

# The Public Health Medicine Workforce 2019



NEW ZEALAND COLLEGE  
OF PUBLIC HEALTH MEDICINE

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New Zealand College of Public Health Medicine  
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## CONTENTS

Contents.....	1
Key findings.....	3
Survey sample and method .....	5
The size of the PHMS workforce .....	5
Respondents not currently working in public health medicine .....	7
Respondents working overseas in public health medicine .....	8
Respondents currently working in public health medicine in NZ .....	9
Demographics .....	9
Qualifications .....	12
Employment.....	13
Satisfaction.....	21
Retirement intentions.....	23
Value placed on public health medicine .....	24
Public health medicine workforce .....	25
Need for additional PHMS workforce .....	25
PHMS workforce establishment .....	27
Changes in the PHMS role.....	28
References .....	30

### Table of Figures

Figure 1: Medical workforce growth relative to 2001 numbers, compared with population growth.....	6
Figure 2: Respondent age groups by gender .....	11
Figure 3: Respondent employment, across all employers.....	13
Figure 4: Salary ranges, all main employer and 1FTE, main employer .....	16
Figure 5: Salary by gender.....	17
Figure 6: Salaries at the two main employment sites.....	17
Figure 7: Activities and proportion of time spent on each .....	19
Figure 8: Satisfaction with PHMS role.....	22
Figure 9: Extent of feeling 'burnt out' .....	22
Figure 10: Age distribution of respondents by employer / worksite .....	23
Figure 11: Retirement intentions.....	24
Figure 12: Perceptions of value placed on PHM by employer .....	24
Figure 13: Perceived need for additional PHMS workforce.....	26

## **Abbreviations**

AFPHM – Australasian Faculty of Public Health Medicine (Royal Australasian College of Physicians)

APC – Annual practising certificate

ASMS MECA – Association of Salaried Medical Specialists Multi-Employer Collective Agreement

CPD – Continuing professional development

DBH – District Health Board

FTE – Full-time equivalent

MCNZ – Medical Council of New Zealand

MoH – Ministry of Health

MOsH – Medical Officers of Health

NZ – New Zealand

NZCPHM – New Zealand College of Public Health Medicine

PGY2 – Trainee Intern Post-Graduate Year two

PHM – Public Health Medicine

PHMS – Public Health Medicine Specialist

PHO – Primary Health Organisation

PHU – Public Health Unit

## KEY FINDINGS

### ***Size of the workforce***

In November 2019 there were 224 vocationally registered Public Health Medicine Specialists (PHMSs) in New Zealand (NZ), of whom 173 held a current Annual Practising Certificate (APC). Whilst the number of PHMSs on the register has increased since 2015 (when there were 215 vocationally registered PHMSs), the number holding a current practising certificate has decreased slightly (from 179). Public Health Medicine (PHM) is the only medical specialty for which growth has not kept pace with population growth.

### ***Demographics***

The proportion of female respondents to the survey was 60.2%. This proportion has increased since the 2015 PHM Workforce survey (when it was 54.0%) and is likely to reflect an increase in the female proportion of the workforce over this period.

Survey responses show ethnicity proportions of 6.5% Māori, 1.1% Pacific People, and 83.9% NZ European. However, ethnicity proportions for current New Zealand College of Public Health Medicine (NZCPHM) Fellows in data held on the College's database shows 9.7% Māori, 3.2% Pacific People and 71.9% New Zealand European / Pākehā. PHM has higher Māori proportions than the medical workforce as a whole or the specialist workforce (at 3.5% and 2.1% respectively).

The mean age of survey respondents has risen since the 2015 survey, from 51.0 to 53.1 years. There is a fairly large difference between the mean age for female respondents (50.3) and for males (57.2).

### ***Qualifications***

The majority of survey respondents (83.9%) obtained their primary medical qualification in NZ – an increase from 77.0% in 2015. All of these doctors did their postgraduate training in NZ. Most of the international medical graduates (those who did their primary medical training overseas) came from England / Scotland / other United Kingdom (9.7% of respondents). Of those who did their primary medical degrees overseas, 60.0% did their postgraduate training in New Zealand with only 40.0% (six respondents) joining the workforce as trained specialists.

The proportion of respondents holding Fellowship of NZCPHM was 72%, with 21.5% holding Fellowship of both NZCPHM and the Australasian Faculty of Public Health Medicine (AFPHM), and 6.5% holding AFPHM Fellowship only.

The majority of respondents (98.9%) hold a current APC. A low proportion of respondents (6.5%) also registered in a second medical specialist scope, most frequently general practice.

### ***Employment***

In total, 50.0% of respondents have some form of employment with a District Health Board (DHB). However, universities employ a higher proportion of respondents (38.6%) than any of the DHB subunits, with Public Health Units (PHUs) employing 30.7% and Planning / funding / strategy employing 13.6%. The proportion of respondents working for the Ministry of Health (MoH) has dropped since 2015, from 13.4% to 9.1%.

A high proportion of Māori respondents are employed by universities (66.7%). The universities also employ a higher proportion of female respondents than male (35.8% female to 28.6% male).

There are 61.3% of respondents who work at one full-time equivalent (FTE) or above and 84.1% work at 0.8FTE or above. 50.5% of respondents report working 40 hours or more per week, across all employment. This is a much higher proportion than was found in the 2015 survey, where 42% of respondents reported working 35 hours or fewer per week.

The median salary for those working at 1FTE falls in the range \$201k – \$225k per annum. Salaries for male respondents tend to be higher than those for female respondents; this may be influenced by the higher proportion of females employed at universities, and the comparatively lower salaries offered by the universities.

In general, respondent satisfaction with variety of work, flexibility of working hours and general job satisfaction is high. University respondents reported less satisfaction with work / life balance. However, 23.5% of respondents reporting feeling burnt out at a level of 7 or above on a scale from 0 – 10.

### ***Retirement intentions***

A high proportion of the PHMS respondents currently employed by both the PHUs and the universities were in the 61 and above age group (25.9% and 32.4% respectively). In total, 47.8% of PHU respondents and 48.1% of university respondents (45.2% of all respondents) expect to retire in the next 10 years. If this proportion is extrapolated to the full workforce, the number of retirements over the next ten years could be expected to fall somewhere between 38 and 78.

### ***Future workforce***

Respondents employed at PHUs and at Planning / funding / strategy units felt that increasing the number of PHMSs employed would definitely be of benefit (44.4% and 45.5% of respondents respectively). This was not felt as strongly by university-based respondents (25.0%).

Information obtained from the supplemental worksite survey indicated that two PHUs have increased their PHMS establishment in the past five years. However, three PHUs indicated that they had had difficulties in filling their PHMS roles, and that the shortage of PHMSs is impacting on their ability to provide a full range of proactive services. Of the four PHU respondents who were accredited training sites at the time of the survey, two indicated that they had seen a decrease in the number of registrar positions available in the past five years.

Five of the six DHB respondents from Planning / funding / strategy and other units indicated that the number of PHMSs employed by their units has increased in the past five years. No difficulties were reported in filling these positions.

University respondents noted that there is no specific FTE establishment set aside for PHMSs in the universities. However, there has been no significant change in the number of PHMSs employed in the past five years (a total headcount of 16 at the two main teaching departments). No difficulties had been experienced in filling vacant roles. Only one of these sites was an accredited training site at the time of the survey; this site noted that the number of registrar places had decreased in recent years.

## SURVEY SAMPLE AND METHOD

The 2019 Public Health Medicine Workforce Survey was sent to 220 out of the 224 vocationally registered specialists on the MCNZ register (regardless of their current registration status or location) in November 2019. No email addresses were available for the remaining four doctors. Registrars were not included in the survey.

Of the 220 survey invitations sent out, four were undeliverable, leaving a total of 216 invitations delivered. The survey remained open for 29 days, with three reminders being sent to boost response rate. A total of 116 responses were received. This is a survey response rate of 53.7%. This is a lower response rate than was achieved for the 2015 PHM workforce survey, when 203 survey requests were sent out, with 154 responses, for a 75.9% response rate.<sup>1</sup>

Survey questions were developed based on the questions used in the 2015 Public Health Medicine Workforce Survey. Additional questions were added to elicit information about second or third employment arrangements.

To ensure questions were relevant, clear, and appropriate to public health medicine the survey was reviewed by three Fellows from a range of workplaces.

The survey largely used a multi-choice question format, with some open-ended questions to provide further insight. Appropriate question logic was applied to reduce the length of the survey as much as possible.

The workforce survey data was supplemented with the results of a second survey (the PHM worksite survey), sent out in December 2019 to 34 public health medicine worksites in New Zealand which employ PHMSs and/or registrars (identified from the NZCPHM database). Nineteen worksites responded, giving a response rate of 56%. These included six responses from DHB: PHUs; two from DHB: Planning / funding / strategy; five from units at a DHB other than PHU or Planning / funding / strategy; and four from university departments. Two responses were received from other organisations. The purpose of this second survey was to obtain further information on workforce size (FTE establishment for PHMSs), how this has changed in the past five years, and the ability of worksites to fill vacant roles. The findings from this survey are reported in the 'PHMS workforce establishment' section of the report.

All percentages reported in the survey are a proportion of the number of respondents who answered that specific question, unless otherwise stated.

