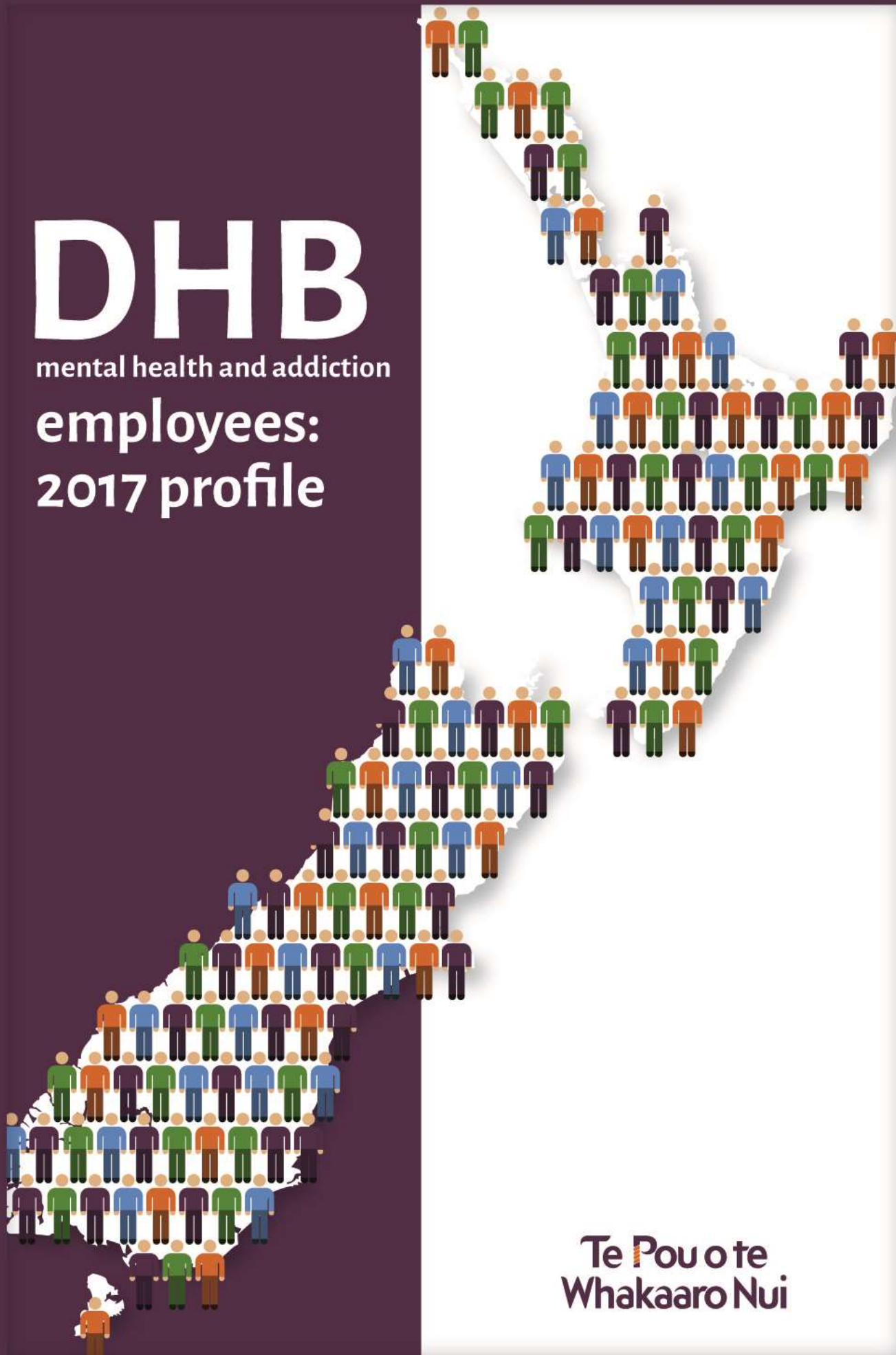


# DHB

mental health and addiction

employees:  
2017 profile



Te Pou o te  
Whakaaro Nui

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# Acknowledgements

This report is the second in the series of DHB mental health and addiction employee profile reports published by Te Pou o te Whakaaro Nui. We thank and acknowledge Fazleen Rahiman, Dale Shaw and Amanda Newton from the Health Workforce Information Programme team at TAS (Technical Advisory Services) for providing the data and analyses, and for peer review.

This report has been written by Te Pou o te Whakaaro Nui (Te Pou). The author of the report is Joanne Richdale (PhD). Input into the report was also provided by Shona Clarke (PGDipArts (Psychology)) and Angela Jury (PhD).

# Abbreviations

ANZSCO	Australia and New Zealand Standard Classification of Occupations
DHB	District health board
FTE	Full-time equivalent positions
HWIP	Health Workforce Information Programme
MHA	DHB mental health and addiction employees
PRIMHD	Programme for the Integration of Mental Health Data

# Executive summary

This is the second report in the series of annual publications describing district health board (DHB) mental health and addiction employee demographic and service profiles. The purpose of this report is to summarise routinely collected Health Workforce Information Programme (HWIP) data about DHB mental health and addiction employees to inform workforce planning and development activities. Specific objectives include describing, as at 30 June 2017:

- the number of people employed and full-time equivalent positions, by occupation groups
- employees profile
  - by age, gender and ethnicity
  - length of service
  - FTE turnover.

The information presented in this report has been provided to Te Pou o te Whakaaro Nui (Te Pou) by the Health Workforce Information Programme (HWIP), at TAS (Technical Advisory Services). It describes aggregated socio-demographic and service information for all people employed in the following groups.

- Those employees who are coded in a mental health and addiction primary area of work (PAOW).
- Those who have another or no PAOW code and who have mental health and addiction job titles or classifications, such as registered nurse (mental health), psychiatrist, psychologist.

The findings are based on information about 8,405 DHB mental health and addiction employees working in 7,555 full-time equivalent (FTE) positions across all 20 DHBs. Compared to all DHB employees, DHB mental health and addiction employees:

- tended to be older on average (48 years compared to 46)
- were more likely to be aged over 50 years (51 per cent compared to 43 per cent)
- were less likely to be female (70 per cent compared to 79 per cent)
- **were more likely to identify as Māori or in a Pasifika ethnic group** (9 and 6 per cent respectively, compared to 7 and 4 per cent)
- have on average been employed for slightly longer (8.9 compared to 8.5 years)
- have slightly higher FTE turnover (11.9 per cent compared to 10.7 per cent).

Figure 1 summarises the demographic and service profile for all DHB mental health and addiction employees and for each of the occupation groups described in this report.

## DHB mental health and addiction employee profile at a glance

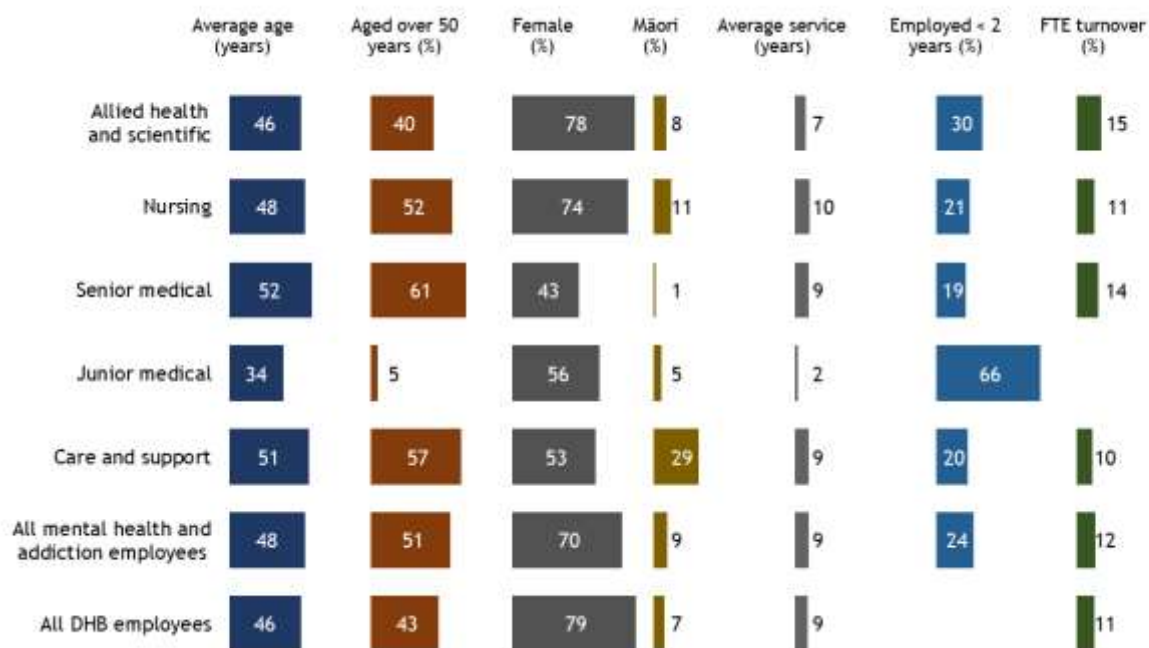


Figure 1. Summary of DHB mental health and addiction employee profile by occupation groups.

The 2017 dataset includes over 800 more DHB mental health and addiction employees than identified in 2016 using the same selection criteria. The expansion of the dataset is due to improved coding giving better access to DHB mental health and addiction employee records. Therefore limited comparisons were made to the 2016 profile report (Te Pou o te Whakaaro Nui, 2017).

Overall, the information provided in this report continues to support the previous finding (Te Pou o te Whakaaro Nui, 2017) that workforce planning and development activities are needed to ensure continuity of DHB mental health and addiction workforce supply, including:

- being prepared to address impending attrition in the workforce due to ageing
- finding ways to capitalise on the workforce's long service and experience to support the development of new entrants
- growing the workforce capabilities for working with older adults to meet anticipated growth in population
- continuing to build on the momentum of workforce development programmes to bring Māori and Pasifika representation into line with the ethnicity of consumers across the range of occupation groups.

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# Introduction

This is the second report in the series of annual publications describing district health board (DHB) mental health and addiction employees and their demographic and service profiles.

The purpose of this report is to summarise routinely collected Health Workforce Information Programme (HWIP) data about DHB mental health and addiction employees to inform workforce planning and development activities. Specific objectives include describing, as at 30 June 2017:

- the number of people employed and full-time equivalent positions, by occupation groups
- employees profile
  - by age, gender and ethnicity
  - length of service
  - FTE turnover.

This report is based on information provided to Te Pou by HWIP. The HWIP team collects and collates **DHB employed workforce information submitted from all 20 DHBs' human resources and payroll systems**. They report quarterly on aggregated information for all DHB employees; see <https://tas.health.nz/strategic-workforce-services/health-workforce-information-programme-hwip/>. Currently there is no similar collection of information from non-government organisations delivering mental health and addiction services.

The information is presented in a variety of ways for use in workforce planning, including:

- national and regional averages<sup>1</sup>
- comparisons with all DHB employees and by occupation group
- averages, by DHB-size based on the groupings described in Appendix B.

The following sections describe the methods used to select and analyse the HWIP data, results overall and by service delivery occupation groups, and the implications of this information for workforce planning and development are described in the discussion.

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<sup>1</sup> For the purposes of this report, the average refers to the mean, which is the sum of all valid values divided by the number of employees with valid values.

## Method

This report is based on HWIP data collected for the quarter ended 30 June 2017. HWIP has provided Te Pou with aggregated information and analyses about DHB employees in mental health and addiction roles. The data was extracted from the HWIP dataset based on the following criteria.

- Employees whose reported primary area of work (PAOW) is associated with mental health and addiction,<sup>2</sup> or
- Employees with a job title suggesting mental health or addiction involvement, eg mental health clinician, alcohol and drug practitioner, or
- Employees not included in the previous two categories who are reported within the following Australia and New Zealand Standard Classification of Occupations (ANZSCO) classifications:
  - clinical psychologist or psychotherapist (ANZSCO codes 272311, 272314, 272399)
  - psychiatrist (ANZSCO code 253411)
  - registered nurse (mental health), (ANZSCO code 254422)
  - drug and alcohol counsellor (ANZSCO code 272112).

The extracted data includes only employed people meeting the criteria above and who have contracted hours greater than zero. It excludes all people on long-term leave, leave without pay and parental leave, casual staff and contractors.

HWIP aggregated and analysed the data according to their current practice and specifications provided by Te Pou for DHB-size groups (see Appendix B) and length of service groups. Only employee records with valid data were included in analyses.

Workforce ethnicity has been calculated taking the number of people who identify in an ethnic group as a proportion of all people with valid ethnicity information supplied. Employees ethnicity is prioritised according to the Ministry of Health ethnicity data protocols (Ministry of Health, 2004). The use of prioritised ethnicity will tend to under-report individuals in non-Māori ethnic groups (eg Pasifika and Asian peoples) if they also identified as Māori.

FTE turnover is calculated from the sum of FTE positions terminated during the year ended 30 June 2017, divided by the average FTE employed during that period. The calculation excludes staff on fixed term contracts, those with zero contracted hours, non-voluntary resignations for example redundancies and deaths, and all junior medical staff.

Results are reported in two sections. The first describes the sociodemographic profile, length of service and FTE turnover for all DHB mental health and addiction employees and makes comparisons with all DHB employees (approximately 70,000 people). The second section describes the profile of DHB

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<sup>2</sup> Mental health and addiction PAOW definition, codes and descriptions are provided in Appendix C.

mental health and addiction employees in the following service delivery occupation groups:

- allied health and scientific (the amalgamation of allied health and technical and scientific groups)
- nursing
- senior medical
- junior medical
- care and support, with a subsection on alcohol and drug counsellors.

Analysis of 781 people in the corporate and other occupation group has not been included in this report. The specific roles in each of these occupation groups are described in the respective sections of this report and in Table 7 of Appendix A.

In each section, comparisons are made with relevant information about all DHB employees. Comparisons are not made with the previously reported HWIP dataset from 2016, as there has been a large increase in the number of employees identified following improvements in PAOW coding.

The implications of this information to workforce planning and development is described in the discussion and concluding comments.

Appendices provide more detailed information about roles and FTEs employed; DHB-size groups; PAOW codes; and summary tables of results.

## DHB employee profile

The selection criteria identified 8,405 people employed in 7,555 FTE positions as DHB mental health and addiction employees, as at 30 June 2017. These included:

- employees working in 7,190 FTE positions, who had a mental health and addiction PAOW code
- employees working in 365 FTE positions, who had mental health and addiction involvement in their job title or a relevant ANZSCO code, and a non-mental health and addiction PAOW code.

This section describes the socio-demographic profile, length of service and FTE turnover for those 8,405 DHB mental health and addiction employees. The subsequent section describes the same information for employees by occupation groups.

Table 1 describes the total people and FTEs employed, as at 30 June 2017, in each HWIP occupation group.

Table 1. *Mental health and addiction employees by occupation groups, FTEs employed and number of people*

Occupation group	FTEs employed	Total people	Proportion of people employed (%)
Allied health and scientific	1,404.4	1,669	20%
Nursing	3,454.2	3,776	45%
Senior medical	509.5	590	7%
Junior medical	232.4	240	3%
Care and support	1,251.1	1,349	16%
Corporate and other*	703.3	781	9%
Total	7,554.9	8,405	100%

\* Demographic information for employees in the “Corporate and other” group is not provided elsewhere in this report.

In the following subsections, DHB mental health and addiction employee information is presented nationally, regionally and by DHB-size groups. Where appropriate, comparisons are made with information for all DHB employees (All DHB), including DHB mental health and addiction employees (MHA) and those in all other roles.

## Age

The average age of DHB mental health and addiction employees was 48.3 years, as at 30 June 2017. Half (51 per cent) of employees were aged over 50 years, with 36 per cent aged over 55, and 20 per cent aged over 60 years; see Figure 2.

