%	20	54.1%	35	41.2%
General Practice	11	40.7%	6	28.6%	5	13.5%	22	25.9%
Adult Medicine / Internal Medicine / Physician	1	3.7%	4	19.0%	2	5.4%	7	8.2%
Anaesthesia	2	7.4%	2	9.5%	1	2.7%	5	5.9%
Obstetrics and Gynaecology	1	3.7%	1	4.8%	1	2.7%	3	3.5%
Ophthalmology	1	3.7%	1	4.8%	1	2.7%	3	3.5%
Emergency Medicine	–	–	–	–	2	5.4%	2	2.4%
Radiology	–	–	–	–	2	5.4%	2	2.4%
Medical Administration (e.g. managing a hospital)	–	–	–	–	1	2.7%	1	1.2%
Occupational and Environmental Medicine	1	3.7%	–	–	–	–	1	1.2%
Other	–	–	1	4.8%	–	–	1	1.2%
Pathology	1	3.7%	–	–	–	–	1	1.2%
Public Health Medicine	–	–	–	–	1	2.7%	1	1.2%
Radiation Oncology	–	–	–	–	1	2.7%	1	1.2%
Total	27	100.0%	21	100.0%	37	100.0%	85	100.0%

*Data from University of Otago graduates only

[Intentions for year seven after graduation \(the PGY7 year\)](#)

Table 28. Intentions for PGY7

Intention for PGY7 year	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
Continue a vocational training programme	120	75.0%	129	66.2%	140	64.2%	389	67.9%
Change role within the medical profession	3	1.9%	8	4.1%	4	1.8%	15	2.6%
Do non-clinical/non-medical work	–	–	5	2.6%	3	1.4%	8	1.4%
Enrol as a student in another course	–	–	1	0.5%	–	–	1	0.2%
Enter a vocational training programme	8	5.0%	15	7.7%	22	10.1%	45	7.9%
Go on a vacation/leave/taking a break	2	1.3%	3	1.5%	6	2.8%	11	1.9%
Leave medicine as a career	–	–	1	0.5%	1	0.5%	2	0.3%
Parental leave/home duties/childcare	9	5.6%	13	6.7%	14	6.4%	36	6.3%
Planning to return to do internship	–	–	–	–	5	2.3%	5	0.9%
Undertake an additional year as a junior medical officer	2	1.3%	1	0.5%	–	–	3	0.5%
Undertake research	4	2.5%	5	2.6%	4	1.8%	13	2.3%
Work outside New Zealand in a clinical role	5	3.1%	3	1.5%	9	4.1%	17	3.0%
Other	7	4.4%	11	5.6%	10	4.6%	28	4.9%
Total	160	100.0%	195	100.0%	218	100.0%	573	100.0%

*Data from University of Otago graduates only

Table 29. Medical specialty of those intending to **continue** a vocational training programme in PGY7 (ranked by Total column)

Medical specialty of vocational training programme	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
General Practice	26	22.0%	33	26.2%	30	22.1%	89	23.4%
Adult Medicine / Internal Medicine / Physician	20	16.9%	25	19.8%	21	15.4%	66	17.4%
Surgery	13	11.0%	7	5.6%	21	15.4%	41	10.8%
Anaesthesia	12	10.2%	14	11.1%	11	8.1%	37	9.7%
Paediatrics and Child Health	11	9.3%	8	6.3%	10	7.4%	29	7.6%
Obstetrics and Gynaecology	6	5.1%	8	6.3%	11	8.1%	25	6.6%
Radiology	11	9.3%	4	3.2%	6	4.4%	21	5.5%
Emergency Medicine	5	4.2%	4	3.2%	5	3.7%	14	3.7%
Ophthalmology	3	2.5%	4	3.2%	2	1.5%	9	2.4%
Psychiatry	2	1.7%	4	3.2%	3	2.2%	9	2.4%
Public Health Medicine	4	3.4%	3	2.4%	2	1.5%	9	2.4%
Other	1	0.8%	4	3.2%	2	1.5%	7	1.8%
Rural and Remote Medicine	1	0.8%	3	2.4%	3	2.2%	7	1.8%
Pathology	2	1.7%	1	0.8%	2	1.5%	5	1.3%
Dual Vocational Training Programme	1	0.8%	3	2.4%	–	–	4	1.1%
Dermatology	–	–	1	0.8%	1	0.7%	2	0.5%
Radiation Oncology	–	–	–	–	2	1.5%	2	0.5%
Sport and Exercise Medicine	–	–	–	–	2	1.5%	2	0.5%
Intensive Care Medicine	–	–	–	–	1	0.7%	1	0.3%
Medical Administration (e.g. managing a hospital)†	–	–	–	–	1	0.7%	1	0.3%
Total	118	100.0%	126	100.0%	136	100.0%	380	100.0%

