



Te Whatu Ora adult mental health and addiction workforce

2022 alcohol and drug, forensic, and mental
health services

Acknowledgements

This report was written by Te Pou. It is based on information provided by the Health Workforce Information Programme (HWIP). Te Pou warmly acknowledges and appreciates the support for this work from Amanda Newton, Paul Bridgford, and the HWIP team and for providing the data and for peer review of the analyses and report.

We also thank Jordana Bealing (National Association of Mental Health Consumer Advisors) and Melissa Roberts (Family Whānau Advisors Aotearoa network) for providing information for the report.

Published in April 2023 by Te Pou.

Te Pou is a national centre of evidence-informed workforce development for the Aotearoa New Zealand addiction, disability, and mental health sectors.

PO Box 108-244, Symonds St, Auckland, Aotearoa New Zealand

ISBN 978-1-991076-05-2

Web www.tepou.co.nz

Email info@tepou.co.nz

Recommended citation:

Te Pou. (2022). *Te Whatu Ora adult mental health and addiction workforce: 2022 alcohol and drug, forensic, and mental health services*. Auckland.

Contents

Acknowledgements	2
Executive summary	7
Background	10
About the HWIP Te Whatu Ora employee dataset	11
Methods overview	12
Workforce estimates	12
Employee profiles	13
Te Whatu Ora workforce	14
Adult services' workforce estimates	14
Workforce size	14
Workforce composition	15
Vacancy rates	18
FTE turnover	20
Employee profiles	22
Age	23
Gender	24
Ethnicity	25
Length of service	26
Discussion	28
Workforce development challenges	28
Limitations	31
Conclusions	31
Appendices	33
Appendix A: HWIP Te Whatu Ora employee information	34
Primary area of work allocation to services	34
Role groups summary	34
Appendix B: Methods	36
HWIP data extract	36
Other sources	36
Adult services' workforce estimates	37
Measures	39
Appendix C: Estimated Te Whatu Ora adult mental health and addiction workforce tables	41
Appendix D: Estimated Te Whatu Ora adult alcohol and drug workforce tables	46
Appendix E: Estimated Te Whatu Ora adult forensic mental health workforce tables	51
Appendix F: Estimated Te Whatu Ora adult mental health workforce tables	56
Appendix G: Change in workforce size since 2018	61
References	65

List of figures

Figure 1. Method for estimating Te Whatu Ora adult workforce by service, region, and role groups (FTEs employed and vacant)	12
Figure 2. Estimated Te Whatu Ora adult mental health and addiction workforce by services (FTEs employed and vacant)	14
Figure 3. Estimated Te Whatu Ora workforce by region	15
Figure 4. Estimated Te Whatu Ora workforce by role groups and services	16
Figure 5. Estimated vacancy rates and FTEs vacant by services and role groups	19
Figure 6. Recruitment and resignation rates by role groups with nett FTE change for the year ended 31 March 2022	21
Figure 7. The share of permanent employees by age groups and primary area of work, including average age	24
Figure 8. Share of permanent employees by gender and primary area of work.....	25
Figure 9. Share of permanent employees by ethnic groups and primary area of work.....	25
Figure 10. Share of permanent employees grouped by years employed and primary area of work	27

List of tables

Table 1. Summary of estimated Te Whatu Ora FTE workforce (employed and vacant) by services and role groups with share of workforce and vacancy rates	7
Table 2. FTE and proportionate change in estimated Te Whatu Ora workforce between 2018 and 2022, by service	15
Table 3. FTE and proportionate change in estimated Te Whatu Ora employed and vacant workforce between 2018 and 2022, by role groups.	17
Table 4. Summary of Te Whatu Ora national consumer and whānau advisor roles for adult services by regions	17
Table 5. Te Whatu Ora adult mental health and addiction service vacancy rates by role groups and regions	20
Table 6. Resignation rates by regions and role groups.....	21
Table 7. Recruitment rates by regions and role groups	22
Table 8. Number of FTE employees recruited and resigned for the year to 31 March 2022 by employee status.....	22
Table 9. Summary of Te Whatu Ora employees by employment status and primary area of work	23
Table 10. Te Whatu Ora permanent, fixed term, and casual employees by role groups	23
Table 11. Average age (years) for fixed term and casual employees by service	24
Table 12. Ethnicity of fixed term and casual employees by primary area of work	26
Table 13. Average length of service (years) for fixed term and casual employees by primary area of work	27

Table 14. Summary of HWIP primary area of work codes and definitions, with allocations used for this report	34
Table 15. Summary of role groups for this report and relevant ANZSCO codes	34
Table 16. Summary of estimate calculations including FTEs from each source by service..	37
Table 17. Summary of process used to move FTE workforce across services based on comparison with mental health and addiction expenditure	38
Table 18. National estimated Te Whatu Ora adult alcohol and drug, forensic, and mental health FTE workforce (employed and vacant) on 31 March 2022.....	41
Table 19. Northern estimated Te Whatu Ora adult alcohol and drug, forensic, and mental health FTE workforce (employed and vacant) on 31 March 2022.....	42
Table 20. Te Manawa Taki estimated Te Whatu Ora adult alcohol and drug, forensic, and mental health FTE workforce (employed and vacant) on 31 March 2022	43
Table 21. Central estimated Te Whatu Ora adult alcohol and drug, forensic, and mental health FTE workforce (employed and vacant) on 31 March 2022.....	44
Table 22. Te Waipounamu estimated Te Whatu Ora adult alcohol and drug, forensic, and mental health FTE workforce (employed and vacant) on 31 March 2022	45
Table 23. National estimated Te Whatu Ora adult alcohol and drug FTE employed and vacant workforce on 31 March 2022	46
Table 24. Northern estimated Te Whatu Ora adult alcohol and drug FTE employed and vacant workforce on 31 March 2022	47
Table 25. Te Manawa Taki estimated Te Whatu Ora adult alcohol and drug FTE employed and vacant workforce on 31 March 2022.....	48
Table 26. Central estimated Te Whatu Ora adult alcohol and drug FTE employed and vacant workforce on 31 March 2022.....	49
Table 27. Te Waipounamu estimated Te Whatu Ora adult alcohol and drug FTE employed and vacant workforce on 31 March 2022.....	50
Table 28. National estimated Te Whatu Ora adult forensic mental health FTE employed and vacant workforce on 31 March 2022	51
Table 29. Northern estimated Te Whatu Ora adult forensic mental health FTE employed and vacant workforce on 31 March 2022	52
Table 30. Te Manawa Taki estimated Te Whatu Ora adult forensic mental health FTE employed and vacant workforce on 31 March 2022	53
Table 31. Central estimated Te Whatu Ora adult forensic mental health FTE employed and vacant workforce on 31 March 2022	54
Table 32. Te Waipounamu estimated Te Whatu Ora adult forensic mental health FTE employed and vacant workforce on 31 March 2022	55
Table 33. National estimated Te Whatu Ora adult mental health FTE employed and vacant workforce on 31 March 2022.....	56
Table 34. Northern estimated Te Whatu Ora adult mental health FTE employed and vacant workforce on 31 March 2022.....	57
Table 35. Te Manawa Taki estimated Te Whatu Ora adult mental health FTE employed and vacant workforce on 31 March 2022	58

Table 36. Central estimated Te Whatu Ora adult mental health FTE employed and vacant workforce on 31 March 2022.....	59
Table 37. Te Waipounamu estimated Te Whatu Ora adult mental health FTE employed and vacant workforce on 31 March 2022	60
Table 38. Comparison of 2018 DHB and 2022 Te Whatu Ora adult mental health and addiction workforce (employed and vacant) showing FTE and proportionate growth	61
Table 39. Comparison of 2018 DHB and 2022 Te Whatu Ora adult alcohol and drug workforce (employed and vacant) showing FTE and proportionate growth.....	62
Table 40. Comparison of 2018 DHB and 2022 Te Whatu Ora adult forensic mental health workforce (employed and vacant) showing FTE and proportionate growth.....	63
Table 41. Comparison of 2018 DHB and 2022 Te Whatu Ora adult mental health workforce (employed and vacant) showing FTE and proportionate growth.....	64

Executive summary

This report is about the workforce in Te Whatu Ora Health New Zealand (Te Whatu Ora), formerly district health board, mental health and addiction services for adults (people aged 18 and over). The workforce includes health workers delivering services to people in community or hospital inpatient settings and providing specialist consultation and liaison services to emergency departments, non-government organisations, general practices, and primary health organisations.

The information comes from the Health Workforce Information Programme (HWIP) Te Whatu Ora employee dataset for the quarter ending 31 March 2022. The report:

- estimates the full-time equivalent (FTE) positions employed and vacant in adult alcohol and drug, forensic mental health, and other mental health services by regions and role groups
- summarises all Te Whatu Ora mental health and addiction employees' socio-demographic profile by services and contract type (permanent, fixed term, and casual employees).

The report aims to inform workforce planning and development to achieve health policy and strategy goals. These goals are to grow the workforce in size and diversity, understand supply challenges, and monitor trends. The methods used are adapted from earlier work by Te Pou (Te Pou, 2021; Te Pou o te Whakaaro Nui, 2019b).

On 31 March 2022, the estimated Te Whatu Ora adult alcohol and drug, forensic, and mental health workforce included 7,311 FTE positions employed and vacant, with a vacancy rate of 11 percent; see Table 1.

Table 1. Summary of estimated Te Whatu Ora FTE workforce (employed and vacant) by services and role groups with share of workforce and vacancy rates

	FTEs employed	FTEs vacant	Total FTE workforce	Share of workforce (%)	Vacancy rate (%)
Services delivered					
Alcohol and drug	574.6	70.4	645.0	8.8	10.9
Forensic mental health	956.5	96.4	1,052.8	14.4	9.2
Mental health	4,957.5	656.0	5,613.5	76.8	11.7
Total FTE workforce	6,488.6	822.8	7,311.3	100.0	11.3

The workforce composition includes nurses (44 percent), allied health workers (17 percent), support workers (15 percent), and medical practitioners (10 percent). Advisors, managers,

and administrators make up the remaining 14 percent. The share of nurses has dropped from 46 percent in 2018.

The workforce estimates show that employed workforce growth is constrained by high vacancy rates (averaging 11 percent). Past year recruitment rates effectively do not, or only just, replace resignations (16 and 15 percent respectively) for most role groups except support workers. These challenges particularly affect alcohol and drug services and nurses, allied health workers, and psychiatrists.

The demographic profile for all Te Whatu Ora employees (including child and adolescent services workforce) shows that half of the workforce is aged over 50 (47 percent). Compared to the population, Māori are under-represented in the workforce (14 percent compared to 17 percent), and even more so in relation to people accessing services (29 percent; Ministry of Health, 2021d). There are relatively few men (29 percent) and very few gender diverse people (less than 1 percent) among employees. Casual employees are more likely to be Māori, Pasifika, or young people compared to those in fixed term and permanent employment.

