

Acknowledgements

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Abbreviations

ANZSCO Australia and New Zealand Standard Classification of Occupations

AOD alcohol and other drug

CAMHS Infant, child and adolescent mental health and addiction services

DHB District health board

FTE Full-time equivalent

HWIP Health Workforce Information Programme

MHA Mental health and addiction

MHSOP Mental health and addiction services for older people

NGO Non-government organisation

PAOW Primary area of work

PRIMHD Programme for the Integration of Mental Health Data

TAS Technical Advisory Services

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Executive summary

This is the fourth report in the series of annual publications describing district health board (DHB) mental health and addiction employee demographic and service profiles. The report summarises routinely collected DHB employee health workforce data (held by the Health Workforce Information Programme [HWIP]) about DHB mental health and addiction service employees. It describes, as at 30 June 2019:

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

The information presented in this report has been provided by HWIP, at Technical Advisory Services (TAS) to Te Pou o te Whakaaro Nui (Te Pou). It describes aggregated socio-demographic and service information for all people employed in a mental health and addiction primary area of work (PAOW). This includes people working in mental health and addiction services for:

- children and adolescents (CAMHS)
- adults
- older people (MHSOP).

There were 8,242 DHB mental health and addiction employees working in 7,416 full-time equivalent (FTE) positions across all 20 DHBs at 30 June 2019. This equates to nearly 12 per cent of the total FTE positions employed by DHBs.¹ Compared to all DHB employees, DHB mental health and addiction employees:

- tend to be older on average (48 years compared to 45 years)
- are more likely to be aged over 50 years (50 per cent compared to 42 per cent)
- are less likely to be female (71 per cent compared to 79 per cent)
- are more likely to identify as Māori or in a Pasifika ethnic group (14 and 7 per cent respectively, compared to 8 and 4 per cent)
- have been employed for similar length of time on average (nearly 9 years compared to just over 8 years)
- have similar FTE turnover (12 per cent compared to 11 per cent).

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

¹ More information about the DHB employed workforce is available from Central Region's Technical Advisory Services Ltd (2019).



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

Comparison of 2019 DHB mental health and addiction employees age and length of service with 2018 results indicates ageing is beginning to impact the workforce profile. Overall, findings support earlier reports (Te Pou o te Whakaaro Nui, 2017a, 2017b, 2019b) emphasising the need for workforce planning and development activities to manage the workforce profile to ensure:

• young new employees are well supported and mentored into their roles

All DHB employees

- workforce diversity continues to grow to better align with the ethnicity of people accessing services
- employee wellbeing is not adversely impacted by increasing turnover.

Introduction

This is the fourth 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 DHB employed health workforce data (held by the Health Workforce Information Programme [HWIP]) about DHB mental health and addiction employees to inform workforce planning and development activities. This includes people working in infant, child and adolescent mental health and addiction services (CAMHS), adult mental health and addiction services, and dedicated mental health and addiction services for older people (MHSOP). Specific objectives include describing, as at 30 June 2019:

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

This report is based on information provided to Te Pou by HWIP. HWIP collects and collates DHB employed workforce information submitted from all 20 DHBs' human resources and payroll systems. HWIP reports quarterly on aggregated information for all DHB employees; see https://tas.health.nz/strategic-workforce-services/health-workforce-information-programme-hwip/.

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

- national and regional averages²
- comparisons with all DHB employees and by occupation group
- averages by DHB-size groups
- where appropriate, trends over time are described also.

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 75,000 people in 63,400 FTE positions). The second section describes the profile of DHB mental health and addiction employees in the following occupation groups:

- allied health
- nurses
- senior medical practitioners
- junior medical practitioners (resident medical officers)
- support workers
- addiction practitioners.³

² 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.

³ Information provided by HWIP by ANZSCO codes has been designated occupation groups according to the categories used in the *More than numbers* project to align with its workforce data collected in 2018.

Analysis of 860 people in the administration and management (corporate and other) occupation group has not been included in this report. The specific ANZSCO codes and role descriptions used in each occupation group are described in Appendix A (Table 3). Other information provided in appendices includes DHBs by size groups (Appendix B); HWIP primary area of work codes (Appendix C) and a summary table of DHB mental health and addiction employee profile data (Appendix D).

Method

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

This report is based on DHB employed workforce data (held by HWIP) collected for the quarter ended 30 June 2019. The data was extracted from the DHB employed workforce information dataset for DHB employees with PAOW codes associated with mental health and addiction.

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.

Analyses

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 are included in analyses.

The occupation group names differ slightly from those reported elsewhere by HWIP. This report describes occupation groups in ways consistent with other workforce reports from Te Pou and Matua Raki (Te Pou o te Whakaaro Nui, 2018a, 2018b).

Workforce ethnicity is calculated taking the number of people who identify in an ethnic group as a proportion of all people with valid ethnicity information supplied. Employee ethnicity is prioritised according to the Ministry of Health ethnicity data protocols (Ministry of Health, 2004). The use of prioritised ethnicity results in under-reporting of individuals in non-Māori ethnic groups (for example Pasifika and Asian peoples) if they also identify as Māori.

FTE turnover is calculated from the sum of FTE positions terminated during the year ended 30 June 2019, 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.

DHB employee profile

This section describes the socio-demographic profile, length of service and FTE turnover of DHB mental health and addiction employees. As at 30 June 2019, DHBs employed 8,242 people in 7,416 FTE positions with a mental health and addiction PAOW code. Table 1 describes the total people and FTEs employed, at 30 June 2019, in each HWIP occupation group.

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

Occupation group	People employed	FTEs employed	Proportion of FTEs employed (%)
Allied health	1,555	1,326.9	17.9
Nurses	3,686	3,354.9	45.2
Senior medical	554	480.1	6.5
Junior medical	236	224.7	3.0
Support workers	1,123	1,038.6	14.0
Addiction practitioners*	228	216.3	2.9
Administration & management**	860	773.9	10.4
Total	8,242	7,415.5	100.0

Notes:

Figures in the following sections show comparisons between all DHB mental health and addiction employees (MHA) and all DHB employees (all DHB) across all services.

Age

The average age of DHB mental health and addiction employees is just over 48 years. DHB mental health and addiction employees tend to be older than all DHB employees whose average age is 45 years.

Figure 2 outlines the proportion of DHB mental health and addiction employees in five-year age groups. It shows that DHB mental health and addiction employees are less likely to be represented in the younger age groups (20 per cent of mental health and addiction employees are aged under 35 compared to 28 per cent of all DHB employees), and more likely to be aged over 45 compared to all DHB employees.

^{*} People and FTE positions in addiction practitioner roles are identified by the ANZSCO code for drug and alcohol counsellors (code number 272112). This report likely under-estimates the size of the DHB addiction practitioner workforce as people undertaking similar work may be reported using their professional group code, eg as social workers.

^{**} Demographic information for employees in the administration and management group is not provided in this report.

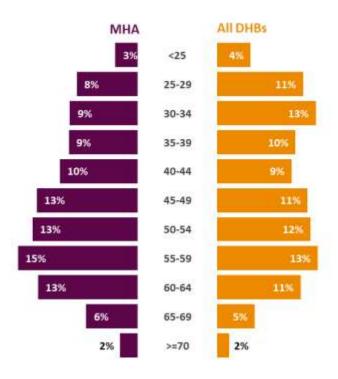


Figure 2. DHB mental health and addiction employees distributed across 5-year age groups.

Half of DHB mental health and addiction employees are aged over 50, with 36 per cent aged over 55, and 21 per cent aged over 60. In contrast, 42 per cent of all DHB employees are aged over 50; see Figure 3.



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 have a slightly lower average age (47 years) compared to other regions, and the South Island region the highest (49 years). Employees in large DHBs tend to be younger than those in small DHBs; see Figure 4.

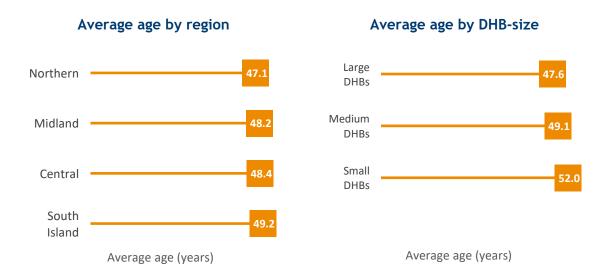


Figure 4. Comparison of mental health and addiction employees' average age, by region and by DHB-size groups.

Gender

Seventy-one per cent of DHB mental health and addiction employees identify as female, compared to 79 per cent of all DHB employees; see Figure 5.

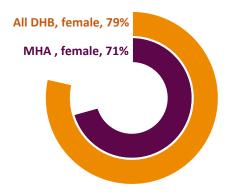


Figure 5. Comparison of female DHB mental health and addiction employees with all DHB female employees.

Ethnicity

DHB mental health and addiction employees identify as Māori (14 per cent) or Pasifika (7 per cent), at higher rates than all DHB employees (8 and 4 per cent respectively) and are less likely to identify in an Asian ethnic group; see Figure 6.

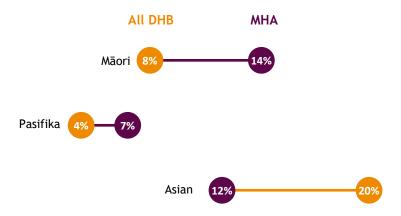


Figure 6. Comparison of DHB mental health and addiction employees' ethnicity with all DHB employees for Māori, Pasifika and Asian ethnic groups.

Māori representation among DHB mental health and addiction employees is highest in the Midland region (18 per cent of employees) and in medium-sized and small DHBs (22 and 21 per cent respectively).⁴ Representation of Pasifika peoples is highest in the Northern and Central regions (10 per cent each), and among people working in large DHBs (8 per cent). A similar trend is seen for employees in Asian ethnic groups in the Northern region and in large DHBs (19 and 14 per cent respectively); see Figure 7.