*Data from University of Otago graduates only

Table 30. Medical specialty of those intending to **enter** a vocational training programme in PGY7 (ranked by Total column)

Medical specialty of vocational training programme	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
Surgery	2	25.0%	5	33.3%	13	59.1%	20	44.4%
General Practice	4	50.0%	4	26.7%	3	13.6%	11	24.4%
Adult Medicine / Internal Medicine / Physician	1	12.5%	2	13.3%	2	9.1%	5	11.1%
Anaesthesia	–	–	2	13.3%	1	4.5%	3	6.7%
Dual Vocational Training Programme	1	12.5%	–	–	–	–	1	2.2%
Emergency Medicine	–	–	–	–	1	4.5%	1	2.2%
Other	–	–	–	–	1	4.5%	1	2.2%
Paediatrics and Child Health	–	–	–	–	1	4.5%	1	2.2%
Public Health Medicine	–	–	1	6.7%	–	–	1	2.2%
Radiation Oncology	–	–	1	6.7%	–	–	1	2.2%
Emergency Medicine	–	–	–	–	1	4.5%	1	2.2%
Total	8	100.0%	15	100.0%	22	100.0%	45	100.0%

*Data from University of Otago graduates only

[Intentions for year eight after graduation \(the PGY8 year\)](#)

Table 31. Intentions for the PGY8 year

Intention for PGY8 year	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
Change role within the medical profession	5	3.1%	9	4.6%	4	1.8%	18	3.2%
Continue a vocational training programme	118	74.2%	134	68.7%	149	68.7%	401	70.2%
Do non-clinical/non-medical work	1	0.6%	5	2.6%	3	1.4%	9	1.6%
Enrol as a student in another course	–	–	1	0.5%	–	–	1	0.2%
Enter a vocational training programme	6	3.8%	7	3.6%	14	6.5%	27	4.7%
Go on a vacation/leave/taking a break	5	3.1%	5	2.6%	4	1.8%	14	2.5%
Leave medicine as a career	1	0.6%	1	0.5%	1	0.5%	3	0.5%
Other	8	5.0%	18	9.2%	19	8.8%	45	7.9%
Parental leave/home duties/childcare	8	5.0%	5	2.6%	8	3.7%	21	3.7%
Undertake an additional year as a medical officer, not in a vocational training programme	–	–	–	–	3	1.4%	3	0.5%
Undertake research	1	0.6%	3	1.5%	5	2.3%	9	1.6%
Work outside New Zealand in a clinical role	6	3.8%	7	3.6%	7	3.2%	20	3.5%
Total	159	100.0%	195	100.0%	217	100.0%	571	100.0%

*Data from University of Otago graduates only

Table 32. Medical specialty of those intending to **continue** a vocational training programme in PGY8 (ranked by Total column)