A national workforce development plan is needed to address this. It should embed Te Tiriti o Waitangi (Te Tiriti) principles and be co-designed with providers (New Zealand Health & Disability System Review, 2020). The plan must include growing the share of Māori and Pasifika peoples, men and gender diverse people in all its activities, as well as:

- increasing the sustainability of health workforce pipelines to meet future population needs, including addressing the mix of domestically educated and international workers
- developing long term plans to mitigate the risks of an ageing workforce among nurses, support workers, and medical professionals
- identifying and addressing the factors contributing to low growth in Te Whatu Ora alcohol and drug services, and high turnover for all services in Te Manawa Taki region and for allied health workers across the country
- increasing stable employment opportunities and addressing employment inequities for Māori and Pasifika peoples, and young people
- increasing the gap between recruitment and resignations for all role groups so that vacancy rates can be returned to previous norms (6 percent in 2018)
- understanding factors impacting retention and addressing these, including workload and burnout, retaining the knowledge and skills of older workers, and better supporting new graduates
- understanding more about the workforce in permanent, fixed term, and casual employment, and addressing any inequities for Māori, Pasifika, and young people compared to others.

Overall, this report shows the HWIP dataset is a useful repository of Te Whatu Ora workforce information that can inform planning and development. However, there are some limitations that may be overcome with more relevant codes and coding completion. The findings are limited by the completeness and accuracy of the HWIP dataset and other information sources used (Ministry of Health, 2021b; Whāraurau, 2021). Te Pou will support HWIP and Te Whatu Ora to achieve these changes where possible.

Background

Te Whatu Ora is now the largest single employer of people delivering mental health and addiction services in Aotearoa New Zealand, following the health system restructure of former district health boards (DHBs). Its workforce delivers clinical treatment and support services in hospital inpatient units and the community, as well as consultation and liaison with other Te Whatu Ora services and other providers including primary healthcare.

Te Whatu Ora mental health and addiction services see people who are experiencing severe mental health challenges and problematic substance use who have been referred to them (Ministry of Health, 2021c). People accessing Te Whatu Ora services may also receive mental health and addiction support from non-government organisations at home and in the community, from primary health services, and from other government agencies like Ara Poutama Aotearoa Department of Corrections (New Zealand Mental Health and Wellbeing Commission, 2021; Te Pou, 2023).

Current health policy and strategy goals for Te Whatu Ora workforce development are broad and varied. These include growing the workforce size and increasing its diversity; applying Te Tiriti principles to the design and delivery of workforce development; understanding the workforce supply; and monitoring changes and trends (Government Inquiry into Mental Health and Addiction, 2018; Ministry of Health, 2017, 2020c, 2020a, 2021a; Te Whatu Ora Health New Zealand & Te Aka Whai Ora, 2022).

National workforce planning and development activities are needed to achieve these goals and ensure that Te Whatu Ora has the right workforce and service capacity for our growing population. These activities require a good understanding of the current workforce and the trends influencing change over time (New Zealand Health & Disability System Review, 2020; Te Pou o te Whakaaro Nui, 2017).

This report summarises information about the workforce in Te Whatu Ora adult alcohol and drug, forensic, and mental health services, and its characteristics. It is based on information from the HWIP Te Whatu Ora employee dataset and role vacancies on 31 March 2022.

Specific objectives include:

- estimating the 2022 national and regional Te Whatu Ora FTE positions employed and vacant, by role groups and services and understanding changes since 2018
- summarising the workforce socio-demographic and employment characteristics including FTE turnover, by services.

The following subsections summarise the information contained in the HWIP Te Whatu Ora employee dataset and give an overview of the methods used in this report.

About the HWIP Te Whatu Ora employee dataset

The HWIP team collates information from Te Whatu Ora (formerly 20 DHB) payroll and human resources systems quarterly. The HWIP dataset is currently well completed for the following information about individual employees.

- Primary area of work with six codes relevant to mental health and addiction services (see Appendix A).
- Contracted FTE based on a 40-hour working week.
- Employment status (permanent, fixed term, and casual employees).
- Australia and New Zealand Standard Classification of Occupations (ANZSCO) role code and current job title.
- Socio-demographic information including age, gender, and ethnicity.
- Start date with the provider and end date if employment has ceased.
- Current role vacancies being advertised for all Te Whatu Ora services. These are not currently described by primary area of work.

All but one very small Te Whatu Ora provider have at least 90 percent of all employees attributed a primary area of work code. This means that the HWIP dataset can provide comprehensive information about the national and regional mental health and addiction workforce size, composition, and characteristics (Te Pou, 2021; Te Pou o te Whakaaro Nui, 2019b).

Bringing together information from over 20 different payroll and human resource systems means some challenges remain.

- Primary area of work:
 - codes do not clearly identify current Aotearoa New Zealand mental health and addiction service settings (inpatient, community), and services dedicated to age (children and adolescents, adults 18 to 64 years, older people aged over 65) or priority ethnic groups (Māori, Pasifika)
 - coding for the Central region is unable to differentiate alcohol and drug and forensic services' employees from those in mental health
 - coding for alcohol and drug workforce appears under-utilised in the Northern, Te Manawa Taki, and Te Waipounamu regions compared to alcohol and drug workforce expenditure (Ministry of Health, 2021b; Te Pou o te Whakaaro Nui, 2019b)
 - coding is not yet completed by one small provider, meaning that a few (less than 1 percent) mental health and addiction employees may not be identified in the dataset.
- The ANZSCO role classification system does not separately identify priority roles featured in workforce development and health policy goals. These include lived experience roles (like peer support workers and consumer advisors) and Māori and Pasifika cultural practitioner, support, and advisory roles.

- FTE vacancies are reported to HWIP for all Te Whatu Ora services without primary area of work codes.
- Start dates include the whole term of employment with the provider, not just employment in the current primary area of work.

These challenges inform the methods used in this report to make the best use of the HWIP dataset.

Methods overview

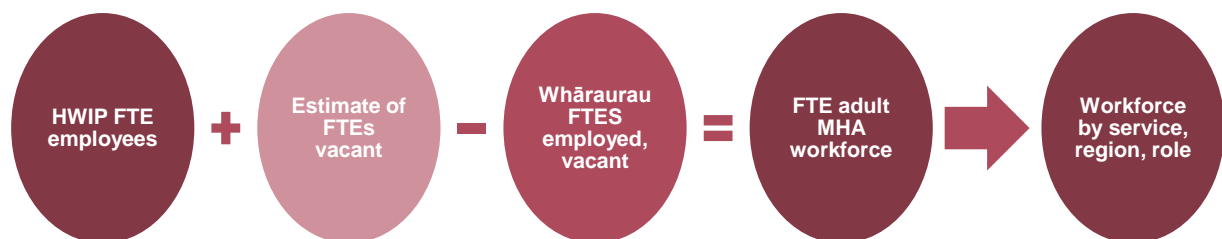
The HWIP team extracted information about Te Whatu Ora employees for the quarter ending 31 March 2022 according to specifications agreed with Te Pou. The extract includes Te Whatu Ora employees in permanent, fixed term, and casual positions working in mental health and addiction primary areas of work; see Appendix A (Table 14).

Workforce estimates

To estimate the adult alcohol and drug, forensic, and mental health workforce, Te Pou adapted the method used in 2018 (Te Pou o te Whakaaro Nui, 2019b). Good research practices prioritise using existing datasets rather than implementing new collections that will duplicate content (World Health Organization, 2005, 2010b). The HWIP dataset and vacancy information hold comprehensive workforce information for all services across age groups. The biannual Whāraurau (2021) workforce stocktake is similarly comprehensive for children’s services. The method also references mental health and addiction expenditure for adult services (Ministry of Health, 2021b) and workforce information from consumer and whānau advisor networks to address known information gaps in the HWIP dataset.

The method adds the FTE employed workforce from the HWIP dataset to estimates for FTEs vacant by services, regions, and roles. It subtracts the 2020 child and adolescent workforce (Whāraurau, 2021) from those groups, and allocates workforce to each service (alcohol and drug, forensic, and mental health) based on primary area of work and the relative share of mental health and addiction expenditure (Ministry of Health, 2021b); see Figure 1.

Figure 1. Method for estimating Te Whatu Ora adult workforce by service, region, and role groups (FTEs employed and vacant)



Note: Vacancy estimates are based on FTEs vacant and employed in the overall Te Whatu Ora workforce, as no primary area of work coding is currently available for vacant roles.

Te Pou received additional information about Te Whatu Ora consumer and whānau advisor roles from the National Association of Mental Health Consumer Advisors (NAMHSCA) and the Family Whānau Advisors Aotearoa network. This was integrated into the HWIP dataset by replacing other roles within the advisors, managers, and administrators role group.

Employee profiles

The method is adapted from earlier work by Te Pou on Te Whatu Ora employee socio-demographic and employment profile (see for example Te Pou, 2021). Analyses are based on the employee extract as provided by HWIP, unmodified by the method for estimating the adult workforce size and composition in specific services. This means that the employee profile analyses include:

- 1,340 employees working in child and adolescent services, approximately 15 percent of employees (Whāraurau, 2021)
- 312 people coded in the alcohol and drug primary area of work, who work in 271 FTE positions across the Northern, Te Manawa Taki, and Te Waipounamu regions
- 952 people coded as forensic employees, working in 814 FTE positions across the Northern, Te Manawa Taki, and Te Waipounamu regions
- 7,882 people coded as mental health, working in 6,557 FTE positions across all regions. These people include some Northern, Te Manawa Taki, and Te Waipounamu alcohol and drug service employees and all Central region alcohol and drug and forensic employees.

Analyses for 8,085 permanent employees are provided in detail with short comparisons made to 443 employees on fixed term and 582 on casual contracts, where relevant.

Permanent employee profile analyses are conducted for each type of service and include:

- average age and share of employees in age ranges (under 50, 50 to 54, 55 to 59, and 60 and over)
- share of employees by gender (male, female, alternative gender)
- share of employees by ethnic groups (Māori, Pasifika, Asian, Other)
- average length of service and share of employees in length of service ranges (less than 2 years, 2 to 4 years, 5 to 9 years, and 10 years and over)
- FTE turnover based on recruitment and resignation rates for the year to 31 March 2022.

Appendix B provides more information about the methods and analyses.

Te Whatu Ora workforce

The following sections summarise results for the:

- estimated Te Whatu Ora adult workforce size, composition, vacancies, and FTE turnover by services on 31 March 2022
- employee socio-demographic and employment profile for all Te Whatu Ora employees by reported primary area of work on 31 March 2022.

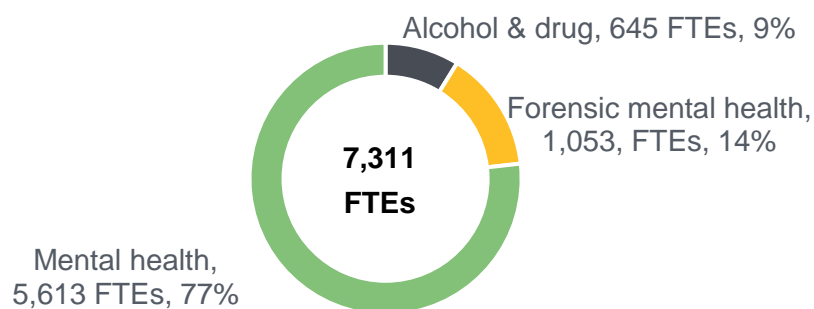
The appendices provide more detailed information tables for the FTE workforce in adult mental health and addiction services in total (Appendix C) and for alcohol and drug (Appendix D), forensic (Appendix E), and mental health (Appendix F) services. Tables in Appendix G compare 2022 results with the 2018 adult workforce in former DHBs.