## THE SIZE OF THE PHMS WORKFORCE

According to data drawn from the MCNZ register, in November 2019 there were 224 vocationally registered PHMSs in New Zealand, of whom 173 held a current APC.<sup>i</sup>

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<sup>i</sup> Downloaded November 2019

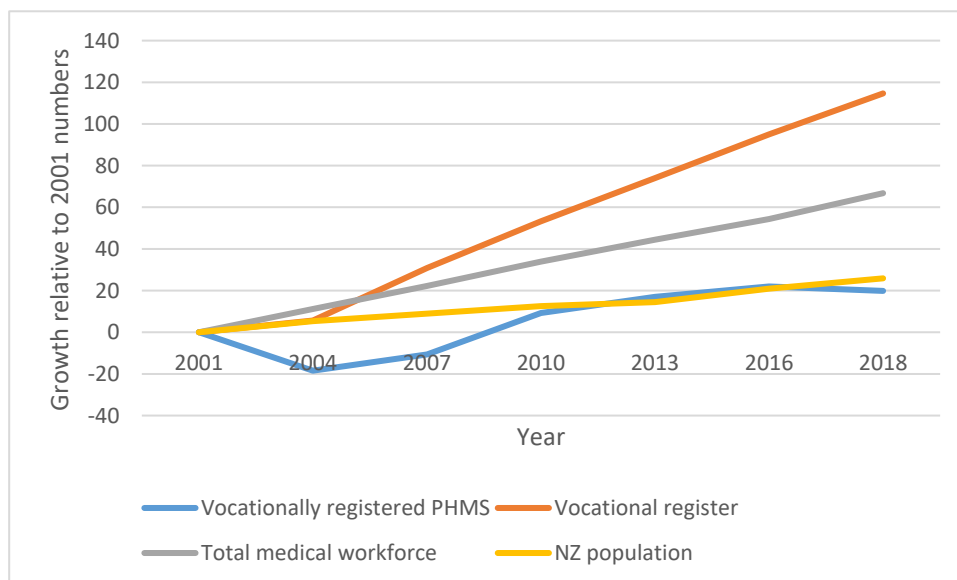
Of the 173 PHMSs who hold a current practising certificate, 154 are current NZCPHM Fellows (active). There are 16 PHMSs who have Fellowship of the Australasian Faculty of Public Health Medicine (AFPHEM) only.<sup>ii</sup> The remaining three doctors are retired but still appear on the register.

Of the 51 PHMSs on the register who did not hold a current practising certificate in November 2019, 17 are current but non-active NZCPHM Fellows (this category normally applies to those working overseas). Thirteen are AFPHEM Fellows only (status unknown). The remaining 21 have retired, resigned, or are working in another scope.

Data published in the annual MCNZ workforce surveys show that the number of vocationally registered PHMSs decreased between 2001 and 2004 (from 141 to 115), before increasing to a peak in 2014 of 178, with a small decline from 2014 to 2018, when the figure was 169.<sup>iii,3</sup>

In contrast, the figures for the medical workforce as a whole, and for the vocationally registered workforce, have increased steadily since 2001, and at a higher rate than population growth since 2007. This growth relative to the 2001 workforce size and compared with population growth is shown in Figure 1 below.

**Figure 1: Medical workforce growth relative to 2001 numbers, compared with population growth**



Data from the same report shows that the growth in the number of public health medicine specialists since 2005 is lower than that in other vocational medical scopes.<sup>4</sup>

<sup>ii</sup> In total in 2017 there were 41 Fellows of AFPHEM in New Zealand, many of whom also hold Fellowship of NZCPHM. (Information drawn from *Human Capital Alliance: Planned and Unplanned Futures for the Public Health Physician Workforce in Australia: A labour market analysis for the Australasian Faculty of Public Health Medicine, 2017*)

<sup>iii</sup> Data provided by the MCNZ and supplemented with information from the *MCNZ New Zealand Medical Workforce Reports, 2001, 2004, 2007, 2010, 2013 and 2014, 2016, 2018*.

**Table 1: Growth in vocational scope numbers**

Medical scopes	2005	2010	2019	2019 relative to 2005	2019 relative to 2010
General practice	2,446	2,701	3,671	50.1%	35.9%
Internal medicine	656	761	1,164	77.4%	53.0%
Anaesthesia	488	577	835	71.1%	44.7%
Psychiatry	425	489	634	49.2%	29.7%
Diagnostic and interventional radiology	266	303	510	91.7%	68.3%
Paediatrics	219	289	412	88.1%	42.6%
Pathology	225	238	319	41.8%	34.0%
Obstetrics and gynaecology	223	234	321	43.9%	37.2%
General surgery	227	235	294	29.5%	25.1%
Orthopaedic surgery	211	237	303	43.6%	27.8%
Emergency medicine	88	135	319	262.5%	136.3%
Public health medicine	130	157	172	32.3%	9.6%
Urgent care	103	119	227	120.4%	90.8%
Ophthalmology	107	124	157	46.7%	26.6%
Otolaryngology head and neck surgery	85	97	118	38.8%	21.6%
Intensive care medicine	44	58	107	143.2%	84.5%
Rural hospital medicine	26	105	120	361.5%	14.3%
Total	6,389	7,310	10,117	58.4%	38.4%

At the current number of PHMSs in the workforce, the ratio of PHMSs per 100 000 population is 3.45.

#### RESPONDENTS NOT CURRENTLY WORKING IN PUBLIC HEALTH MEDICINE

Of the 113 survey responses to the question ‘are you currently working in public health medicine in New Zealand?’, 15 (13.3%) indicated that they are not. The majority of these 15 respondents are retired (60.0%), with a small proportion having changed career (20%).

**Table 2: Respondents not currently working in Public Health Medicine in New Zealand**

	Respondents	
	n	%
I have formally retired	9	60.0%
I have left public health medicine and changed career within medicine	2	13.3%
I have left public health medicine and changed career outside of medicine	1	6.7%
Other reason	3	20.0%
Total	15	100%

Two of the three respondents citing ‘other reasons’ are semi-retired, doing some research work. The other respondent was out of the country but looking for a NZ vacancy.

Of the nine retired respondents, eight are male, with one female. At the time of the survey, three of



these respondents still held a current practising certificate.

The age at which these doctors retired varied widely, with 65 to 69 being the most frequent response.

**Table 3: Age of retirement for retired respondents**

	Respondents	
	n	%
60 years or younger	1	11.1%
60 to 64 years old	3	33.3%
65 to 69 years old	4	44.4%
70 to 74 years old	0	0%
75 to 79 years old	1	11.1%
Total	9	100%

## RESPONDENTS WORKING OVERSEAS IN PUBLIC HEALTH MEDICINE

A total of five respondents (4.4% of the total survey respondents) are currently working overseas. One of these respondents holds a current New Zealand practising certificate.

Four of these respondents (80%) obtained their first medical degree in New Zealand, with one respondent having obtained his first medical degree elsewhere. This respondent, and two of the New Zealand trained respondents, did their postgraduate public health medicine training in New Zealand. The other two New Zealand trained respondents did their postgraduate public health medicine training abroad.

Of the five respondents in this category, three have left New Zealand in the last decade, with the other two having left before this (in one case, a considerable period before this).

The primary reason for leaving New Zealand was interest in international public health (four respondents, 80%), career advancement and work experience (three respondents, 60%) and academic opportunities elsewhere (one respondent, 20%).<sup>iv</sup> No respondents indicated that they were returning to a home country, or that they left because of a lack of job opportunities in NZ.

Respondents were asked whether they are likely to return to New Zealand to work as a PHMS. One of the five indicated that they had no plans to return at this stage. The other four are intending to return, in the next two years (two respondents), three to five years (one respondent) or six to ten years (one respondent).

Respondents were asked whether there are any specific work-related issues in the New Zealand context that would discourage them from returning. Two respondents indicated that there are none. One indicated that there are few opportunities to work in global health in New Zealand, and one indicated that the difference in remuneration between DHBs and MoH jobs was a detractor.

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<sup>iv</sup> Note that respondents could choose multiple options to this question.

## RESPONDENTS CURRENTLY WORKING IN PUBLIC HEALTH MEDICINE IN NZ

Ninety-three survey respondents (82.3%) indicated that they are currently working in public health medicine in New Zealand. Of these respondents, all except one hold a current New Zealand practising certificate.

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### DEMOGRAPHICS

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#### GENDER

Of the survey respondents currently working in public health medicine in New Zealand, 56 (60.2%) were female, with 37 (39.8%) being male.

This is an increase in the proportion of respondents who are female since the 2015 PHMS workforce survey, where the gender breakdown was found to be 54% female, 46% male. This increase in survey respondents is likely to reflect an increase in the female proportion of the workforce: the NZCPHM registrar group has been predominately female for many years, with a female proportion of 83.3% in 2020.

In comparison, MCNZ data shows that the female proportion of the full active medical workforce (including registrars and other scopes) is 45.4%.<sup>4</sup> This figure reduces to 34.2% for specialists only. In the MCNZ data, only Obstetrics and Gynaecology and Paediatrics have higher proportions of female to male doctors (at 64.6% and 59.5% respectively) than public health medicine (given as 57.9%).

[Note that since the survey finding regarding the female proportion is higher than the MCNZ figure of 57.9%, the survey sample is likely to be slightly weighted towards female respondents.]

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#### ETHNICITY

Ethnicity categories provided as options in the survey were drawn from the level two Stats NZ categories.<sup>v</sup> Respondents could choose any number of ethnicities.

In the table below, responses are shown using Stats NZ level one classifications, modified to include a distinction between 'NZ European' and 'All other European'. The Stats NZ means of determining the level one category is used – i.e., if a person has indicated two level two ethnicities which both fall within a single level one classification, they are only counted once for that level one classification.<sup>5,vi</sup>

**Table 4: Ethnicity of respondents working in PHM in NZ**

	Respondents	
	n	%
Māori	6	6.5%
Pacific Peoples	1	1.1%

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<sup>v</sup> Not including the 'nfd' categories.