Medical specialty of vocational training programme	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
General Practice	25	21.6%	37	28.5%	30	20.8%	92	23.6%
Adult Medicine / Internal Medicine / Physician	23	19.8%	25	19.2%	21	14.6%	69	17.7%
Surgery	15	12.9%	10	7.7%	31	21.5%	56	14.4%
Anaesthesia	13	11.2%	14	10.8%	13	9.0%	40	10.3%
Paediatrics and Child Health	8	6.9%	9	6.9%	10	6.9%	27	6.9%
Obstetrics and Gynaecology	6	5.2%	8	6.2%	9	6.3%	23	5.9%
Radiology	9	7.8%	4	3.1%	6	4.2%	19	4.9%
Emergency Medicine	3	2.6%	4	3.1%	5	3.5%	12	3.1%
Ophthalmology	3	2.6%	4	3.1%	2	1.4%	9	2.3%
Psychiatry	3	2.6%	2	1.5%	2	1.4%	7	1.8%
Dual Vocational Training Programme	3	2.6%	2	1.5%	1	0.7%	6	1.5%
Other	1	0.9%	3	2.3%	1	0.7%	5	1.3%
Pathology	2	1.7%	1	0.8%	2	1.4%	5	1.3%
Public Health Medicine	2	1.7%	2	1.5%	1	0.7%	5	1.3%
Rural and Remote Medicine	–	–	2	1.5%	3	2.1%	5	1.3%
Dermatology	–	–	2	1.5%	1	0.7%	3	0.8%
Radiation Oncology	–	–	1	0.8%	2	1.4%	3	0.8%
Sport and Exercise Medicine	–	–	–	–	2	1.4%	2	0.5%
Intensive Care Medicine	–	–	–	–	1	0.7%	1	0.3%
Medical Administration (e.g. managing a hospital)	–	–	–	–	1	0.7%	1	0.3%
Total	116	100.0%	130	100.0%	144	100.0%	390	100.0%

*Data from University of Otago graduates only

Table 33. Medical specialty of those intending to **enter** a vocational training programme in PGY8 (ranked by Total column)

Medical specialty of vocational training programme	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
Surgery	1	16.7%	1	16.7%	6	46.2%	8	32.0%
Adult Medicine / Internal Medicine / Physician	1	16.7%	1	16.7%	–	–	2	8.0%
General Practice	–	–	1	16.7%	1	7.7%	2	8.0%
Ophthalmology	2	33.3%	–	–	–	–	2	8.0%
Palliative Medicine	–	–	–	–	2	15.4%	2	8.0%
Anaesthesia	–	–	1	16.7%	–	–	1	4.0%
Dermatology	–	–	1	16.7%	–	–	1	4.0%
Emergency Medicine	–	–	–	–	1	7.7%	1	4.0%
Obstetrics and Gynaecology	–	–	1	16.7%	–	–	1	4.0%
Other	–	–	–	–	1	7.7%	1	4.0%
Pathology	1	16.7%	–	–	–	–	1	4.0%
Radiology	1	16.7%	–	–	–	–	1	4.0%
Rural and Remote Medicine	–	–	–	–	1	7.7%	1	4.0%
Sport and Exercise Medicine	–	–	–	–	1	7.7%	1	4.0%
Total	6	100.0%	6	100.0%	13	100.0%	25	100.0%

*Data from University of Otago graduates only

Table 34. First preference of country of future practice

First preference of country of future practice	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
New Zealand	143	92.3%	180	97.8%	202	98.1%	525	96.3%
Country other than New Zealand	12	7.7%	4	2.2%	4	1.9%	20	3.7%
Total	155	100.0%	184	100.0%	206	100.0%	545	100.0%