Adult services' workforce estimates

Workforce size

On 31 March 2022, the total Te Whatu Ora adult alcohol and drug, forensic, and mental health workforce is estimated to be 7,311 FTE positions (employed and vacant). Figure 2 indicates the mental health workforce comprises three-quarters (77 percent) of the estimated workforce, followed by forensic mental health (14 percent), and alcohol and drug workforce (9 percent).

Figure 2. Estimated Te Whatu Ora adult mental health and addiction workforce by services (FTEs employed and vacant)



Overall, there are 11 percent more FTE positions (employed and vacant) than in 2018 (6,603 FTEs). This is greater than the change in population over the same period, which is 5 percent (Statistics New Zealand, 2023).

Table 2 summarises the change in the FTE workforce between 2018 and 2022 for the different services. It shows that the estimated workforce in alcohol and drug services grew

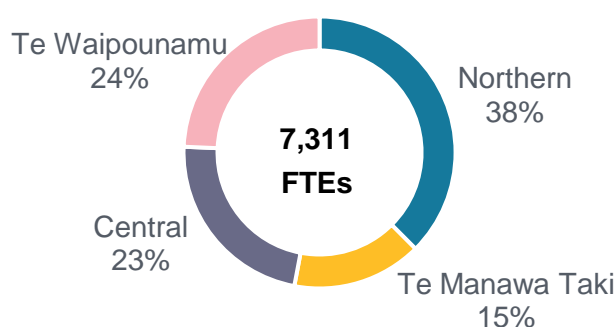
the least (4 percent), followed by forensic (7 percent), and mental health (12 percent) workforces. More information is available in Appendix G.

Table 2. FTE and proportionate change in estimated Te Whatu Ora workforce between 2018 and 2022, by service

Service	2018 FTE workforce	2022 FTE workforce	FTE growth	Growth (%)
Alcohol and drug	620.8	645.0	24.2	3.9
Forensic mental health	988.5	1,052.8	64.3	6.5
Mental health	4,993.3	5,613.5	620.2	12.4
Total FTE workforce	6,602.7	7,311.3	708.6	10.7

Figure 3 shows the total estimated Te Whatu Ora workforce distribution across the regions. The Northern region has the largest workforce share (38 percent), consistent with its share of the population. Te Manawa Taki has the smallest share (15 percent), reflecting the strong emphasis on NGO service delivery in this region (Te Pou o te Whakaaro Nui, 2018a).¹

Figure 3. Estimated Te Whatu Ora workforce by region



The regional distribution is fairly consistent with that reported in 2018. There is a slight decrease in the Northern and Te Manawa Taki regions' share of the workforce (decreasing from 40 and 17 percent respectively in 2018) and a slight increase in the Central region's share, from 20 percent in 2018 to 23 percent in 2022.

Workforce composition

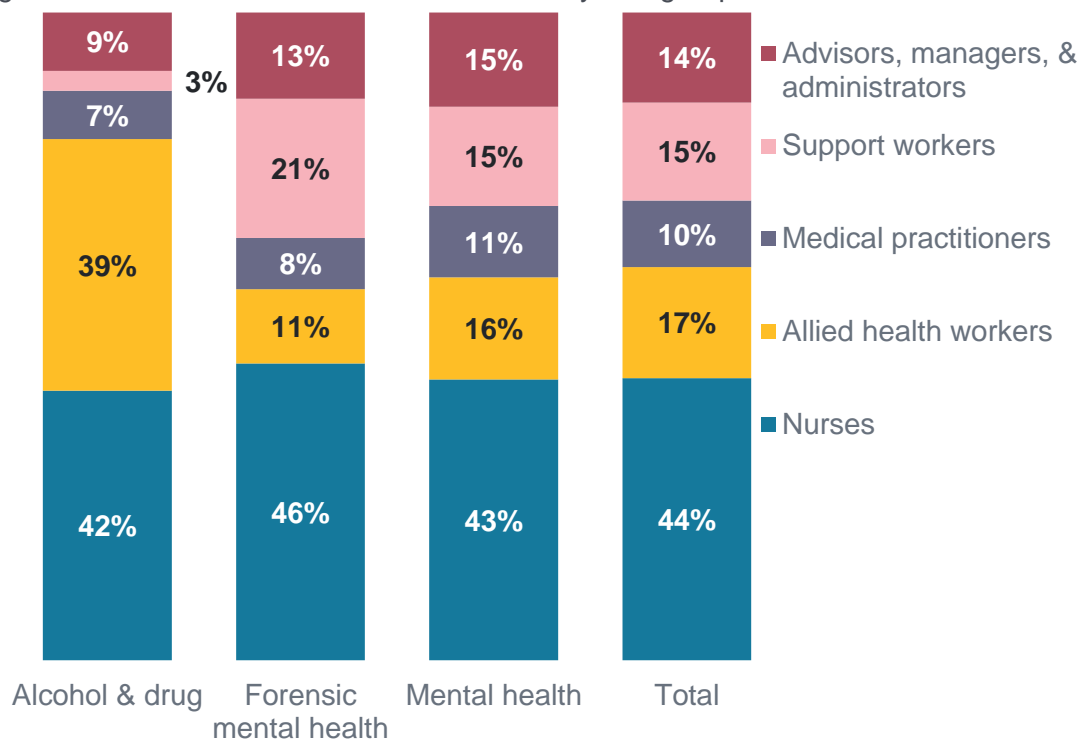
Figure 4 shows nurses are the largest role group at nearly half (44 percent) of the workforce, followed by allied health workers and support workers (17 and 15 percent respectively).

¹ The Aotearoa New Zealand population is distributed across the regions in the following way: Northern 37 percent; Te Manawa Taki 20 percent; Central 19 percent; and Te Waipounamu 24 percent; see Statistics New Zealand (2021).

Medical practitioners comprise 10 percent of the workforce and advisors, managers, and administrators are 14 percent.

Alcohol and drug services have a much greater share of their workforce in allied health roles (39 percent) compared to forensic and mental health services (11 to 16 percent). In contrast, forensic services have a greater share of support workers in their workforce (21 percent) compared to other services (3 percent for alcohol and drug services and 15 percent for mental health).

Figure 4. Estimated Te Whatu Ora workforce by role groups and services



The estimated workforce composition is broadly similar to 2018. The main differences are a slightly smaller share of the workforce is in nursing roles (44 percent compared to 46 percent in 2018), and a slightly greater share are advisors, managers, and administrators (14 percent compared to 12 percent in 2018).

Table 3 shows the difference in estimated workforce FTE size and proportionate growth between 2018 and 2022 by role groups. It shows that allied health workers and medical practitioners have the highest growth rate of service delivery roles (14 and 12 percent respectively) and the nursing workforce the lowest (5 percent). The large growth in advisors, managers, and administrators appears to be due to more managers being coded to mental health and addiction primary areas of work than in 2018. This may reflect changes to the allocation of corporate roles to different primary areas of work, rather than actual FTE growth in the workforce.

Table 3. FTE and proportionate change in estimated Te Whatu Ora employed and vacant workforce between 2018 and 2022, by role groups.

Role group	2018 FTE workforce	2022 FTE workforce	FTE growth	Growth (%)
Allied health	1,096.6	1,254.3	157.7	14.4
Nurses	3,034.0	3,185.1	151.1	5.0
Medical practitioners	670.3	749.9	79.6	11.9
Support workers	1,001.2	1,106.4	105.2	10.5
Advisors, managers, administrators	800.6	1015.7	215.1	26.7
Total FTE workforce	6,602.7	7,311.3	708.6	10.7

Consumer and whānau advisor roles

Consumer and whānau advisor roles are of special interest to mental health and addiction workforce development. These roles do not have specific ANZSCO codes, which means we are unable to separately identify these within the HWIP dataset.

Table 4 presents information received from NAMHSCA and the Family Whānau Advisors Aotearoa network. Within the method used to estimate the workforce, this information has been recoded to enable separate reporting from other leadership roles. The table includes only consumer and whānau advisors directly employed by Te Whatu Ora. It excludes FTEs contracted in from non-government organisations and those specific to child and adolescent services. While this is the best available information, there is some information about employed and vacant FTEs missing in the Northern, Te Manawa Taki, and Te Waipounamu regions. So, this information is under-reported.

Table 4. Summary of Te Whatu Ora national consumer and whānau advisor roles for adult services by regions

Role/region	FTEs employed	FTEs vacant	Total FTE workforce	Share of advisors (%)	Vacancy rate (%)
Consumer advisors					
Northern	11.3	-	11.3	25.6	-
Te Manawa Taki	3.4	-	3.4	7.7	-
Central	7.5	1.1	8.6	19.5	12.8
Te Waipounamu	2.6	-	2.6	5.9	-
Total consumer advisors	24.8	1.1	25.9	58.8	4.2
Whānau advisors					
Northern	3.7	1.0	4.7	10.7	21.3
Te Manawa Taki	3.1	0.5	3.6	8.2	13.9
Central	4.0	1.0	5.0	11.3	20.0

Role/region	FTEs employed	FTEs vacant	Total FTE workforce	Share of advisors (%)	Vacancy rate (%)
Te Waipounamu	4.9	-	4.9	11.1	-
Total whānau advisors	15.7	2.5	18.2	41.2	13.8
Total FTE advisors	40.5	3.6	44.1	100.0	8.2
Note: Excludes consumer and whānau advisors employed by non-government organisations and advisors employed in Te Whatu Ora services for children and adolescents (Whāraurau, 2021).					

Other lived experience roles

Health policy and strategy prioritise developing lived experience support and other roles to increase the involvement of people with lived experience and whānau in the overall design and delivery of services (Ministry of Health, 2017, 2021a; Te Pou, 2020). These roles are many and varied, including peer and whānau support workers, peer supervisors, peer and consumer researchers and evaluators (Te Pou, 2020).

Currently, the ANZSCO coding system provides no options for specific lived experience roles. Te Pou attempted to identify such roles through job titles in the HWIP dataset. This did not produce any credible results, suggesting the information is not a reliable reflection of the extent of lived experience roles in Te Whatu Ora employment.

Cultural services and roles

Developing Māori and Pasifika services and increasing the number of dedicated cultural roles is another key policy goal for mental health and addiction services (Ministry of Health, 2017, 2017, 2020a, 2020c, 2021a). These include kaupapa Māori and Pasifika-led services and a wide range of clinical, support, advisory, and cultural supervision roles.

The HWIP dataset primary area of work codes do not identify any dedicated kaupapa Māori or Pasifika services' workforce within Te Whatu Ora.