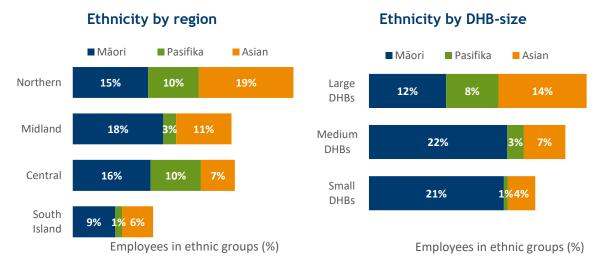


Figure 7. Māori, Pasifika and Asian representation among DHB mental health and addiction employees, by region and DHB-size groups.

⁴ Māori representation in the population varies by region, with the Midland region having the highest (26 per cent), followed by Central (18 per cent), Northern (13 per cent), and the South Island (10 per cent); see Statistics New Zealand (2018).

Length of service

The average length of service for DHB mental health and addiction employees is just under 9 years, at 30 June 2019; compared to 8 years for all DHB employees. 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 (236 people out of a total of 8,242; 3 per cent), their shorter length of service due to the nature of their role slightly lowers the overall average.

More than half (54 per cent) of DHB mental health and addiction employees have over 5 years' length of service, and most have been employed for more than 8 years; see Figure 8.

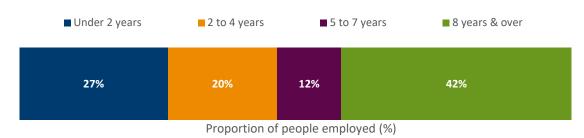


Figure 8. The proportion of DHB mental health and addiction employees by period employed.

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

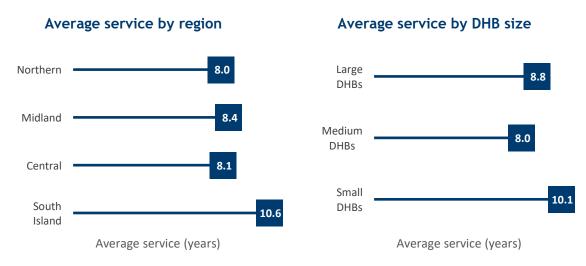


Figure 9. Average length of service for DHB mental health and addiction employees, by regions and DHB size groups.

FTE turnover

In June 2019, DHB mental health and addiction employees had an FTE turnover rate of 12 per cent for the year. This is similar to all DHB employees over the same period (11 per cent). In the regions, DHB mental health and addiction employees in the Northern and Central regions have the highest FTE turnover (12 and 13 per cent respectively), as do the employees in medium-sized DHBs (12 per cent); see Figure 10.

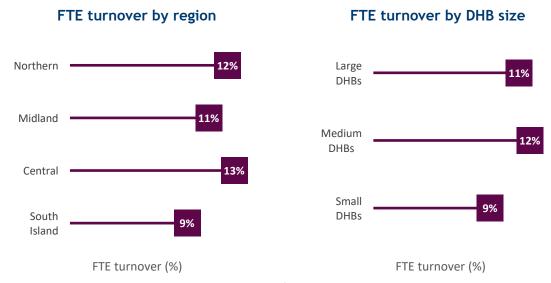


Figure 10. DHB mental health and addiction employees' FTE turnover, by region and by DHB-size groups.

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 occupation groups described in Table 1 on page 12.

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 Aged over 50 ■ Female ■ Māori Average service Employed ■ FTE turnover (%) (years) (%) (%) (%) (years) <2 years (%) Allied health 10 Nursing 49 Senior medical 63 33 54 Junior medical 71 50 58 50 Support workers Addiction 49 51 63 practitioners All mental health 48 50 71 and addiction All DHB employees 45 42

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

DHB mental health and addiction employees are described in the following subsections by occupation groups. 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

The DHB mental health and addiction employees in the allied health occupation group includes 1,555 people working in 1,327 FTE positions. Within this group, the roles with the most FTEs employed are social workers (37 per cent of allied health workers), clinical psychologists (34 per cent), and occupational therapists (22 per cent).⁵

Key findings

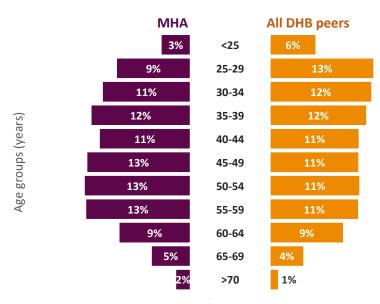
DHB mental health and addiction allied health employees:

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

Age

The average age of DHB mental health and addiction allied health employees was 46 at 30 June 2019. This is older than for all DHB peers in the allied health group (44 years). The median age group for DHB mental health and addiction allied health employees is 45 to 49 years.

Despite being a relatively youthful workforce compared to other DHB mental health and addiction employees, DHB mental health and addiction allied health workers are less likely to be aged under 35 than all DHB allied health workers (23 per cent compared to 32 per cent); see Figure 12.



Proportion of allied health workers

Figure 12. Proportion of DHB mental health and addiction allied health employees by age groups.

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⁵ More information about the roles in this group, by ANZSCO code, is provided in Appendix A (Table 3).

Two-fifths (41 per cent) of DHB mental health and addiction allied health employees are aged over 50, which is greater than for all DHB peers (36 per cent). However, the proportion of allied health workers aged over 60 is closer to that of all DHB allied health workers (15 per cent compared to 14 per cent); see Figure 13.



Allied health workers aged 50 and over

Figure 13. Comparison of the DHB mental health and addiction allied health employees aged 50, 55 and 60 and over with all DHB peers in the same age groups.

Of the regions, DHB mental health and addiction allied health employees in the Midland region are on average slightly older (47 years) than those in other regions. Allied health workers in the Northern region are on average slightly younger (45 years) than those in other regions. Allied health workers in large and small DHBs are on average younger than those in medium-sized DHBs; see Figure 14.

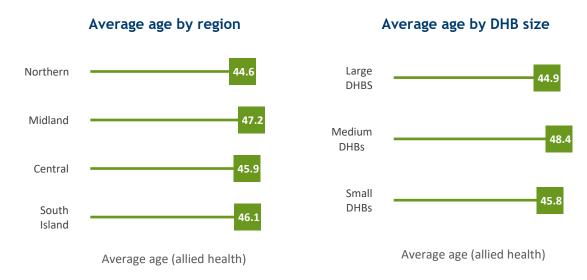
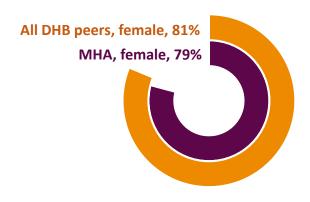


Figure 14. Average age for mental health and addiction allied health employees, by region and by DHB size groups.

Gender

About 79 per cent of DHB mental health and addiction allied health employees are female, like all DHB peers (81 per cent); see Figure 15.

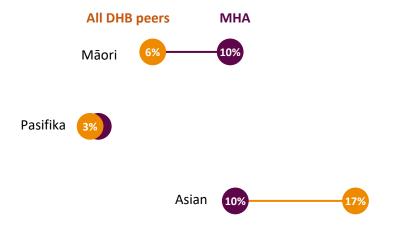


Allied health workers

Figure 15. Comparison of female DHB mental health and addiction allied health employees with all DHB peers.

Ethnicity

DHB mental health and addiction allied health employees are more likely to identify as Māori (10 per cent) than all DHB peers (6 per cent), and less likely to identify in an Asian ethnic group than all DHB peers (10 per cent compared to 17 per cent); see Figure 16.



Allied health workers

Figure 16. Comparison of DHB mental health and addiction allied health employees' ethnicity with all DHB peers.

The proportion of DHB mental health and addiction allied health employees identifying as Māori is higher in the three North Island regions (11 to 13 per cent) than the South Island (4 per cent). This is also seen in medium-sized DHBs (17 per cent respectively) compared to large and small DHBs (8 and 9 per cent respectively); see Figure 17.

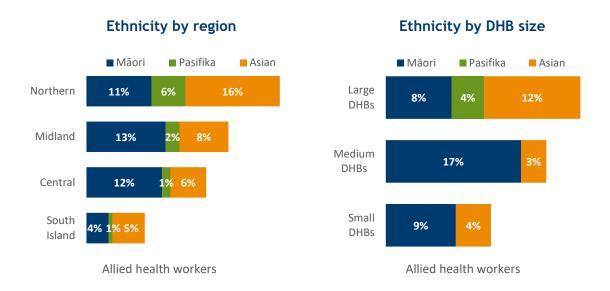
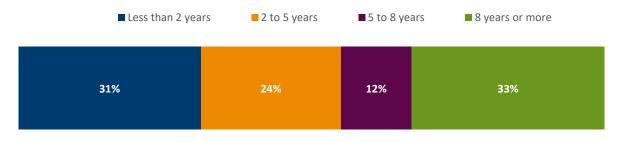


Figure 17. DHB mental health and addiction allied health employees' ethnicity, by region and by DHB-size group.

Length of service and FTE turnover

Nationally, DHB mental health and addiction allied health employees have been employed for 7 years on average. This is less than all DHB peers, whose average length of service is just over 8 years. Nearly one third (31 per cent) of DHB mental health and addiction allied health employees have been employed for less than 2 years, and 55 per cent for less than 5 years; see Figure 18.



Proportion of employees by length of service (allied health)

Figure 18. Proportion of DHB mental health and addiction allied health employees employed for specified periods of time.

DHB mental health and addiction allied health employees in the South Island region have the longest average length of service (8 years), as do those in medium-sized DHBs (8 years); see Figure 19.

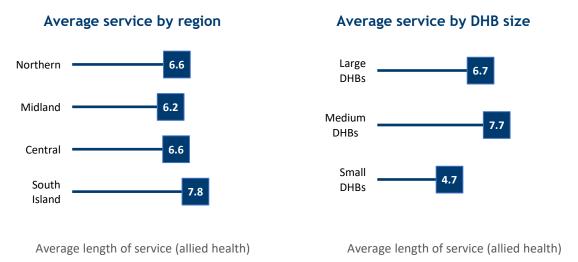


Figure 19. DHB mental health and addiction allied health average length of service by region, and by DHB size-group.