*Data from University of Otago graduates only

Table 35. First preference for region of future practice

First preference of region of future practice	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
Auckland	31	20.0%	57	30.5%	55	26.7%	143	26.1%
Bay of Plenty	13	8.4%	17	9.1%	17	8.3%	47	8.6%
Canterbury	23	14.8%	26	13.9%	29	14.1%	78	14.2%
Gisborne	1	0.6%	4	2.1%	3	1.5%	8	1.5%
Hawke's Bay	12	7.7%	5	2.7%	16	7.8%	33	6.0%
Manawatu-Wanganui	3	1.9%	10	5.3%	6	2.9%	19	3.5%
Marlborough	–	–	2	1.1%	–	–	2	0.4%
Nelson	2	1.3%	10	5.3%	8	3.9%	20	3.6%
Northland	5	3.2%	9	4.8%	5	2.4%	19	3.5%
Otago	12	7.7%	8	4.3%	14	6.8%	34	6.2%
Southland	2	1.3%	1	0.5%	2	1.0%	5	0.9%
Taranaki	4	2.6%	3	1.6%	6	2.9%	13	2.4%
Tasman	–	–	1	0.5%	–	–	1	0.2%
Waikato (inc. Taupo)	2	1.3%	5	2.7%	7	3.4%	14	2.6%
Wellington region	33	21.3%	25	13.4%	34	16.5%	92	16.8%
Country other than New Zealand	12	7.7%	4	2.1%	4	1.9%	20	3.6%
Total	155	100.0%	187	100.0%	206	100.0%	548	100.0%

*Data from University of Otago graduates only

Table 36. Preferred population centre size of future practice

First preference of population centre size of future practice	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
Major city	101	64.7%	108	56.0%	124	59.3%	333	59.7%
Regional centre or large town	37	23.7%	65	33.7%	65	31.1%	167	29.9%
Town	8	5.1%	9	4.7%	6	2.9%	23	4.1%
Small town	3	1.9%	6	3.1%	7	3.3%	16	2.9%
Not applicable, not intending to work in New Zealand	7	4.5%	5	2.6%	7	3.3%	19	3.4%
Total	156	100.0%	193	100.0%	209	100.0%	558	100.0%

*Data from University of Otago graduates only

[Future medical specialty](#)

Table 37. Decided on future medical specialty

Decided on future medical specialty	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
Yes	153	95.6%	181	92.3%	200	93.5%	534	93.7%
No	7	4.4%	15	7.7%	14	6.5%	36	6.3%
Total	160	100.0%	196	100.0%	214	100.0%	570	100.0%

*Data from University of Otago graduates only

Table 38. First preference of medical specialty irrespective of whether a future medical specialty had been decided (ranked by Total column)

First preference of future medical specialty	2016*		2017		2018		TOTAL	
	n=158		n=192		n=213		n=563	
	%	Rank†	%	Rank	%	Rank	%	Rank
General Practice	24.1%	1	29.7%	1	26.3%	1	26.8%	1
Adult Medicine / Internal Medicine / Physician	13.3%	2	14.6%	2	14.1%	3	14.0%	2
Surgery	10.8%	3=	8.3%	4	18.3%	2	12.8%	3
Anaesthesia	10.8%	3=	9.4%	3	6.6%	4	8.7%	4
Paediatrics and Child Health	8.2%	5	6.3%	5	6.1%	5	6.7%	5
Obstetrics and Gynaecology	5.1%	7	5.7%	6	5.6%	6	5.5%	6
Radiology	7.0%	6	3.6%	7	2.8%	8	4.3%	7
Emergency Medicine	3.2%	8=	2.1%		3.3%	7	2.8%	8
Psychiatry	2.5%		3.1%	8=	1.9%		2.5%	9
Public Health Medicine	2.5%		3.1%	8=	1.4%		2.3%	10
Other	1.3%		2.6%	10=	2.3%	9=	2.1%	
Ophthalmology	3.2%	8=	2.1%		0.9%		2.0%	
Rural and Remote Medicine	1.3%		2.6%	10=	1.9%		2.0%	
Dual Vocational Training programme	3.2%	8=	1.6%		0.9%		1.8%	
Pathology	1.9%		1.0%		2.3%	9=	1.8%	
Dermatology	–		1.6%		0.5%		0.7%	
Radiation Oncology	–		1.0%		0.9%		0.7%	
Medical Administration	0.6%		0.5%		0.5%		0.5%	
Palliative Medicine	0.6%		–		0.9%		0.5%	
Intensive Care Medicine	–		0.5%		0.9%		0.5%	
Sport and Exercise Medicine	–		–		1.4%		0.5%	
Occupational and Environmental Medicine	0.6%		–		–		0.2%	
Sexual Health Medicine	–		0.5%		–		0.2%	
Total	100%		100%		100%		100%	