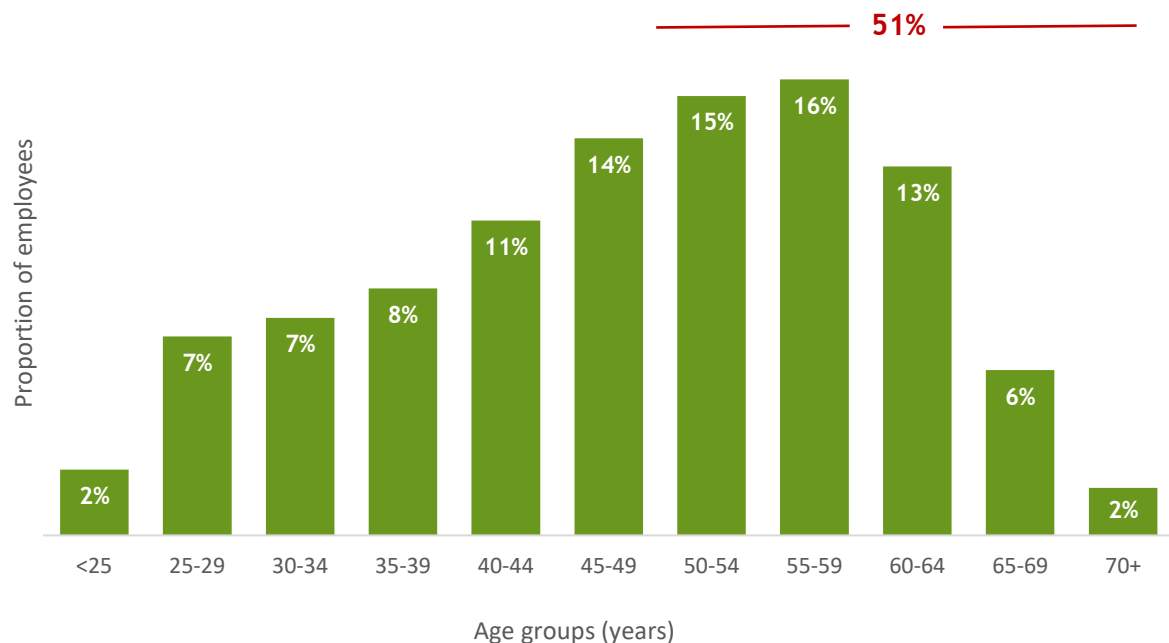


Figure 2. DHB mental health and addiction employees distributed across 5-year age groups.

The DHB mental health and addiction employee workforce tended to be older than all DHB employees (average age 45.7 years), of whom 43 per cent are aged over 50; see Figure 3.

### Half of MHA employees are aged over 50 years

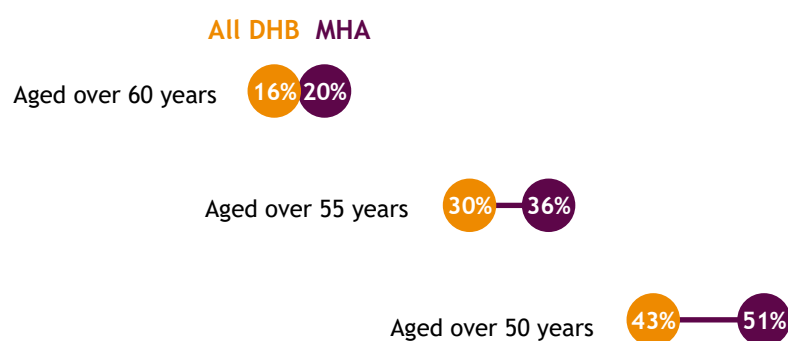


Figure 3. Comparison of mental health and addiction employees' average age with all DHB employees, by age groups.

DHB mental health and addiction employees in the Northern region had slightly lower average age (47.4 years) compared to other regions, and the South Island region the highest (49.2 years). Employees in large DHBs tended to be younger than those in small DHBs; see Figure 4.

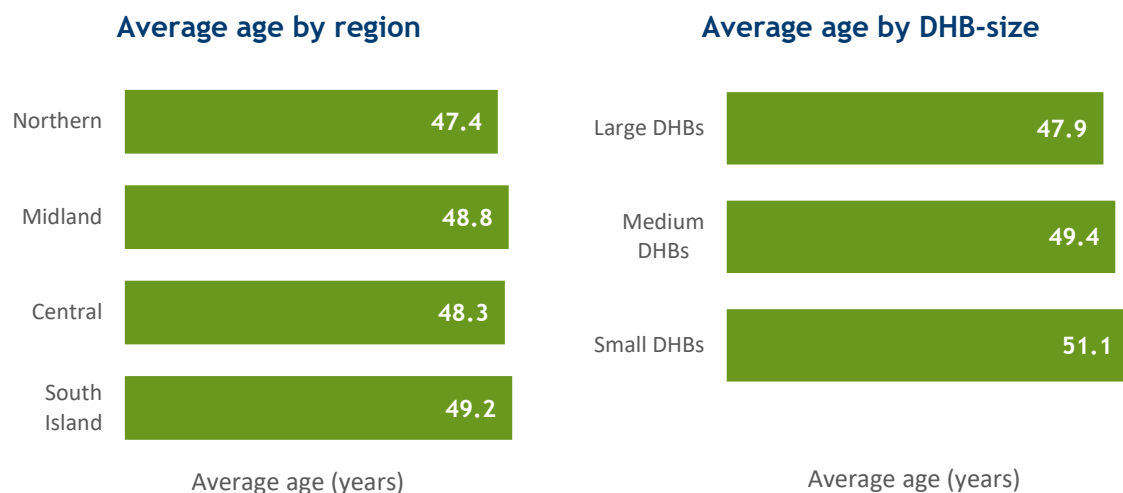


Figure 4. Comparison of mental health and addiction employees' average age, by region and by DHB-size groups, as at 30 June 2017.

## Gender

In 2017, the proportion of female DHB mental health and addiction employees was 70 per cent compared to all DHB employees, of whom 79 per cent were female; see Figure 5.

### Fewer MHA employees are female compared to all DHB employees

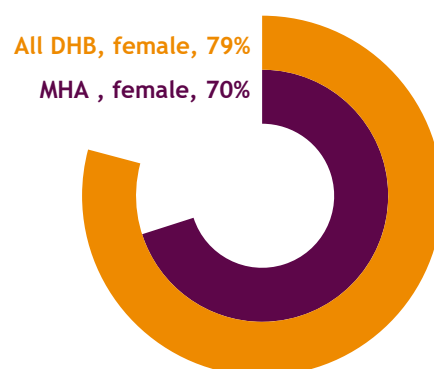


Figure 5. Comparison of female DHB mental health and addiction employees with all DHB female employees.



## Ethnicity

DHB mental health and addiction employees identified as Māori (9 per cent) or Pasifika (6 per cent), at higher rates than all DHB employees (7 and 4 per cent respectively) and were less likely to identify in an Asian ethnic group; see Figure 6.

### More MHA employees are Māori or Pasifika than all DHB employees

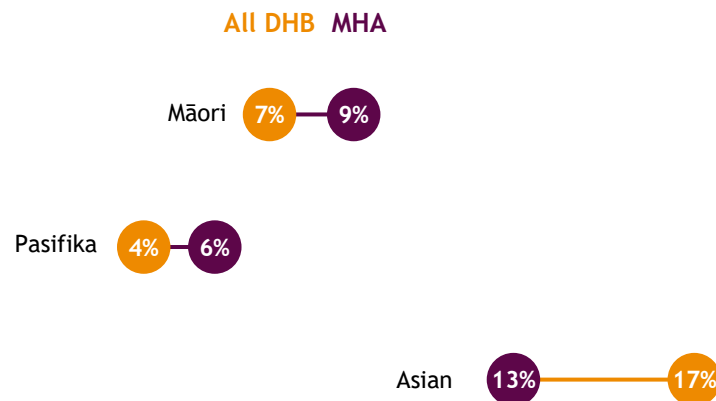


Figure 6. Comparison of DHB mental health and addiction employees' ethnicity with all DHB employees for Māori, Pasifika and Asian ethnic groups.

DHB mental health and addiction employees were most likely to be Māori in the Midland region (18 per cent of employees) along with small DHBs (24 per cent). Of the regions, those employees in the Northern region were most likely to identify in Pasifika ethnic groups (9 per cent) and in large DHBs (7 per cent). A similar trend was seen for employees in Asian ethnic groups in the Northern region and in large DHBs (15 per cent and 11 per cent respectively); see Figure 7.

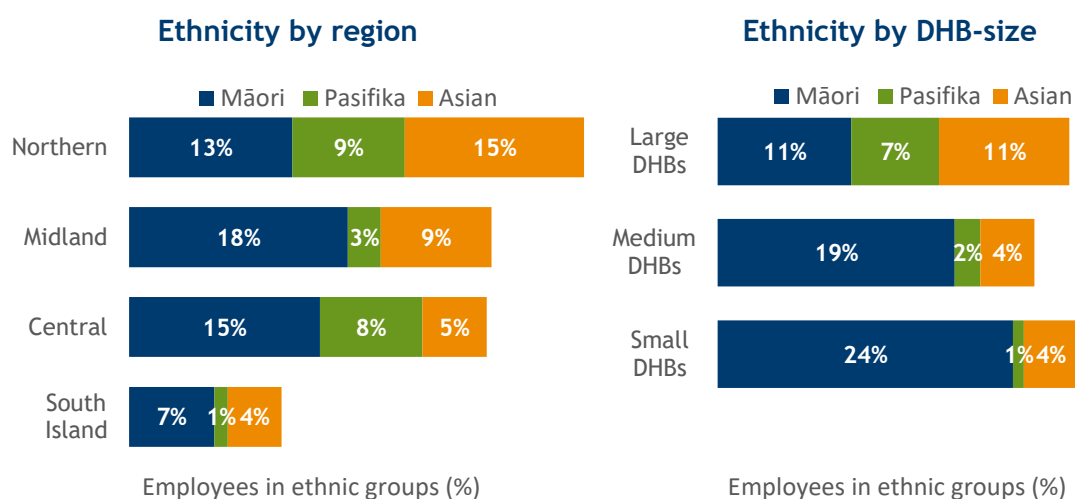


Figure 7. Māori, Pasifika and Asian representation among DHB mental health and addiction employees, by region and DHB-size groups, as at 30 June 2017.

## Length of service

The average length of service for DHB mental health and addiction employees was 8.9 years, as at 30 June 2017; similar to all DHB employees (8.5 years). The average length of service for DHB mental health and addiction employees includes information about junior medical professionals' length of service. Although this group is very small (240 people out of a total of 8,405; 3 per cent), their shorter length of service due to the nature of their role does slightly lower the overall average.

More than half (57 per cent) of DHB mental health and addiction employees had over 5 years' length of service, and most of those were employed for more than 8 years; see Figure 8.

### Nearly half of MHA employees served for more than 8 years

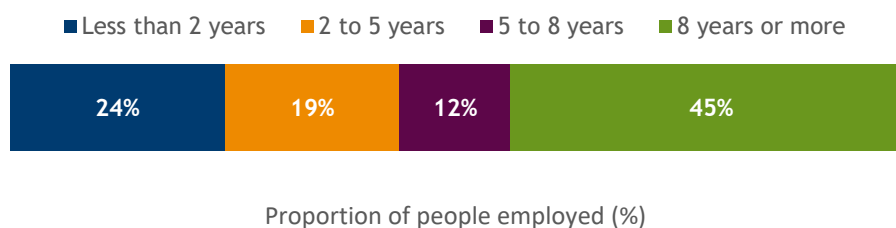


Figure 8. The proportion of DHB mental health and addiction employees by period employed, as at 30 June 2017.

DHB mental health and addiction employees in the South Island region had the longest average length of service (11 years) as did those in small DHBs (10 years); see Figure 9.

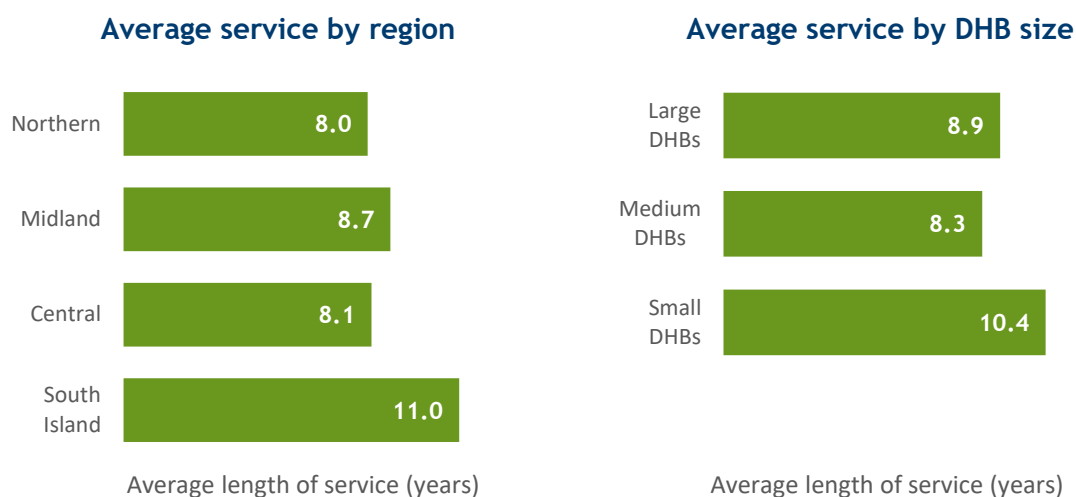


Figure 9. Average length of service for DHB mental health and addiction employees, by regions and DHB size groups, as at 30 June 2017.

## FTE turnover

DHB mental health and addiction employees had an FTE turnover rate of 11.9 per cent for the year ended 30 June 2017. This was slightly higher than for all DHB employees over the same period (10.7 per cent). DHB mental health and addiction employees in the Central region had the highest FTE turnover of all the regions, as did the employees in small DHBs (14 per cent each); see Figure 10.

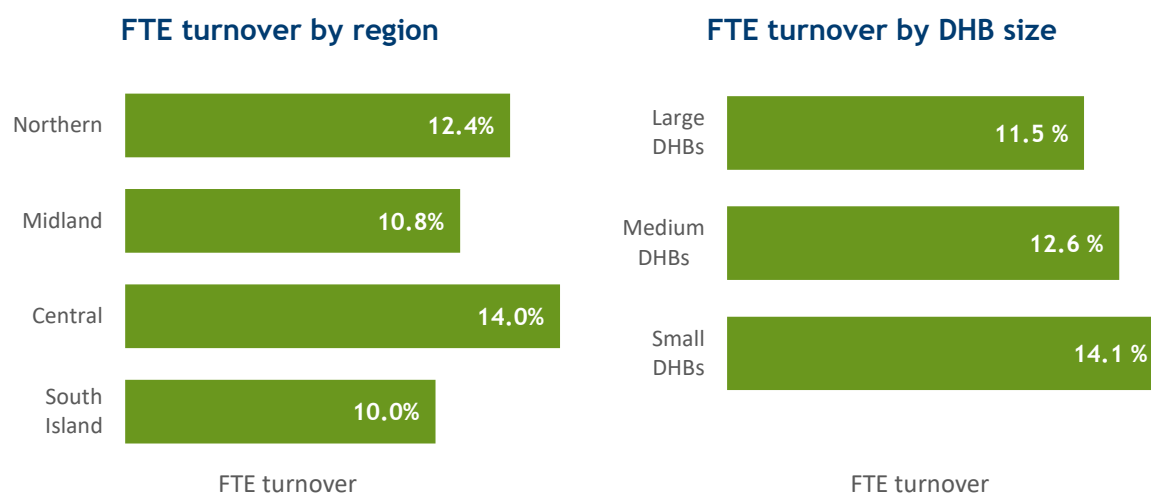


Figure 10. DHB mental health and addiction employees' FTE turnover, by region and by DHB-size groups, as at 30 June 2017.

# Occupation groups

This section provides information about the socio-demographic profile, length of service and FTE turnover of DHB mental health and addiction employees in each of the following service delivery occupation groups.

- allied health and scientific (1,669 people)
- nursing (3,776 people)
- senior medical (590 people)
- junior medical (240 people)
- care and support (1,349 people).

Figure 11 compares key information for each occupation group, with averages for all DHB mental health and addiction employees and for all DHB employees.