<sup>vi</sup> Those who indicated 'other' ethnicity were categorised into the level one category as per the stats NZ classification scheme (see note seven above), e.g. 'Australian' was categorised to 'other European', 'Jewish' was categorised to MELAA. There were very few 'other' responses.

Asian	5	5.4%
Middle Eastern / Latin American / African (MELAA)	2	2.2%
European	82	88.2%
(Other European)	(10)	(10.8%)
(NZ European / Pākehā)	(78)	(83.9%)

Note that respondents could indicate more than one ethnicity. Numbers reported include all responses to the level one category, and percentages will total to more than 100%.

Ethnicity proportions for respondents to this survey (6.5% Māori, 1.1% Pacific Peoples, 83.9% NZ European / Pākehā) were not dissimilar to those obtained in the 2015 workforce survey (5.3% Māori, 2.2% Pacific Peoples and 80.9% NZ European). However, these figures are likely to underrepresent both the proportion of Māori and Pacific People in the PHMS workforce, and to overrepresent the proportion of NZ Europeans: the proportions for current NZCPHM Fellows in data held on the College's database shows 9.7% Māori, 3.2% Pacific People and 71.9% New Zealand European / Pākehā.

Of the 93 responses to this question, eight respondents indicated that they had two ethnicities, and one indicated three ethnicities. The table showing multiple ethnicities is shown below (using the NZ European / Other European distinction).

**Table 5: Dual ethnicities for respondents working in PHM in NZ**

	Respondents	
	n	%
Māori	5	5.4%
Māori / NZ European (Pākehā)	1	1.1%
Pacific Peoples / NZ European (Pākehā)	1	1.1%
Asian	5	5.4%
MELAA	1	1.1%
MELAA / Other European / NZ European (Pākehā)	1	1.1%
Other European	4	4.3%
Other European / NZ European (Pākehā)	5	5.4%
NZ European (Pākehā)	70	75.3%
Total	93	100%

Table 6 below shows a comparison of the ethnicity findings of this survey with the MCNZ ethnicity proportions for the medical workforce as a whole and for the specialist component of the medical workforce. In this table, the ethnicity classification categories and method used in the 2018 MCNZ workforce survey report is adopted, so figures are not directly comparable with those in the tables above.<sup>vii</sup>

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<sup>vii</sup> In the MCNZ method of analysis, doctors can report up to three ethnicities. However, in reporting each doctor is assigned a single ethnicity using a simplified version of Statistics New Zealand's prioritisation standard. The priority order is: 1. Māori; 2. Pacific Island (Pasifika); 3. Chinese; 4. Indian; 5. Other non-European; 6. Other

Whilst the survey numbers are small, they do show a higher proportion of Māori PHMSs than in the medical workforce as a whole or in medical specialties as a whole. The NZ European / Pākehā proportion of the workforce in public health medicine is also much higher than those for the medical workforce and the specialist workforce overall.

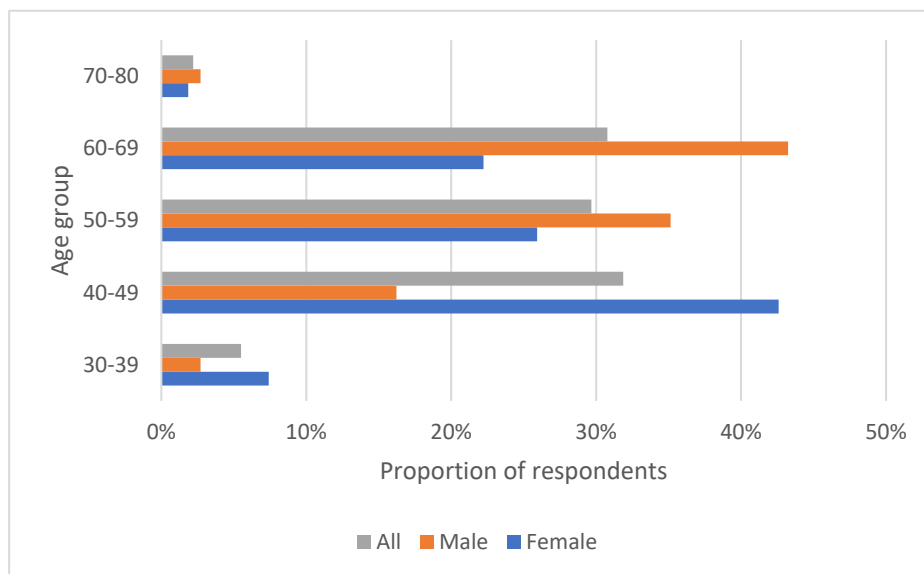
**Table 6: Prioritised ethnicity comparison with MCNZ data**

	MCNZ Survey data		PHMS survey data	
	Total workforce %	Specialists %	n	%
Māori	3.5%	2.1%	6	6.5%
Pasifika	1.8%	1.1%	1	1.1%
Chinese	5.8%	4.6%	0	0%
Indian	5.5%	5.6%	2	2.2%
Other non-European	10.6%	8.2%	5	5.4%
Other European	19.5%	18.7%	9	9.6%
NZ European / Pākehā	51.0%	57.4%	70	75.3%

## AGE

Ninety-one respondents to the survey provided their age. These respondents ranged in age from 31 to 71, with a mean age of 53.1 years. The age distribution is shown in Figure 2 below.

**Figure 2: Respondent age groups by gender**



The mean age for female respondents was 50.3, and for males was 57.2. These means have risen since the 2015 survey (when they were 48 and 55 respectively, with an overall mean of 51 years).

No patterns emerged from the data with regard to ethnicity and age.

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## QUALIFICATIONS

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### FIRST MEDICAL DEGREE

Respondents were asked in which country they gained their first medical degree. Seventy-eight respondents (83.9%) indicated that they obtained their primary medical qualification in New Zealand (this figure is higher than that found in 2015, which was 77%). All of these respondents did their postgraduate public health training in NZ.

A total of 15 respondents (16.1%) did not get their first medical degree in New Zealand. The majority of these (nine respondents, 9.7% of the respondents currently working in public health medicine in New Zealand and 60% of those who did their primary medical degree overseas) came from England / Scotland / other United Kingdom. Australia was the only other country indicated by more than one respondent. Of the 15 respondents who did their primary medical training elsewhere, nine (60.0%) did their postgraduate public health medicine training in NZ, and six (40.0%) did their postgraduate training outside of NZ.

**Table 7: Country of training**

	Country of primary medical degree		PG training in NZ	PG training outside NZ
	n	%		
Australia	3	3.2%	1	2
England / Scotland / other United Kingdom	9	9.7%	7	2
India	1	1.1%	1	0
New Zealand	78	83.9%	78	0
South Africa	1	1.1%	0	1
Sri Lanka	1	1.1%	0	1
Total	93	100%	87	6

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### FELLOWSHIP AND VOCATIONAL REGISTRATION

Ninety-two out of the 93 (98.9%) currently practising PHMSs who responded to the survey in New Zealand hold a current annual practising certificate.

Respondents who have Fellowships of both public health medicine Colleges total 21% with 72% having Fellowship of the NZCPHM only.

**Table 8: PHM Fellowships held**

	College	
	n	%
Australasian Faculty of Public Health Medicine (AFPHM)	6	6.5%
Both NZCPHM and AFPHM	20	21.5%
New Zealand College of Public Health Medicine (NZCPHM)	67	72.0%
Total	93	100%

## Other scopes

Eighty-seven of the 93 (93.5%) current practising PHMSs who responded to this survey are registered only in the scope of public health medicine. Six respondents (6.5%) are registered in an additional scope: three in general practice, two in medical administration and one in occupational health.

None of the currently practising Fellows indicated that they hold three specialist scopes of practice.

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## EMPLOYMENT

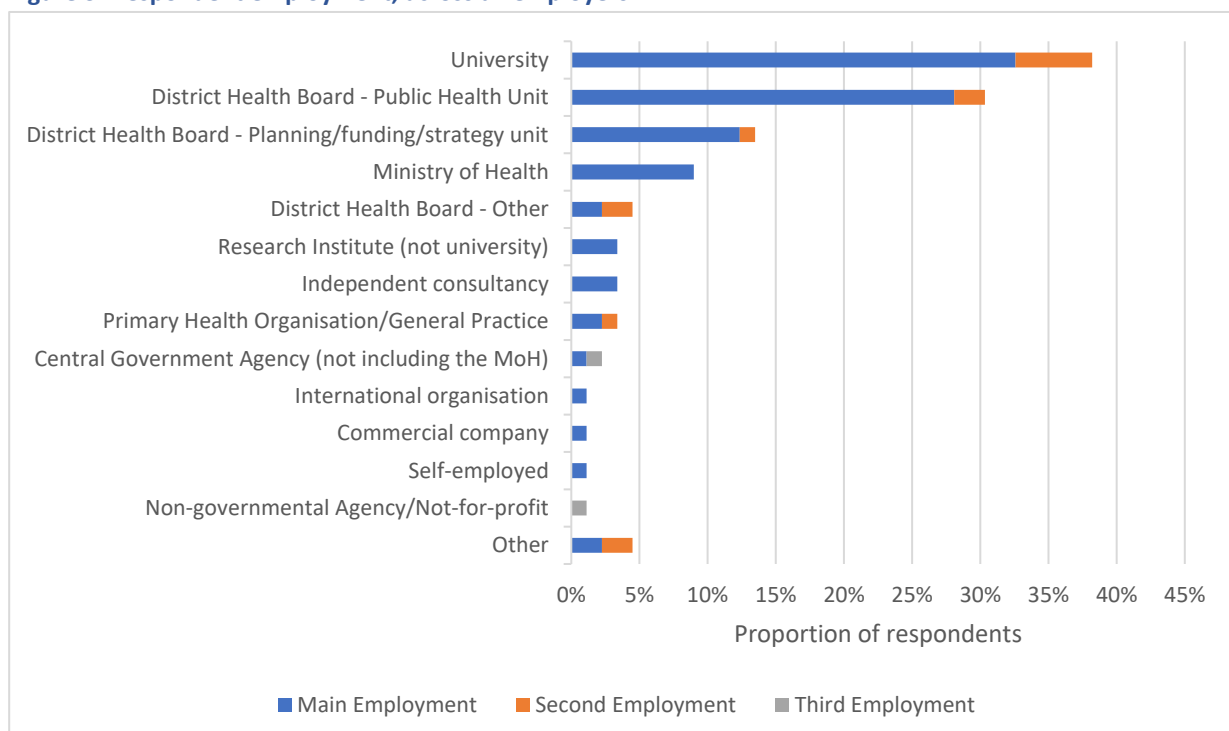
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### OVERALL EMPLOYMENT