The FTE turnover for DHB mental health and addiction allied health employees at 30 June 2019 was relatively high at 17 per cent. This is higher than for all DHB peers (12 per cent) and for all mental health and addiction employees (12 per cent). The rate varies by region with the Central region having the highest (21 per cent). The FTE turnover rate is highest in large and medium-sized DHBs (16 and 17 per cent respectively); see Figure 20.

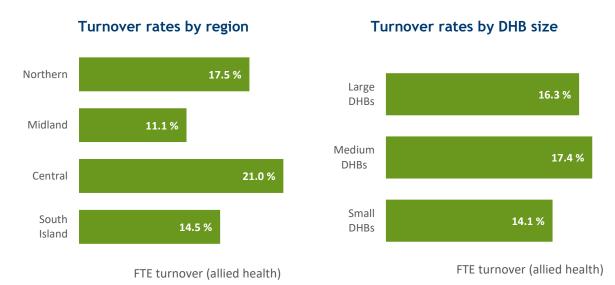


Figure 20. DHB mental health and addiction allied health employees' FTE turnover, by region and by DHB-size group.

Nurses

The nurse occupation group includes 3,686 people working in 3,354 FTE positions. Within this group, the roles with the most FTEs employed are registered nurse (mental health, 82 per cent) followed by nurse managers (6 per cent).⁶

Key findings

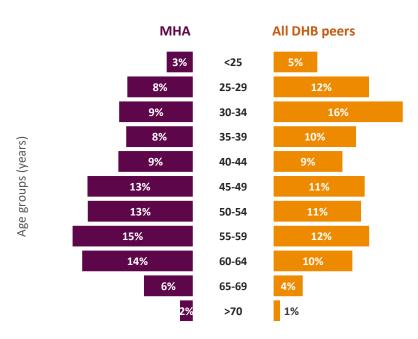
DHB mental health and addiction nurses:

- 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 similar average length of service than all DHB peers
- have similar FTE turnover to all DHB peers.

Age

The average age of DHB mental health and addiction nurses is 48. These employees tend to be older than nurses across all DHB services, whose average age is 44. The median age group for mental health and addiction nurses is 45 to 49. This is lower than the previous year's median age group of 50 to 54 years; see (Te Pou o te Whakaaro Nui, 2019b).

Twenty per cent of DHB mental health and addiction nurses are aged under 35. This is substantially lower than for all DHB nurses (33 per cent); see Figure 21.



Proportion of nurses

Figure 21. Proportion of DHB mental health and addiction nurses by age groups.

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⁶ More information about the roles in this group, by ANZSCO code, is provided in Appendix A (Table 3).

Half (49 per cent) of DHB mental health and addiction nurses are aged over 50, which is more than for all DHB peers (37 per cent); see Figure 22.

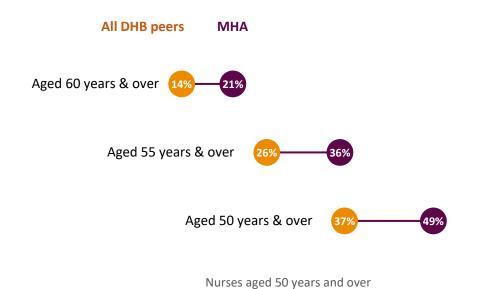


Figure 22. Comparison of the DHB mental health and addiction nurses over 50, 55 and 60 with all DHB peers in the same age groups.

Of the regions, DHB mental health and addiction nurses in the Northern region are on average younger (46 years) than those in other regions, as are those in large DHBs (47 years) compared to medium and small DHBs; see Figure 23.

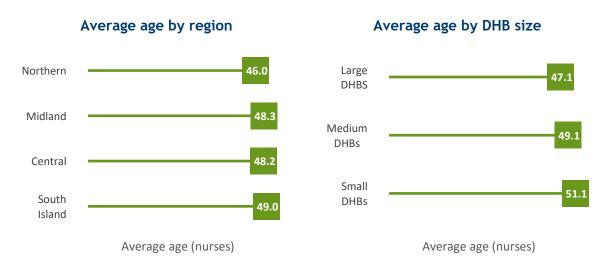


Figure 23. Average age for mental health and addiction nurses, by region and by DHB size groups.

Gender

Three-quarters (75 per cent) of DHB mental health and addiction nurses are female. Figure 24 shows that DHB mental health and addiction nurses are less likely to be female than all DHB nurses (89 per cent).

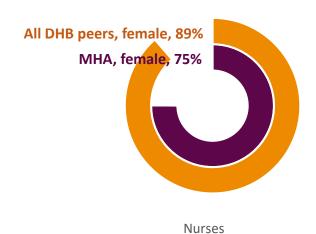


Figure 24. Comparison of female DHB mental health and addiction nurses with all DHB peers.

Ethnicity

DHB mental health and addiction nurses are more likely to identify as Māori (13 per cent) or Pasifika (6 per cent) than all DHB peers (7 and 3 per cent respectively). They are much less likely to identify in an Asian ethnic group than all DHB peers (13 per cent compared to 26 per cent); see Figure 25.

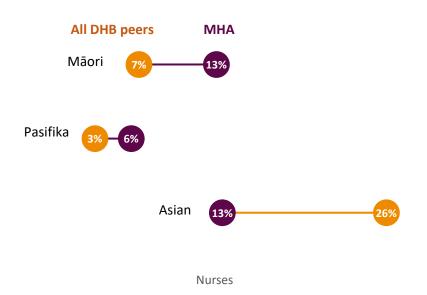


Figure 25. Comparison of DHB mental health and addiction nurses' ethnicity with all DHB peers.

DHB mental health and addiction nurses in the three North Island regions are more likely to be Māori than in the South Island. Nurses in medium and small-sized DHBs are more likely to be Māori than those employed in large DHBs; see Figure 26.

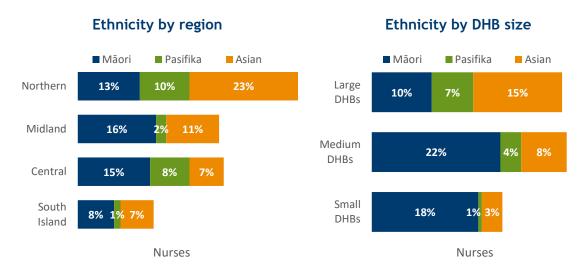
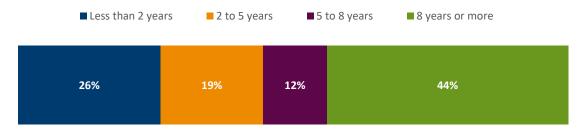


Figure 26. DHB mental health and addiction nurses' ethnicity, by region and by DHB-size group.

Length of service and FTE turnover

Nationally, DHB mental health and addiction nurses have been employed for 9 years, on average. This is like the average for all DHB peers (9 years).

Nearly half (44 per cent) of DHB mental health and addiction nurses have been employed for more than 8 years. Just over one in four nurses (26 per cent) have been employed for less than 2 years; see Figure 27.



Proportion of employees by length of service (nurses)

Figure 27. The proportion of DHB mental health and addiction nurses by length of service.

DHB mental health and addiction nurses in the Northern and Central regions have the shortest average length of service (8 years) of all the regions, as do nurses in medium-sized DHBs (9 years); see Figure 28.

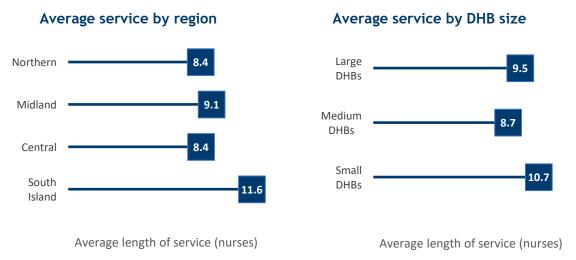


Figure 28. DHB mental health and addiction nurses' average length of service by region, and by DHB size-group.

FTE turnover for DHB mental health and addiction nurses is similar to all DHB peers (10 per cent compared to 11 per cent). The rate is highest in the Northern and Central regions (12 and 11 per cent respectively). Medium-sized and small DHBs have lower FTE turnover on average at 9 per cent, compared to large DHBs (11 per cent); see Figure 29.

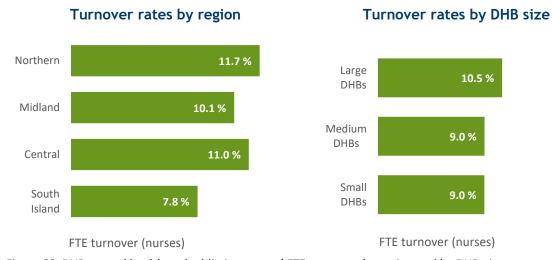


Figure 29. DHB mental health and addiction nurses' FTE turnover, by region and by DHB-size group.

Senior medical

The senior medical occupation group includes 554 people working in 480 FTE positions. Most (90 per cent) senior medical practitioners are psychiatrists.⁷

Key findings

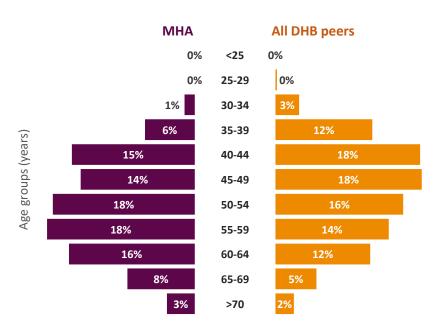
DHB mental health and addiction senior medical employees are:

- older than all DHB peers
- more gender-balanced than all DHB peers
- slightly more likely to belong to an Asian ethnic group than all DHB peers
- have similar average length of service and substantially higher FTE turnover compared to all DHB peers.