## DHB mental health and addiction employee profile at a glance

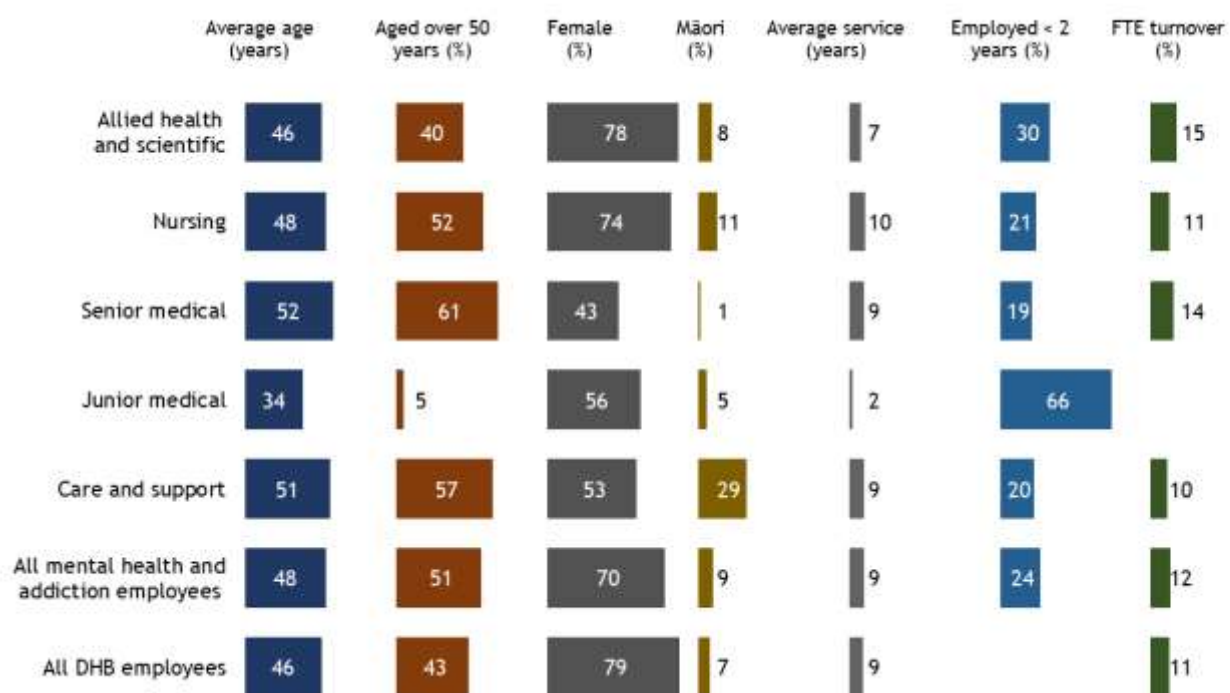


Figure 11. Summary of DHB mental health and addiction employee profile by occupation groups.

DHB mental health and addiction employees (MHA) in each occupation group are described in the following subsections. Comparisons are made with demographic information provided by HWIP for all DHB employees in the same occupation group (**referred to as “all DHB peers”**), where relevant.

## Allied health and scientific

The allied health and scientific occupation group included 1,669 people working in 1,404 FTE positions. Most (93 per cent) of FTE employees were coded with the mental health and addiction PAOW. People employed in 101 FTE positions worked in other DHB services, most of whom were psychologists; see Table 2.

Table 2. *Roles and FTEs employed in the allied health and scientific occupation group*

Role	MHA PAOW code	Non-MHA PAOW code*	FTEs employed
Clinical psychologist	470.0	95.3	565.3
Social worker	502.8	3.4	506.2
Occupational therapist	265.4	1.0	266.4
Psychotherapist	33.2	0.6	33.8
Diversional therapist	7.6		7.6
Hospital pharmacist	4.6		4.6
Physiotherapist	4.5		4.5
Psychologists (other)	4.3	0.2	4.5
Dietitian	3.7		3.7
Health diagnostic and promotion professionals	3.3		3.3
Speech language therapist	2.6		2.6
Natural and physical science professionals	1.9		1.9
Allied health and scientific total	1,303.8	100.5	1,404.4

## Age

The average age of DHB mental health and addiction allied health and scientific employees was 45.7 years, as at 30 June 2017. This was slightly older than for all DHB peers in the allied health and scientific group (43.7 years).

Two-fifths (40 per cent) of DHB mental health and addiction allied health and scientific employees were aged over 50 years, which was greater than for all DHB peers (36 per cent); see Figure 12.

Allied health and scientific employees tended to be older than all DHB peers

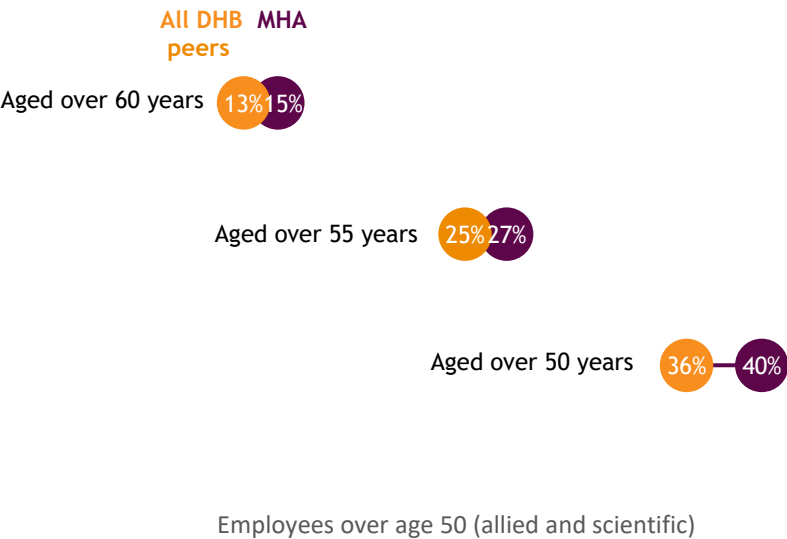


Figure 12. Comparison of the DHB mental health and addiction allied health and scientific employees over 50, 55 and 60 years old with all DHB peers in the same age groups.

Of the regions, DHB mental health and addiction allied health and scientific employees in the Midland region were on average older (47.3 years) while those in the South Island region were on average younger (45.0 years). Large DHBs were on average younger; see Figure 13.

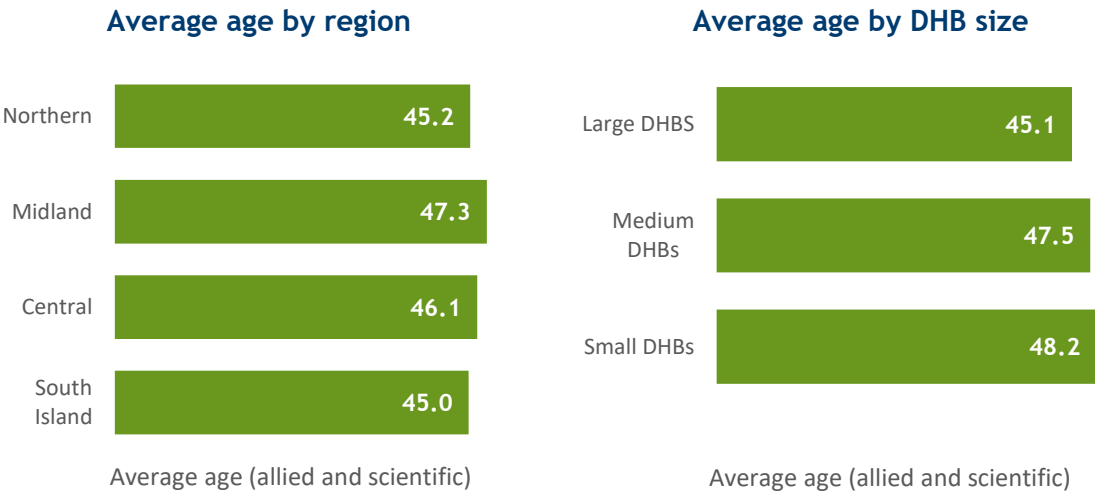
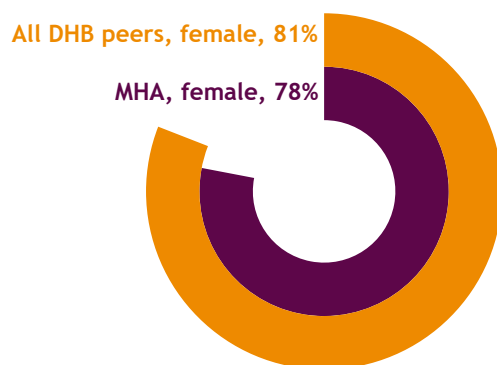


Figure 13. Average age for mental health and addiction allied health and scientific employees, by region and by DHB size groups, as at 30 June 2017.

## Gender

About four in five DHB mental health and addiction allied health and scientific employees were female, similar to all DHB peers (78 per cent compared to 81 per cent); see Figure 14.

### MHA employees were nearly as likely to be female as all DHB peers



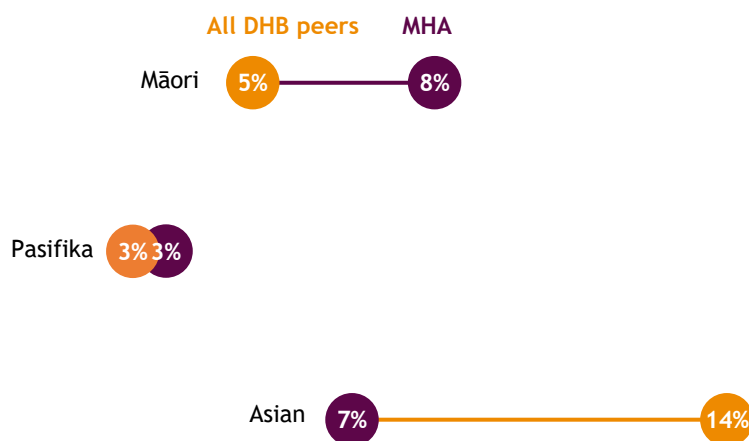
Gender (allied and scientific)

Figure 14. Comparison of female DHB mental health and addiction allied health and scientific employees with all DHB peers.

## Ethnicity

DHB mental health and addiction allied health and scientific employees were more likely to identify as Māori (8 per cent) than all DHB peers (5 per cent), and less likely to identify in an Asian ethnic group compared to all DHB peers (7 per cent compared to 14 per cent); see Figure 15.

### Allied health and scientific employees are more likely to be Māori than all DHB peers



Ethnicity (allied and scientific)

Figure 15. Comparison of DHB mental health and addiction allied health and scientific employees' ethnicity with all DHB peers.

The proportion of DHB mental health and addiction allied health and scientific employees identifying as Māori was higher in the three North Island regions (9 to 10 per cent) than the South Island (3 per cent), and in medium and small DHBs (12 and 10 per cent respectively) compared to large DHBs (7 per cent); see Figure 16.

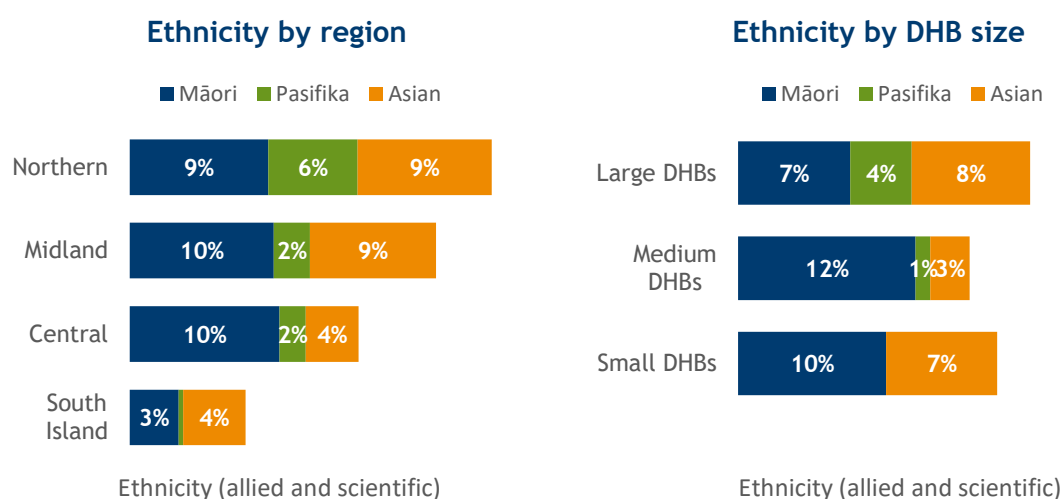


Figure 16. DHB mental health and addiction allied health and scientific employees' ethnicity, by region and by DHB-size group, as at 30 June 2017.

## Length of service and FTE turnover

Nationally, DHB mental health and addiction allied health and scientific employees have been employed for 6.8 years on average, as at 30 June 2017. This was approximately 15 months less than all DHB peers, whose average length of service is 8.4 years.

Nearly one third (30 per cent) of DHB mental health and addiction allied health and scientific employees had been employed for less than two years, and 52 per cent for less than 5 years; see Figure 17.

### Half of allied health and scientific employees are employed for less than 5 years

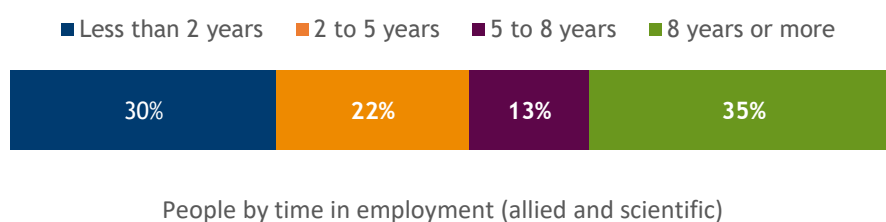


Figure 17. Proportion of DHB mental health and addiction allied health and scientific employees employed for specified periods of time.



DHB mental health and addiction allied health and scientific employees in the South Island region had the longest average length of service (8.0 years), as did those in medium-sized DHBs (7.4 years); see Figure 18.

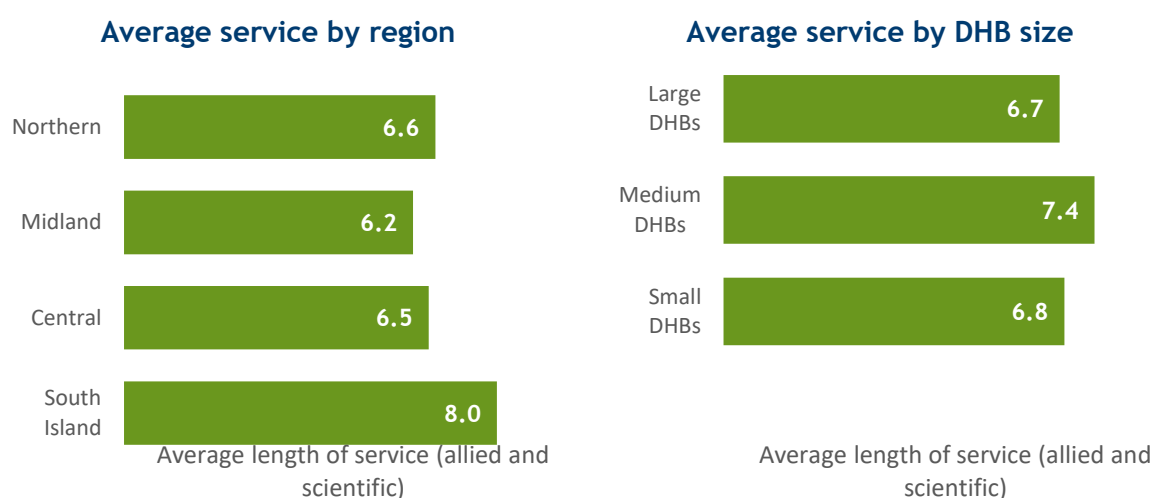


Figure 18. DHB mental health and addiction allied health and scientific average length of service by region, and by DHB size-group.

The FTE turnover for DHB mental health and addiction allied health and scientific employees as at 30 June 2017 was relatively high at 15.1 per cent. This was higher than for all DHB peers (11.0 per cent) and for all mental health and addiction employees (11.9 per cent). The rate varied by region with the Central region having the highest (18.5 per cent). The FTE turnover rate was about twice as high in small DHBs (28.6 per cent) compared to medium and large DHBs; see Figure 19.

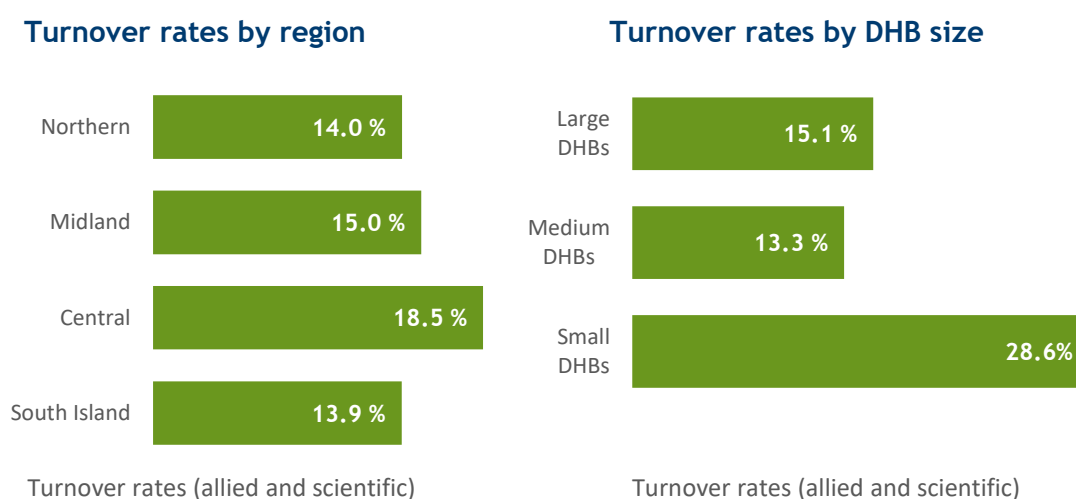


Figure 19. DHB mental health and addiction allied health and scientific employees' FTE turnover, by region and by DHB-size group, as at 30 June 2017.