Eighty-eight respondents provided detail about their main employer in the survey section asking about employment. Thirteen respondents (14.8%) indicated that they work also for a second employer and two (2.3%) indicated that they work for three employers (in both cases, the third role was not a PHMS role). No respondent indicated that they had four employers.

Taking all employment into account, DHBs are the most common employer of PHMSs (50%, or 44 of 88 respondents have some form of employment with a DHB). However, across all employment, the universities employ a higher proportion of respondents (38.6%) than any of the DHB sub-units, with PHUs employing 30.7% of respondents and Planning / Funding / Strategy Units employing 13.6%.

**Figure 3: Respondent employment, across all employers**



These findings are similar to those of the 2015 PHM Workforce Survey, where the overall proportion of DHB-employed respondents was found to be 48.0%, and the proportion working at universities as

their main employer was found to be 32.3%. The proportion of respondents working at the Ministry of Health has dropped since 2015 from 17 (13.4%) to eight (9.1%).

Whilst the same number of female and male respondents work at DHBs (19 across all roles in each case), this represents a lower proportion of female respondents than males (35.8% versus 54.3%). In contrast, a higher proportion of female respondents are university-employed (35.8% compared to 28.6% of males).

Of the six respondents who indicated a Māori ethnicity, four (66.7%) are employed by a university.

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## FULL TIME EQUIVALENTS AND WORK HOURS

### Full-time equivalents (FTEs) worked

The survey requested information about the FTE worked for each employment held. At the main worksite, 47 out of 88 respondents (53.4%) work at 1FTE, with 69 respondents (78.4%) working at 0.8FTE or above. Female respondents were slightly less likely to work at 0.8FTE or above than male (74.1% and 85.3% respectively).

Eight of the ten respondents who provided details regarding their second employment work less than 0.5FTE at the second employment. For seven of the ten respondents, the sum of the main and second employment is 1FTE.

In total, taking into account all employment positions, 54 respondents (61.3%) work 1FTE or above, with 74 (84.1%) working at 0.8FTE or above.

**Table 9: FTEs worked for main employer and across all roles**

FTE	Employment			
	Main employer		Total all worksites	
	n	%	n	%
<b>0.1</b>	0	-	0	0.0%
<b>0.2</b>	0	-	0	0.0%
<b>0.3</b>	1	1.1%	1	1.1%
<b>0.4</b>	2	2.3%	0	0.0%
<b>0.5</b>	8	9.1%	6	6.8%
<b>0.6</b>	6	6.8%	5	5.7%
<b>0.7</b>	2	2.3%	2	2.3%
<b>0.8</b>	16	18.2%	15	17.0%
<b>0.9</b>	6	6.8%	5	5.7%
<b>1</b>	47	53.4%	52	59.1%
<b>1.1</b>	0	-	1	1.1%
<b>1.2</b>	0	-	1	1.1%
<b>Total</b>	88	100%	88	100%

## Work hours

Respondents were asked to provide an indication of the number of hours that they spend in each role in the average week. It is clear from the responses that FTE does not provide an accurate indication of hours worked, for example:

- of the six people who work 0.6 in the main worksite
  - 2 work 21 – 25 hours per week
  - 3 work 26 – 30 hours per week
  - 1 works 30 – 35 hours per week
- of those working 1FTE in the main worksite
  - 1 works 31 to 35 hours per week
  - 10 work 36 – 40 hours per week
  - 35 work more than 40 hours per week

In total 41 respondents (46.6%) report working more than 40 hours per week in their main worksite.<sup>viii</sup> Nine of the ten respondents working for two employers, and the one respondent who provided details regarding a third employment, also work 40 or more hours per week (some of whom were already working more than 40 hours per week at the main employment). This gives a total of 47 of 93 respondents (50.5%) who work 40 hours per week or more across all employment.

This is a much higher proportion than was found in the 2015 survey, where 42% of respondents reported working 35 hours or fewer per week, 21.5% reported working 36 – 40 hours and 15.4% reported working 41 hours or above.

Eighteen respondents (19.4%) indicated that they worked less than 30 hours per week in public health medicine. This group was largely female (13 out of 18 or 72.2%).

The reasons given for working less than 30 hours per week are shown in the table below. The most common reasons given were caring for children (50.0%) and lifestyle choice (44.4%). No respondents indicated that they were working fewer hours because they were unable to find work.

**Table 10: Reasons for working less than 30 hours per week**

Reason given for working >30 hours	Respondents	
	n	%
Caring for children	9	50.0%
Lifestyle choice	8	44.4%
Spend time working in another medical scope	4	22.2%
Semi-retired	3	16.7%
Spend time working in a non-medical position	2	11.1%
Busy with academic study	1	5.5%
Total	18	100%

Note that respondents could choose more than one response.

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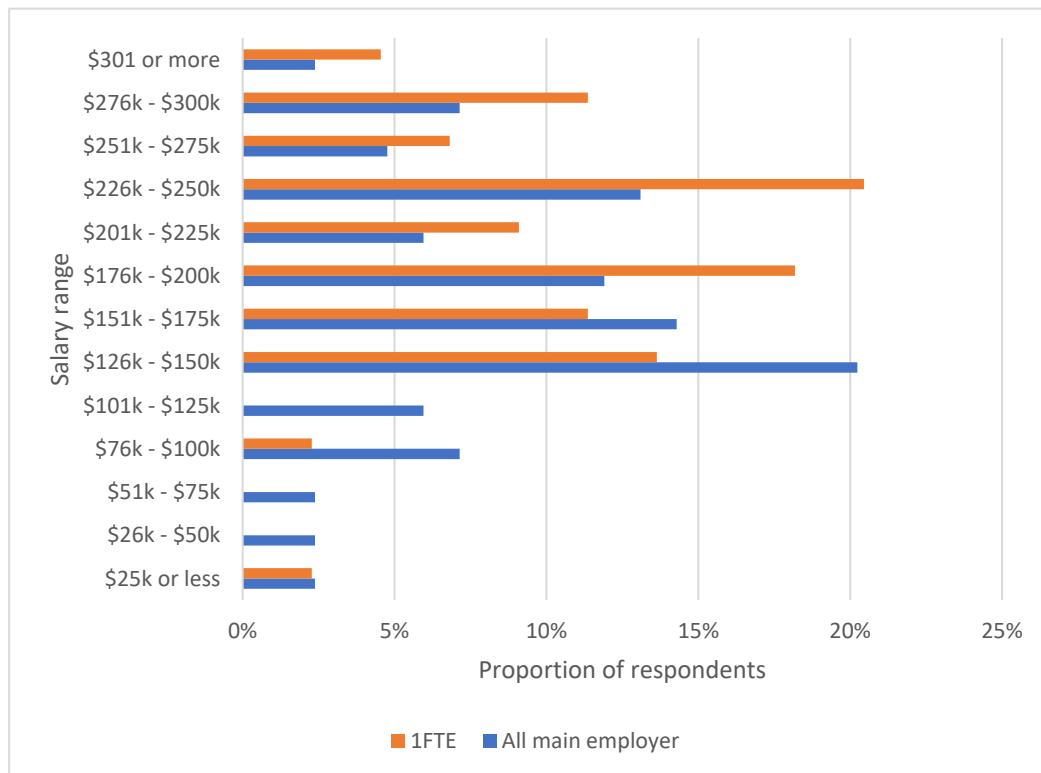
<sup>viii</sup> 'More than 40 hours' was the maximum choice given on the survey – there was no attempt to quantify how much more.



## SALARY AND BENEFITS

Eighty-four respondents provided information about their annual income (before tax) for their main employer. Since survey instructions, unfortunately, were not clear on whether the salary should be reported pro-rata for those working less than 1FTE, these instructions may have been interpreted differently by respondents.<sup>ix</sup> The data below therefore also shows information relevant only to those working full time (1FTE).