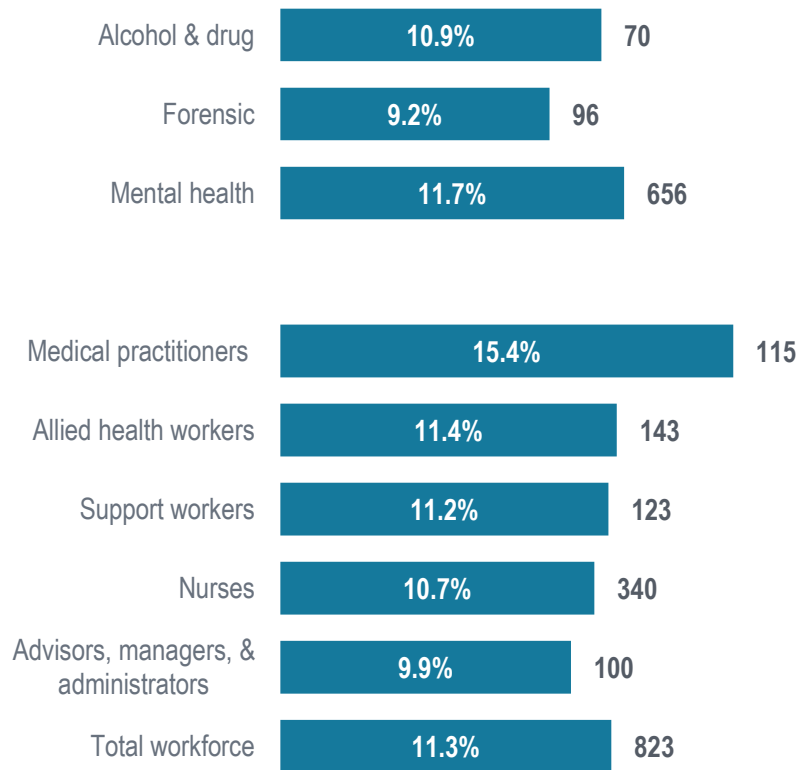
The ANZSCO coding system provides only one option for cultural roles, the 'Māori health assistant' code 411512. There are relatively few FTE employees in this group (79 FTE positions in total). Te Pou attempted to identify specific cultural roles through job titles in the HWIP dataset. This did not produce any credible results, suggesting the information is not a reliable reflection of the extent of cultural roles in Te Whatu Ora employment.

Vacancy rates

The estimated 2022 workforce vacancy rate is just over 11 percent. Figure 5 shows vacancy rates vary across different services. Forensic services have the lowest vacancy rate (9 percent), followed by alcohol and drug (11 percent) and mental health (12 percent) services.

Rates also vary across the different role groups. Medical practitioners have the highest vacancy rates at 15 percent. Allied health workers, nurses, and support workers are all around 11 percent.

Figure 5. Estimated vacancy rates and FTEs vacant by services and role groups



Note: The bold black numbers at the end of each bar describe the estimated number of FTE positions vacant in this analysis.

The 2022 estimated vacancy rates are nearly twice those of 2018 (6 percent). This has the effect of limiting the employed workforce growth. Overall, the employed workforce grew by 5 percent between 2018 and 2022, with alcohol and drug workforce remaining static in size (575 FTE positions employed compared to 580 in 2018), and minor growth in forensic (3 percent) and mental health (6 percent) employed workforces.

Table 5 shows that vacancy rates vary by region and role groups. Te Manawa Taki services have the highest vacancy rate overall and for each role group.

Table 5. Te Whatu Ora adult mental health and addiction service vacancy rates by role groups and regions

Role group	Northern (%)	Te Manawa Taki (%)	Central (%)	Te Waipounamu (%)
Allied health	8.6	20.0	12.2	10.8
Nurses	9.5	17.3	9.9	9.1
Medical practitioners	12.2	25.3	20.5	8.8
Support workers	9.4	15.3	12.0	9.8
Advisors, managers, & administrators	8.9	17.1	9.5	7.6
Total vacancy rate (%)	9.5	18.4	11.5	9.2

Appendices C, D, E, and F provide more information about vacancy rates for services, roles, and regions.

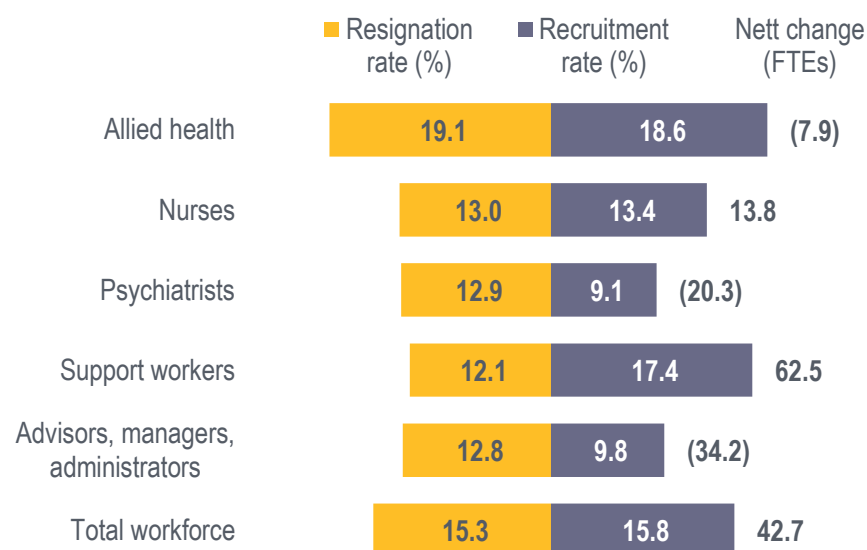
FTE turnover

In the year to 31 March 2022, 1,706 people in 1311 FTE positions left Te Whatu Ora employment and 1,764 people were recruited to 1,353 FTE positions including permanent and fixed term roles. This represents an overall increase in the employed workforce of 43 FTE positions for the year.

The following information should be used with care. It does not reflect the actual change in FTE workforce size during the year. The analysis does not include existing employees moving across services within the provider or those changing their working hours during the year. Resignation and recruitment rates are presented by role groups and not by services because it is unclear whether FTEs recruited and resigned are accurately coded in the alcohol and drug and forensic primary area of work, making service level results unreliable. This limitation of the HWIP dataset is further explained in the Background section.

Figure 6 shows that overall, the recruitment rate is nearly the same as the rate of resignations for the year to 31 March 2022 (nearly 16 and 15 percent respectively). Allied health workers have the highest resignation rate (19 percent). Allied health workers, psychiatrists, and advisors, managers, and administrators' role groups resignation rates exceeded recruitment. Support workers recruited more FTE positions than resigned during the year (17 compared to 12 percent).

Figure 6. Recruitment and resignation rates by role groups with nett FTE change for the year ended 31 March 2022



Note: Rates for resident medical officers are not reported as most are in fixed term employment as part of their training. Rates do not include changes in the working hours of existing employees nor the movement of employees to or from other Te Whatu Ora services.

Table 6 shows that the resignation rate varies by regions and role groups. Te Manawa Taki region has the highest rate, 18 percent. Te Waipounamu the lowest at 13 percent. Resignation rates for allied health workers are high in all regions, ranging from 17 to 21 percent.

Table 6. Resignation rates by regions and role groups

Role groups	Northern (%)	Te Manawa Taki (%)	Central (%)	Te Waipounamu (%)
Allied health	21.4	18.3	20.7	16.9
Nurses	12.8	17.2	14.5	12.5
Psychiatrists	12.2	15.4	19.6	10.6
Support workers	12.2	20.0	10.6	11.0
Advisors, managers, administrators	14.7	12.3	15.4	9.7
Total resignation rate	16.9	18.4	16.7	12.5

Note: Resignation rates for resident medical officers are not reported as most are in fixed term employment as part of their training.

Table 7 shows that the Central region has the highest recruitment rate (18 percent), and Te Waipounamu the lowest (13 percent). Allied health workers in have very high recruitment

rates in all four regions (19 to 21 percent) as do support workers outside the Northern region (19 to 23 percent).

Table 7. Recruitment rates by regions and role groups

Role groups	Northern (%)	Te Manawa Taki (%)	Central (%)	Te Waipounamu (%)
Allied health	19.9	20.6	18.6	18.7
Nurses	14.8	14.4	15.9	11.4
Psychiatrists	8.2	8.3	15.6	8.5
Support workers	13.6	19.6	23.1	18.8
Advisors, managers, administrators	12.0	9.0	11.2	7.2
Total recruitment rate	17.4	17.0	18.3	13.0

Note: Recruitment rates for resident medical officers are not reported as most are in fixed term employment as part of their training.

Table 8 shows that resignations exceeded recruitment for permanent roles by 17 FTE positions. In contrast, recruitment exceeded resignations by 59 FTE positions for fixed term roles and by 45 people for casual roles.

Table 8. Number of FTE employees recruited and resigned for the year to 31 March 2022 by employee status

Employee status	Resigned	Recruited	Nett change
Permanent (FTEs)	1,084.5	1,067.4	(17.1)
Fixed term (FTEs)	226.9	285.7	58.8
Casual (people)	182	227	45

Employee profiles

The following subsections summarise the socio-demographic and employment profile of Te Whatu Ora employees by HWIP primary area of work. These analyses include around 1,340 employees in child and adolescent services (Whāraurau, 2021). Analyses are based on service groups as coded in the HWIP dataset. This means that the mental health category includes all of the Central region's alcohol and drug and forensic services' employees, and some alcohol and drug services' employees from the other three regions.

Table 9 shows that most (89 percent) employees are permanent, with 443 people (5 percent) in fixed term roles and another 579 (6 percent) casual employees.

Table 9. Summary of Te Whatu Ora employees by employment status and primary area of work

Employee status	Alcohol & drug	Forensic	Mental health	All employees	Share of employees (%)
Permanent	295	856	6,970	8,085	88.8
Fixed term	10	24	409	443	4.8
Casual	7	72	503	582	6.4
Number of employees	312	952	7,882	9,146	100.0

Note: Totals include people working in services for children and adolescents. There are 36 people in permanent roles that work across more than one service, therefore the total people employed in alcohol and drug, forensic, and mental health services is slightly greater than the total number of employees reported.

Table 10 shows that two in five (41 percent) people in permanent roles are nurses. Nurses also make up one-third (31 percent) of people in fixed term employment and nearly half of casual workers (44 percent). Support workers make up another two in every five (43 percent) casual workers. Medical practitioners employed temporarily as part of their training are reflected in the large number of these roles in fixed term roles.

Table 10. Te Whatu Ora permanent, fixed term, and casual employees by role groups

Role groups	People on permanent contracts	Share (%)	Fixed term contracts	Share (%)	Casual contracts	Share (%)
Allied health	1,802	22.2	97	21.9	24	4.3
Nurses	3,392	41.8	138	31.2	258	44.3
Medical practitioners	691	8.5	144	32.5	13	2.2
Support workers	1,146	14.1	27	6.1	248	43.0
Advisors, managers, administrators	1,090	13.4	37	8.4	36	6.2
Number of employees	8,085	100.0	443	100.0	579	100.0

Note: Totals include people working in services for children and adolescents. Permanent employees total to more than the number of people employed as 36 individuals are counted in more than one service.

Age

The average age of permanent employees is just under 48. Figure 7 shows employees in the alcohol and drug primary area of work are the oldest on average (50 years) and have the largest share of people aged 60 and over (24 percent). Employees in the forensic area are similar to those in mental health with a larger share of the workforce aged under 50 (56 and 53 percent respectively).