*Data from University of Otago graduates only;

†Only top 10 ranks given due to small numbers thereafter

Table 39. First preference of medical specialty for those who **have decided** on a future medical specialty (ranked by Total column)

First preference of future medical specialty	2016*		2017		2018		TOTAL	
	n=152		n=181		n=199		n=532	
	%	Rank†	%	Rank	%	Rank	%	Rank
General Practice	25.0%	1	30.9%	1	27.1%	1	27.8%	1
Adult Medicine / Internal Medicine / Physician	13.2%	2	14.9%	2	12.6%	3	13.5%	2
Surgery	11.2%	3	7.7%	4	19.1%	2	13.0%	3
Anaesthesia	10.5%	4	9.9%	3	7.0%	4	9.0%	4
Paediatrics and Child Health	7.9%	5	6.6%	5	6.0%	5=	6.8%	5
Obstetrics and Gynaecology	5.3%	7	6.1%	6	6.0%	5=	5.8%	6
Radiology	7.2%	6	3.3%	7	3.0%	7=	4.3%	7
Emergency Medicine	3.3%	8=	2.2%		3.0%	7=	2.8%	8
Psychiatry	2.6%	10=	3.3%	7	1.5%		2.4%	9
Public Health Medicine	2.6%	10=	2.8%	9=	1.5%		2.3%	10
Ophthalmology	3.3%	8=	2.2%		1.0%		2.1%	
Other	1.3%		2.8%	9=	2.0%	10	2.1%	
Rural and Remote Medicine	1.3%		2.8%	9=	1.5%		1.9%	
Pathology	1.3%		1.1%		2.5%	9	1.7%	
Dual Vocational Training Programme	2.6%	10=	0.6%		1.0%		1.3%	
Dermatology	–		1.7%		0.5%		0.8%	
Medical Administration (e.g. managing a hospital)	0.7%		–		0.5%		0.4%	
Intensive Care Medicine	–		–		1.0%		0.4%	
Occupational and Environmental Medicine	0.7%		–		–		0.2%	
Total	100%		100%		100%		100%	

*Data from University of Otago graduates only;

†Only top 10 ranks given due to small numbers thereafter

Table 40. Preferred sub-specialty of those who **have decided** on a future medical specialty