**Figure 4: Salary ranges, all main employer and 1FTE, main employer**



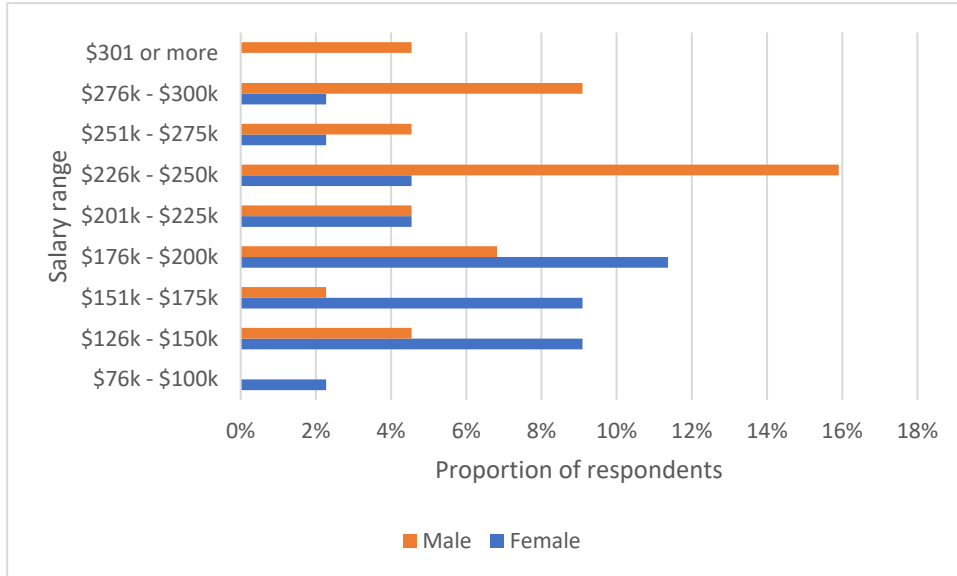
The median salary for all respondents (main employer) is in the range \$151k - \$175k. The median salary for those working at 1 FTE is in the range \$201k – 225k per annum.

Note that the starting salary for medical specialists in 2019 at level one of the Association of Salaried Medical Specialists Multi-Employer Collective Agreement (ASMS MECA) was \$161,306.<sup>6</sup> This would apply to all DHB-employed medical professionals. In comparison, the results of the 2018 General Practice Workforce Survey show that, for general practitioners working 36 hour per week or more, median income was \$125k - \$200k.<sup>7</sup>

<sup>ix</sup> The question was worded 'Which of the following responds to your annual income (before tax) for this role?'

Of the 44 respondents working fulltime (1FTE) at their main worksite, 21 were female and 23 were male. These numbers are small, however, analysis of salary band by gender does show a pattern of higher salaries for male respondents.

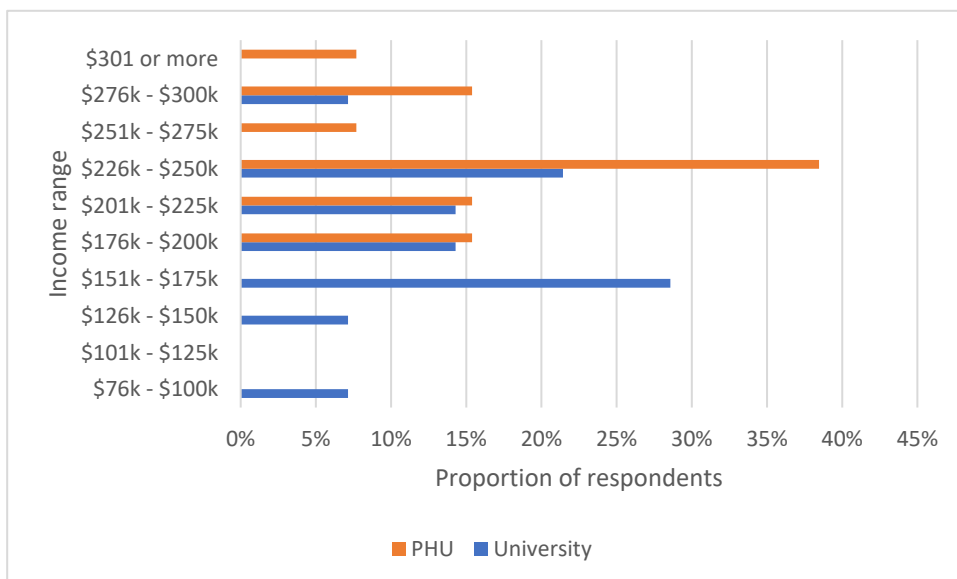
**Figure 5: Salary by gender**



The median for female respondents falls in the range \$176k - \$200k; for male respondents, it falls in the range \$226k - \$250k.

This pattern may be influenced both by respondent age (as a proxy for length of time in the workforce and given that male respondents to the survey were on average older than female respondents), and by employer (given that a higher number of female respondents are employed by the universities). A comparison of University and PHU salaries, for those working 1FTE at their main workplace only, shows that PHU salaries tend to start at a higher level and have a higher median than university salaries. Whilst the median for PHU salaries falls in the range \$226k - \$250k, for universities, the median is in the range \$176k – 200k.

**Figure 6: Salaries at the two main employment sites**



Although there is a wide overlap in ranges, starting salaries are clearly higher for those employed on the ASMS MECA. Not shown above, but unsurprisingly, the MECA, DHB Planning / funding / strategy salaries are similar to those for the PHUs. The Ministry of Health salary range, on the other hand, appears more similar to that of the universities.

### Benefits for non MECA-employed respondents

On the ASMS MECA employees are entitled to six weeks annual leave and 10 days continuing professional development (CPD) leave per year (plus agreed travelling time) and are entitled to reimbursement for CPD expenses up to \$16,000 pa.<sup>x, vii</sup> CPD time and funding can be accrued for up to five years.

Twenty-eight survey respondents who are employed at 1FTE at their main employment indicated that they are not employed on the MECA.

Three of these respondents indicated that their annual leave entitlement was 'less than four weeks'. All three respondents were working for independent consultancies or international organisations.

The majority of the remaining respondents (57.1%) have five weeks of leave available each year (a total of 67.8% at five weeks or more).

**Table 11: Annual leave for 1FTE non-MECA respondents**

	Non-MECA respondents	
	n	%
Less than 4 weeks	3	10.7%
4 weeks	6	21.4%
5 weeks	16	57.1%
6 weeks	2	7.1%
>6 weeks	1	3.6%
Total	28	100.0%

Respondents were asked to provide an indication of the CPD funding available to them annually. For many respondents (32.6%), funding available for this purpose is negotiated on a case-by-case basis. A large group of respondents (23.9%) indicated that CPD costs are a personal expense.

**Table 12: CPD Allowance, non-MECA respondents**

	All non-MECA respondents		University only	
	n	%	n	%
\$10,000 +	3	6.5%	1	4.0%
\$8,001 – 10,000	2	4.3%	2	8.0%
\$6,001 - \$8,000	0	-	0	-
\$4,001 – 6,000	4	8.7%	4	16.0%
\$2,001 – 4,000	6	13.0%	6	24.0%

<sup>x</sup> Leave entitlements and funding is prorated for part-time employees.

\$500 – 2,000	4	8.7%	2	8.0%
Less than \$500	1	2.2%	0	0.0%
Negotiated on a case by case basis	15	32.6%	6	24.0%
None (any CPD costs are a personal expense)	11	23.9%	4	16.0%
Total	46	100%	25	100.0%

Very few non-MECA-employed respondents have a fixed annual CPD leave allowance, with the majority (59.6% of non-MECA respondents, and 76% of the university-based respondents) indicating that this was negotiated on a case-by-case basis.

**Table 13: CPD leave, non-MECA respondents**

	All non-MECA respondents		University only	
	n	%	n	%
5 - 10 days	4	8.5%	2	8.0%
1 - 4 days	1	2.1%	0	0.0%
Not specified/ negotiated on a case by case basis	28	59.6%	19	76.0%
None	14	29.8%	4	16.0%
Total	47	100%	25	100%

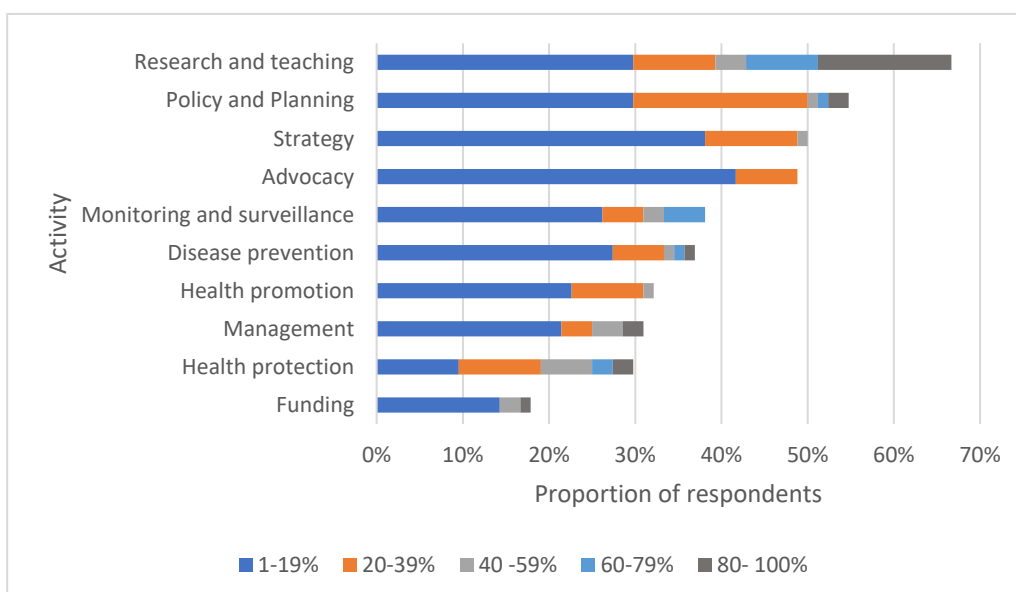
## ACTIVITIES AND FOCUS

### Activities

Survey respondents were provided with a list of common PHM work-related activities and asked to indicate which of these describe what they do in their main employment, and what proportion of their time is spent on each activity.