## Summary

DHB mental health and addiction allied health and scientific employees:

- are on average older than all DHB allied health and scientific employees
- are mostly female
- are more likely to identify as Māori, and less likely to identify in an Asian ethnic group than all DHB peers
- have been employed for shorter periods on average compared to all mental health and addiction employees and are more likely to have been employed less than 5 years
- have higher FTE turnover rates than all DHB peers and all DHB mental health and addiction employees.

## Nursing

The nursing occupation group included 3,776 people working in 3,454 FTE positions. Most (94 per cent) of FTE employees were coded in the mental health and addiction PAOW. Nurses employed in 195 FTEs worked in other DHB services, most of whom were registered nurses (mental health); see Table 3.

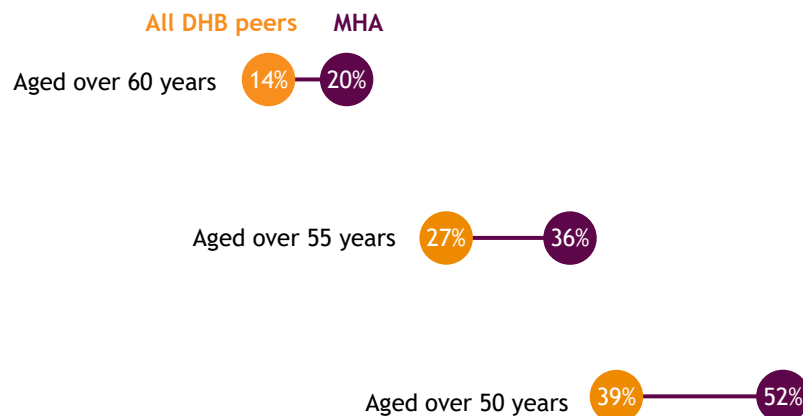
Table 3. Roles and FTEs employed in the nursing occupation group

Role	MHA PAOW code	Non-MHA PAOW code*	FTEs employed
Registered nurse (mental health)	2,391.4	188.9	2,580.3
Registered nurses	367.9	0.2	368.1
Nurse manager	202.4	1.0	203.4
Enrolled nurse	112.5		112.5
Registered nurse (community health)	78.5	1.0	79.5
Registered nurse (medical)	46.8		46.8
Nurse educator	21.1	1.0	22.1
Registered nurse (disability and rehabilitation)	8.6	1.6	10.2
Nursing clinical director	7.0	1.0	8.0
Registered nurse (developmental disability)	7.5		7.5
Nurse practitioner	6.9		6.9
Registered nurse (child and family health)	3.4		3.4
Registered nurse (aged care)	2.0		2.0
Registered nurse (paediatric)	1.8		1.8
Registered nurse (surgical)	1.0		1.0
Nurse researcher	0.7		0.7
Nursing total	3,259.6	194.7	3,454.2

## Age

The average age of DHB mental health and addiction nursing employees was 48.2 years. These employees tended to be older than for all DHB peers in the nursing occupation group across all DHB services, whose average age was 44.4 years. Just over half (52 per cent) of DHB mental health and addiction nursing employees are aged over 50 years old, which is more than for all DHB peers (39 per cent); see Figure 20.

### Nursing employees tend to be older than all DHB peers



#### Employees over age 50 (nursing)

Figure 20. Comparison of the DHB mental health and addiction nursing employees over 50, 55 and 60 years old with all DHB peers in the same age groups.

Of the regions, DHB mental health and addiction nursing employees in the Northern region were on average younger (46.9 years), as were those in large DHBs (47.7 years); see Figure 21.

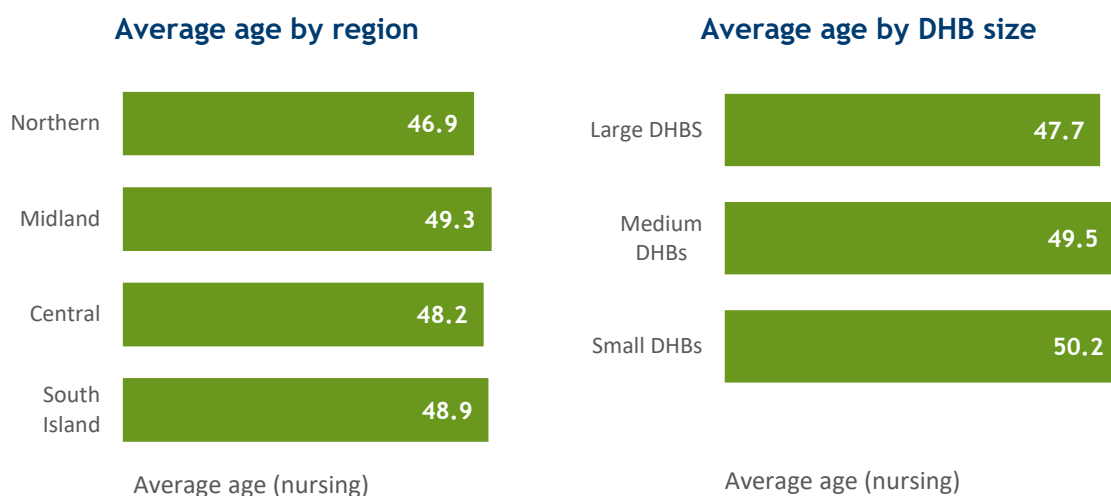


Figure 21. Average age for mental health and addiction nursing employees, by region and by DHB size groups, as at 30 June 2017.

## Gender

About three in every four DHB mental health and addiction nursing employees were female (74 per cent), which was fewer than for all DHB nursing peers (89 per cent); see Figure 22.

### MHA nurses were less likely to be female than all DHB nurses

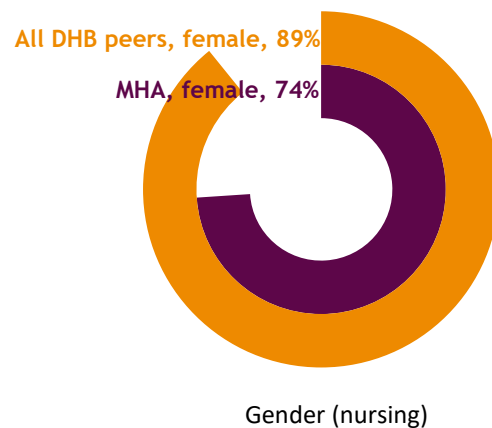


Figure 22. Comparison of female DHB mental health and addiction nursing employees with all DHB peers.

## Ethnicity

DHB mental health and addiction nursing employees were more likely to identify as Māori (11 per cent) or Pasifika (5 per cent) than all DHB peers (6 and 3 per cent respectively). They were much less likely to identify in an Asian ethnic group than all DHB peers (9 per cent compared to 22 per cent); see Figure 23.

### Nursing employees are more likely to be Māori or Pasifika than all DHB nurses

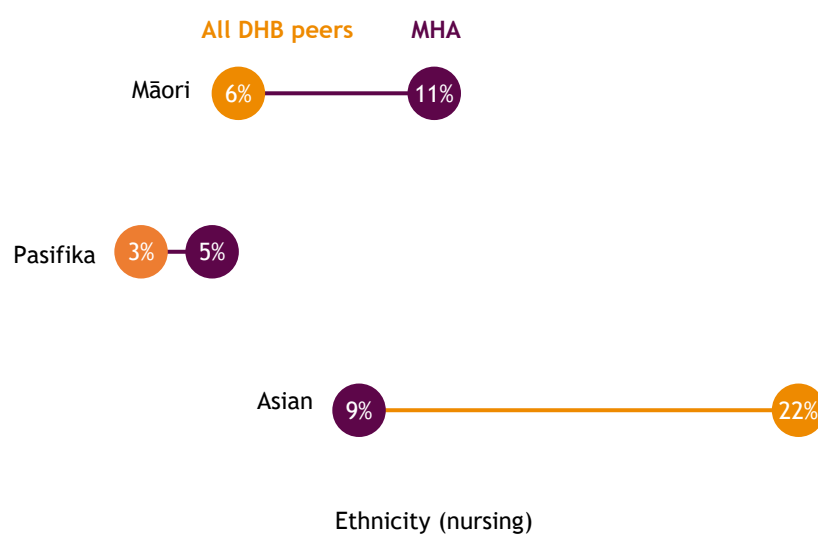


Figure 23. Comparison of DHB mental health and addiction nursing employees' ethnicity with all DHB peers.

DHB mental health and addiction nursing employees in the three North Island regions were more likely to be Māori than in the South Island. Nurses in medium and small-sized DHBs were more likely to be Māori than those employed in large DHBs; see Figure 24.

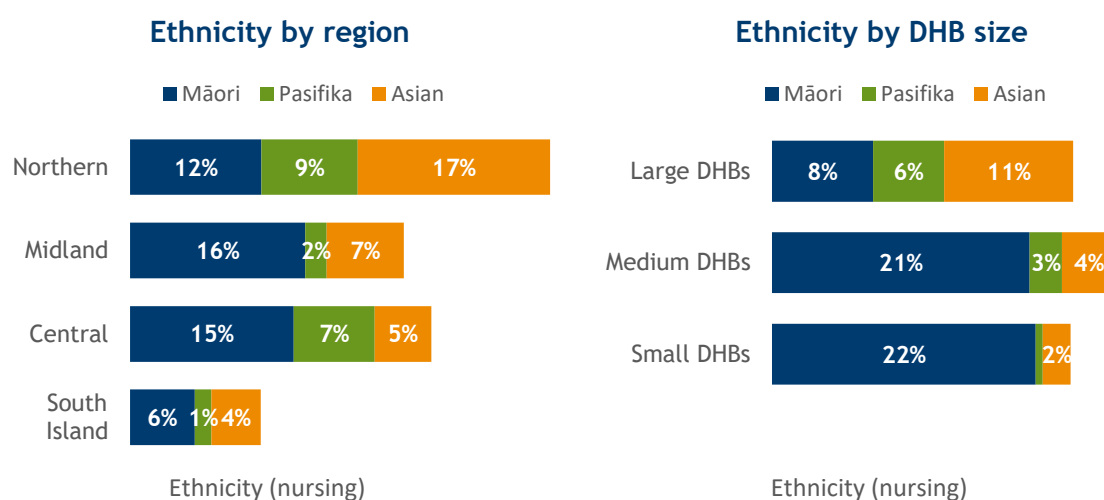


Figure 24. DHB mental health and addiction nursing employees' ethnicity, by region and by DHB-size group, as at 30 June 2017.

## Length of service and FTE turnover

Nationally, DHB mental health and addiction nursing employees have been employed for an average of 9.8 years, only slightly longer than all DHB peers (9.3 years).

Nearly half (47 per cent) of DHB mental health and addiction nurses have been employed for more than 8 years. One in five (21 per cent) have been employed for less than 2 years; see Figure 25.

### Nearly half of MHA nurses have over 8 years length of service

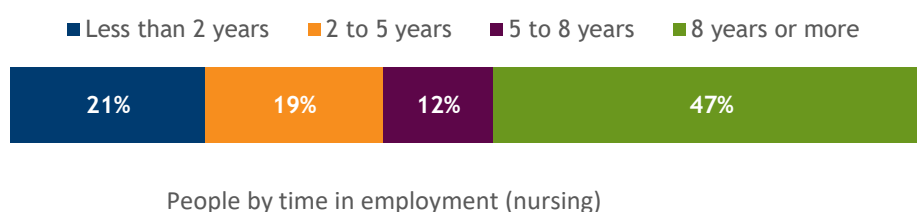


Figure 25. The proportion of DHB mental health and addiction nursing employees by length of service as at 30 June 2017.

DHB mental health and addiction nurses in the Northern and Central regions had the shortest average length of service (8.5 years each) of all the regions, as did nurses in medium sized DHBs (9.1 years); see Figure 26.

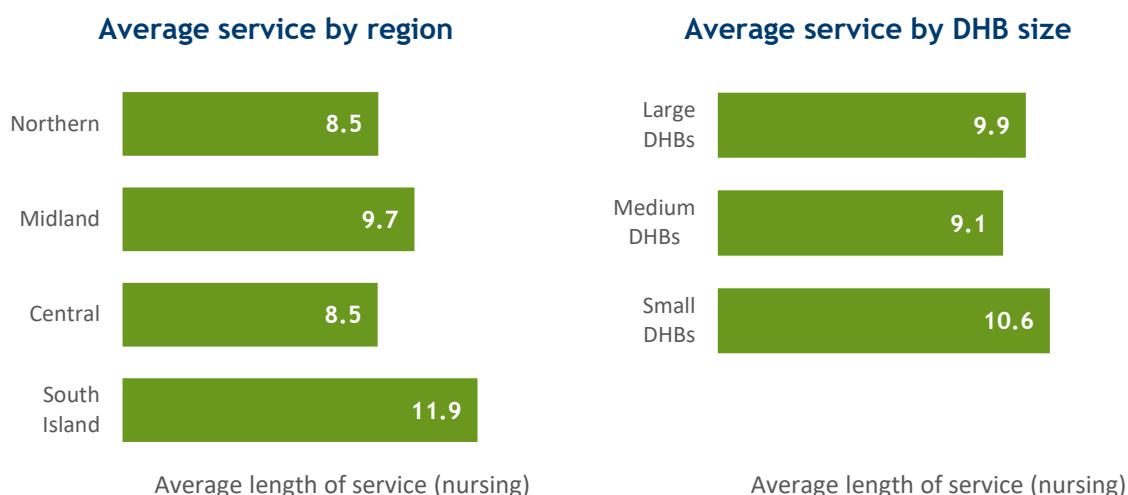


Figure 26. DHB mental health and addiction nursing employees' average length of service by region, and by DHB size-group.

FTE turnover for DHB mental health and addiction nursing employees was slightly higher than for all DHB peers (11.0 per cent compared to 10.4 per cent). The rate was highest in the Northern and Central regions (12.4 and 12.3 per cent respectively). Small DHBs had slightly lower FTE turnover of 10.3 per cent compared to medium and large DHBs; see Figure 27.

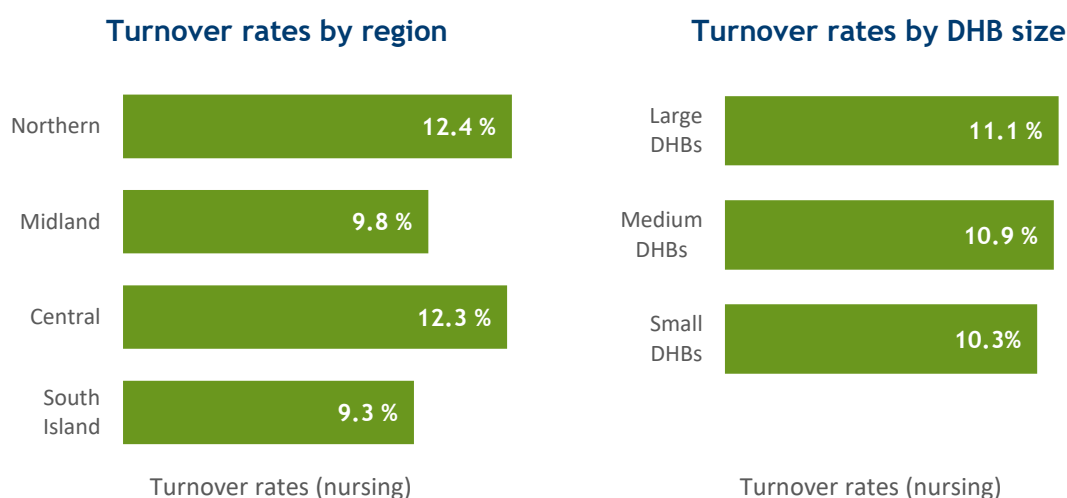


Figure 27. DHB mental health and addiction nursing employees' FTE turnover, by region and by DHB-size group, as at 30 June 2017.

## Summary

DHB mental health and addiction nursing employees:

- are on average older than all DHB nurse peers
- are more likely to be male than all DHB peers
- **are more likely to identify as Māori or Pasifika than all DHB peers**
- have a longer average length of service than all DHB peers
- have similar FTE turnover to all DHB peers.