	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
Adult Medicine/Internal Medicine/Physician sub-specialties								
Cardiology	1	5.0%	5	18.5%	4	16.0%	10	13.9%
Endocrinology	–	–	3	11.1%	2	8.0%	5	6.9%
Gastroenterology and Hepatology	–	–	3	11.1%	3	12.0%	6	8.3%
General Medicine	4	20.0%	3	11.1%	3	12.0%	10	13.9%
Geriatric Medicine	1	5.0%	6	22.2%	2	8.0%	9	12.5%
Haematology	3	15.0%	–	–	1	4.0%	4	5.6%
Immunology and Allergy	–	–	–	–	1	4.0%	1	1.4%
Infectious Diseases	1	5.0%	2	7.4%	1	4.0%	4	5.6%
Medical Oncology	3	15.0%	2	7.4%	2	8.0%	7	9.7%
Nephrology	–	–	1	3.7%	4	16.0%	5	6.9%
Neurology	2	10.0%	1	3.7%	1	4.0%	4	5.6%
Respiratory and Sleep Medicine	2	10.0%	–	–	1	4.0%	3	4.2%
Rheumatology	2	10.0%	–	–	–	–	2	2.8%
No sub-specialty indicated	1	5.0%	1	3.7%	–	–	2	2.8%
Total	20	100.0%	27	100.0%	25	100.0%	72	100.0%
Paediatric and Child Health sub-specialties								
Clinical Genetics	–	–	–	–	1	8.3%	1	2.8%
Community Child Health	2	16.7%	–	–	–	–	2	5.6%
General Paediatrics	7	58.3%	9	75.0%	9	75.0%	25	69.4%
Neonatal and Perinatal Medicine	1	8.3%	–	–	1	8.3%	2	5.6%
Paediatric Endocrinology	1	8.3%	–	–	–	–	1	2.8%
Paediatric Infectious Diseases	–	–	1	8.3%	–	–	1	2.8%
Paediatric Medical Oncology	–	–	–	–	1	8.3%	1	2.8%
Paediatric Neurology	1	8.3%	1	8.3%	–	–	2	5.6%
No sub-specialty indicated	–	–	1	8.3%	–	–	1	2.8%
Total	12	100.0%	12	100.0%	12	100.0%	36	100.0%
Dual Vocational Training Programme sub-specialties								
FRACP/FRCPA	2	50.0%	–	–	1	50.0%	3	42.9%
Other programme	2	50.0%	1	100.0%	1	50.0%	4	57.1%
Total	4	100.0%	1	100.0%	2	100.0%	7	100.0%

*Data from University of Otago graduates only

	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
Obstetrics and Gynaecology sub-specialties								
Gynaecological Oncology	1	12.5%	2	18.2%	–	–	3	9.7%
Maternal-Fetal Medicine	1	12.5%	2	18.2%	5	41.7%	8	25.8%
O&G Ultrasound	–	–	1	9.1%	2	16.7%	3	9.7%
Reproductive Endocrinology and Infertility	2	25.0%	3	27.3%	1	8.3%	6	19.4%
No sub-specialty indicated	4	50.0%	3	27.3%	4	33.3%	11	35.5%
Total	8	100.0%	11	100.0%	12	100.0%	31	100.0%
Pathology sub-specialties								
Anatomical Pathology (including cytopathology)	1	50.0%	1	50.0%	4	80.0%	6	66.7%
Chemical Pathology	–	–	–	–	1	20.0%	1	11.1%
Microbiology	1	50.0%	–	–	–	–	1	11.1%
No sub-specialty indicated	–	–	1	50.0%	–	–	1	11.1%
Total	2	100.0%	2	100.0%	5	100.0%	9	100.0%
Radiology sub-specialties								
Diagnostic Radiology	9	81.8%	6	100.0%	6	100.0%	21	91.3%
No sub-specialty indicated	2	18.2%	–	–	–	–	2	8.7%
Total	11	100.0%	6	100.0%	6	100.0%	23	100.0%
Surgery sub-specialties								
Cardiothoracic Surgery	–	–	–	–	1	2.6%	1	1.4%
General Surgery	5	29.4%	5	35.7%	13	34.2%	23	33.3%
Orthopaedic Surgery	3	17.6%	4	28.6%	9	23.7%	16	23.2%
Otolaryngology - Head and Neck Surgery	1	5.9%	1	7.1%	6	15.8%	8	11.6%
Paediatric Surgery	1	5.9%	1	7.1%	1	2.6%	3	4.3%
Plastic Surgery	2	11.8%	1	7.1%	2	5.3%	5	7.2%
Urology	1	5.9%	1	7.1%	4	10.5%	6	8.7%
Vascular Surgery	1	5.9%	–	–	1	2.6%	2	2.9%
No sub-specialty indicated	3	17.6%	1	7.1%	1	2.6%	5	7.2%
Total	17	100.0%	14	100.0%	38	100.0%	69	100.0%