As some survey respondents indicated, there are overlaps between the activity categories, and time estimates are indicative only. However, the results provide a useful understanding of the range of public health activities commonly practiced by respondents.

**Figure 7: Activities and proportion of time spent on each**



‘Research and teaching’ is the activity engaged in by the highest proportion of the survey respondents. It is also the activity on which the highest number of respondents will spend the majority of their time.<sup>xi</sup> This is a similar finding to that of the 2015 NZCPHM membership survey (where education and research combines to give a total 77.9% of respondents). Responses indicating involvement in both advocacy and in health promotion activities have increased since the 2015 survey, when they were found to be 15.0% and 8.7% of respondents respectively.<sup>2</sup>

Results on this question were compared with results obtained in the 2017 AFPHM membership survey: those findings indicate also that ‘teaching and research’ is the activity most cited by the Australian public health medicine workforce (78.2%), followed by policy and planning (69.7%). Disease prevention was more frequently cited (60.6%) than monitoring and surveillance (55.8%), with health promotion (at 40.6%) and health protection (35.2%) being less common.<sup>3</sup>

Other areas of work cited by respondents which were not included in the question choices were: governance, programme implementation, leadership, equity, university service roles, innovation, information management, and quality.

### Population group focus

The majority of respondents (75.0%) indicated that their work at their main employment does not focus on any one specific population group. For those whose work does have a focus, Māori health and equity was the most frequently cited (14.3% of respondents), followed by Child and Youth (6.0% of respondents).

**Table 14: Population focus**

Work focus	Respondents	
	n	%
Maori health and equity	12	14.3%
Child and youth	5	6.0%
Pacific people health	3	3.6%
Mental health	2	2.4%
Older people	1	1.2%
Food consumers, Rural population, Agricultural workforce	1	1.2%
Pharmaceuticals	1	1.2%
None indicated	63	75.0%
Total respondents	84	100%

Two respondents with a second employment indicated that their second employment role focused on a specific population group – in both cases, this area of focus was the same as their main employment.

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<sup>xi</sup>Some respondents pointed out that research and teaching activities should be separated for the next workforce survey.

## VOCATIONAL REGISTRATION REQUIREMENTS

Vocational registration is a position requirement for 61.4% of respondents. Whilst vocational registration was not required for 30.7%, it was an advantage, and 9.1% indicated that vocational registration was not required.

When sorted by employer, almost all of the respondents employed at a Public Health Unit indicated that vocational registration was a requirement of their positions. The same was true for those based at DHB: Planning / funding / strategy units. Of the university respondents, 34.5% indicated that vocational registration was a requirement of their positions, 51.7% indicated that vocational registration is not required but is an advantage, and 13.8% indicated that vocational registration is not necessary for their role.

**Table 15: Requirement for vocational registration**

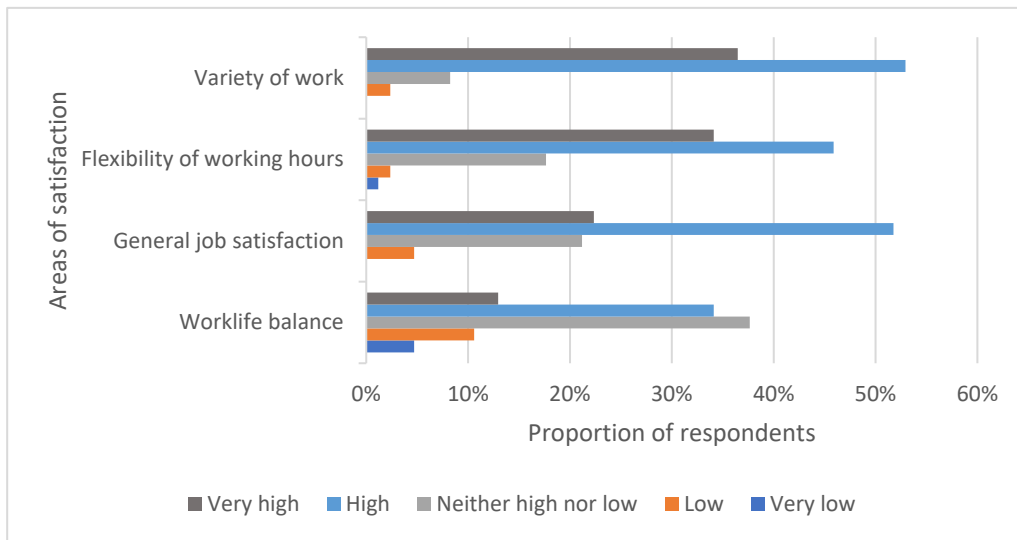
	Yes		Advantage only		No	
	n	%	n	%	n	%
University (n=29)	10	34.5%	15	51.7%	4	13.8%
District Health Board: Public Health Unit (n=25)	24	96.0%	1	4.0%	-	-
District Health Board: Planning / funding / strategy unit (n=11)	10	90.9%	1	9.1%	-	-
Ministry of Health (n=8)	6	75.0%	1	12.5%	1	12.5%
Independent consultancy (n=3)	1	33.3%	2	66.7%	-	-
Research institute other than a university (n=3)	1	33.3%	1	33.3%	1	33.3%
District Health Board: Other (n=2)	1	50.0%	1	50.0%	-	-
Primary health organisation / general practice (n=2)	1	50.0%	-	-	1	50.0%
Central government agency (not including Ministry of Health) (n=1)	-	-	1	100%	-	-
Commercial company (n=1)	-	-	1	100%	-	-
Institute for Innovation and Improvement (n=1)	-	-	1	100%	-	-
International organisation (n=1)	-	-	1	100%	-	-
Self-employed (n=1)	-	-	-	-	1	100%
<b>Total (n=88)</b>	<b>54</b>	<b>61.4%</b>	<b>27</b>	<b>30.7%</b>	<b>8</b>	<b>9.1%</b>

## SATISFACTION

Respondents were asked to rate their level of satisfaction with their role on four dimensions: flexibility of work hours, variety of work, work/life balance and general job satisfaction.

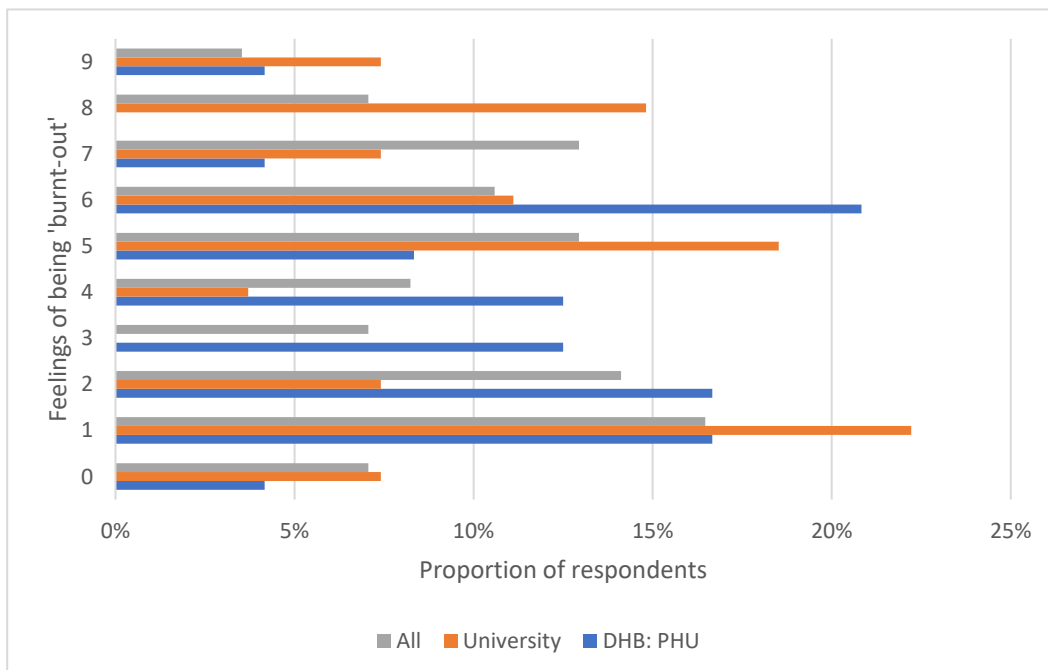
Results indicate that satisfaction is high in all areas, with a variety of work rated highest (80.0% of respondents scored satisfaction on this dimension as high or very high). The lowest satisfaction levels were recorded for work / life balance (47.0% reporting high or very high satisfaction). This was largely due to lower ratings given by staff employed by universities: only 29.6% of university respondents reported high or very high satisfaction with their work/life balance, in comparison with 58.3% of respondents from PHUs.

**Figure 8: Satisfaction with PHMS role**



Respondents were asked to rate the extent to which they felt burnt out, on a scale where 0 = 'not at all burnt out' and 10 = 'extremely burnt out'. No respondents selected a '10'; however, a not insignificant proportion of respondents (23.5%) indicated 7 or above. This proportion was similar (22.2%) when only those working full time (1FTE) were included and was slightly higher for those working in universities (29.6% of all respondents, and 28.6% of those working 1FTE). However, a high proportion of university respondents also indicated low levels of burnout (3 or below; 37.0% for all respondents, and 35.7% for those working 1FTE only).