Age

The average age of DHB mental health and addiction senior medical employees is 53. This is more than 3 years older than the average for all DHB senior medical peers (50 years). The median age group for senior medical employees is 50 to 54 years.

Less than a quarter (22 per cent) of DHB mental health and addiction senior medical employees are aged under 40, compared to 33 per cent of all DHB senior medical employees; see Figure 30.

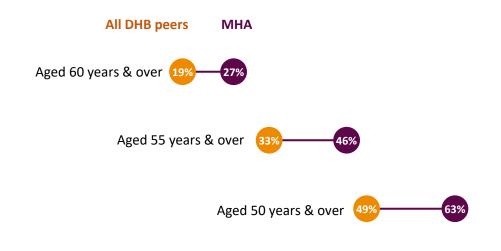


Proportion of senior medical employees

Figure 30. Proportion of senior medical employees in each age group.

⁷ More information about the roles in this group, by ANZSCO code, is provided in Appendix A (Table 3).

Just over three in five (63 per cent) DHB mental health and addiction senior medical employees are aged over 50, compared to about half of all DHB peers (49 per cent); see Figure 31.



Senior medical employees aged 50 years and over

Figure 31. 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 age of DHB mental health and addiction senior medical employees is similar across all four regions. Senior medical employees in small DHBs are slightly older on average than other DHB-size groups; see Figure 32.

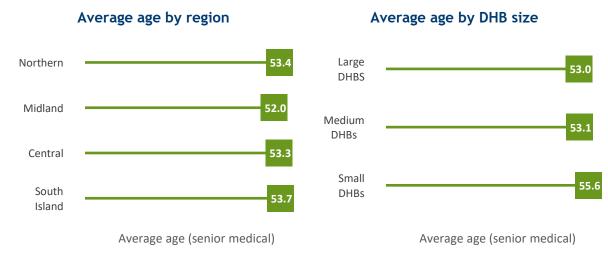
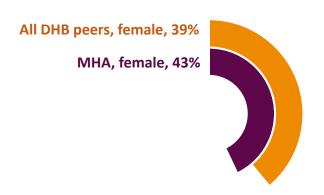


Figure 32. Average age for mental health and addiction senior medical employees, by region and by DHB size groups.

Gender

More than two in five (43 per cent) DHB mental health and addiction senior medical employees are female, which is greater than for all DHB peers (39 per cent); see Figure 33.



Senior medical

Figure 33. Comparison of male DHB mental health and addiction senior medical employees with all DHB peers.

Ethnicity

There are very low rates of Māori and Pasifika representation among DHB mental health and addiction senior medical employees (2 per cent each). This is the same as all DHB peers. DHB mental health and addiction senior medical employees are more likely to identify in an Asian ethnic group than all DHB peers (21 per cent compared to 18 per cent); see Figure 34.



Figure 34. Comparison of DHB mental health and addiction senior medical employees' ethnicity with all DHB peers.

Senior medical

The proportion of DHB mental health and addiction senior medical employees identifying as Māori is highest in the South Island region (4 per cent) and in small DHBs (5 per cent). Senior medical employees in the Northern and Midland regions are most likely to identify within Asian ethnic groups (25 and 23 per cent respectively); see Figure 35.

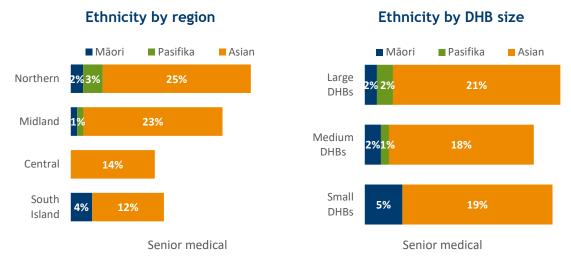
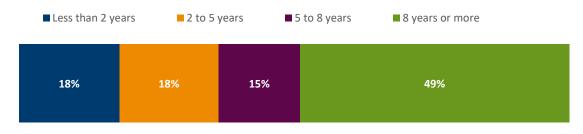


Figure 35. DHB mental health and addiction senior medical employees' ethnicity, by region and by DHB-size group.

Length of service and FTE turnover

Nationally, DHB mental health and addiction senior medical employees have been employed for 10 years on average. This is the same as the average for all DHB peers (10 years).

Nearly two-thirds (64 per cent) of DHB mental health and addiction senior medical employees have been employed for more than five years; see Figure 36.



Proportion of employees by length of service (senior medical)

Figure 36. The proportion of DHB mental health and addiction senior medical employees by length of service.

DHB mental health and addiction senior medical employees in the Northern and Midland regions have the shortest average length of service (9 years each) while those in the South Island region have the longest (12 years). For DHB-size groups, employees in medium-sized DHBs have the shortest average length of service (8 years); see Figure 37.

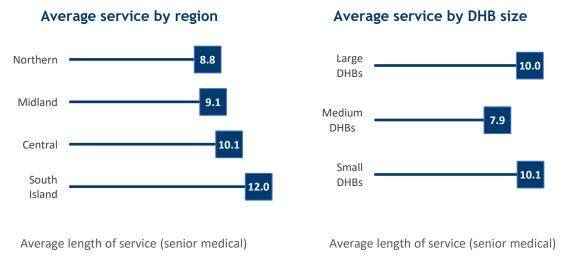


Figure 37. DHB mental health and addiction senior medical employees' average length of service by region, and by DHB size-group.

The FTE turnover for DHB mental health and addiction senior medical employees is much higher than for all DHB peers (11 per cent compared to 7 per cent). The rate varies by region with the South Island region having the lowest (5 per cent). By DHB-size groups, medium-sized and small DHBs have the highest FTE turnover of 15 per cent; see Figure 38.

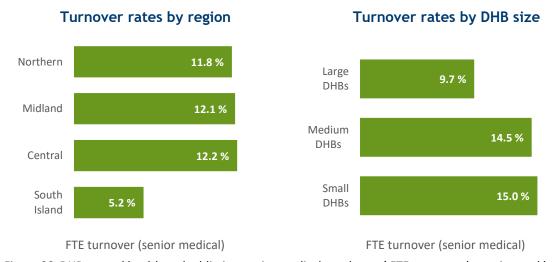


Figure 38. DHB mental health and addiction senior medical employees' FTE turnover, by region and by DHB-size group.

Junior medical

The junior medical occupation group includes 236 people working in 225 FTE positions, as resident medical officers; see Appendix A (Table 3). Due to the small size of this group and its unique employment conditions, limited analyses are presented in this section.

Key findings

DHB mental health and addiction junior medical employees are:

- somewhat older than all DHB peers
- similarly gender balanced as all DHB peers
- slightly more likely to be Māori compared to all DHB peers
- employed on average for slightly longer than all DHB peers.

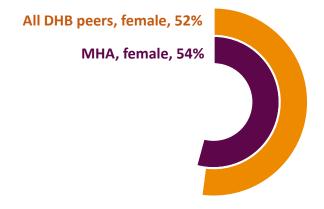
Age

The average age of DHB mental health and addiction junior medical employees was 33 at 30 June 2019. This is older than all DHB junior medical peers (31 years). Around 4 per cent of DHB mental health and addiction junior medical employees are aged over 50, which is more than for all DHB peers (1 per cent).

The average age of DHB mental health and addiction junior medical employees across the regions ranges from 32 to 33 years. This includes junior medical employees in large and medium-sized DHBs (33 years). In contrast, junior medical employees in small DHBs have an older average age of 43; see Appendix D (Table 6).

Gender

Just over half (54 per cent) of DHB mental health and addiction junior medical employees are female, which is similar to all DHB peers (52 per cent); see Figure 39.



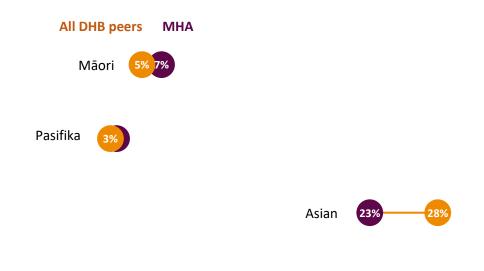
Junior medical

Figure 39. 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 are far more likely to be female than senior medical employees (54 per cent compared to 43 per cent; see Figure 33).

Ethnicity

DHB mental health and addiction junior medical employees are more likely to identify as Māori (7 per cent) than all DHB peers (5 per cent). Rates of Pasifika representation among junior medical employees are similar across mental health and addiction employees and all DHB peers (3 per cent each). However, DHB mental health and addiction junior medical employees are less likely to belong to an Asian ethic group than all DHB peers; see Figure 40.



Junior medical

Figure 40. Comparison of DHB mental health and addiction junior medical employees' ethnicity with all DHB peers.

DHB mental health and addiction junior medical employees are most likely to identify as Māori or in a Pasifika ethnic group in the Northern region (10 and 6 per cent respectively). Small DHBs report no junior medical employees identify as Māori, Pasifika or Asian. In contrast, a large proportion of DHB mental health and addiction junior medical employees in the Northern region identify with an Asian ethic group (28 per cent respectively); see Figure 41.

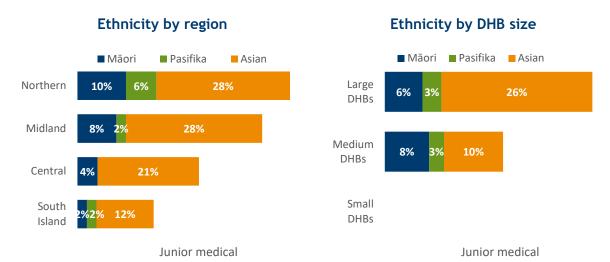


Figure 41. DHB mental health and addiction junior medical employees' ethnicity, by region and by DHB-size group.

Length of service and FTE turnover

The average length of service for DHB mental health and addiction junior medical employees is just under 2 years compared to just over 1 year (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.