## Senior medical

The senior medical occupation group included 590 people working in 509 FTE positions. Most (91 per cent) of FTE employees were coded in the mental health and addiction PAOW. Senior medical employees working in 47 FTEs were employed in other DHB services, all but one of whom were psychiatrists; see Table 4

Table 4. *Roles and FTEs employed in the senior medical occupation group*

Role	MHA PAOW code	Non-MHA PAOW code*	FTEs employed
Psychiatrist	436.2	45.7	482.0
Medical practitioners	9.5		9.5
Specialist physician (general medicine)	5.7		5.7
Medical superintendent	2.8	1.0	3.8
General practitioner	3.7		3.7
Paediatrician	2.8		2.8
Emergency medicine specialist	1.0		1.0
Ophthalmologist	1.0		1.0
Senior medical total	462.7	46.7	509.5

## Age

The average age of DHB mental health and addiction senior medical employees was 52.4 years. This is approximately 2.5 years older than the average for all DHB senior medical peers (49.9 years).

Three out of five (61 per cent) DHB mental health and addiction senior medical employees were aged over 50 years old. This group was a greater proportion of the senior medical workforce than for all DHB peers (49 per cent); see Figure 28.

## Senior medical employees tend to be much older than all DHB peers

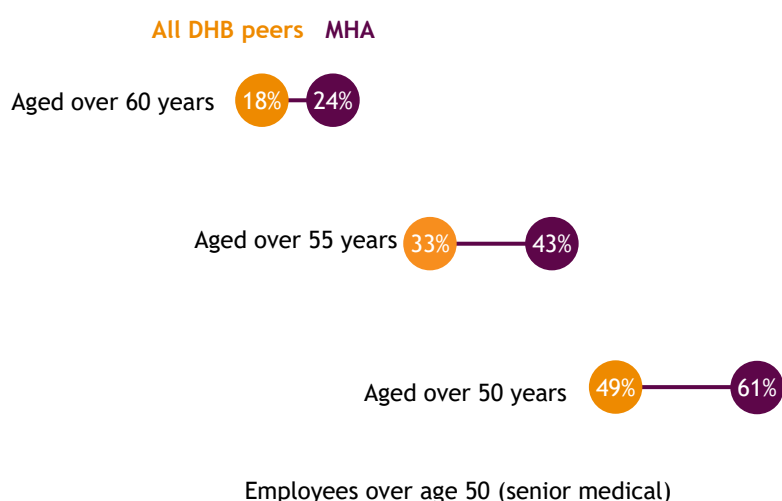


Figure 28. Comparison of the DHB mental health and addiction senior medical employees over 50, 55 and 60 years old with all DHB peers in the same age groups.

The average of DHB mental health and addiction senior medical employees was similar across all four regions, and there was little variation in average age across DHB-size groups; see Figure 29.

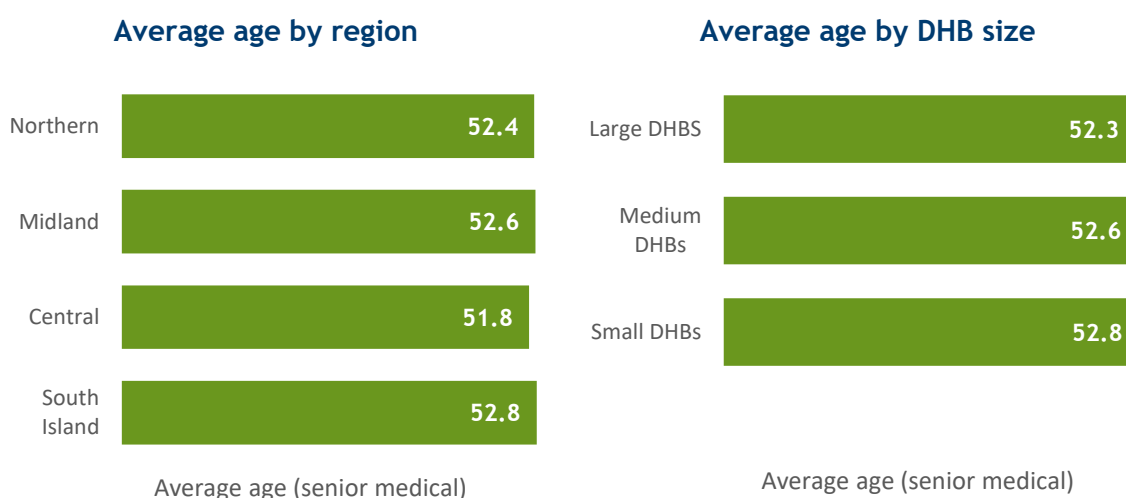


Figure 29. Average age for mental health and addiction senior medical employees, by region and by DHB size groups, as at 30 June 2017.



## Gender

Over half (57 per cent) of DHB mental health and addiction senior medical employees were male as at 30 June 2017, which was lower than for all DHB peers (63 per cent); see Figure 30.

### MHA senior medical employees were less likely to be male than all DHB peers

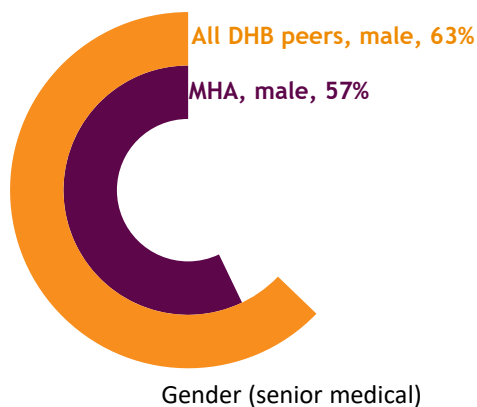


Figure 30. Comparison of male DHB mental health and addiction senior medical employees with all DHB peers.

## Ethnicity

There were very low rates of Māori and Pasifika representation among DHB mental health and addiction senior medical employees (1.3 and 0.9 per cent respectively), which was slightly lower than for all DHB peers (1.8 and 1.0 per cent respectively). DHB mental health and addiction senior medical employees were more likely to identify in an Asian ethnic group than all DHB peers (19 per cent compared to 16 per cent); see Figure 31.

### Senior medical employees are more likely to be Asian compared to all DHB peers

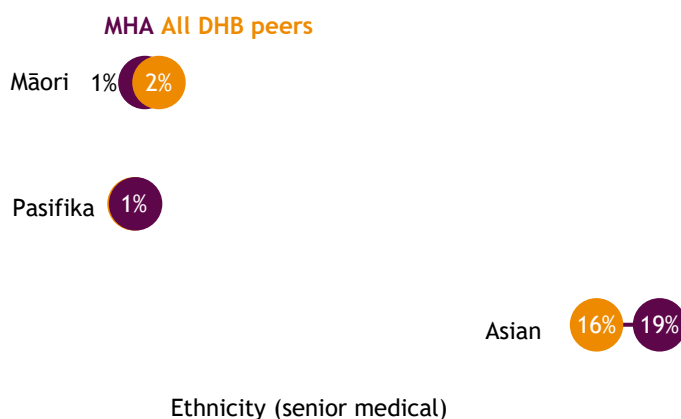


Figure 31. Comparison of DHB mental health and addiction senior medical employees' ethnicity with all DHB peers.

The proportion of DHB mental health and addiction senior medical employees identifying as Māori was highest in the South Island region (3 per cent) and highest in small DHBs (10 per cent). Senior medical employees in the Northern and Midland regions were most likely to identify in Asian ethnic groups (22 and 25 per cent respectively); see Figure 32.

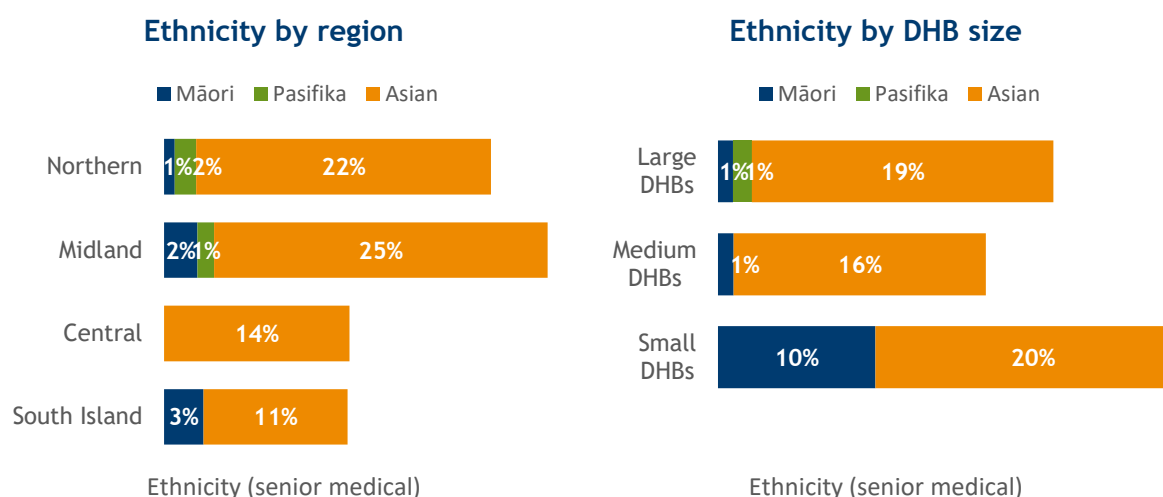


Figure 32. DHB mental health and addiction senior medical employees' ethnicity, by region and by DHB-size group, as at 30 June 2017.

## Length of service and FTE turnover

Nationally, DHB mental health and addiction senior medical employees have been employed for 9.2 years on average, about 10 months less than the average for all DHB peers (10 years).

Three out of five (60 per cent) of DHB mental health and addiction senior medical employees have been employed for more than five years; see Figure 33.

### Most senior medical employees have length of service over 5 years

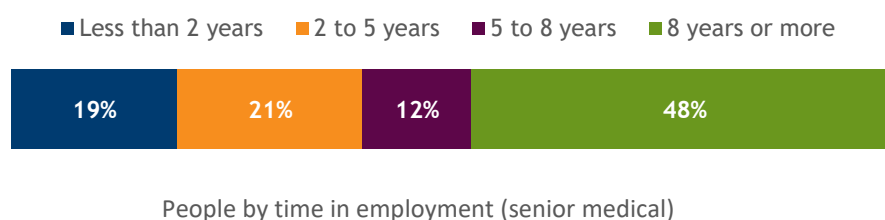


Figure 33. The proportion of DHB mental health and addiction senior medical employees by length of service as at 30 June 2017.

DHB mental health and addiction senior medical employees in the Northern region had the shortest average length of service (8.2 years) compared to Midland and Central regions (9.1 and 9.3 years respectively). By DHB-size groups, employees in medium-sized DHBs had the shortest average length of service (7.6 years); see Figure 34.

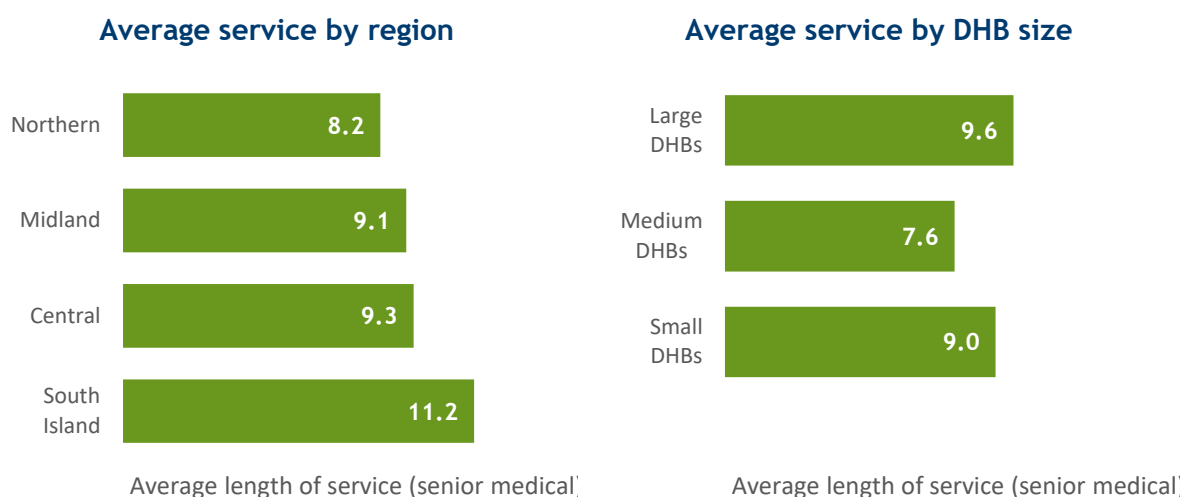


Figure 34. DHB mental health and addiction senior medical employees' average length of service by region, and by DHB size-group.

The FTE turnover for DHB mental health and addiction senior medical employees as at 30 June 2017 was much higher than for all DHB peers (14 per cent compared to 7 per cent). The rate varied by region with the South Island region having the lowest (11 per cent). By DHB-size groups, small DHBs had the highest FTE turnover of 27 per cent; see Figure 35.

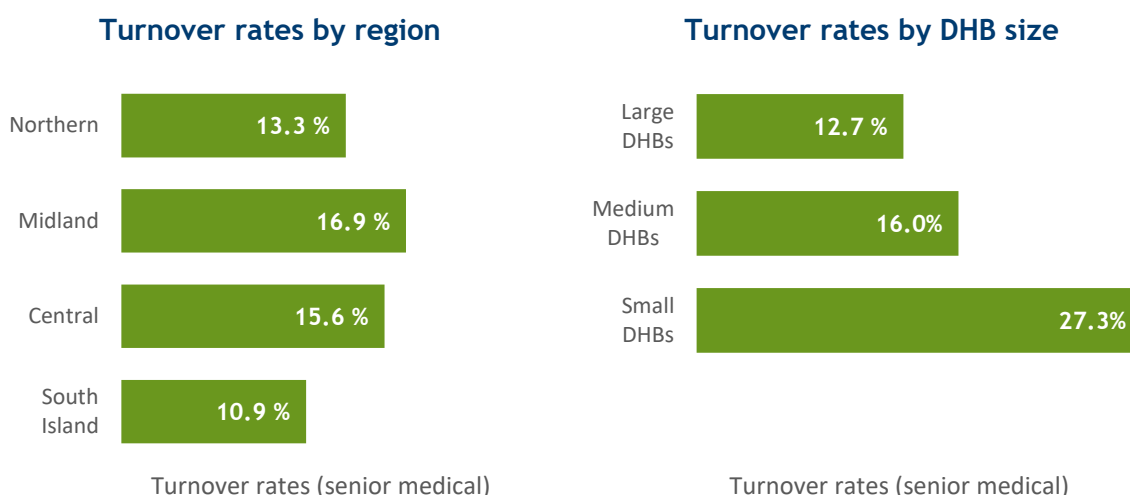


Figure 35. DHB mental health and addiction senior medical employees' FTE turnover, by region and by DHB-size group, as at 30 June 2017.

## Summary

DHB mental health and addiction senior medical employees are:

- slightly older than all DHB peers
- more gender-balanced than all DHB peers
- less likely to be Māori or Pasifika people and more likely to belong to an Asian ethnic group than all DHB peers
- have longer average length of service compared to all DHB peers and much higher FTE turnover.

## Junior medical

The junior medical occupation group included 240 people working in 232 FTE positions, as resident medical officers; see Table 7 in Appendix A. These people are all coded in the mental health and addiction PAOW, so none work in other DHB services.

Because of the small size of this group and its unique employment conditions, limited analyses are presented in this section.

### Age

The average age of DHB mental health and addiction junior medical employees was 34.1 years, as at 30 June 2017. This was older than for all DHB junior medical peers (30.9 years). Five per cent of DHB mental health and addiction junior medical employees are aged over 50 years, which was more than for all DHB peers (1 per cent).

DHB mental health and addiction junior medical employees in the South Island region were on average older (35.6 years), as well as those in small DHBs (41.0 years); see Figure 36.

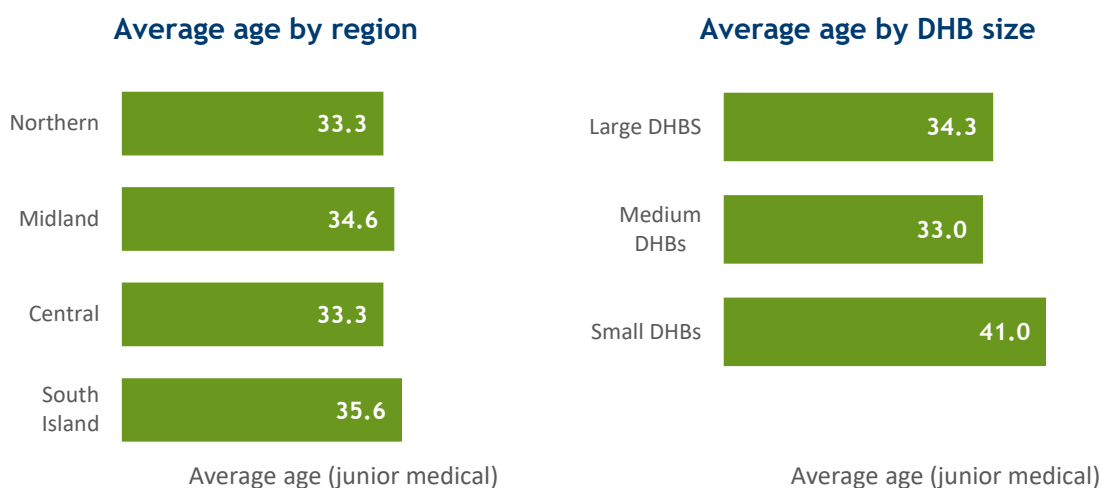


Figure 36. Average age for mental health and addiction junior medical employees, by region and by DHB size groups, as at 30 June 2017.