Figure 7. The share of permanent employees by age groups and primary area of work, including average age

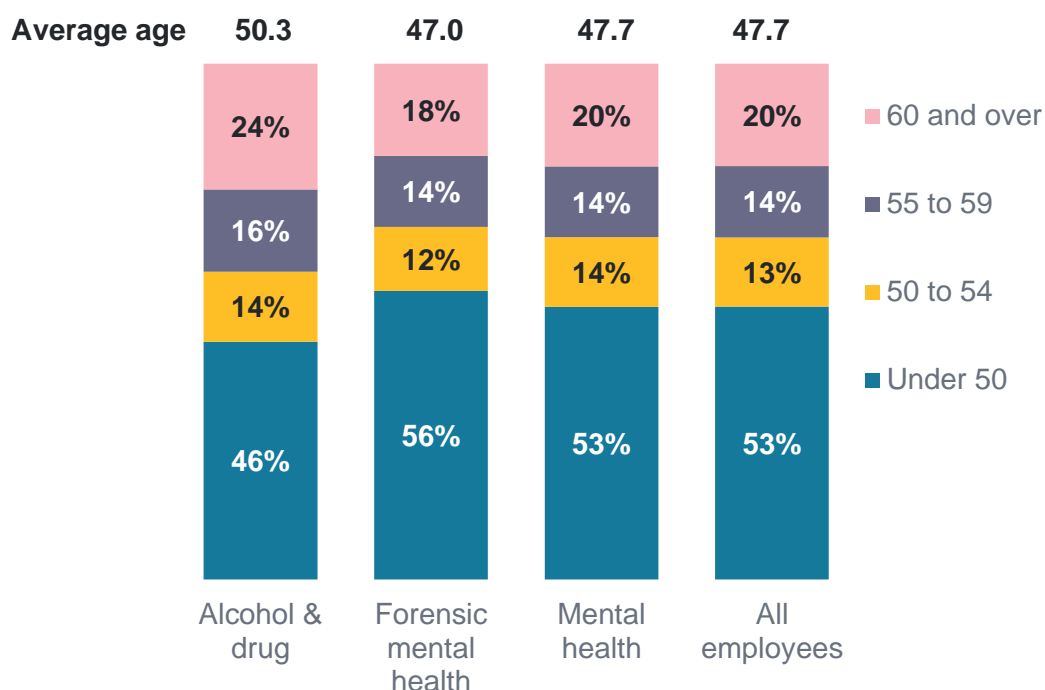


Table 11 shows people in fixed term roles tend to be younger than those in permanent roles with an overall average age of 39 years. In contrast, casual employees are closer in age to people in permanent roles albeit slightly younger across each of the services.

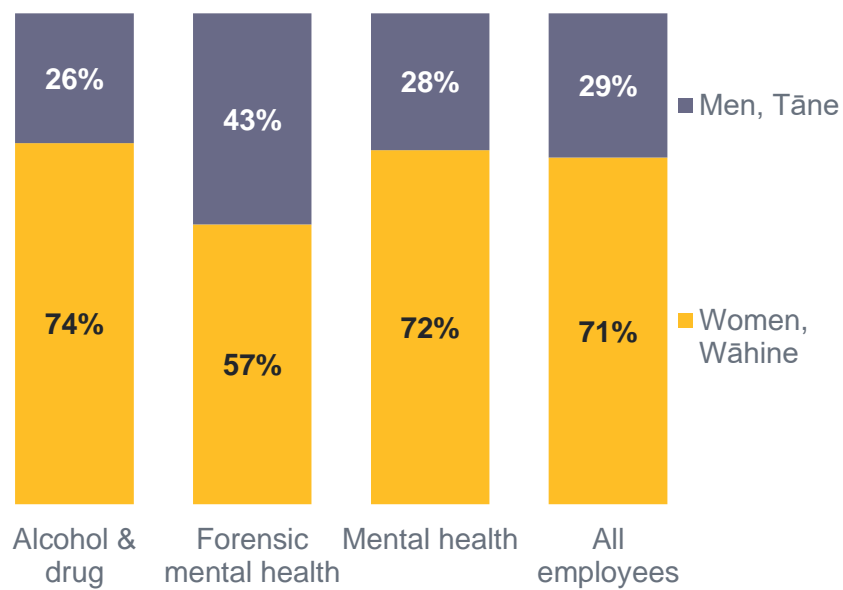
Table 11. Average age (years) for fixed term and casual employees by service

Employee status	Alcohol & drug	Forensic	Mental health	All employees
Permanent	50.3	47.0	47.7	47.7
Fixed term	42.6	34.2	39.1	38.9
Casual	48.6	43.7	46.2	45.9

Gender

Figure 8 shows two-thirds of employees are women (71 percent). Employees in the forensic area of work are more likely to be men (43 percent), compared to those in alcohol and drug and mental health areas (26 and 28 percent respectively). A very small group of people (less than 1 percent) report an alternate gender.

Figure 8. Share of permanent employees by gender and primary area of work.



The share of people in fixed term employment who identify as women (72 percent) is similar to those in permanent roles. A slightly lower share of casual employees identify as women (67 percent).

Ethnicity

Figure 9 shows about 14 percent of permanent employees identify as Māori, with those in forensic and mental health areas being more likely to identify as Māori than those in the alcohol and drug area.

Figure 9. Share of permanent employees by ethnic groups and primary area of work

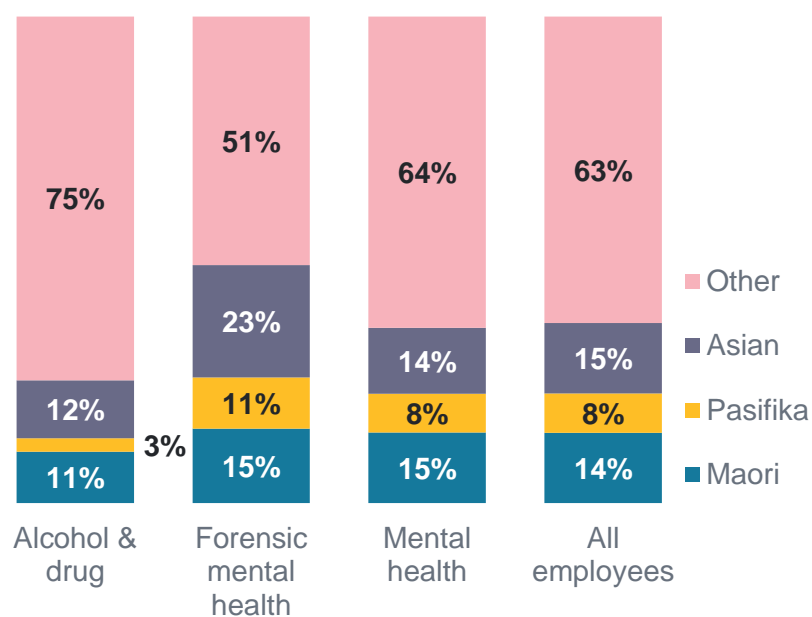


Table 12 shows casual employees are more likely to identify as Māori across all areas compared to permanent employees. There are high rates of casual employment for Pasifika peoples in the alcohol and drug area (29 percent). Fixed term forensic and mental health employees are less likely to identify as Pasifika than permanent employees.

Table 12. Ethnicity of fixed term and casual employees by primary area of work

Employee status	Alcohol & drug (%)	Forensic (%)	Mental health (%)	All employees (%)
Permanent				
Māori	10.6	15.3	14.5	14.5
Pasifika	2.7	10.5	8.0	8.0
Asian	11.9	23.1	13.6	14.5
Other	74.7	51.1	63.9	63.0
Fixed term				
Māori	20.0	8.3	14.4	14.2
Pasifika	0.0	0.0	5.2	4.8
Asian	0.0	16.7	18.4	17.8
Other	80.0	75.0	62.0	63.2
Casual				
Māori	14.3	21.7	15.3	16.1
Pasifika	28.6	8.7	11.3	11.2
Asian	14.3	10.1	10.7	10.6
Other	42.9	59.4	62.8	62.1

Length of service

Figure 10 shows the average length of service for permanent employees is 8 and a half years. Employees in the mental health area are more likely to have been employed less than 2 years than those in the alcohol and drug area (27 and 20 percent respectively). In contrast, nearly two in five (37 percent) employees in the alcohol and drug and forensic areas have been employed more than 10 years.

Figure 10. Share of permanent employees grouped by years employed and primary area of work

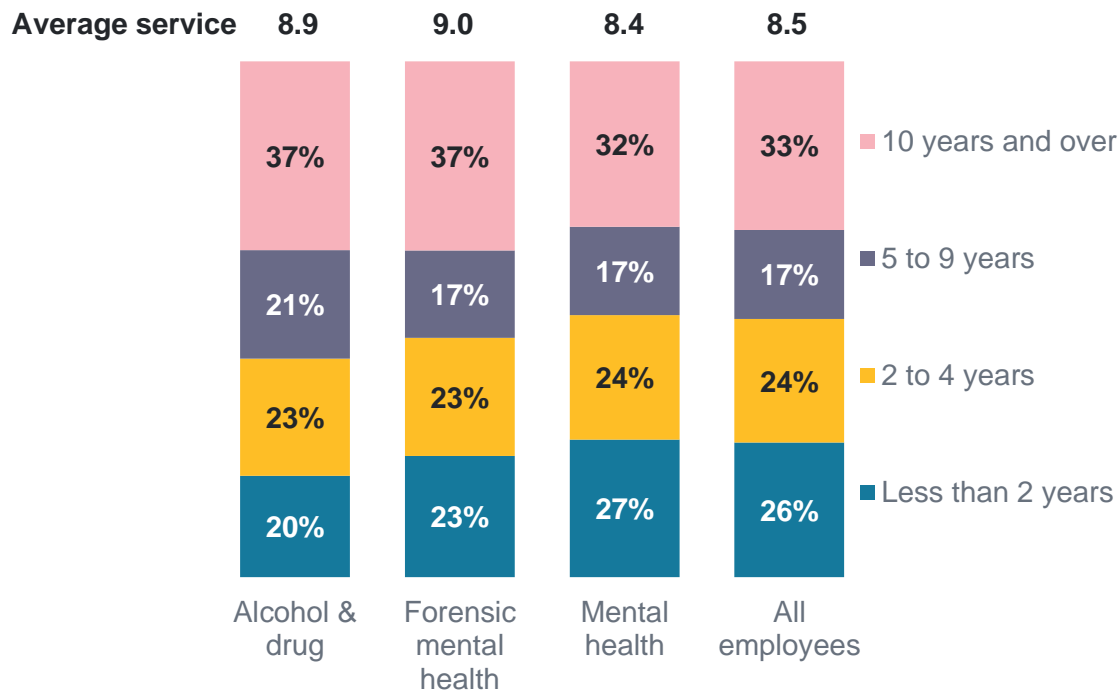


Table 13 shows fixed term employees have the lowest average length of service at just under 3 years. In contrast, casual employees tend to have longer terms averaging 4 years. Casual alcohol and drug employees have an average of 8 years' service.

Table 13. Average length of service (years) for fixed term and casual employees by primary area of work

Employee status	Alcohol & drug	Forensic	Mental health	All employees
Permanent	8.9	9.0	8.4	8.5
Fixed term	2.7	1.8	2.7	2.7
Casual	8.3	5.3	3.6	3.9

Discussion

This report presents analyses of the HWIP dataset for Te Whatu Ora employees in alcohol and drug, forensic, and mental health services. The analysis includes:

- an estimate of the employed and vacant workforce in adult services by FTE size and composition, regions, and role groups, with past year recruitment and resignation rates
- summaries of the overall Te Whatu Ora employed workforce socio-demographic profile, and length of service by services according to the primary area of work coding in the HWIP dataset.