Support workers

The support worker occupation group includes 1,123 people working in 1,039 FTE positions. The roles with the largest workforces include nursing support worker (66 per cent), community worker (15 per cent), and Māori health assistant (9 per cent).⁸

Key findings

DHB mental health and addiction support workers are:

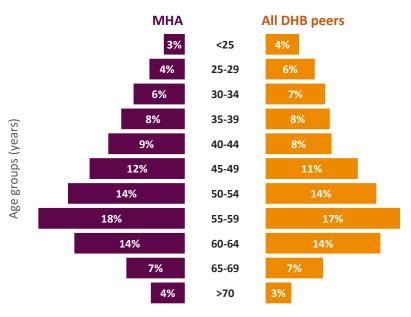
- on average a similar age to all DHB peers
- more likely to be male than all DHB peers
- much more likely to identify as Māori or in a Pasifika ethnic group than all DHB peers
- employed for longer on average than all DHB peers
- have lower FTE turnover on average than all DHB peers.

⁸ More information about the roles in this group, by ANZSCO code, is provided in Appendix A (Table 3).

Age

DHB mental health and addiction support workers have an average age of 50, similar to all DHB care and support peers (49 years). The median age range for support workers is 50 to 54 years.

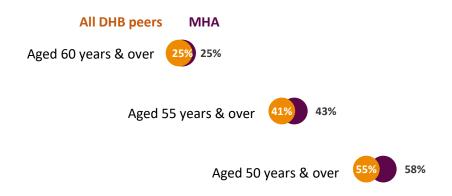
DHB mental health and addiction support workers are less likely to be aged under 35 than all DHB support workers; see Figure 42.



Proportion of support workers

Figure 42. Proportion of mental health and addiction support workers in 5-year age groups, compared to all DHB support workers.

Around three in five (58 per cent) DHB mental health and addiction support workers are aged over 50, which is slightly higher than for all DHB peers (55 per cent). The proportion of the workforce aged over 60 is similar to all DHB peers; see Figure 43.



Support workers aged 50 years and over

Figure 43. Comparison of the DHB mental health and addiction support workers over 50, 55 and 60 years old with all DHB peers in the same age groups

DHB mental health and addiction support workers in the South Island are on average slightly older than those in the other regions (52 years compared to 49 to 51 years). Likewise, support workers in small DHBs are older than those employed in large and medium-sized DHBs; see Figure 44.

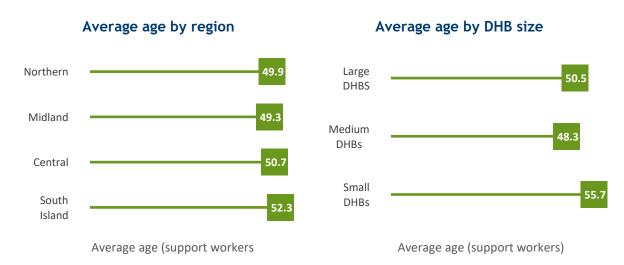
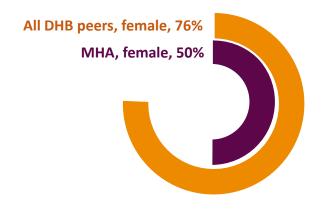


Figure 44. Average age for mental health and addiction support workers, by region and by DHB size groups.

Gender

Half (50 per cent) of DHB mental health and addiction support workers are female, which is very different to all DHB support worker peers of whom 76 per cent are female; see Figure 45.



Support workers

Figure 45. Comparison of female DHB mental health and addiction support workers with all DHB peers.

Ethnicity

DHB mental health and addiction support workers are more likely to identify as Māori than all DHB peers (33 per cent compared to 18 per cent); or with a Pasifika ethnic group (16 per cent compared to 10 per cent). DHB mental health and addiction support workers are much less likely to identify in an Asian ethnic group than all DHB peers (9 per cent compared to 19 per cent); see Figure 46. DHB

mental health and addiction support workers have the highest Māori and Pasifika representation of all mental health and addiction occupation groups.

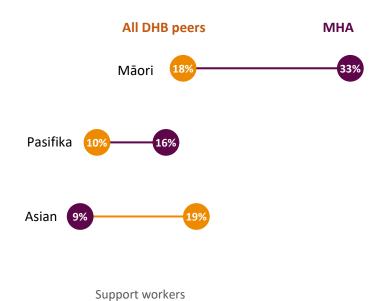


Figure 46. Comparison of DHB mental health and addiction support workers' ethnicity with all DHB peers.

DHB mental health and addiction support workers in the Midland region are most likely to be Māori (41 per cent), and in the Central region are most likely to be identified in a Pasifika ethnic group (33 per cent). Māori representation in medium and small DHBs tends to be higher than large DHBs; see Figure 47.

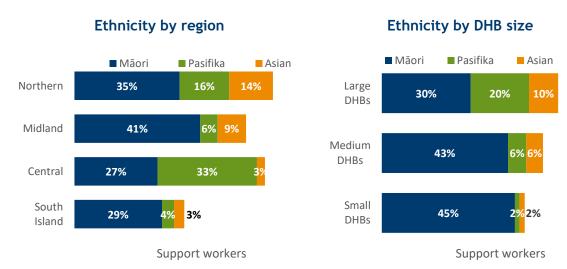
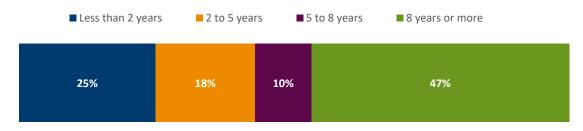


Figure 47. DHB mental health and addiction support workers' ethnicity, by region and by DHB-size group.

Length of service and FTE turnover

Nationally, DHB mental health and addiction support workers are employed for 9 years, on average. This is slightly longer than all DHB peers (8 years).

Nearly half (47 per cent) of DHB mental health and addiction support workers are employed for more than 8 years; see Figure 48.



Proportion of employees by length of service (support workers)

Figure 48. The proportion of DHB mental health and addiction support workers by length of service.

Average length of service for DHB mental health and addiction support workers is similar across all regions at around 9 years. Compared to DHBs in other size groups, small DHBs have the longest average length of service (11 years); see Figure 49.

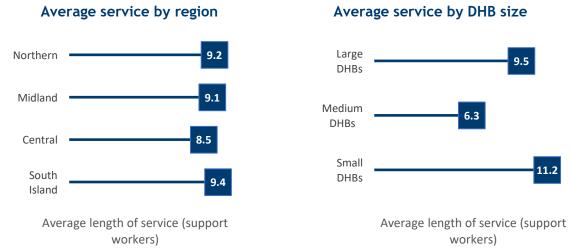


Figure 49. DHB mental health and addiction support workers' average length of service, by region and by DHB-size group.

FTE turnover for DHB mental health and addiction support workers for the year ended 30 June 2019 is 10 per cent, which was similar to all DHB peers (11 per cent). The Northern and South Island regions have the lowest FTE turnover of 9 and 8 per cent respectively. Medium-sized DHBs have the highest turnover of 13 per cent; see Figure 50.

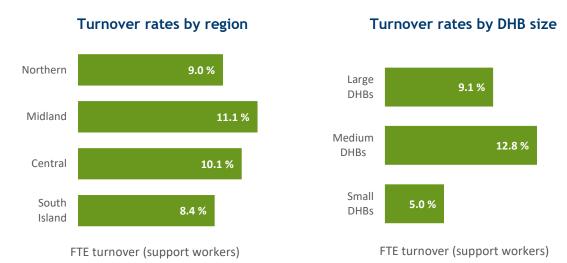


Figure 50. DHB mental health and addiction support workers' FTE turnover, by region and by DHB-size group.

Addiction practitioners

Addiction practitioners include 228 people employed in drug and alcohol counsellor roles (ANZSCO code number 272112), working in 216 FTE positions, although the actual number of addiction practitioners may be higher than reported here.⁹

The following analyses present demographic information for this role separate from occupation groups. ¹⁰ Comparisons are made with DHB mental health and addiction employees across all occupation groups. More information by region and DHB-size groups is provided in Table 6 of Appendix D.

Key findings

Compared to all DHB mental health and addiction employees, addiction practitioners are:

- on average older
- more likely to be male
- more likely to identify as Māori and less likely to identify in Pasifika or Asian ethnic groups
- employed for less time on average
- have higher FTE turnover on average.

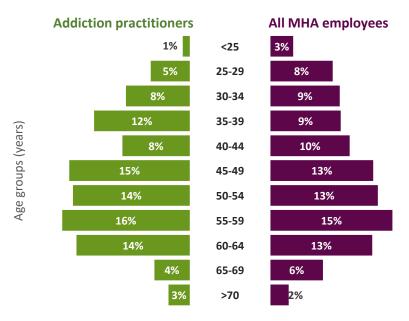
 9 For consistency with other workforce reporting by Te Pou and Matua Ra \underline{k} i, drug and alcohol counsellors are called "addiction practitioners". It is important to note that other DHB employees may fill similar roles but be categorised by ANZSCO codes relevant to their qualifications, such as social workers.

¹⁰ The overall workforce in DHB addiction services is not yet able to be analysed separately from mental health, although PAOW coding for AOD employees is improving over time.

Age

Addiction practitioners are aged 49 on average. They tend to be older than all DHB mental health and addiction employees whose average age is 48 years. The median age range is 45 to 49 years old.

Addiction practitioners are more likely to be aged over 40 years old than all DHB mental health and addiction employees; see Figure 51.



Proportion of addiction practitioners

Figure 51. Proportion of addiction practitioners in 5-year age groups, compared to all DHB mental health and addiction employees.

Gender and ethnicity

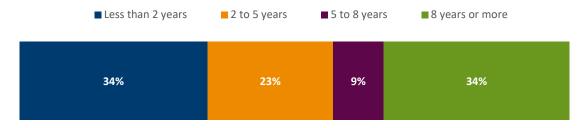
Nearly two-thirds (63 per cent) of DHB addiction practitioners are female. In contrast, 71 per cent of all DHB mental health and addiction employees are female.