*Data from University of Otago graduates only

Table 41. Interest in medical teaching within medical career

Interest in teaching	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
Yes	109	68.6%	144	73.8%	159	74.3%	412	72.5%
No	11	6.9%	10	5.1%	14	6.5%	35	6.2%
Undecided	39	24.5%	41	21.0%	41	19.2%	121	21.3%
Total	159	100.0%	195	100.0%	214	100.0%	568	100.0%

*Data from University of Otago graduates only

Table 42. Interest in research within medical career

Interest in research	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
Yes	70	44.0%	78	40.2%	87	40.7%	235	41.4%
No	51	32.1%	51	26.3%	53	24.8%	155	27.3%
Undecided	38	23.9%	65	33.5%	74	34.6%	177	31.2%
Total	159	100.0%	194	100.0%	214	100.0%	567	100.0%

*Data from University of Otago graduates only

Table 43. Certainty of practising in most preferred medical specialty

Certainty	2016*		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
Absolutely certain	61	38.1%	89	46.4%	93	43.7%	243	43.0%
Moderately certain	79	49.4%	86	44.8%	101	47.4%	266	47.1%
Not at all certain	20	12.5%	17	8.9%	19	8.9%	56	9.9%
Total	160	100.0%	192	100.0%	213	100.0%	565	100.0%

*Data from University of Otago graduates only

Factors influencing specialty choice

Respondents were asked to rate on a scale from 1 (=not at all) to 5 (=a great deal) how a certain factor would influence their most preferred type of medical practice. Each factor was then ranked using the mean response.

Table 44. Factors influencing choice of specialty (ranked by Total column)

Factor influencing choice of specialty	2016*		2017		2018		TOTAL	
	Mean	Rank†	Mean	Rank	Mean	Rank	Mean	Rank
Atmosphere/work culture typical of the discipline	4.09	1	4.06	1	3.95	4	4.03	1
Interest in helping people	4.01	2	3.79	6	4.02	1	3.94	2=
Influence of training experiences (e.g. mentors, consultants) as a doctor	3.95	4	3.85	4	4.00	2	3.94	2=
Self-appraisal of own skills/aptitudes	3.90	6	3.93	2	3.97	3	3.94	2=
Intellectual content of the specialty	4.00	3	3.77	7	3.94	5	3.90	5
Work experience since graduation	3.93	5	3.86	3	3.82	6	3.87	6
Perceived opportunity to work flexible hours	3.80	7	3.85	4	3.69	7	3.77	7
Perceived amount of working hours	3.66	8	3.70	8	3.59	8=	3.65	8
Type of patients typical of the discipline	3.59	9	3.41	10	3.59	8=	3.53	9
Self-appraisal of own domestic circumstances	3.36	11	3.48	9	3.27	11	3.37	10
Opportunity for procedural work:	3.43	10	3.30	11	3.33	10	3.35	11
Perceived job security	3.15	13	3.12	12	3.19	12	3.15	12
Availability of a vocational training placement	3.25	12	2.93	14	3.00	14=	3.05	13
Perceived career advancement prospects	3.05	14	2.92	15	3.00	14=	2.99	14
Experience of specialty as a medical student	2.88	15	2.91	16	3.02	13	2.94	15
Geographical location of most preferred specialty	2.85	17	2.99	13	2.90	16	2.92	16
General medical school experiences (e.g. mentors, discipline placements)	2.86	16	2.80	17	2.85	17	2.83	17
Number of years required to complete training	2.65	19	2.56	19	2.62	18	2.61	18=
Opportunity for research and/or teaching	2.74	18	2.58	18	2.54	19	2.61	18=
Perceived financial prospects	2.42	20	2.38	20	2.36	20	2.39	20
Perceived prestige of the discipline	2.28	21	2.03	21	2.19	21	2.16	21