## Gender

Just over half (56 per cent) of DHB mental health and addiction junior medical employees are female, which is slightly more than all DHB peers (52 per cent); see Figure 37.

### MHA junior medical employees were slightly more likely to be female than all DHB peers

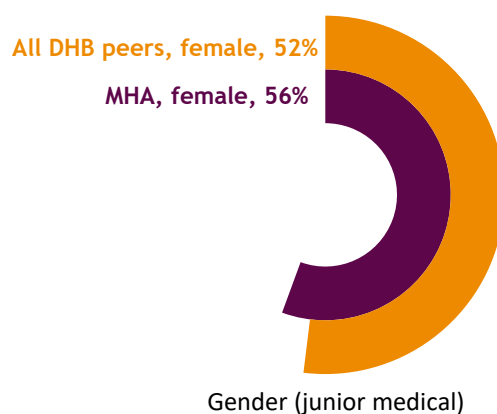


Figure 37. Comparison of female DHB mental health and addiction junior medical employees with all DHB peers.

It is notable that DHB mental health and addiction junior medical employees were far less likely to be male than senior medical employees (44 per cent compared to 57 per cent; see Figure 30).

## Ethnicity

DHB mental health and addiction junior medical employees were slightly more likely to identify as Māori (5 per cent) than all DHB peers (4 per cent). However, DHB mental health and addiction junior medical employees were much less likely to belong to an Asian ethnic group than all DHB peers; see Figure 38.

### Junior medical employees are more likely to be Māori or Pasifika than all DHB peers

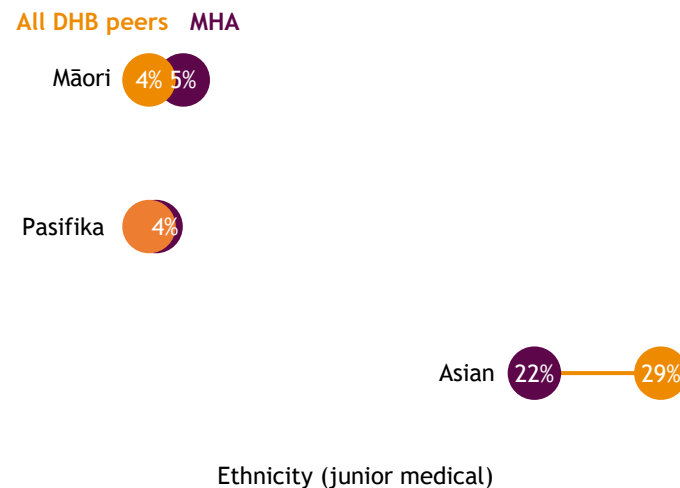


Figure 38. Comparison of DHB mental health and addiction junior medical employees' ethnicity with all DHB peers.

DHB mental health and addiction junior medical employees were most likely to identify as Māori or in a Pasifika ethnic group in the Northern region (8 and 9 per cent respectively). There was no Māori, Pasifika or Asian representation reported for junior medical employees by small DHBs. In contrast, a large proportion of DHB mental health and addiction junior medical employees in the Midland and Northern regions identified in an Asian ethnic group (37 and 21 per cent respectively); see Figure 39

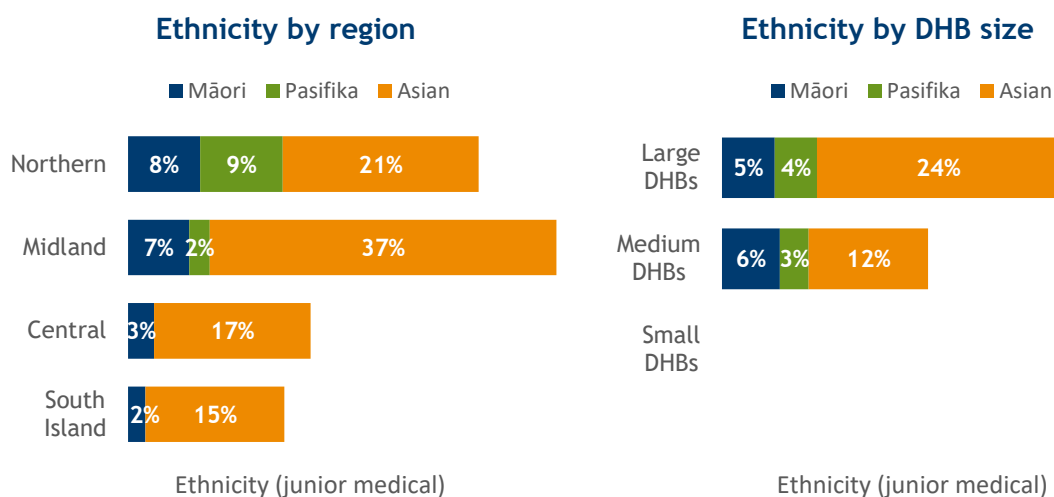


Figure 39. DHB mental health and addiction junior medical employees' ethnicity, by region and by DHB-size group, as at 30 June 2017.

## Length of service and FTE turnover

The average length of service for DHB mental health and addiction junior medical employees was 2.1 years compared to 1.3 years for all DHB peers. FTE turnover for DHB mental health and addiction junior medical employees is not reported due to the nature of their employment conditions.

## Summary

DHB mental health and addiction junior medical employees were:

- older than all DHB peers
- nearly half male
- more likely to be Māori or Pasifika compared to all DHB peers
- employed on average for longer than all DHB peers.

## Care and support

The care and support occupation group included 1,349 people working in 1,251 FTE positions. Almost all (99 per cent) of FTE employees were coded in the mental health and addiction PAOW, with 14 FTEs employed in other DHB services; see Table 5.

Table 5. *Roles and FTEs employed in the care and support occupation group*

Role	MHA PAOW code	Non-MHA PAOW code*	FTEs employed
Nursing support worker	635.4	2.5	637.9
Drug and alcohol counsellor	201.3	7.8	209.1
Community worker	202.7		202.7
Maori health assistant	71.5	1.0	72.5
Therapy aide	40.2		40.2
Welfare worker	37.0	1.8	38.8
Counsellors	17.5		17.5
Family and marriage counsellor	6.9		6.9
Health promotion officer	5.8	1.0	6.8
Personal care assistant	5.0		5.0
Recreation coordinator	3.0		3.0
Youth worker	3.0		3.0
Social professionals	2.8		2.8
Hospital orderly	2.4		2.4
Family support worker	2.0		2.0
Rehabilitation counsellor	0.5		0.5
Care and support total	1,237.0	14.1	1,251.1

## Age

DHB mental health and addiction care and support employees had an average age of 50.5 years. This was like all DHB care and support peers who averaged 50.1 years.

More than half (57 per cent) of DHB mental health and addiction care and support employees were aged over 50 years, which was about the same as for all DHB peers. The proportion of the workforce aged over 55 and 60 years old was also much the same for both groups of employees; see Figure 40.



## Care and support employees tended to be slightly older than all DHB peers

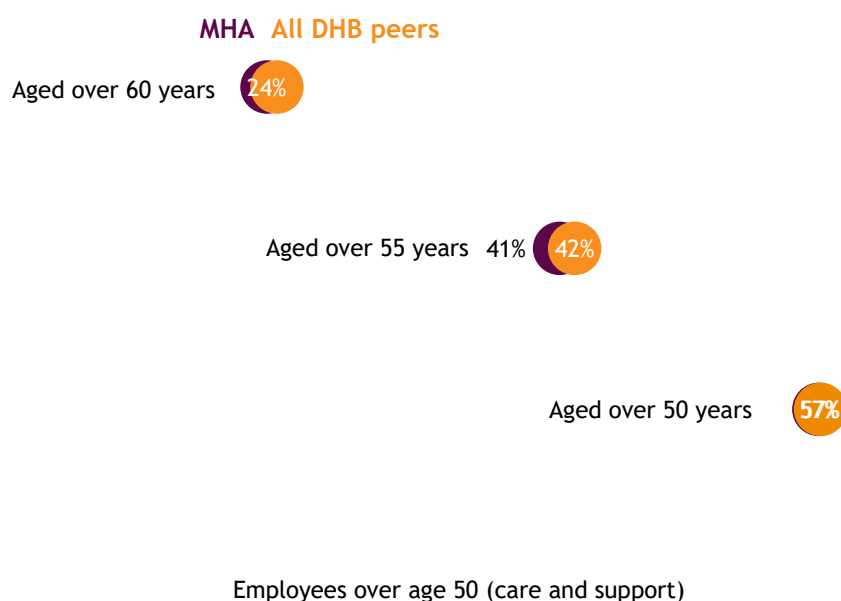


Figure 40. Comparison of the DHB mental health and addiction care and support employees over 50, 55 and 60 years old with all DHB peers in the same age groups

DHB mental health and addiction care and support employees of the South Island were on average older than those in the other regions (55.1 years compared to 49 to 51 years). Likewise, care and support employees in small DHBs were older than those employed in large and medium DHBs; see Figure 41.

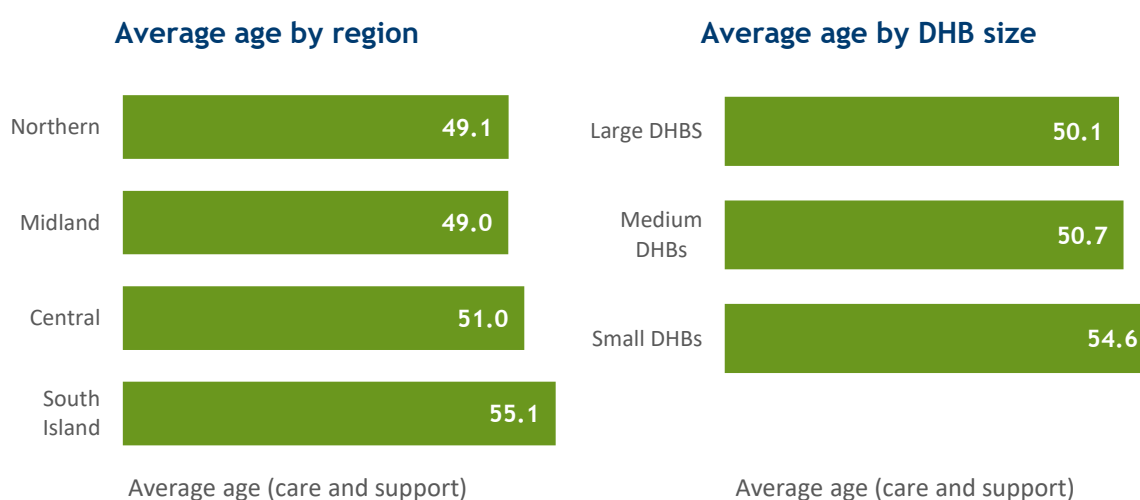


Figure 41. Average age for mental health and addiction care and support employees, by region and by DHB size groups, as at 30 June 2017.

## Gender

About half (53 per cent) of DHB mental health and addiction care and support employees were female, which was very different to all DHB care and support peers of whom 75 per cent were female; see Figure 42.

### MHA care and support employees were much less likely to be female than all DHB peers

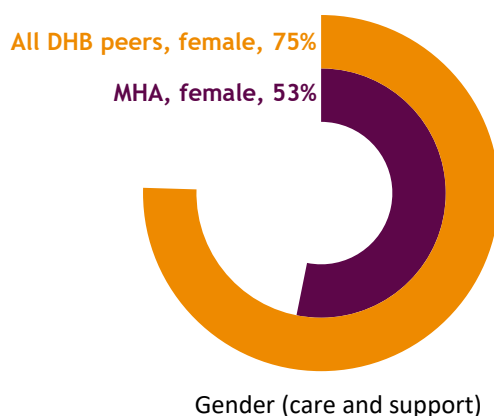


Figure 42. Comparison of female DHB mental health and addiction care and support employees with all DHB peers.

## Ethnicity

DHB mental health and addiction care and support employees had the highest Māori and Pasifika representation of all occupation groups at 29 and 14 per cent respectively. This was very different to all DHB care and support peers, of whom 17 per cent identified as Māori and 10 per cent identified in a Pasifika ethnic group. In addition, DHB mental health and addiction care and support employees were much less likely to identify in an Asian ethnic group than all DHB peers; see Figure 43.

## Care and support employees are much more likely to be Māori or Pasifika than all DHB peers

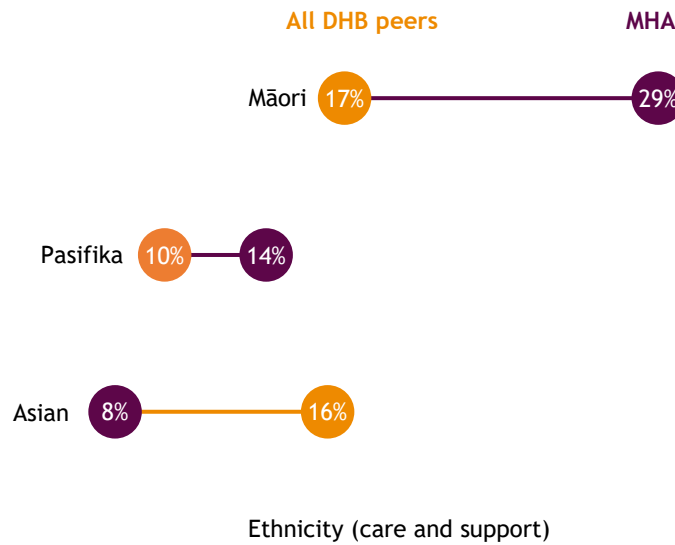


Figure 43. Comparison of DHB mental health and addiction care and support employees' ethnicity with all DHB peers.

DHB mental health and addiction care and support employees in the Midland region were most likely to be Māori (37 per cent), and in the Central region were most likely to be identified in a Pasifika ethnic group (25 per cent). Māori representation in medium and small DHBs tended to be higher than large DHBs; see Figure 44.

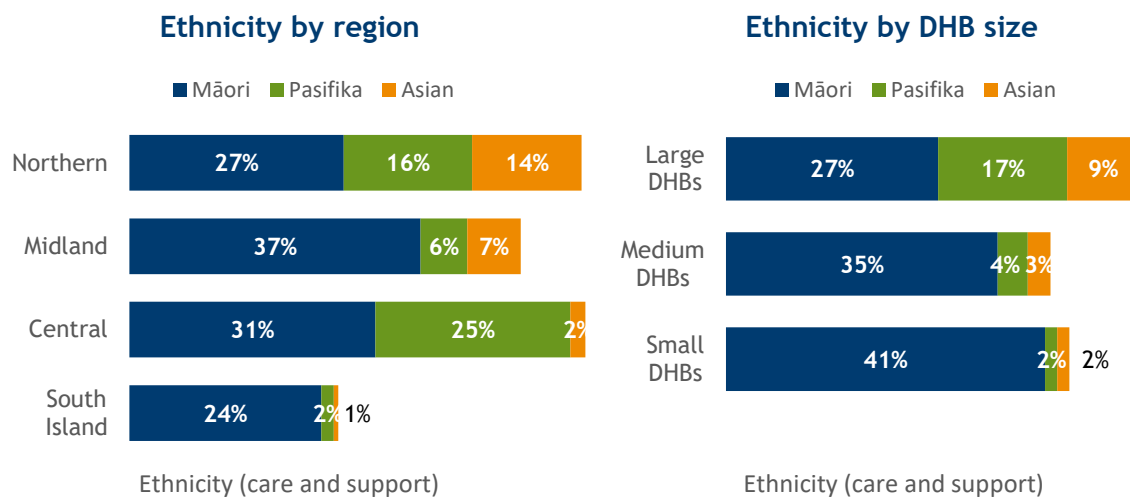


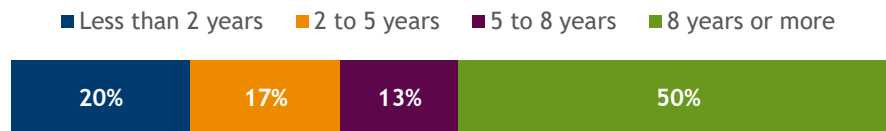
Figure 44. DHB mental health and addiction care and support employees' ethnicity, by region and by DHB-size group, as at 30 June 2017.