Compared to all DHB mental health and addiction employees, addiction practitioners are much more likely to identify as Māori (20 per cent compared to 14 per cent). In contrast, addiction practitioners are less likely to identify with a Pasifika ethnic group (5 per cent compared to 7 per cent) and are as likely to identify in an Asian ethnic group (12 per cent).¹¹

Length of service and FTE turnover

The average length of service for addiction practitioners is nearly 7 years, which is around 2 years less than all DHB mental health and addiction employees (9 years). About one-third (34 per cent) of addiction practitioners have been employed for less than 2 years; see Figure 52.

¹¹ More information about DHB addiction practitioners by region and DHB-size groups is available in Appendix D (Table 6).



Proportion of employees by length of service (addiction practitioner)

Figure 52. The proportion of addiction practitioners by length of service.

The low average length of service is also reflected in slightly higher FTE turnover for addiction practitioners compared to all DHB mental health and addiction employees (14 per cent compared to 12 per cent). 12

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¹² See footnote 11.

Discussion

This report describes the socio-demographic profile, length of service and FTE turnover of 8,242 DHB employees whose PAOW code relates to mental health and addiction. These employees work in 7,416 FTE positions, across DHB services for all age groups including CAMHS, adult mental health and addiction services and dedicated MHSOP.

Our understanding of the demographic and service profile of DHB mental health and addiction employees is strengthened by improvements in PAOW coding for people working in mental health and addiction services. At 30 June 2019, nearly all DHBs had coded all their employees by PAOW.¹³ This will allow change over time to be explored for the DHB employed workforce.

In line with previous reports, results indicate the workforce is stable and experienced, with low FTE turnover at 12 per cent compared to the New Zealand average across all industries (19 per cent) and compared to the 2018 NGO adult mental health and addiction workforce, 23 per cent (Lawson Williams, 2017; Te Pou o te Whakaaro Nui, 2018). However, as reported previously, substantial risks to this stability are presented by the older workforce age profile.

Compared to 2018, the relative proportion of DHB mental health and addiction employees aged under 40 is slightly greater. In contrast, over the same period the share of people aged 40 to 64 decreased slightly; see Figure 53. This suggests older workers who are leaving employment are replaced by younger, less experienced people. There is also a small increase in the proportion of employees aged 65 and over, indicating that some older employees continue working into their late-60s. DHBs will need to look at how best to support older workers to make the most of their experience.

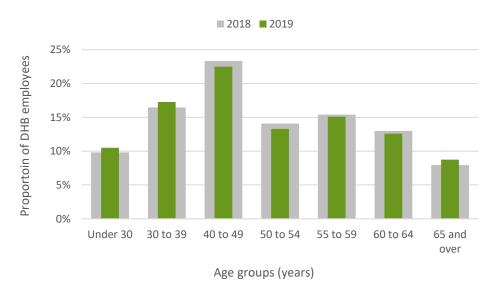


Figure 53. Comparison of 2018 and 2019 DHB employee distribution by age groups.

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¹³ The exceptions are one large DHB that has coded nearly 99 per cent of its employees, and one small DHB that has coded 44 per cent.

This trend towards more young, new employees is also reflected in the length of service profile since 2018. More people had been in DHB employment for less than 2 years in 2019, 27 per cent compared to 25 per cent in 2018. There is a slight reduction in the share of the workforce employed for 8 years or more (42 per cent compared to 44 per cent); see Figure 54.

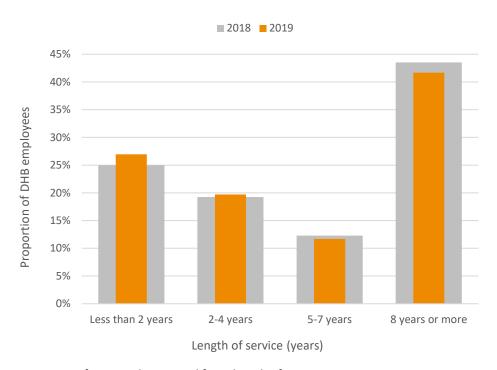


Figure 54. Comparison of 2018 and 2019 workforce length of service.

The trend towards employment of more young people and fewer older workers, is likely to continue. Half (50 per cent) of current DHB mental health and addiction employees are aged 50 and older. Over time, attrition in this age group will likely increase turnover rates and decrease average age and length of service. Nurses, senior medical, and support worker occupation groups will be most affected. DHBs will need to plan how they will support and mentor new young employees into their roles, while also addressing the loss of their older, experienced workers.

Table 2 outlines how many current DHB mental health and addiction employees will be aged 65 or over in 5, 10, and 15 years.

Table 2. Number of 2018 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
Nurses	784	1,333	1,811
Support workers	282	485	647
Allied health	234	433	635
Senior medical	152	253	350
Addiction practitioners	48	84	117
Junior medical	1	6	9
Administration and management	258	411	533
Total DHB mental health and addiction employees	1,758	3,004	4,103

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

The DHB mental health and addiction employee profile is more ethnically diverse than all DHB employees across most occupation groups. This may reflect the impact of scholarships targeted to increase Māori and Pasifika people in the workforce. However, Māori people comprise more than one-quarter (26 per cent) of people seen by DHB mental health and addiction services (Ministry of Health, 2019). There is still substantial workforce development needed to attain a workforce that reflects the diversity of the people they serve. Maintaining and growing workforce diversity will need to be considered in plans to address workforce ageing.

These findings continue to underscore the need for workforce planning and development to ensure adequate supply of health workers to replace older workers over the next 15 years. This will be in addition to growing the existing workforce to meet future demand based on the growing population,¹⁴ and meet the goal of expanding access to and choice of services (Government Inquiry into Mental Health and Addiction, 2018).

As indicated in previous reports, DHBs will need to manage the workforce to ensure:

- young new employees are well supported and mentored into their roles
- workforce diversity continues to grow to better align with the ethnicity of people accessing services
- employee wellbeing is not adversely impacted by increasing turnover.

Limitations

HWIP DHB employed workforce dataset relies upon the quality of the data supplied from DHBs that is extracted from multiple systems within the DHBs. HWIP works closely with DHBs to continually improve the data quality of this national collection.

¹⁴ The New Zealand population is projected to grow by 13 per cent over the next 15 years to 2034 (Statistics New Zealand, 2018).

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

This report examined only DHB employees with PAOW codes for mental health and addiction. It excludes other employees with mental health and addiction involvement in their job titles or ANZSCO codes, that were included in reports for June 2016 and 2017. This means that the results provided here are only directly comparable with the previous 2018 report.

The occupation group names differ from those reported elsewhere by HWIP. This report describes occupation groups in ways consistent with other workforce reports from Te Pou and Matua Raki (Te Pou o te Whakaaro Nui, 2018, 2019a).

Concluding comments

The information provided in this report is useful to inform workforce planning and development 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.

With nearly universal PAOW coding for DHB employees, there is opportunity to begin documenting DHB mental health and addiction workforce trends over time. Understanding these trends will contribute to our understanding of the impact of factors such as workforce ageing and provide further evidence to support workforce development activities.

Appendices

Appendix A: Roles in each occupation group

The roles allocated to each of the occupation groups described in this report are listed with the relevant ANZSCO codes in Table 3.

Table 3. Roles and ANZSCO codes allocated to each HWIP occupation group

Table 5. Notes und ANZSCO codes dilocated to each Tiwir oc	capation group		
ANZSCO code and role description	FTEs employed	Proportion of occupation group (%)	Proportion of all employees (%)
Allied health			
272511 Social worker	495.2	37.3	6.7
272311 Clinical psychologist	449.2	33.9	6.1
252411 Occupational therapist	289.2	21.8	3.9
251999 Health diagnostic & promotion professionals	33.5	2.5	0.5
272314 Psychotherapist	23.1	1.7	0.3
411311 Diversional therapist	11.3	0.9	0.2
251111 Dietitian	6.8	0.5	0.1
252511 Physiotherapist	6.4	0.5	0.1
251511 Hospital pharmacist	4.7	0.4	0.1
252712 Speech language therapist	3.3	0.2	0.0
272399 Psychologists	1.9	0.1	0.0
234999 Natural & physical science professionals	1.0	0.1	0.0
252299 Complementary health therapists	0.8	0.1	0.0
234611 Medical laboratory scientist	0.5	0.0	0.0
Allied health total	1,326.9	100.0	17.9
Nurses			
254422 Registered nurse (mental health)	2,741.2	81.7	37.0
254311 Nurse manager	212.3	6.3	2.9
254499 Registered nurses	137.5	4.1	1.9
411411 Enrolled nurse	134.6	4.0	1.8
254414 Registered nurse (community health)	42.4	1.3	0.6
254211 Nurse educator	28.2	0.8	0.4
254411 Nurse practitioner	12.3	0.4	0.2
254416 Registered nurse (developmental disability)	11.5	0.3	0.2
134212 Nursing clinical director	9.9	0.3	0.1
254418 Registered nurse (medical)	9.0	0.3	0.1
254412 Registered nurse (aged care)	6.0	0.2	0.1
254413 Registered nurse (child & family health)	4.6	0.1	0.1
254425 Registered nurse (paediatric)	2.8	0.1	0.0
254417 Registered nurse (disability & rehabilitation)	2.6	0.1	0.0
Nurses total	3,354.9	100.0	45.2
Senior medical			
253411 Psychiatrist	433.9	90.4	5.9
253999 Medical practitioners	20.0	4.2	0.3
			5.5