Factor influencing choice of specialty	2016*		2017		2018		TOTAL	
	Mean	Rank†	Mean	Rank	Mean	Rank	Mean	Rank
Influence of parents/relatives	2.16	22	1.91	22	1.86	22	1.96	22
Risk of litigation and associated insurance costs	1.96	23	1.73	23	1.66	23	1.77	23
Financial costs of medical school education and/or debt	1.89	24	1.64	24	1.48	24	1.65	24
Financial costs of vocational training	1.77	25	1.55	25	1.44	25	1.57	25

*Data from University of Otago graduates only

Appendix A: Response rate

The number of graduating students in New Zealand between 2011 and 2013 was 1,079. This is the pool who were eligible to respond to the PGY5 questionnaire. Every effort was made to contact all those in the pool.

The number of respondents across the time period 2016 to 2018 was 590 giving an overall response rate of 55%. The response rates for each graduating year are presented in **Table 45**.

Given the two universities cover different geographical areas, there is likely a skewing of location intentions towards those expressed by Otago graduates.

Table 45. Response rate by university of students completing study (pool) and questionnaires (PGY5)

Medical School/ Programme		2016		2017		2018		TOTAL	
		n	%	n	%	n	%	n	%
University of Auckland	Responses	–	–	68	42.0%	72	37.5%	139	39.5%
	Pool	–	–	162	–	192	–	352	–
University of Otago	Responses	166	70.0%	132	54.3%	153	62.0%	451	62.0%
	Pool	237	–	243	–	247	–	727	–
Total	Responses	166	70.0%	200	49.4%	225	51.5%	590	54.7%
	Pool	237	–	405	–	437	–	1079	–

Table 46. Number of respondents by university

Medical School/ Programme	2016		2017		2018		TOTAL	
	n	%	n	%	n	%	n	%
University of Auckland	–	–	68	34.0%	72	32.0%	139	23.6%
University of Otago	166	100.0%	132	66.0%	153	68.0%	451	76.4%
Total	166	100.0%	200	100.0%	225	100.0%	590	100.0%

Table 47. Respondents/non-respondents by gender

Gender	Responders		Non-responders		TOTAL	
	n	%	n	%	n	%
Female	344	58.3%	243	49.7%	587	54.4%
Male	244	41.4%	206	42.1%	450	41.7%
Not declared	2	0.3%	40	8.2%	42	3.9%
Total	590	100.0%	489	100.0%	1079	100.0%

Table 48. Respondents/non-respondents by age

Age in years†	Responders	Non-responders	TOTAL
Median	29.4	29.9	29.4
Minimum	27.5	27.2	27.2
Maximum	52.7	45.3	52.7

†Age calculated at 30 November in the year surveyed

Appendix B: Method

In 2016 the University of Otago conducted the first survey of doctors five years after graduation. Additional options to some questions were added for the 2017 survey of both University of Otago and University of Otago graduates. The questionnaire has since remained stable throughout this reporting period, and gathers respondent information about basic demographics, future medical practice, and college training programmes. The majority of the questions are quantitative.

University of Otago study data were collected and managed using the Research Electronic Data Capture (REDCap) tool hosted at the University of Otago¹. REDCap is a secure, web-based application designed to support data capture for research studies, providing 1) an intuitive interface for validated data entry; 2) audit trails for tracking data manipulation and export procedures; 3) automated export procedures for seamless data downloads to common statistical packages; and 4) procedures for importing data from external sources.

University of Auckland administered a paper version of the questionnaire to their graduates in 2017, following up non-responders with an invitation to complete the REDCap questionnaire. From 2018 University of Auckland study data will be collected and managed using the REDCap tool hosted at the University of Otago.

The two sets of data from each year were combined to form national data sets.

¹ Paul A. Harris, Robert Taylor, Robert Thielke, Jonathon Payne, Nathaniel Gonzalez, Jose G. Conde, Research electronic data capture (REDCap) – A metadata-driven methodology and workflow process for providing translational research informatics support, *J Biomed Inform.* 2009 Apr;42(2):377-81