## Length of service and FTE turnover

Nationally, DHB mental health and addiction care and support employees have been employed for 9.2 years, on average. This is slightly longer than all DHB peers (8.5 years).

Half (50 per cent) of DHB mental health and addiction care and support employees have been employed for more than 8 years; see Figure 45.

### Half of care and support employees have 8 years or more service



People by time in employment (care and support)

Figure 45. The proportion of DHB mental health and addiction care and support employees by length of service as at 30 June 2017.

DHB mental health and addiction care and support employees in the South Island region had the longest average length of service (11.4 years) of all the regions. Compared to DHBs in other size groups, small DHBs had the longest average length of service (11.5 years); see Figure 46.

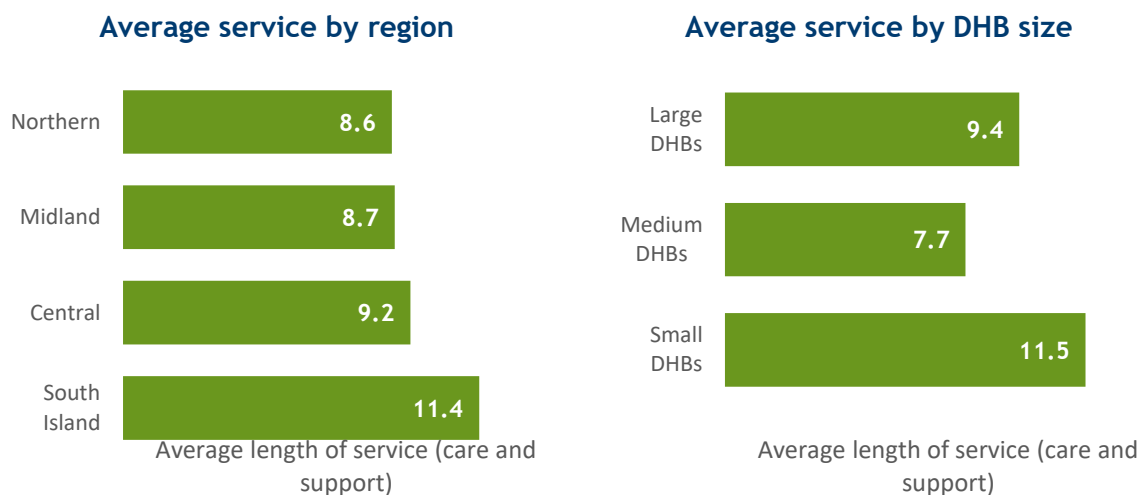


Figure 46. DHB mental health and addiction care and support employees' average length of service, by region and by DHB-size group, as at 30 June 2017.

FTE turnover for DHB mental health and addiction care and support workers for the year ended 30 June 2017 was 9.8 per cent, which was lower than for all DHB peers 10.6 per cent. The Midland and South Island regions had the lowest FTE turnover of 7.7 and 7.6 per cent respectively. Medium DHBs had the highest turnover of 14.1 per cent; see Figure 47.

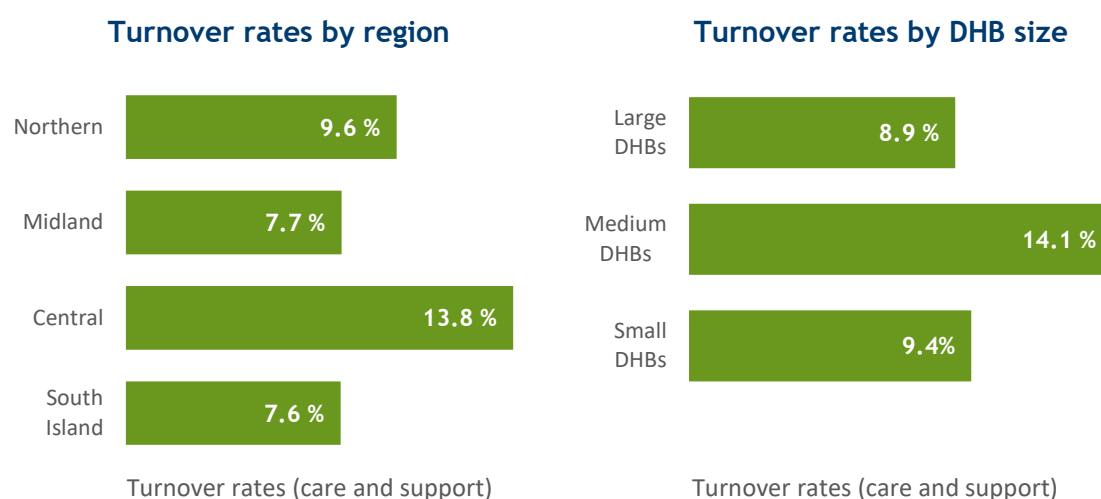


Figure 47. DHB mental health and addiction care and support employees' FTE turnover, by region and by DHB-size group, as at 30 June 2017

## Summary

DHB mental health and addiction care and support employees were:

- on average older than all DHB peers
- more likely to be male than all DHB peers
- more likely to identify as Māori or in a Pasifika ethnic group than all DHB peers
- employed for longer on average than all DHB peers.

## Drug and alcohol counsellors

Within the care and support occupation group, 218 people were employed in drug and alcohol counsellor roles (ANZSCO code number 272112), working in 209 FTE positions. These employees' information has been included in analyses for the care and support occupation group, and are also described separately here.

The following analyses present demographic information for this role as the workforce in DHB addiction services is not yet able to be separately described from mental health. Comparisons are made with all DHB employees (all occupation groups). More information by region and DHB-size groups is provided in Table 10 of Appendix D.

## Age

Drug and alcohol counsellors were aged on average was 49.4 years old. They tended to be older than all DHB employees, with 52 per cent aged over 50 years compared to 43 per cent of all DHB employees; see Figure 48.

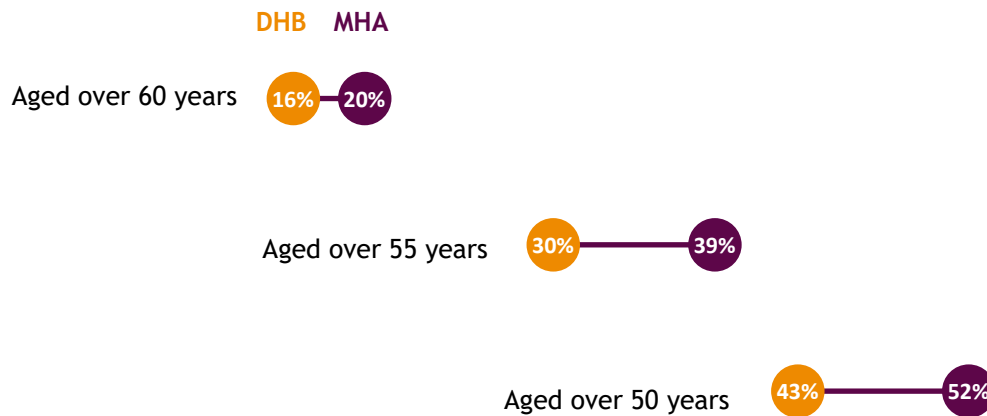


Figure 48. Comparison of drug and alcohol counsellors over 50, 55 and 60 years old with all DHB employees in the same age groups.

## Gender

In 2017, 62 per cent of DHB drug and alcohol counsellors were female.

## Ethnicity

A substantially larger proportion of drug and alcohol counsellors identified as Māori (19 per cent) compared to all DHB employees (7 per cent). In contrast, the proportion of counsellors who identified in a Pasifika ethnic group was like all DHB employees (5 and 4 per cent respectively). Drug and alcohol counsellors were much less likely to identify in an Asian ethnic group than all DHB employees (9 per cent compared to 17 per cent); see Figure 49.

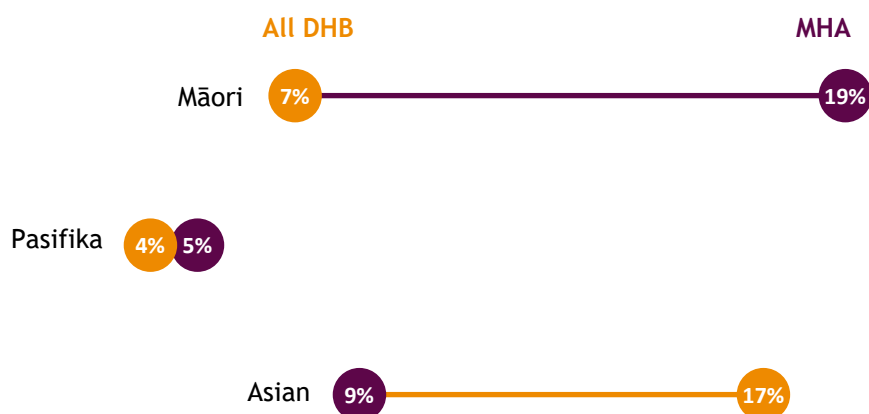


Figure 49. Comparison of DHB drug and alcohol counsellors' ethnicity with all DHB employees.

### Length of service and FTE turnover

The average length of service for drug and alcohol counsellors was 7.1 years, which was more than one year less than all DHB employees (8.5 years). One quarter (24 per cent) of drug and alcohol counsellors have length of service of less than 2 years; see Figure 50.

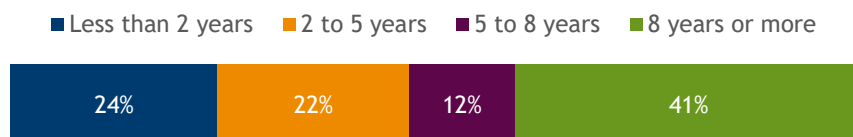


Figure 50. The proportion of drug and alcohol counsellors by length of service, as at 30 June 2017.

The FTE turnover for drug and alcohol counsellors was 14.2 per cent, which was higher than for all DHB employees (10.7 per cent).

## Discussion

This report describes the socio-demographic profile, length of service and FTE turnover of 8,405 DHB mental health and addiction employees working in 7,555 FTE positions.

Our understanding of the demographic and service profile of DHB mental health and addiction employees has been strengthened by improvements in PAOW coding for people working in mental health and addiction services. This has resulted in the collection of information about over 800 more DHB mental health and addiction employees than was identified for 2016.

DHB mental health and addiction employees tend to be older than all DHB employees with an average age of 48 years compared to 45 years. They are more likely to be aged over 50 years old than all DHB employees. DHB mental health and addiction employees in the Northern region were on average the youngest (47 years). DHB mental health and addiction employees were less likely to be female and more likely to identify as Māori or in a Pasifika ethnic group and less likely to identify as Asian compared all DHB employees.

DHB mental health and addiction employees tend to have long average length of service, although their FTE turnover for the year ended 30 June 2017 was higher than for all DHB employees. There are differences between the regions, with employees in the Midland and Northern regions having the shortest average length of service (8 years each) and the highest FTE turnover (14 and 12 per cent respectively).

In line with the 2016 report, results indicate the workforce is stable and reflect development efforts to build ethnic diversity.

Within occupation groups, results indicate a high proportion of employees in the nursing, senior medical and care and support groups are aged over 50 years (52 to 60 per cent). The proportion of junior medical employees who identify as Māori or in a Pasifika ethnic group was low, albeit slightly higher than for all DHB junior medical peers. Across the other occupation groups, average length of service was long indicating an experienced workforce, however FTE turnover was between 10 and 15 per cent.



# Implications

## Ageing

Given the improvements in PAOW coding, there is better information available about the characteristics of the workforce, including age.

In 2017, the proportion of DHB employees aged over 50 years was 51 per cent or about 4,254 people. The average age of employees was similar to that in 2016 (48.3 years compared to 48.2 years).

Table 6 shows that in 15 years' time, it is anticipated that approximately 4,254 DHB mental health and addiction employees will be aged 65 years or older. This refers to nearly 2,000 nurses, 800 care and support workers, and 700 allied and scientific employees.

Table 6. Number of 2017 DHB mental health and addiction employees expected to attain or exceed the age of 65 years in 5, 10 and 15 years (cumulative over time)

Occupation group	Aged 65 or older in 5 years	Aged 65 or older in 10 years	Aged 65 or older in 15 years
Allied and scientific	250	445	662
Nursing	740	1,361	1,953
Senior medical	143	255	360
Junior medical	1	5	11
Care and support	318	559	773
Corporate and other	223	364	495
Total employees	1,675	2,989	4,254
Proportion of 2017 employees	20%	36%	51%

Note: the three number columns show the cumulative total employees.

In addition to maintaining the workforce size to meet future population growth, workforce planning is also needed to replace older people in the workforce due to retirement or transition to different forms of work.

These findings continue to underscore the need for workforce planning and development over the next 15 years. Workforce development is needed to ensure an adequate workforce supply to address gaps that will occur due to workforce ageing. In addition, the workforce needs to grow to meet the health needs of our future population. This will include growing **health workers'** capabilities for working with older adults across the whole of the health sector (Te Pou o te Whakaaro Nui, 2011), as older people are projected to number over 1.1 million by 2032, increasing from 15 per cent of the total population in 2017 to 21 per cent by 2032 (Statistics New Zealand, 2016).

## Ethnic diversity

Compared to the total DHB workforce (around 70,000 people), the 8,405 DHB mental health and addiction employees examined in this report were more ethnically diverse, with 9 per cent of employees identifying as Māori, 6 per cent identifying in a Pasifika ethnic group and 13 per cent identifying in an Asian ethnic group.

Some variation was found within DHB mental health and addiction employees by occupation groups. Senior medical employees were the only group with higher Asian representation than all DHB peers, and junior medical employees had very high Asian representation at 22 per cent, compared to other groups. Māori and Pasifika representation among senior and junior medical employees was low compared to the average for all DHB mental health and addiction employees. This indicates the need to continue efforts to grow ethnic diversity in these occupation groups.

As previously stated in the 2016 profile report (Te Pou o te Whakaaro Nui, 2017), Māori and Pasifika representation among DHB mental health and addiction employees is greater than for all DHB employees. However, continuing emphasis on growing ethnic diversity in the workforce is needed to bring workforce ethnicity (especially the clinical workforce) into alignment with consumers, of whom 26 per cent were Māori people during the year ended 30 June 2017 (Ministry of Health, 2017). Furthermore, there is a risk that current gains may be eroded by population growth. Over the next 15 years to 2032, the Māori population is projected to grow by 32 per cent, the Pasifika population by 27 per cent and the Asian population by 60 per cent (Statistics New Zealand, 2016).

## HWIP data collection

The completion of PAOW coding of employee records by all but one small DHB means that the dataset presents a better picture of mental health and addiction employees than has previously been available. In 2017, over 800 additional mental health and addiction employees have been identified by the selection criteria, compared to 2016.

The expansion of the dataset is largely due to better access to DHB mental health and addiction employee records, although change over time will also be a factor. It is not possible to identify the extent of change over time for DHB employees between 2017 and 2016, however. For this reason, comparisons with the 2016 dataset are only made to describe the impact of improved reporting on our understanding of the workforce profile. Now that PAOW coding has been improved to include all but one small DHB, change over time will be able to be explored in future reports.

The capture of more mental health and addiction employees from the HWIP dataset as at 30 June 2017 provides a truer picture of the size of the DHB employed workforce, and its profile.

## Limitations

The HWIP dataset relies upon the quality of the data supplied from the DHBs and consideration must be made to the fact that the data is extracted from multiple systems within the DHBs. The HWIP team works closely with DHBs to continually improve the data quality of the national collection.

Improvements in the coding of PAOW by DHBs has increased the number of DHB employees captured by the selection criteria by over 800 FTEs employed. This increase cannot be interpreted as growth in the workforce size, rather it reflects that the selection criteria is able to access a greater number of mental health and addiction employees with mental health and addiction PAOW codes.

The information presented here is dependent upon coding decisions made within individual DHBs, in consultation with the HWIP team. Consequently, there may be issues with the accuracy and consistency of information collected that are not specifically described here.

The improvements in PAOW coding has altered some of results for occupation groups demographic and service profiles from those previously reported by Te Pou o te Whakaaro Nui (2017). This means that the information presented for 2017 is not directly comparable with that previously reported as differences are most likely due to increased catchment of DHB mental health and addiction employees rather than change over time.

## Concluding comments

The information provided in this report is useful to inform workforce planning activities by DHB locality, regionally, and nationally. The regional and DHB-size group analyses provide useful comparators for DHBs undertaking workforce planning so that they can compare their own workforce information with the whole region, or with other similar sized DHBs.