ANZSCO code and role description	FTEs employed	Proportion of occupation group (%)	Proportion of all employees (%)
253399 Specialist physicians	8.7	1.8	0.1
134211 Medical superintendent (NZ)	8.6	1.8	0.1
253321 Paediatrician	3.5	0.7	0.0
253311 Specialist physician (general medicine)	2.8	0.6	0.0
253111 General practitioner	2.7	0.6	0.0
Senior medical total	480.1	100.0	6.5
Junior medical			
253112 Resident medical officer	224.7	100.0	3.0
Junior medical total	224.7	100.0	
Addiction practitioners			
272112 Drug & alcohol counsellor	216.3	100.0	2.9
Addiction practitioners total	216.3	100.0	2.9
Clinical roles total	5,603.0		75.6
Support workers	500.5	65.7	
423312 Nursing support worker	682.6	65.7	9.2
411711 Community worker	158.0	15.2	2.1
411512 Maori health assistant	91.5	8.8	1.2
272613 Welfare worker	32.3	3.1	0.4
423314 Therapy aide	25.5	2.5	0.3
272199 Counsellors	22.8	2.2	0.3
272113 Family & marriage counsellor	6.7	0.6	0.1
411713 Family support worker	4.5	0.4	0.1
251911 Health promotion officer	3.3	0.3	0.0
272499 Social professionals	3.2	0.3	0.0
272612 Recreation coordinator	3.0	0.3	0.0
423313 Personal care assistant	3.0	0.3	0.0
411716 Youth worker	2.3	0.2	0.0
Support workers total	1,038.6	100.0	14.0
Administration & management		_	_
599999 Clerical & administrative workers	125.4	16.2	1.7
531111 General clerk	121.3	15.7	1.7
134299 Health & welfare services managers	94.4	12.2	1.3
521211 Secretary (general)	67.7	8.8	0.9
542114 Medical receptionist	58.9	7.6	0.9
561999 Clerical & office support workers	41.5	5.4	0.6
542112 Admissions clerk	34.3	4.4	0.6
224912 Liaison officer	26.9	3.5	0.5
521111 Personal assistant	26.7		0.4
221111 LGI2011q1 q2212fq11f	20.7	3.5	0.4

ANZSCO code and role description	FTEs employed	Proportion of occupation group (%)	Proportion of all employees (%)
542111 Receptionist (general)	26.1	3.4	0.4
224999 Information & organisation professionals	18.5	2.4	0.2
511112 Program or project administrator	17.5	2.3	0.2
899311 Handyperson	16.0	2.1	0.2
442217 Security officer	11.0	1.4	0.1
224712 Organisation & methods analyst	8.9	1.1	0.1
139914 Quality assurance manager	6.5	0.8	0.1
111211 Corporate general manager	6.0	0.8	0.1
224411 Intelligence officer	6.0	0.8	0.1
811411 Commercial housekeeper	6.0	0.8	0.1
132411 Policy & planning manager	5.4	0.7	0.1
223111 Human resource adviser	5.0	0.6	0.1
139999 Specialist managers	5.0	0.6	0.1
532113 Word processing operator	4.9	0.6	0.1
512111 Office manager	4.0	0.5	0.1
223311 Training & development professional	3.8	0.5	0.1
851311 Kitchenhand	3.5	0.4	0.0
134214 Welfare centre manager	3.3	0.4	0.0
132311 Human resources manager	2.0	0.3	0.0
262113 Systems administrator	2.0	0.3	0.0
532111 Data entry operator	2.0	0.3	0.0
511111 Contract administrator	1.4	0.2	0.0
225311 Public relations professional	1.0	0.1	0.0
221112 Management accountant	1.0	0.1	0.0
223211 ICT trainer	1.0	0.1	0.0
541211 Information officer	1.0	0.1	0.0
841412 Horticultural nursery assistant	1.0	0.1	0.0
132211 Finance manager	1.0	0.1	0.0
551111 Accounts clerk	1.0	0.1	0.0
224611 Librarian	0.9	0.1	0.0
312611 Safety inspector	0.9	0.1	0.0
249111 Education adviser	0.8	0.1	0.0
224412 Policy analyst	0.6	0.1	0.0
811699 Cleaners	0.5	0.1	0.0
411712 Disabilities services officer	0.5	0.1	0.0
731199 Automobile drivers	0.5	0.1	0.0
351411 Cook	0.2	0.0	0.0
Administration & management total	773.9	100.0	10.4
Grand total	7,415.5		100.0

Appendix B: DHBs by size groups

While national and regional analyses are useful for thinking about local workforce priorities, individual DHBs may also find it helpful to compare their workforce with similar sized DHBs. Three DHB size groups were used to analyse the HWIP DHB employed workforce dataset: large, medium and small. Table 4 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 4. DHBs in each of the three size groupings

Large	Medium	Small
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.

HWIP DHB employed workforce data was extracted for the primary area of work codes described in Table 5. As at 30 June 2019, all but two DHBs have completed a PAOW code for more than all employees: one DHB has done so for 99 per cent of employees, and one small DHB has coded 44 per cent of its employees.

Table 5. 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 6. 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

Category	MHA employees	All DHB employees		Mental health a	Ind addiction en	nployees by occ	Mental health and addiction employees by occupation groups Senior Junior Support
			Allied health	Nurses	medical	medical	workers
No. people employed	8,242	75,956	1,555	3,686	554	236	1,123
FTEs employed	7,415.5	64,052	1,326.9	3,354.9	480.1	224.7	1,038.6
Average age (years)	48.1	45.2	45.6	47.7	53.2	32.9	50.4
Average age by region							
Northern region	47.1		44.6	46.0	53.4	33.4	49.9
Midland region	48.2		47.2	48.3	52.0	32.8	49.3
Central region	48.4		45.9	48.2	53.3	32.0	50.7
South Island region	49.2		46.1	49.0	53.7	32.9	52.3
Average by DHB size							
Large DHBs	47.6		44.9	47.1	53.0	32.8	50.5
Medium DHBs	49.1		48.4	49.1	53.1	32.9	48.3
Small DHBs	52.0		45.8	51.1	55.6	43.0	55.7
Employees by age groups							
Under 25 years	2.8%	4.3%	3.5%	3.2%	0.0%	2.5%	2.6%
25-29	7.7%	10.9%	9.0%	8.1%	0.0%	39.8%	4.4%
30-34	8.6%	12.5%	10.7%	9.1%	1.3%	26.7%	6.3%
35-39	8.7%	9.9%	12.2%	8.2%	6.2%	16.1%	7.9%
40-44	9.8%	9.4%	11.1%	9.2%	15.2%	7.2%	9.5%
45-49	12.7%	11.5%	12.7%	13.0%	14.1%	3.8%	11.8%

	МНА	AII DHB		Mental health a	Mental health and addiction employees by occupation groups	nployees by occ	upation groups	
Caregory	employees	employees	Allied health	Nurses	Senior medical	Junior medical	Support workers	Addiction practitioners
Central region								
Māori	15.6%		12.5%	15.1%	0.0%	4.2%	27.4%	18.5%
Pasifika	10.1%		1.4%	8.2%	0.0%	0.0%	32.7%	3.7%
Asian	6.8%		5.9%	7.2%	14.1%	20.8%	2.7%	3.7%
Other	67.5%		80.3%	69.5%	85.9%	75.0%	37.3%	74.1%
South Island region								
Māori	8.5%		3.6%	7.6%	3.6%	2.0%	28.8%	9.1%
Pasifika	1.4%		0.7%	1.3%	0.0%	2.0%	4.0%	0.0%
Asian	6.2%		5.3%	6.9%	12.0%	11.8%	3.4%	0.0%
Other	83.9%		90.4%	84.1%	84.3%	84.3%	63.8%	90.9%
Large DHBs								
Māori	12.1%		8.4%	10.1%	1.5%	6.4%	30.1%	16.5%
Pasifika	8.2%		4.1%	7.0%	2.0%	3.2%	19.8%	6.5%
Asian	13.8%		12.2%	15.0%	21.2%	25.5%	9.8%	18.0%
Other	65.9%		75.3%	67.8%	75.2%	64.9%	40.4%	59.0%
Medium DHBs								
Māori	21.7%		17.1%	21.8%	2.0%	7.5%	42.7%	28.8%
Pasifika	2.6%		0.0%	3.5%	1.0%	2.5%	6.2%	1.5%
Asian	6.5%		3.2%	7.7%	18.4%	10.0%	5.6%	1.5%
Other	69.2%		79.6%	67.0%	78.6%	80.0%	45.5%	68.2%
Small DHBs								
Māori	21.2%		8.9%	18.0%	4.8%	0.0%	45.0%	12.5%
Pasifika	0.6%		0.0%	0.6%	0.0%	0.0%	1.7%	0.0%
Asian	4.3%		4.4%	3.5%	19.0%	0.0%	1.7%	0.0%
Other	73.9%		86.7%	77.9%	76.2%	100.0%	51.7%	87.5%