The following summarises workforce development challenges emerging from the report. These are discussed in relation to health policy and strategy goals to grow the workforce in size and diversity, and understand workforce supply challenges and trends (Government Inquiry into Mental Health and Addiction, 2018; Ministry of Health, 2017, 2020c, 2020a, 2021a; Te Whatu Ora Health New Zealand & Te Aka Whai Ora, 2022). The report limitations are described also.

Workforce development challenges

The information in this report suggests various workforce challenges.

- High vacancy rates (10 to 15 percent) are constraining Te Whatu Ora services' capacity to grow the workforce and deliver services to more people.
- Past year recruitment rates effectively replaced resignations only, with little or no excess to lower vacancy rates or grow the workforce in size for most role groups except support workers.
- Māori representation in the overall workforce (14 percent) is lower than the population across all age groups (now 17 percent; Statistics New Zealand, 2023) and much lower than the share of people accessing services who identify as Māori (29 percent; Ministry of Health, 2021d).
- Half of current employees are aged over 50, and this will likely lead to increased resignation rates over time.

These challenges affect services and role groups differently.

- Alcohol and drug services show particularly low growth in the employed and vacant workforce (4 percent since 2018).
- Mental health and addiction services in Te Manawa Taki region have very high vacancy and resignation rates (around 19 percent) compared to other regions, and past year recruitment did not replace resignations.
- Past year resignation rates are very high for allied health workers (19 percent) and have not been fully replaced by recruitment.
- Past year recruitment only just replaced nurse resignations (13 percent each) and did not completely replace psychiatrist resignations (9 percent compared to 12 percent).

- Since 2018, the allied health, medical, and support worker role groups have grown at twice the rate of nurses (more than 10 percent compared to 5 percent). So, the relative share of nurses in the workforce has declined from 46 percent in 2018 to 44 percent.
- Māori and Pasifika peoples are more likely to be employed casually than other groups, and young people are more likely to be employed for fixed terms.

These challenges likely reflect multiple factors, including pressures on workforce supply pipelines due to a tight labour market and substantial national and international competition for qualified health workers. Some of these challenges are relatively new, reflecting the COVID-19 pandemic's impact on immigration for example. Other challenges, like the ageing workforce, increasing FTE turnover, and low growth in the alcohol and drug workforce are long-standing issues identified previously (see for example Te Pou, 2021, 2022a; Te Pou o te Whakaaro Nui, 2019b).

A national workforce development plan is needed to address these challenges for Te Whatu Ora providers (New Zealand Health & Disability System Review, 2020). All workforce planning and development should embed Te Tiriti principles including Māori leadership and authority (Ministry of Health, 2020c, 2020b; Waitangi Tribunal, 2019). Other good practices in workforce planning and development include co-design with providers to reflect their diversity and priorities (Beck et al., 2018; New Zealand Health & Disability System Review, 2020; Te Kāhui Raraunga, 2021). This report adds to the substantial body of existing work that can inform workforce planning and development activities (Te Pou, 2021, 2022a; Te Pou o te Whakaaro Nui, 2019b; Werry Workforce Whāraurau, 2019; Whāraurau, 2021).

Growing Te Whatu Ora services' capacity to support more people (Government Inquiry into Mental Health and Addiction, 2018; Ministry of Health, 2017, 2021a) requires pipelines into the workforce that can deliver sufficient supply of qualified health workers. This includes adequate supply to both return vacancy rates to previous norms (6 percent; Te Pou o te Whakaaro Nui, 2019b) and grow the workforce in size to meet increased demand. Workforce planning and development needs to consider our current reliance on immigration as a workforce pipeline for nurses and medical practitioners (Buchan et al., 2011; OECD, 2017), and ensure the mix of domestic education and immigration is sustainable into the future.

We need long term plans to address the impact of workforce ageing on FTE turnover. Workforce planning and development should aim to produce enough health workers to replace people who are reducing their hours or retiring in the future. We may also have to reconsider current work practices and service models to make better use of the available workforce (Amorim Lopes et al., 2015; Buchan & Dal Poz, 2002; Segal & Bolton, 2009; Te Pou o te Whakaaro Nui, 2014).

Workforce planning and development needs to identify and address the factors contributing to low growth in the alcohol and drug workforce. Such activities will require better information about the actual size and characteristics of this workforce. This should include better coding of the alcohol and drug workforce separate from mental health. This is currently a key limitation of the HWIP dataset, for both alcohol and drug and forensic services.

Improving retention will help to maintain workforce supply. The health system restructure to a single entity may support better understanding of the current retention issues for Te Whatu Ora providers across the country. For example, staffing shortages (Logan, 2018), excess workload, and burnout (Chambers & Frampton, 2022), retaining the knowledge and skills of older workers (Health Workforce New Zealand, 2012; Walker et al., 2018), and supporting new graduates' entry to practice (Smith & Jury, 2017; Te Pou o te Whakaaro Nui, 2018b). Taking a multi-level approach, national, regional, and local, will support sustainable and successful workforce planning and development (World Health Organization, 2010a).

Some regions and roles face more challenges than others. More information is required to understand high turnover in Te Manawa Taki region compared to other regions. Likewise, we need to understand why allied health workers' turnover is so high across the country, and what extra supports this group needs to improve retention (see for example Te Pou o te Whakaaro Nui, 2018b). Similarly, we need to understand the challenges providers face filling nurse and psychiatrist vacancies. Identifying contributing factors will inform decision-making about how best to address these issues.

A focus on ethnic and gender diversity should be included in all workforce development activities. The population is becoming more diverse over time, with 17 percent of people in Aotearoa New Zealand now identifying as Māori (Statistics New Zealand, 2023). Nearly one-third (29 percent) of people accessing Te Whatu Ora services are Māori (Ministry of Health, 2021d). The share of Māori among Te Whatu Ora employees has been relatively static for the past 5 years (14 percent; Te Pou, 2021, 2022a). Continuing to grow the Māori workforce across all role groups requires ongoing attention in both learning and development, and recruitment and retention activities. Similarly, a focus on workforce gender is needed to grow the share of men and gender diverse peoples.

This report is the first to examine the relative share of FTE employed workforce in permanent (89 percent), fixed term (5 percent), and casual (6 percent) roles. Monitoring the share of employees by contract status can help to understand the pressures on Te Whatu Ora services in maintaining the employed workforce. Analysis of demographic profiles in each group suggests some employment inequities for Māori, Pasifika, and young people compared to others. More work is needed to understand the workforce development implications of these results.

Limitations

This report presents workforce estimates that are limited to Te Whatu Ora adult alcohol and drug, forensic, and mental health services. It includes some workforce in dedicated services for older people (aged 65 and over). The latter are likely underreported. This is due the Central and Te Waipounamu regions' having mental health and addiction specialists embedded into older peoples' physical health services (Cheung et al., 2018).

The workforce estimates are limited by the accuracy and completeness of the information used. The HWIP dataset may under-report employees from one very small provider that has not completed primary area of work coding, this is likely to be less than 1 percent of the workforce. Our use of the 2020 child and adolescent services' information (Whāraurau, 2021), may overstate the 2022 adult workforce slightly (by 1 to 2 percent) and not include recent changes in workforce composition and vacancies.

Our estimates for FTEs vacant are based on information about all Te Whatu Ora services, not just mental health and addiction. Anecdotal evidence suggests this approach may underestimate mental health and addiction service vacancies.

We use the latest available mental health and addiction expenditure to inform this project. This includes information about contracts for the year ended 30 June 2021 (Ministry of Health, 2021b), which is 9 months out of date by March 2022. So our estimates may not fully reflect the current distribution of funding across different regions and services.

Conclusions

This report presents estimates for Te Whatu Ora adult alcohol and drug, forensic, and mental health workforce, and analyses employee information. It aims to inform workforce planning and development to grow the workforce size and diversity and understand and address its challenges.

A national workforce development plan is needed. Priorities include growing workforce pipelines to sustainably supply the right number of health workers, increasing ethnic and gender diversity in the workforce, and reducing vacancy rates through recruitment and retention activities. Planning and development activities should pay attention to understanding the alcohol and drug workforce size and barriers to its growth; turnover in all Te Manawa Taki services; and pay specific attention to recruitment and retention of allied health workers, nurses, and medical practitioners.

The HWIP dataset provides useful information about Te Whatu Ora adult mental health and addiction workforce. However there are some areas where the dataset coding needs to be updated to categorise the information in more meaningful ways to inform workforce planning and development. These areas are now well documented (Te Pou, 2022b; Te Pou o te

Whakaaro Nui, 2019b), and Te Pou is committed to supporting HWIP and Te Whatu Ora to achieve these changes.

Appendices

The following information is provided in Appendices.

- Appendix A: HWIP Te Whatu Ora employee information.
- Appendix B: Methods.
- Appendix C: Estimated Te Whatu Ora adult mental health and addiction workforce tables.
- Appendix D: Estimated Te Whatu Ora adult alcohol and drug workforce tables.
- Appendix E: Estimated Te Whatu Ora adult forensic mental health workforce tables.
- Appendix F: Estimated Te Whatu Ora adult mental health workforce tables.
- Appendix G: Change in workforce size since 2018.

Appendix A: HWIP Te Whatu Ora employee information

The following subsections summarise how information from the HWIP employee dataset has been translated into meaningful categories about mental health and addiction services' workforce.

Primary area of work allocation to services

In the HWIP dataset, the primary area of work code is a four-digit code specifying both a general service area and specialisation. The coding system is based on UK standards and occupations (Health Workforce Information Programme, 2016). The primary area of work codes used in this report are summarised in Table 14.

Table 14. Summary of HWIP primary area of work codes and definitions, with allocations used for this report

Primary area of work code	HWIP description	Report allocation	Notes
0801	Psychiatry - General psychiatry	Mental health	
0802	Psychiatry – Forensic psychiatry	Forensic	Not identified in Central region
0803	Psychiatry - Psychotherapy	Mental health	
1004	Primary care - Mental health	Mental health	
1202	Clinical support - Substance abuse	Alcohol & drug	Not identified in Central region
1219	Clinical support - Clinical psychology	Mental health	

Source: Health Workforce Information Programme (2016).

Role groups summary

Role groups are based on previous Te Pou reports (Te Pou o te Whakaaro Nui, 2015, 2019a). These are described in Table 15, with a summary of each groups' inclusions.

Table 15. Summary of role groups for this report and relevant ANZSCO codes

Role group	Included ANZSCO code and description
Allied health roles	
Addiction practitioner	ANZSCO code 272112 Drug and alcohol counsellor
Social worker	ANZSCO code 272511 Social worker
Occupational therapist	ANZSCO code 252411 Occupational therapist
Psychologist	ANZSCO code 272311 Clinical psychologist ANZSCO code 272399 Psychologists
Other allied health roles	All other ANZSCO codes relating to allied health professionals
Nurse	
Enrolled nurse	ANZSCO code 411411 Enrolled nurse
Registered nurses.	All ANZSCO codes relating to registered nurses except 411411 Enrolled nurses (reported separately) and 254311 Nurse managers (reported as Service managers and team leaders)
Medical practitioners	

Role group	Included ANZSCO code and description
Psychiatrists	ANZSCO code 253411 Psychiatrist
Other medical practitioner	ANZSCO code 253112 Resident medical officer and all other ANZSCO codes relating to medical practitioners
Support workers	
Support workers	All ANZSCO codes relating to non-clinical workforce and including counsellors
Advisors, managers, administrators	
Advisors	National consumer and whānau advisors as provided by networks
Managers	All ANZSCO codes with 'manager' or 'lead' in the title including 254311 Nurse manager and 134212 Nursing clinical director and various administration managers
Administrator	All ANZSCO codes relating to administration and other non-service delivery support roles like IT, cooks, cleaners, security

Source: Health Workforce Information Programme (2016).