Workforce planning and development activities are needed to ensure continuity of DHB workforce supply (Te Pou o te Whakaaro Nui, 2017), including:

- being prepared to address impending attrition in the workforce due to ageing
- **finding ways to capitalise on the workforce's long service and experience to support the development of new entrants**
- growing the workforce capabilities for working with older adults to meet anticipated growth in population
- continuing to build on the momentum of workforce development programmes to bring **Māori and Pasifika representation into line with the ethnicity of consumers across the range of occupation groups.**

# Appendices

## Appendix A: Roles in HWIP occupation groups

The roles allocated to each of the HWIP occupation groups described in this report are listed with the relevant ANZSCO codes in Table 7.

The second column presents the workforce identified by HWIP with mental health and addiction PAOW codes, totalling 7,190 FTEs. The third column describes the workforce in 365 FTEs employed that includes 36 FTEs for employees with no PAOW code, and another 329 FTEs for employees in other DHB services who have mental health and addiction involvement in their job title or a relevant ANZSCO code.

Table 7. Roles and ANZSCO codes allocated to each HWIP occupation group

Group and role	MHA PAOW code	Non-MHA PAOW code*	FTEs employed
Allied health and scientific			
Clinical psychologist	470.0	95.3	565.3
Social worker	502.8	3.4	506.2
Occupational therapist	265.4	1.0	266.4
Psychotherapist	33.2	0.6	33.8
Diversional therapist	7.6		7.6
Hospital pharmacist	4.6		4.6
Physiotherapist	4.5		4.5
Psychologists	4.3	0.2	4.5
Dietitian	3.7		3.7
Health diagnostic and promotion professionals	3.3		3.3
Speech language therapist	2.6		2.6
Natural and physical science professionals	1.9		1.9
Allied health and scientific total	1,303.8	100.5	1,404.4
Nursing			
Registered nurse (mental health)	2,391.4	188.9	2,580.3
Registered nurses	367.9	0.2	368.1
Nurse manager	202.4	1.0	203.4
Enrolled nurse	112.5		112.5
Registered nurse (community health)	78.5	1.0	79.5
Registered nurse (medical)	46.8		46.8
Nurse educator	21.1	1.0	22.1
Registered nurse (disability and rehabilitation)	8.6	1.6	10.2
Nursing clinical director	7.0	1.0	8.0
Registered nurse (developmental disability)	7.5		7.5
Nurse practitioner	6.9		6.9
Registered nurse (child and family health)	3.4		3.4
Registered nurse (aged care)	2.0		2.0

Group and role	MHA PAOW code	Non-MHA PAOW code*	FTEs employed
Registered nurse (paediatric)	1.8		1.8
Registered nurse (surgical)	1.0		1.0
Nurse researcher	0.7		0.7
Nursing total	3,259.6	194.7	3,454.2
Senior medical			
Psychiatrist	436.2	45.7	482.0
Medical practitioners	9.5		9.5
Specialist physician (general medicine)	5.7		5.7
Medical superintendent	2.8	1.0	3.8
General practitioner	3.7		3.7
Paediatrician	2.8		2.8
Emergency medicine specialist	1.0		1.0
Ophthalmologist	1.0		1.0
Senior medical total	462.7	46.7	509.5
Junior medical			
Resident medical officer	232.4		232.4
Junior medical total	232.4		232.4
Care and support			
Nursing support worker	635.4	2.5	637.9
Drug and alcohol counsellor	201.3	7.8	209.1
Community worker	202.7		202.7
Maori health assistant	71.5	1.0	72.5
Therapy aide	40.2		40.2
Welfare worker	37.0	1.8	38.8
Counsellors	17.5		17.5
Family and marriage counsellor	6.9		6.9
Health promotion officer	5.8	1.0	6.8
Personal care assistant	5.0		5.0
Recreation coordinator	3.0		3.0
Youth worker	3.0		3.0
Social professionals	2.8		2.8
Hospital orderly	2.4		2.4
Family support worker	2.0		2.0
Rehabilitation counsellor	0.5		0.5
Care and support total	1,237.0	14.1	1,251.1
Corporate and other			
Secretary (general)	112.9		112.9
Clerical and administrative workers	95.0	3.0	98.0
General clerk	90.5		90.5

Group and role	MHA PAOW code	Non-MHA PAOW code*	FTEs employed
Health and welfare services managers	67.2	4.5	71.7
Medical receptionist	58.3		58.3
Admissions clerk	44.1		44.1
Clerical and office support workers	39.7		39.7
Personal assistant	36.2		36.2
Receptionist (general)	33.7		33.7
Program or project administrator	19.4		19.4
Cleaners	15.4		15.4
Information and organisation professionals	10.0		10.0
Word processing operator	9.6		9.6
Organisation and methods analyst	8.0		8.0
Quality assurance manager	5.5		5.5
Corporate general manager	5.0		5.0
Commercial housekeeper	5.0		5.0
Policy and planning manager	2.9	1.0	3.9
Kitchenhand	3.2		3.2
Contract administrator	3.0		3.0
Specialist managers	3.0		3.0
Intelligence officer	3.0		3.0
Health practice manager	2.0		2.0
Welfare centre manager	2.0		2.0
Human resource adviser	2.0		2.0
Liaison officer	1.7		1.7
Public relations professional	1.0		1.0
Management accountant	1.0		1.0
Finance manager	1.0		1.0
Accounts clerk	1.0		1.0
Security consultant	1.0		1.0
Customer service manager	1.0		1.0
Librarian	1.0		1.0
Horticultural nursery assistant	1.0		1.0
ICT business analyst	1.0		1.0
Office manager	1.0		1.0
Policy analyst	1.0		1.0
Education adviser	1.0		1.0
Systems administrator	1.0		1.0
Switchboard operator	0.9		0.9
Database administrator	0.9		0.9
Commercial cleaner	0.6		0.6
Automobile drivers	0.4		0.4
Cook	0.4		0.4
Corporate and other total	694.8	8.5	703.3

Group and role	MHA PAOW code	Non-MHA PAOW code*	FTEs employed
Total FTEs employed	7,190.3	364.5	7,554.9

\* the non-MHA PAOW code column includes 36 FTEs for employees with no PAOW code, and 329 FTEs for employees with other PAOW codes than those for mental health and addiction.



## Appendix B: DHBs by size groups

While national and regional analyses are useful for thinking about local workforce priorities, individual services may also find it helpful to compare their workforce with similar sized DHBs. Three DHB size groups were used to analyse the HWIP dataset: large, medium and small. Table 8 shows the different DHBs included in each group, which are the same size groups used in the key performance indicator framework for New Zealand mental health and addiction services in their reports (Mental Health and Addiction Key Performance Indicator Programme, 2015).

Table 8. *DHBs in each of the three size groupings*

Large DHBs	Medium DHBs	Small DHBs
Bay of Plenty	Lakes	West Coast
Capital and Coast	Taranaki	Wairarapa
Southern	Nelson–Marlborough	Tairāwhiti
Waikato	Hutt Valley	Whanganui
Auckland	Hawke’s Bay	South Canterbury
Counties Manukau	Northland	
Canterbury	MidCentral	
Waitematā		

## Appendix C: Primary area of work codes

The primary area of work code is used to describe the main or most common area of work, even though an employee may work in two or more different areas, this may often be the case for nurses.

The HWIP data was extracted for the primary area of work codes described in Table 9. As at 30 June 2017, all but two DHBs were completing a PAOW code for all employees: one DHB had done so for 99 per cent of employees, and one small DHB was yet to start coding for its employees.

Table 9. *Primary area of work codes relevant to mental health and addiction included in this report*

Primary code	Primary level	Secondary code	Secondary level	Area of work code	Department grouping
08	Psychiatry	01	General psychiatry	0801	Mental health
08	Psychiatry	02	Forensic psychiatry	0802	Mental health
08	Psychiatry	03	Psychotherapy	0803	Mental health
10	Primary care	04	Mental health	1004	Mental health
12	Clinical support	02	Substance abuse	1202	Counselling
12	Clinical support	19	Clinical psychology	1919	Psychology

Sourced from Health Workforce Information Programme (2016).

## Appendix D: DHB mental health and addiction employees' profile

Table 10. DHB mental health and addiction employee demographic and service profile averages and proportions nationally, regionally and in DHB size groups, and by service delivery occupation groups

	MHA employees	All DHB employees	Mental health and addiction employees by occupation groups					
			Allied health and scientific	Nursing	Senior medical	Junior medical	Care and support	Drug and alcohol counsellors
No. people employed	8,405	69,620	1,669	3,776	590	240	1,349	218
FTEs employed	7,554.9	58,451	1,404.4	3,454.2	509.5	232.4	1,251.1	209.1
Average age (years)	48.3	45.7	45.7	48.2	52.4	34.1	50.5	49.4
Average age by region								
Northern region	47.4		45.2	46.9	52.4	33.3	49.1	45.7
Midland region	48.8		47.3	49.3	52.6	34.6	49.0	51.6
Central region	48.3		46.1	48.2	51.8	33.3	51.0	53.4
South Island region	49.2		45.0	48.9	52.8	35.6	55.1	55.4
Average by DHB size								
Large DHBs	47.9		45.1	47.7	52.3	34.3	50.1	47.0
Medium DHBs	49.4		47.5	49.5	52.6	33.0	50.7	49.4
Small DHBs	51.1		48.2	50.2	52.8	41.0	54.6	55.9
Employees by age groups								
Under 25 years	2.3%	3.8%	2.1%	3.1%	0.0%	2.1%	1.8%	1.8%
25-29	6.8%	10.2%	7.6%	7.4%	0.0%	34.2%	4.3%	1.8%
30-34	7.5%	11.2%	12.2%	6.9%	1.0%	22.4%	5.4%	8.7%

	MHA employees	All DHB employees	Mental health and addiction employees by occupation groups					
			Allied health and scientific	Nursing	Senior medical	Junior medical	Care and support	Drug and alcohol counsellors
35-39	8.5%	9.2%	11.3%	7.5%	7.3%	18.6%	7.8%	6.4%
40-44	10.8%	10.2%	13.5%	9.5%	15.4%	11.0%	10.2%	13.8%
45-49	13.6%	12.5%	13.6%	13.8%	15.4%	7.2%	13.2%	15.6%
50-54	15.1%	12.8%	13.0%	15.7%	17.7%	2.5%	15.8%	13.3%
55-59	15.6%	13.6%	11.7%	16.4%	18.9%	1.7%	17.9%	18.3%
60-64	12.6%	10.4%	9.4%	13.8%	14.7%	0.4%	12.4%	15.1%
65-69	5.7%	4.5%	4.6%	4.9%	6.1%	0.0%	7.7%	4.1%
Over 70 years	1.6%	1.5%	1.0%	0.8%	3.4%	0.0%	3.5%	0.9%
Gender								
Female	70.1%	78.6%	78.2%	74.0%	42.9%	56.2%	53.1%	61.9%
Male	29.9%	21.4%	21.8%	26.0%	57.1%	43.8%	46.9%	38.1%
Ethnicity (national)								
Māori	9.2%	7.1%	8.4%	11.3%	1.3%	5.3%	29.2%	19.1%
Pasifika	5.9%	4.0%	3.4%	5.1%	0.9%	4.0%	13.7%	5.0%
Asian	12.9%	17.3%	6.8%	9.2%	18.6%	22.0%	7.8%	8.5%
Other	72.0%	71.5%	81.4%	74.5%	79.2%	68.7%	49.3%	67.3%
Northern region								
Māori	13.2%		9.3%	11.7%	0.8%	7.7%	27.1%	21.2%
Pasifika	9.1%		6.0%	8.6%	1.6%	8.8%	16.2%	7.7%
Asian	14.5%		9.0%	17.2%	21.8%	20.9%	13.8%	12.5%
Other	63.2%		75.6%	62.5%	75.8%	62.6%	42.9%	58.7%

	MHA employees	All DHB employees	Mental health and addiction employees by occupation groups					
			Allied health and scientific	Nursing	Senior medical	Junior medical	Care and support	Drug and alcohol counsellors
Midland region								
Māori	17.5%		9.7%	15.7%	2.5%	6.5%	36.8%	26.2%
Pasifika	2.7%		2.4%	1.9%	1.2%	2.2%	6.0%	2.4%
Asian	8.9%		8.5%	6.9%	24.7%	37.0%	6.8%	7.1%
Other	70.9%		79.4%	75.6%	71.6%	54.3%	50.4%	64.3%
Central region								
Māori	15.4%		10.4%	14.6%	0.0%	2.8%	30.7%	10.5%
Pasifika	8.3%		1.8%	7.2%	0.0%	0.0%	24.6%	5.3%
Asian	5.2%		3.6%	5.1%	13.7%	16.7%	1.9%	0.0%
Other	71.1%		84.3%	73.1%	86.3%	80.6%	42.8%	84.2%
South Island region								
Māori	6.9%		3.4%	5.8%	2.9%	1.9%	24.2%	8.8%
Pasifika	1.1%		0.3%	1.5%	0.0%	0.0%	1.5%	0.0%
Asian	4.4%		4.3%	4.4%	10.7%	14.8%	0.5%	2.9%
Other	87.7%		92.0%	88.3%	86.4%	83.3%	73.7%	88.2%
Large DHBs								
Māori	10.9%		7.4%	8.4%	1.0%	5.2%	27.2%	15.0%
Pasifika	7.1%		4.1%	5.9%	1.2%	4.2%	16.5%	7.5%
Asian	10.6%		7.8%	10.7%	19.1%	24.0%	9.2%	12.0%
Other	71.5%		80.6%	75.1%	78.7%	66.7%	47.1%	65.4%
Medium DHBs								
Māori	19.1%		12.0%	21.3%	1.0%	5.9%	35.1%	25.9%
Pasifika	2.1%		1.0%	2.7%	0.0%	2.9%	4.0%	0.0%

	MHA employees	All DHB employees	Mental health and addiction employees by occupation groups					
			Allied health and scientific	Nursing	Senior medical	Junior medical	Care and support	Drug and alcohol counsellors
Asian	4.3%		2.6%	4.5%	16.0%	11.8%	3.0%	0.0%
Other	74.5%		84.4%	71.5%	83.0%	79.4%	57.9%	74.1%
Small DHBs								
Māori	23.6%		9.8%	21.8%	10.0%	0.0%	41.3%	33.3%
Pasifika	0.9%		0.0%	0.6%	0.0%	0.0%	1.6%	0.0%
Asian	4.2%		7.3%	2.3%	20.0%	0.0%	1.6%	8.3%
Other	71.3%		82.9%	75.3%	70.0%	100.0%	55.6%	58.3%
Length of service (LOS)								
Average LOS (years)	8.9	8.5	6.8	9.8	9.2	2.1	9.2	7.1
By region								
Northern	8.0		6.6	8.5	8.2	1.0	8.6	6.2
Midland	8.7		6.2	9.7	9.1	3.4	8.7	6.6
Central	8.1		6.5	8.5	9.3	0.9	9.2	9.0
South Island	11.0		8.0	11.9	11.2	3.9	11.4	9.5
By DHB size								
Large DHBs	8.9		6.7	9.9	9.6	2.2	9.4	6.3
Medium DHBs	8.3		7.4	9.1	7.6	1.5	7.7	8.7
Small DHBs	10.4		6.8	10.6	9.0	1.9	11.5	8.8
Proportion employed for								
Less than 2 years	23.8%		29.9%	21.2%	18.8%	66.3%	20.2%	24.3%

	MHA employees	All DHB employees	Mental health and addiction employees by occupation groups					
			Allied health and scientific	Nursing	Senior medical	Junior medical	Care and support	Drug and alcohol counsellors
2 to less than 5 years	19.4%		21.7%	19.3%	20.8%	20.8%	16.9%	22.5%
5 to less than 8 years	12.3%		13.5%	12.0%	12.2%	9.6%	13.3%	12.4%
Over 8 years	44.5%		34.9%	47.5%	48.1%	3.3%	49.6%	40.8%
FTE turnover								
Average	11.9%	10.7%	15.1%	11.0%	13.8%		9.8%	14.2%
By region								
Northern	12.4%		14.1%	12.4%	13.3%		9.6%	15.1%
Midland	10.8%		15.0%	9.8%	16.9%		7.7%	9.3%
Central	14.0%		18.5%	12.3%	15.6%		13.8%	33.3%
South Island	10.0%		13.9%	9.3%	10.9%		7.6%	7.1%
By DHB size								
Large DHBs	11.5%		15.1%	11.1%	12.7%		8.9%	14.4%
Medium DHBs	12.6%		13.3%	10.9%	16.0%		14.1%	16.1 %
Small DHBs	14.1%		28.6%	10.3%	27.3%		9.4%	5.9 %

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