Category WHAA Employeess All DHB Employeess All DHB Allied health Nurses Sention medical m									
rules (LOS) RND Oyees's (loss) Allied health Nurses Senior medical medical medical medical medical workers Support workers (wars) 8.7 8.2 6.8 9.4 9.7 1.8 9.0 (wars) 8.0 6.6 8.4 8.8 9.1 9.1 9.1 8.1 6.6 8.4 10.1 9.1 9.1 9.1 10.6 8.8 6.7 9.5 10.0 9.5 9.4 8.8 6.7 9.5 10.0 9.5 6.3 9.4 10.1 4.7 10.7 10.1 11.2 6.3 10.7 10.7 10.1 11.2 6.3 10.7% 10.7% 10.1 11.2 10.7% 10.7% 10.1 11.2 10.7% 10.1 11.2 10.2% 10.2% 11.6% 11.6% 11.2% 70.8% 24.8% 10.2% 10.2% 10.2% 10.2% 10.2% 10.2%	Category	WHA	All DHB		Mental health a	and addiction en	nployees by occi	upation groups	
revice (LOS) 8.7 8.2 6.8 9.4 9.7 1.8 9.0 (years) 8.7 8.2 6.8 9.4 9.7 1.8 9.0 8.0 6.6 8.4 8.8 9.1 9.2 <t< th=""><th>category</th><th>employees</th><th>employees</th><th>Allied health</th><th>Nurses</th><th>Senior medical</th><th>Junior medical</th><th>Support workers</th><th>Addiction practitioners</th></t<>	category	employees	employees	Allied health	Nurses	Senior medical	Junior medical	Support workers	Addiction practitioners
rotee (1005) (Veers) 8.7 8.2 6.8 9.4 9.7 1.8 9.0 (Veers) 8.7 8.2 6.8 9.4 9.7 1.8 9.0 (Veers) 8.0 6.6 8.4 8.8 9.1 9.1 9.1 (Veers) 8.1 6.6 8.4 10.1 8.5 (Veers) 8.1 6.6 8.4 10.1 9.1 9.1 (Veers) 8.1 6.7 9.5 10.0 9.5 (Veers) 8.8 6.7 9.5 10.0 9.5 (Veers) 8.8 8.0 7.7 8.7 7.9 6.3 (Veers) 8.0 7.7 8.7 7.9 6.3 (Veers) 8.0 10.1 4.7 10.7 10.1 11.2 (Veers) 8.8 8.0 11.7% 18.2% 70.8% 24.8% 18.1% 19.9% 18.1% 19.9% 18.2% 18.2% 19.9% 18.1% 19.9% 18.2% 18.2% 19.9% 18.2% 10.2% 1									
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8.0 6.6 8.4 8.8 9.2 9.1 8.1 8.1 8.1 8.5 9.2 9.1 8.1 8.1 8.5 8.5 9.1 9.1 9.1 9.1 9.1 9.1 9.1 9.1 9.1 9.1									
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8.1 6.6 8.4 10.1 8.5 10.6 7.8 11.6 12.0 9.4 8.8 6.7 9.5 10.0 9.5 8.8 7.7 8.7 7.9 10.1 11.2 mployed for mployed for 10.7 25.9% 18.2% 70.8% 24.8% 19.9% 18.1% 19.9% 19.9% 18.1% 19.9% 18.1% 19.9% 18.1% 19.9% 19.9% 19.9% 19.9% 19.9% 19.9% 19.9% 19.9% 19.9% 19.9% 19.9% 19.9% 19.9% 19.9% 19.9% 19.9% 19.9% 19.9% 19.9% 1	Midland	8.4		6.2	9.1	9.1		9.1	6.4
10.6 7.8 11.6 12.0 9.4 9.4 8.8 6.7 9.5 10.0 9.5 8.0 7.7 8.7 7.9 6.3 11.2 9.5 10.1 11.2 9.5 8.8 11.6 12.0 9.5 9.5 9.5 9.5 9.5 9.5 9.5 9.5 9.5 9.5	Central	8.1		6.6	8.4	10.1		8.5	8.7
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In employed for 27.0% 31.1% 25.9% 18.2% 70.8% 24.8% 2 years 19.7% 23.9% 18.6% 18.1% 19.9% 18.1% han 8 years 11.7% 12.0% 11.6% 14.8% 7.2% 10.2% ars 41.7% 32.9% 43.8% 48.9% 2.1% 46.8% ver 11.5% 11.2% 16.5% 10.2% 10.7% 9.5% 12.4% 17.5% 11.7% 11.8% 9.0%	Medium DHBs	8.0		7.7	8.7	7.9		6.3	7.2
nemployed for 2 years 27.0% 31.1% 25.9% 18.2% 70.8% 24.8% 2 years 19.7% 23.9% 18.6% 18.1% 19.9% 18.1% han 8 years 11.7% 12.0% 11.6% 14.8% 7.2% 10.2% ars 41.7% 32.9% 43.8% 48.9% 2.1% 46.8% ver 11.5% 11.2% 16.5% 10.2% 10.7% 9.5% 12.4% 17.5% 11.7% 11.8% 9.0%	Small DHBs	10.1		4.7	10.7	10.1		11.2	12.3
nemployed for 27.0% 31.1% 25.9% 18.2% 70.8% 24.8% 2 years 19.7% 23.9% 18.6% 18.1% 19.9% 18.1% han 5 years 11.7% 12.0% 11.6% 14.8% 7.2% 10.2% ars 41.7% 32.9% 43.8% 48.9% 2.1% 46.8% ver 11.5% 11.2% 16.5% 10.2% 10.7% 9.5% 12.4% 17.5% 11.7% 11.8% 9.0%									
2 years 27.0% 31.1% 25.9% 18.2% 70.8% 24.8% han 5 years 19.7% 23.9% 18.6% 18.1% 19.9% 18.1% han 8 years 11.7% 12.0% 11.6% 14.8% 7.2% 10.2% ars 41.7% 32.9% 43.8% 48.9% 2.1% 46.8% ver 11.5% 11.2% 16.5% 10.2% 10.7% 9.5% 12.4% 17.5% 11.7% 11.8% 9.0%	Proportion employed for								
han 5 years 19.7% 23.9% 18.6% 18.1% 19.9% 18.1% han 8 years 11.7% 12.0% 11.6% 14.8% 7.2% 10.2% ars 41.7% 32.9% 43.8% 48.9% 2.1% 46.8% ver 11.5% 11.2% 16.5% 10.2% 10.7% 10.7% 9.5% 12.4% 17.5% 11.7% 11.8% 9.0%	Less than 2 years	27.0%		31.1%	25.9%	18.2%	70.8%	24.8%	34.2%
han 8 years 11.7% 12.0% 11.6% 14.8% 7.2% 10.2% ars 41.7% 32.9% 43.8% 48.9% 2.1% 46.8% ver 11.5% 11.2% 16.5% 10.2% 10.7% 9.5% 10.2% 10.7% 9.0%	2 to less than 5 years	19.7%		23.9%	18.6%	18.1%	19.9%	18.1%	22.8%
arrs 41.7% 32.9% 43.8% 48.9% 2.1% 46.8% ver 11.5% 11.2% 16.5% 10.2% 10.7% 9.5% 12.4% 17.5% 11.7% 11.8% 9.0%	5 to less than 8 years	11.7%		12.0%	11.6%	14.8%	7.2%	10.2%	9.2%
ver 11.5% 11.2% 16.5% 10.2% 10.7% 9.5% 12.4% 17.5% 11.7% 11.8% 9.0%	Over 8 years	41.7%		32.9%	43.8%	48.9%	2.1%	46.8%	33.8%
ver 11.5% 11.2% 16.5% 10.2% 10.7% 9.5% 12.4% 17.5% 11.7% 11.8% 9.0%									
11.5% 11.2% 16.5% 10.2% 10.7% 9.5% 12.4% 17.5% 11.7% 11.8% 9.0%	FTE turnover								
12.4% 17.5% 11.7% 11.8% 9.0%	Average	11.5%	11.2%	16.5%	10.2%	10.7%		9.5%	13.9%
12.4% 17.5% 11.7% 11.8% 9.0%									
12.4% 17.5% 11.7% 11.8% 9.0%	By region								
	Northern	12.4%		17.5%	11.7%	11.8%		9.0%	18.3%

Category	МНА	All DHB		Mental health a	and addiction er	Mental health and addiction employees by occupation groups	upation groups	
category	employees	employees	Allied health	Nurses	Senior	Junior	Support	Addiction
Midland	10.9%		11.1%	10.1%	12.1%		11.1%	9.5%
Central	12.9%		21.0%	11.0%	12.2%		10.1%	3.7%
South Island	9.2%		14.5%	7.8%	5.2%		8.4%	11.7%
By DHB size								
Large DHBs	11.5%		16.3%	10.5%	9.7%		9.1%	16.0%
Medium DHBs	12.3%		17.4%	9.0%	14.5%		12.8%	8.4%
Small DHBs	9.2%		14.1%	9.0%	15.0%		5.0%	19.0%

^{*}Some results for Junior medical employees are not reported due the short-term nature of their employment.

References

- Central Region's Technical Advisory Services Ltd. (2019). *District health board employed workforce quarterly report:* 1 April to 30 June 2019. Wellington: Central Region's Technical Advisory Services Ltd.
- Government Inquiry into Mental Health and Addiction. (2018). He Ara Oranga: Report of the Government Inquiry into Mental Health and Addiction. Wellington: Department of Internal Affairs.
- Health Workforce Information Programme. (2016). *DHB Shared Services health workforce information programme (HWIP): Base data*. Wellington: Health Workforce Information Programme.
- Lawson Williams. (2017). The New Zealand staff turnover survey Summary report. Auckland: Lawson Williams.
- Mental Health and Addiction Key Performance Indicator Programme. (2015). Key performance indicator framework for New Zealand mental health and addiction services: National adult mental health services 2014/2015 financial year. New Zealand: Mental Health and Addiction Key Performance Indicator Programme.
- Ministry of Health. (2004). Ethnicity data protocols for the health and disability sector. Wellington:

 Ministry of Health. Retrieved from http://www.health.govt.nz/publication/ethnicity-data-protocols-health-and-disability-sector.
- Ministry of Health. (2019). *PP6: Improving the health status of people with severe mental illness through improved access.* Wellington: Ministry of Health.
- Statistics New Zealand. (2018). *Projections produced by Statistics New Zealand according to assumptions specified by the Ministry of Health 2018 update.* Wellington: Ministry of Health.
- Te Pou o te Whakaaro Nui. (2017a). *DHB mental health and addiction employees: 2016 profile*Auckland: Te Pou o te Whakaaro Nui.
- Te Pou o te Whakaaro Nui. (2017b). *DHB mental health and addiction employees: 2017 profile.*Auckland: Te Pou o te Whakaaro Nui.
- Te Pou o te Whakaaro Nui. (2018). NGO adult mental health and addiction workforce: 2018 survey of secondary care health services. Auckland: Te Pou o te Whakaaro Nui.
- Te Pou o te Whakaaro Nui. (2019a). *DHB adult mental health and addiction workforce: 2018 provider arm services*. Auckland: Te Pou o te Whakaaro Nui.
- Te Pou o te Whakaaro Nui. (2019b). *DHB mental health and addiction employees: 2018 profile*. Auckland: Te Pou o te Whakaaro Nui.



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