Appendix B: Methods

The report methods are adapted from previous work by Te Pou (2021; Te Pou o te Whakaaro Nui, 2019b), using the following information.

- Extracts from the HWIP Te Whatu Ora employee dataset.
- The Whāraurau (2021) workforce stocktake of alcohol and drug, forensic, and mental health services for children and adolescents.
- Manatū Hauora Ministry of Health (2021b) mental health and addiction expenditure for the year ended 31 June 2021.
- Information from NAMHSCA and the Family Whānau Advisors Aotearoa Network.

HWIP data extract

The HWIP team provided Te Pou with the following information extracted from the Te Whatu Ora employee dataset for the quarter ended 31 March 2022.

- FTEs employed and socio-demographic characteristics of employees in mental health and addiction primary areas of work by region, ANZSCO role code, and employment status (permanent, fixed term, and casual).
- Summary information about:
 - all employees and vacant roles in all Te Whatu Ora services by ANZSCO occupation groups (vacancy information is not available by primary area of work)
 - FTEs recruited to and resigned from mental health and addiction primary areas of work during the previous year, by regions and roles
 - casual employees by primary area of work, region, and roles
 - roles with specific key words in job titles relating to lived experience and Māori cultural roles.

The extract included all Te Whatu Ora employees:

- with permanent, fixed term, and casual contracts
- in a mental health and addiction primary area of work; see Appendix A (Table 14).

The extract excludes employees on leave without pay and long-term leave such as parental leave, and contractors.

Other sources

Information about Te Whatu Ora child and youth mental health and addiction services workforce was collated from the most recent Whāraurau (2021) workforce stocktake.

Manatū Hauora Ministry of Health provided information about adult mental health and addiction expenditure for Te Whatu Ora provider arm services for the year ended 30 June 2021 (Ministry of Health, 2021b). This information was screened prior to use to exclude out

of scope services such as integrated primary mental health and addiction services, aged care, workforce development, research, and quality improvement and audit activities.

Other information used in this report includes:

- national consumer advisor workforce information from NAMHSCA
- national whānau advisor workforce information from the Family Whānau Advisors Aotearoa Network
- 2018 workforce estimates (Te Pou o te Whakaaro Nui, 2019b).

Adult services' workforce estimates

The following steps comprise the method used to estimate Te Whatu Ora workforce.

1. Aggregate the FTE employed workforce in mental health and addiction primary areas of work into services (alcohol and drug, forensic, mental health), regions, and role groups. For role groups see Appendix A (Table 15).
2. Use Te Whatu Ora information for all services to estimate vacancies in mental health and addiction primary areas of work based on the ratio of vacant to employed FTEs.
3. Add estimated mental health and addiction vacant FTEs to the FTE employed workforce by regions and role groups.
4. Subtract the reported 2020 child and adolescent services' employed and vacant workforce (Whāraurau, 2021).
5. Analyse Te Whatu Ora workforce funding described in mental health and addiction expenditure (Ministry of Health, 2021b) to identify under-reported workforce by service and region.
6. Identify and move excess mental health FTE workforce to under-reported services by region and roles.

Table 16 summarises the data sources and information about FTE positions used in the estimation method and presents the calculations used to estimate the adult Te Whatu Ora mental health and addiction workforce.

Table 16. Summary of estimate calculations including FTEs from each source by service

Service	FTEs employed	FTEs vacant	Total FTE workforce	Children's workforce	Move to services	Adult FTE workforce
Source:	HWIP six primary areas of work	HWIP all Te Whatu Ora services	Calculated	Whāraurau (2021)	Ministry of Health (2021b)	Calculated
Calculation:	=a	=b	c=a+b	=d	=e	f=c-d+e
Alcohol & drug	270.6	31.9	302.5	41.0	383.5	645.0
Forensic	813.8	96.3	910.1	59.0	201.9	1,052.8
Mental health	6,556.8	812.0	7,368.8	1,170.1	(585.4)	5,613.5
Total	7,641.2	940.2	8,581.4	1,211.1	0.0	7,311.3

Table 17 shows the calculations used to identify and move FTE workforce out of mental health services and into alcohol and drug and forensic services. These calculations are based on comparisons of the share of mental health and addiction expenditure by services and regions with estimated adult services' FTE workforce calculated as "c-d" in Table 16 above.

Table 17. Summary of process used to move FTE workforce across services based on comparison with mental health and addiction expenditure

	Alcohol & drug	Forensic	Mental health	Total workforce
Workforce by primary area of work (c-d)	261.5	851.2	6,198.6	7,311.3
Share of estimated workforce (%)	3.6	11.6	84.8	100.0
Share of expenditure (%)	8.8	12.5	78.7	100.0
FTEs to move across services				
Northern	81.3		(81.3)	
Te Manawa Taki	87.1		(87.1)	
Central	123.1	201.9	(325.1)	
Te Waipounamu	91.9		(91.9)	
Total FTE movement (e)	383.5	201.9	(585.4)	0.0
Adult FTE workforce total	645.0	1,052.8	5,613.5	7,311.3

Te Pou moved FTE positions for addiction practitioners out of mental health primary areas of work into alcohol and drug services. Remaining FTEs moved were spread across the receiving services' workforce by pro-rata to preserve their original composition.

Lived experience and cultural roles

The ANZSCO coding system has no specific code for lived experience or cultural roles. These are key workforces for development (Ministry of Health, 2017, 2020c, 2020a; Te Pou, 2020; Te Whatu Ora Health New Zealand & Te Aka Whai Ora, 2022).

Working with HWIP, Te Pou attempted to identify these roles through relevant keywords in employee job titles like 'peer support', 'Māori', 'consumer', 'family' or 'whānau', 'cultural' and 'advisor' and general use of te reo Māori terms in job titles. However, this was unsuccessful at this time, due to apparently widespread use of such terms in job titles across numerous registered professional and support worker categories. So, results did not align with sector intelligence.

The workforce in consumer and whānau advisor roles is collated by NAMHSCA and the Family Whānau Advisors Aotearoa Network. Te Pou included this information in the HWIP

data set by offsetting against the existing “Liaison officer” code 224912 so that it appears separately in report tables. This excludes child and adolescent service advisors reported by Whāraurau (2021).

Measures

Full-time equivalent (FTE) positions

FTE position information is calculated by HWIP as employees’ annual contracted hours divided by 2,086 hours per annum (40 hours per week).

FTEs employed and vacant

The number of FTE positions employed plus the number of FTE positions vacant.

FTE turnover

FTE turnover is measured in two rates.

- The recruitment rate is the number of permanent and fixed term FTE positions recruited during the year to 31 March 2022 divided by the total number of FTE positions employed plus vacant on 31 March 2022.
- The resignation rate is the number of permanent and fixed term FTE positions resigned during the year to 31 March 2022 divided by the total number of FTE positions employed plus vacant on 31 March 2022.

Role groups

Te Pou aggregated information from the HWIP employee dataset into role groups based on previous workforce reports and our annual Te Whatu Ora mental health and addiction employee profile reports (Te Pou, 2021; Te Pou o te Whakaaro Nui, 2015, 2019b) as follows.²

- Allied health (including addiction practitioners).
- Nurses.
- Medical practitioners.
- Support workers.
- Advisors, managers, and administrators; see Appendix A (Table 15).

Regions

Workforce information is attributed to one of four Te Whatu Ora regions.

- Northern (including former Northland, Waitematā, Auckland, Counties Manukau DHBs).
- Te Manawa Taki (previously Midland region, including former Waikato, Lakes, Bay of Plenty, Tairāwhiti, Taranaki DHBs).

² See <https://www.tepou.co.nz/initiatives/workforce-planning-and-development/workforce-and-other-data-reports>

- Central (including former MidCentral, Hawke’s Bay, Whanganui, Wairarapa, Capital & Coast, Hutt DHBs).
- Te Wai Pounamu (previously South Island region, including former Nelson-Marlborough, Canterbury, West Coast, South Canterbury, Southern DHBs).

Services

The workforce is analysed across three types of adult mental health and addiction services:

- alcohol and drug services
- forensic mental health services
- mental health services.

Allocation of employees to each type of service is based on their recorded primary area of work code and services’ proportionate share of mental health and addiction expenditure previously described in the Methods section.

Appendix C: Estimated Te Whatu Ora adult mental health and addiction workforce tables

Table 18. National estimated Te Whatu Ora adult alcohol and drug, forensic, and mental health FTE workforce (employed and vacant) on 31 March 2022

Role group	Alcohol & drug (FTEs)	Forensic (FTEs)	Mental health (FTEs)	Total workforce (FTEs)	Share of workforce (%)	Vacancy rate (%)
Clinical roles						
Allied health						
Addiction practitioner	175.7	1.2	0.0	176.8	2.4	9.6
Occupational therapist	7.2	53.8	209.3	270.3	3.7	11.8
Psychologist	12.9	32.5	270.2	315.6	4.3	9.2
Social worker	40.6	30.3	340.4	411.3	5.6	13.5
Other allied health	14.0	2.9	63.4	80.3	1.1	12.7
Allied health subtotal	250.4	120.6	883.2	1,254.3	17.2	11.4
Nurses						
Enrolled nurse	-	26.7	129.6	156.2	2.1	10.7
Registered nurse	268.6	455.7	2,304.6	3,028.8	41.4	10.7
Nurses subtotal	268.6	482.4	2,434.1	3,185.1	43.6	10.7
Medical practitioners						
Psychiatrist	33.4	37.6	377.4	448.4	6.1	18.7
Other medical practitioners	14.9	45.5	241.1	301.5	4.1	10.5
Medical practitioners subtotal	48.2	83.2	618.5	749.9	10.3	15.4
Total clinical roles	567.2	686.2	3,935.8	5,189.2	71.0	11.5
Support workers subtotal	19.7	226.4	860.4	1,106.4	15.1	11.2
Advisors, managers, administrators						
Consumer & whānau advisor	-	-	44.1	44.1	0.6	8.2
Manager	18.9	63.3	296.9	379.1	5.2	10.2
Administration & support	39.1	77.1	476.4	592.5	8.1	9.8
Advisors, managers, administrators subtotal	58.1	140.3	817.3	1,015.7	13.9	9.9
Total FTE workforce	645.0	1,052.8	5,613.5	7,311.3	100.0	11.3

Table 19. Northern estimated Te Whatu Ora adult alcohol and drug, forensic, and mental health FTE workforce (employed and vacant) on 31 March 2022