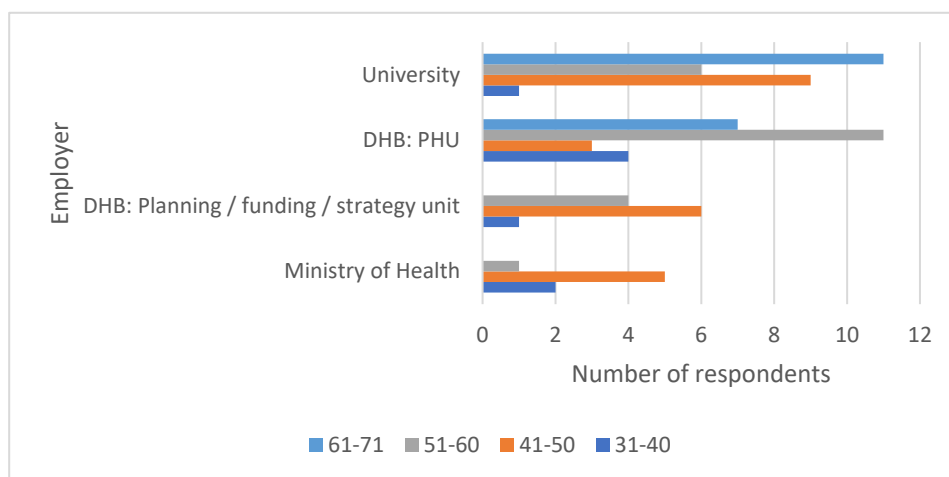
**Figure 9: Extent of feeling 'burnt out'**



## RETIREMENT INTENTIONS

Looking at the worksites (employer) at which eight or more PHMSs are employed, the age distribution of respondents (using number of respondents, rather than proportions) is shown below.

**Figure 10: Age distribution of respondents by employer**



It is evident from this graph that both PHUs and universities have a high proportion of their current PHMS staff in the 61 – 71 age group. Seven of the 25 people currently working at PHUs (28.0%) fall into this bracket; for universities, the figure is 11 of 27 respondents (40.7%). This will have implications for the future workforce.

The retirement intentions of respondents to the survey are shown in the table below.

**Table 16: Retirement intentions**

	DHB: PHU		University		Total	
	n	%	n	%	n	%
1 – 5 years from now	1	4.3%	8	29.6%	14	16.7%
6 – 10 years from now	10	43.5%	5	18.5%	24	28.6%
11 – 15 years from now	3	13.0%	5	18.5%	11	13.1%
16 – 20 years from now	4	17.4%	5	18.5%	18	21.4%
More than 20 years from now	3	13.0%	3	11.1%	12	14.3%
Not sure yet	2	8.7%	1	3.7%	5	6.0%
Total	23	100.0%	27	100.0%	84	100.0%

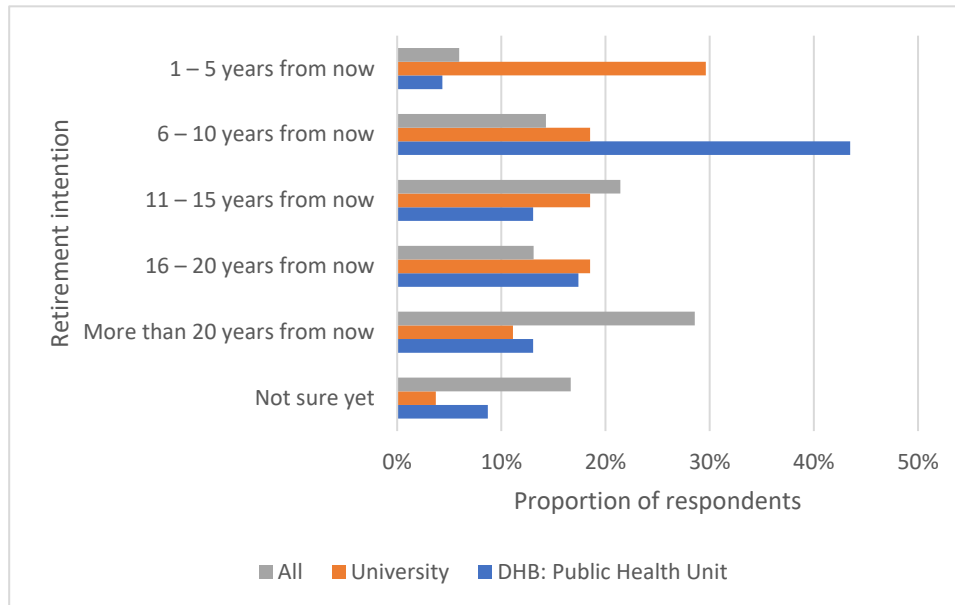
Of the PHU respondents, 47.8% are expected to retire in the next 10 years. Similarly, 48.1% of university respondents are expected to retire in the next 10 years. This is a total for survey respondents of 38 people (45.2% of the sample). This is an increase from the 2015 survey, when 29.1% indicated an intention to retire in the next 10 years.

Extrapolating this proportion to the full workforce of 173 PHMSs with a current practising certificate, it is possible that that the number of retirements from the current workforce in the next ten years could be as high as 78. Assuming that the number retiring will fall somewhere in the range between the 38 respondents indicating this intention in the survey and the extrapolated figure of 78, there will need to be between four and eight new PHMSs per year in New Zealand, to keep the overall number constant



(not projecting growth). International Medical Graduates entries to PHM in New Zealand are very low (in the region of one or two per year). This means that the number of registrars successfully completing training each year should be between three and seven. The current five-year average of new Fellowships granted by NZCPHM is 3.8.

**Figure 11: Retirement intentions**

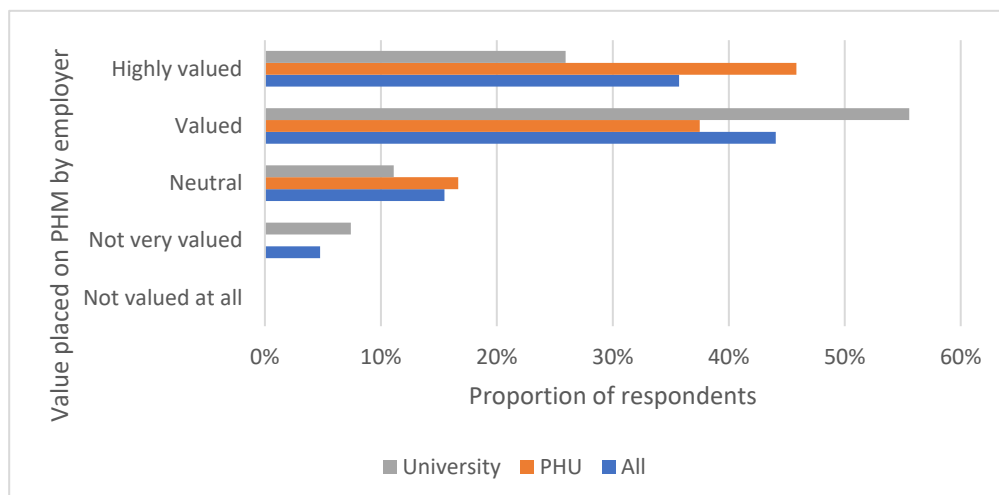


Of the 14 people planning on retiring in the next five years, three have already reduced their hours in anticipation and a further five are planning to reduce their hours. Nine of those intending to retire six to ten years from now, are planning to reduce their hours before retirement, three would plan on doing this five years before retirement and five, two to three years before retirement.

**VALUE PLACED ON PUBLIC HEALTH MEDICINE**

Respondents were asked how much value is placed on public health medicine by their employer. A strong majority indicated that public health medicine is highly valued.

**Figure 12: Perceptions of value placed on PHM by employer**



Almost all of the comments received from PHU respondents referred to the fact that although they were valued by their unit, they were not valued at DHB level. An additional comment received was

- At the organisational level: Valued in terms of role scope, but not valued in terms of getting us to work at the highest end of our role. We frequently act as substitutes in roles that could be filled by junior doctors with oversight. At the national level: Medical Officers of Health (MOsH) are undervalued for the expertise they can provide on the wider system. Concerned that the MOH role is becoming narrower and we are not collectively advocating well for its importance.

A few comments from university-employed respondents similarly indicated that although they are valued within their departments, they are less valued by the organisation. One comment received referred to the different pay scales of medical and other academics:

- Valued in terms of relatively higher clinical pay scales. But colleagues cannot understand how this pay is justifiable.

Other comments included that:

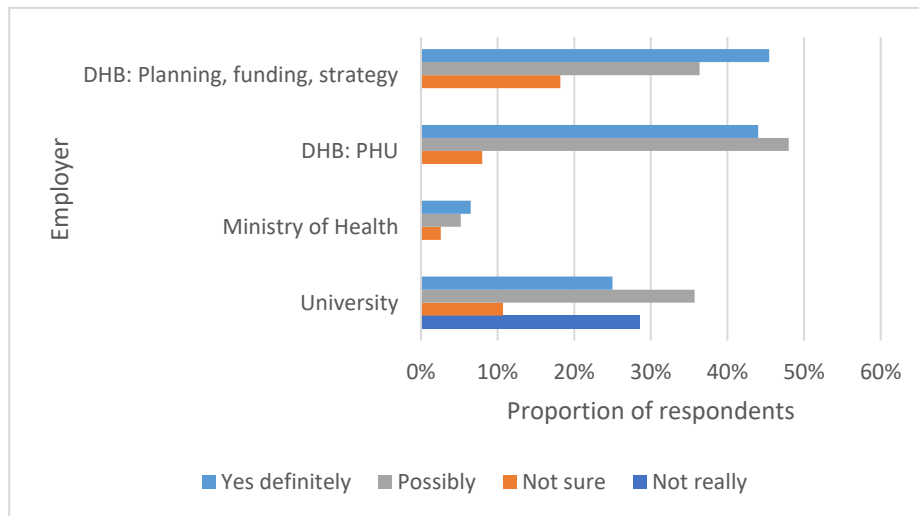
- I use my expertise in PHM all the time in the work I do.
- More valued now than previously.
- Public health physicians occupy very senior and trusted roles in the organization.

## PUBLIC HEALTH MEDICINE WORKFORCE

### NEED FOR ADDITIONAL PHMS WORKFORCE

When asked whether their worksite would benefit from additional PHMSs, 36.0% of respondents indicated that their worksite would definitely benefit and a further 38.4% indicated that they felt this would possibly be beneficial. These proportions were higher for DHB respondents: 45.5% of the DHB Planning / funding / strategy respondents and 44.0% of the PHU respondents felt that their worksite would definitely benefit from more PHMSs, with a further 36.4% and 48.0% respectively indicating that it would 'possibly' benefit.

**Figure 13: Perceived need for additional PHMS workforce**



Constraints raised, apart from funding, were as follows:

- Difficulty recruiting.
- Funding is main constraint but the lack of any benchmarking regarding numbers of PHMSs per population is an issue (especially for regulatory roles like MOH). This means that there is inconsistency in staffing and on call rosters across the country.
- Lack of appreciation of the added value that PHMSs offer.
- Lack of DHB executive desire to have Director of Public Health involved in leadership and strategy/funding teams.
- Movement between MOsH and non-MOsH roles has meant no reduction in FTE but a higher on-call frequency for the remaining MOsH.
- Lack of recognition of value.
- There is a cap on recruiting which is about number of positions and productivity not just funding.
- Fixed team structure and DHB FTE restrictions.

For university-employed respondents, 25.0% indicated that more PHMSs would definitely be valuable, with 35.7% indicating 'possibly'. 10.7% were not sure, and a fairly high 28.6% felt that more PHMSs were not really needed. Constraints apart from funding raised by this group were:

- Availability of PHMSs with capacity for additional roles
- Relatively low remuneration compared with MECA
- Need more Māori
- They would need to have received special stream training in epidemiology as that expertise is decidedly poor among general specialists in public health medicine.
- Would be beneficial in higher university leadership levels, not just at a dept level. I don't think the population thinking that we bring is understood or valued by many and I see some pretty poor decision-making due to a lack of understanding process, complexity, and wider impacts of decisions.

## PHMS WORKFORCE ESTABLISHMENT

Information for this section is drawn from the 2019 PHM Worksite Survey (described in Method above).

### Public health units

The Worksite Survey received six responses from PHUs regarding their PHMS establishment. Two of the larger PHUs are not included in this sample. In total, 21 headcount PHMSs are employed in the responding PHUs. Two of those responding had an establishment of 1.5FTE or less, three have an establishment of 3 - 3.5FTE, and one is much larger with an FTE establishment of 8.5 - 9.00FTE.

In total, for the responding PHUs, employed FTEs differed from FTE establishment by negative 1.3 - 1.8FTE (i.e. employment was not at capacity).

Four of the PHU respondents indicated that there had been no changes in their PHU establishment in the past five years. Two PHUs have increased their establishment in this time.

Respondents were asked whether there were any PHMS vacancies in their departments which they have been unable to fill, or had difficulties filling in the past five years. Whilst three respondents indicated that they did not, the other three indicated that they had had difficulties. In one case, international recruitment has been necessary for two roles, one unit went a period of a year with 1FTE short, and one is on a third round of recruitment for a PHMS and is finding few suitable candidates applying.

Two of the six respondents indicated that their current PHMS establishment is about right, whilst the other four felt that more PHMSs would be useful. These four respondents noted that the shortage of PHMSs is impacting primarily on ability to provide a full range of proactive services. Main constraints to additional PHMS employment are funding, and the ability to successfully recruit. One respondent raised a concern that the current registrar pipeline does not seem to be working.

Four of the PHU respondents indicated that they are an accredited registrar training site. Two of these respondents indicated that there has been a decrease in the number of places available for registrars in the past five years.

At the time of the survey, two of the PHU respondents had intern postgraduate year two (PGY2) trainees. One of these respondents had previously also had a PGY2 trainee, and spoke highly of the experience:

- Highly valued in our service. When we have a registrar as well (we also have nurses) this provides an excellent skill mix. From a training perspective both training grades benefit.

The other four PHUs all indicated that they were considering PGY2 employment.

### Universities

There were four respondents from university departments, two of whom are based in key teaching departments, and two based in smaller units.

There is no specific FTE establishment set aside for PHMSs in the universities; however, in total at the two large teaching departments, 14.4FTE PHMSs are employed (headcount 16). Both of the larger departments and one of the smaller units indicated that there has been no change in the number of PHMS employed over the past five years. One unit indicated that additional PHMSs had been employed. No respondents indicated that they had experienced difficulties in filling PHMS roles.

Both of the teaching departments indicated that the number of PHMSs employed was about right, whilst both of the smaller units indicated that they could use more: apart from funding, availability of PHMSs with capacity for additional work was a constraint to this.

Only one of the sites is currently accredited as a registrar training site: that site indicated that the number of places for registrars has decreased in recent years. None of the university respondents are employing PGY2s.

### **DHB Planning and Funding and other**

There were six DHB respondents from units other than a PHU (two from Planning / Funding / Strategy Units, the other five from a range of different units). In total in these units 16 headcount PHMSs are employed, against an FTE establishment of 14.

In five cases, respondents indicated that the number of PHMSs has increased in the past five years. In two cases, the employment of a PHMS in the unit is a recent development; in two cases, the PHMS establishment grew by 2FTE; and in one case a new unit opened, employing three PHMSs who were previously employed elsewhere in the DHB.

No respondents indicated that they had difficulties filling a PHMS role.

Four of the respondents felt that the PHMS establishment is about the right size currently, with two indicating that additional PHMSs would be useful. Constraints to this, apart from funding were:

- I don't believe the role of a PHMS in a Planning and Funding Unit is well understood or valued for the specialist skills that are available for a PHMS.
- Recruiting Maori/Pacific PHMS is an issue, and also people who can tolerate the messiness of the DHB context is not always easy.

Two of the units are currently accredited registrar training sites: in one case the number of registrar places has increased in the past five years (from no registrars previously), and in one case the number of registrar places has decreased in the past five years (down from two places previously).

None of these units are employing PGY2 trainees.

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### **CHANGES IN THE PHMS ROLE**

Respondents to the worksite survey were asked to provide their thoughts on how the PHMS role is changing. Their comments are provided in full below:

- Hopefully being useful in a wider range of work settings than currently. Likely a growth in consultancy and freelance work. Hopefully greater international mobility.
- Hopefully there will be increasing number and diversity of roles for PHMSs but only time will tell.
- More ability to demonstrate public health leadership - "Mobilising others to make progress on public health challenges" (Public Health Leadership Programme); and "Leadership: Ensure direction, Generate energy, Getting focus and commitment". Greater understanding about the application of the Tiriti and ways to eliminate health inequities and institutional racism.
- There is likely to be both a resurgence in CDC outbreaks and thus the need for PHMSs to be competent and capable in health protection work at the same time as needing to be strategic and work on the determinants of health, engaging with key partners in local government, transport planning and urban design. In addition to technical knowledge, excellence in public health communication, the ability to bring people with you and leadership skills will be essential.
- There may be changes depending on the Health & Disability Sector review for PHUs and staffing. Probably a need for generalists, and those who can engage effectively within DHBs (when PHU planning is embedded in DHB plans), and externally with partners.
- Need to acquire basic skills in data analytics and be digitally literate.
- I think there will be a greater drive to have more robust work on equity in a range of areas in the healthcare system - at the moment I think PHMSs are well equipped, but the other medical colleges are quickly catching up, we soon won't be the 'experts' in this field. I think PHMSs need to be open to working in healthcare settings such as hospitals and primary care, rather than setting ourselves aside from these places. PHMSs need to be doing research on what works to improve equitable outcomes in these settings, and then leading the implementation of great system changes in healthcare.
- Increasing potential to add value as the focus on equity increases across the system. Increasing complexity means the value of the system view of PHMSs is particularly valuable. There is increased recognition of the value of PHMSs in Planning and Funding and more demands on the current teams.
- More varied skills required, greater use of data and digital tools, leadership across the sector.
- There is a big focus in the training and conferences around the reasons for inequalities but not the solutions. Sometimes I come away feeling like I have heard it all before but still have no answers.
- Move to a greater focus on solutions for reducing health inequalities (esp. as more come to light).

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- <sup>5</sup> Stats NZ Ethnicity information and classification codes: <http://datainfolplus.stats.govt.nz/Item/nz.govt.stats/7079024d-6231-4fc4-824f-dd8515d33141>; [http://archive.stats.govt.nz/tools\\_and\\_services/ClassificationCodeFinder/ClassificationCodeHierarchy.aspx?classification=4270](http://archive.stats.govt.nz/tools_and_services/ClassificationCodeFinder/ClassificationCodeHierarchy.aspx?classification=4270)
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- <sup>7</sup> The Royal New Zealand College of General Practitioners. 2018 general practice workforce survey, Part 1. Wellington: RNZCGP, 2018. (<https://www.rnzcgp.org.nz/gpdocs/New-website/Publications/GP-Workforce/WorkforceSurvey2018Report1-revised-July-20194web.pdf>)