Role group	Alcohol & drug (FTEs)	Forensic (FTEs)	Mental health (FTEs)	Total workforce (FTEs)	Share of workforce (%)	Vacancy rate (%)
Clinical roles						
Allied health						
Addiction practitioner	120.8	-	-	120.8	4.4	8.3
Occupational therapist	-	24.1	89.0	113.1	4.1	9.5
Psychologist	6.2	19.4	101.6	127.2	4.6	3.5
Social worker	20.5	14.8	129.5	164.8	6.0	11.4
Other allied health	10.0	-	5.8	15.8	0.6	16.4
Allied health subtotal	157.5	58.3	325.9	541.7	19.7	8.6
Nurses						
Enrolled nurse	-	8.9	32.5	41.4	1.5	10.2
Registered nurse	49.8	213.0	821.7	1,084.4	39.5	9.4
Nurses subtotal	49.8	221.9	854.2	1,125.8	41.0	9.5
Medical practitioners						
Psychiatrist	17.8	21.0	162.6	201.4	7.3	17.1
Other medical practitioners	10.1	10.7	89.4	110.3	4.0	3.3
Medical practitioners subtotal	27.9	31.8	252.1	311.7	11.4	12.2
Total clinical roles	235.2	311.9	1,432.2	1,979.3	72.1	9.7
Support workers subtotal	5.4	123.4	308.0	436.9	15.9	9.4
Advisors, managers, administrators						
Consumer & whānau advisor	-	-	16.0	16.0	0.6	6.7
Manager	7.6	18.6	89.1	115.2	4.2	9.1
Administration & support	19.4	47.5	129.8	196.7	7.2	9.0
Advisors, managers, administrators subtotal	26.9	66.1	234.9	327.9	11.9	8.9
Total FTE workforce	267.6	501.5	1,975.0	2,744.1	100.0	9.5

Table 20. Te Manawa Taki estimated Te Whatu Ora adult alcohol and drug, forensic, and mental health FTE workforce (employed and vacant) on 31 March 2022

Role group	Alcohol & drug (FTEs)	Forensic (FTEs)	Mental health (FTEs)	Total workforce (FTEs)	Share of workforce (%)	Vacancy rate (%)
Clinical roles						
Allied health						
Addiction practitioner	18.7	0.5	-	19.2	1.7	26.0
Occupational therapist	-	13.6	36.0	49.6	4.4	17.2
Psychologist	-	4.8	57.6	62.3	5.5	15.8
Social worker	10.5	5.8	30.4	46.8	4.1	25.3
Other allied health	-	2.3	3.5	5.8	0.5	26.7
Allied health subtotal	29.2	27.1	127.4	183.7	16.3	20.0
Nurses						
Enrolled nurse	-	4.8	16.9	21.7	1.9	17.0
Registered nurse	96.5	36.4	330.6	463.4	41.0	17.3
Nurses subtotal	96.5	41.2	347.4	485.1	43.0	17.3
Medical practitioners						
Psychiatrist	-	1.2	75.2	76.4	6.8	30.4
Other medical practitioners	-	26.1	31.5	57.6	5.1	18.5
Medical practitioners subtotal	-	27.3	106.7	134.0	11.9	25.3
Total clinical roles	125.7	95.6	581.5	802.8	71.1	19.3
Support workers subtotal	-	20.5	162.0	182.5	16.2	15.3
Advisors, managers, administrators						
Consumer & whānau advisor	-		7.0	7.0	0.6	7.1
Manager	-	17.1	61.0	78.1	6.9	16.2
Administration & support	-	5.8	52.9	58.7	5.2	19.6
Advisors, managers, administrators subtotal	-	22.9	120.9	143.9	12.7	17.1
Total FTE workforce	125.7	139.1	864.4	1,129.2	100.0	18.4

Table 21. Central estimated Te Whatu Ora adult alcohol and drug, forensic, and mental health FTE workforce (employed and vacant) on 31 March 2022

Role group	Alcohol & drug (FTEs)	Forensic (FTEs)	Mental health (FTEs)	Total workforce (FTEs)	Share of workforce (%)	Vacancy rate (%)
Clinical roles						
Allied health						
Addiction practitioner	19.7	-	-	19.7	1.2	0.0
Occupational therapist	1.0	10.1	28.6	39.8	2.4	12.8
Psychologist	3.1	5.9	37.0	46.0	2.8	12.6
Social worker	9.5	5.8	81.7	97.1	5.8	14.2
Other allied health	4.0	0.6	13.8	18.4	1.1	13.2
Allied health subtotal	37.4	22.4	161.2	221.0	13.3	12.2
Nurses						
Enrolled nurse	-	5.1	13.0	18.1	1.1	10.4
Registered nurse	45.0	83.0	562.2	690.2	41.6	9.9
Nurses subtotal	45.0	88.1	575.2	708.3	42.7	9.9
Medical practitioners						
Psychiatrist	8.4	6.8	63.6	78.7	4.7	23.1
Other medical practitioners	4.2	8.7	51.5	64.4	3.9	17.3
Medical practitioners subtotal	12.5	15.5	115.1	143.1	8.6	20.5
Total clinical roles	94.9	126.0	851.5	1,072.4	64.6	11.8
Support workers subtotal	3.9	40.6	269.4	313.9	18.9	12.0
Advisors, managers, administrators						
Consumer & whānau advisor	-	-	13.6	13.6	0.8	15.4
Manager	4.2	11.7	55.9	71.9	4.3	10.4
Administration & support	9.5	14.4	163.8	187.7	11.3	8.7
Advisors, managers, administrators subtotal	13.7	26.2	233.3	273.2	16.5	9.5
Total FTE workforce	112.5	192.7	1,354.2	1,659.5	100.0	11.5

Table 22. Te Waipounamu estimated Te Whatu Ora adult alcohol and drug, forensic, and mental health FTE workforce (employed and vacant) on 31 March 2022

Role group	Alcohol & drug (FTEs)	Forensic (FTEs)	Mental health (FTEs)	Total workforce (FTEs)	Share of workforce (%)	Vacancy rate (%)
Clinical roles						
Allied health						
Addiction practitioner	16.4	0.7	-	17.1	1.0	11.7
Occupational therapist	6.2	5.9	55.7	67.8	3.8	11.0
Psychologist	3.6	2.4	74.0	80.0	4.5	11.2
Social worker	-	3.8	98.8	102.6	5.8	10.8
Other allied health	-	-	40.3	40.3	2.3	9.1
Allied health subtotal	26.3	12.9	268.7	307.9	17.3	10.8
Nurses						
Enrolled nurse	-	7.8	67.2	75.1	4.2	9.1
Registered nurse	77.4	123.3	590.1	790.7	44.5	9.1
Nurses subtotal	77.4	131.2	657.3	865.8	48.7	9.1
Medical practitioners						
Psychiatrist	7.3	8.6	75.9	91.8	5.2	8.7
Other medical practitioners	0.6	-	68.7	69.2	3.9	8.9
Medical practitioners subtotal	7.8	8.6	144.6	161.0	9.1	8.8
Total clinical roles	111.5	152.6	1,070.6	1,334.7	75.0	9.5
Support workers subtotal	10.3	41.8	121.0	173.1	9.7	9.8
Advisors, managers, administrators						
Consumer & whānau advisor	-		7.5	7.5	0.4	-
Manager	7.1	15.9	90.8	113.8	6.4	7.0
Administration & support	10.3	9.3	129.9	149.4	8.4	8.5
Advisors, managers, administrators subtotal	17.4	25.1	228.2	270.7	15.2	7.6
Total FTE workforce	139.2	219.5	1,419.8	1,778.6	100.0	9.2

Appendix D: Estimated Te Whatu Ora adult alcohol and drug workforce tables

Table 23. National estimated Te Whatu Ora adult alcohol and drug FTE employed and vacant workforce on 31 March 2022

Role group	FTEs employed	FTEs vacant	FTE workforce	Share of workforce (%)	Vacancy rate (%)
Clinical roles					
Allied health					
Addiction practitioner	158.8	16.8	175.7	27.2	9.6
Occupational therapist	6.6	0.7	7.2	1.1	9.0
Psychologist	11.9	1.1	12.9	2.0	8.3
Social worker	36.6	4.0	40.6	6.3	9.8
Other allied health	12.9	1.1	14.0	2.2	7.9
Allied health subtotal	226.8	23.6	250.4	38.8	9.4
Nurses					
Enrolled nurse					
Registered nurse	234.7	33.9	268.6	41.6	12.6
Nurses subtotal	234.7	33.9	268.6	41.6	12.6
Medical practitioners					
Psychiatrist	28.0	5.4	33.4	5.2	16.1
Other medical practitioners	13.8	1.1	14.9	2.3	7.3
Medical practitioners subtotal	41.8	6.5	48.2	7.5	13.4
Total clinical roles	503.3	64.0	567.2	87.9	11.3
Support workers subtotal	17.8	1.9	19.7	3.1	9.7
Advisors, managers, administrators					
Consumer & whānau advisor					
Manager	17.5	1.5	18.9	2.9	7.7
Administration & support	36.1	3.1	39.1	6.1	7.8
Advisors, managers, administrators subtotal	53.6	4.5	58.1	9.0	7.8
Total FTE workforce	574.6	70.4	645.0	100.0	10.9

Table 24. Northern estimated Te Whatu Ora adult alcohol and drug FTE employed and vacant workforce on 31 March 2022

Role group	FTEs employed	FTEs vacant	FTE workforce	Share of workforce (%)	Vacancy rate (%)
Clinical roles					
Allied health					
Addiction practitioner	110.8	10.0	120.8	45.2	8.3
Occupational therapist	-	-	-	-	
Psychologist	5.7	0.5	6.2	2.3	7.9
Social worker	18.9	1.6	20.5	7.7	7.9
Other allied health	9.2	0.8	10.0	3.7	7.9
Allied health subtotal	144.6	12.9	157.5	58.9	8.2
Nurses					
Enrolled nurse	-	-	-	-	
Registered nurse	44.7	5.1	49.8	18.6	10.2
Nurses subtotal	44.7	5.1	49.8	18.6	10.2
Medical practitioners					
Psychiatrist	14.5	3.3	17.8	6.6	18.6
Other medical practitioners	9.4	0.7	10.1	3.8	7.2
Medical practitioners subtotal	23.9	4.0	27.9	10.4	14.5
Total clinical roles	213.2	22.0	235.2	87.9	9.4
Support workers subtotal	4.9	0.5	5.4	2.0	9.4
Advisors, managers, administrators					
Consumer & whānau advisor	-	-	-	-	
Manager	6.9	0.6	7.6	2.8	8.1
Administration & support	17.8	1.6	19.4	7.2	8.1
Advisors, managers, administrators subtotal	24.7	2.2	26.9	10.1	8.1
Total FTE workforce	242.8	24.7	267.6	100.0	9.2

Table 25. Te Manawa Taki estimated Te Whatu Ora adult alcohol and drug FTE employed and vacant workforce on 31 March 2022

Role group	FTEs employed	FTEs vacant	FTE workforce	Share of workforce (%)	Vacancy rate (%)
Clinical roles					
Allied health					
Addiction practitioner	13.8	4.9	18.7	14.9	26.1
Occupational therapist	-	-	-	-	
Psychologist	-	-	-	-	
Social worker	9.0	1.5	10.5	8.4	14.5
Other allied health	-	-	-	-	
Allied health subtotal	22.8	6.4	29.2	23.2	21.9
Nurses					
Enrolled nurse	-	-	-	-	
Registered nurse	80.0	16.4	96.5	76.8	17.0
Nurses subtotal	80.0	16.4	96.5	76.8	17.0
Medical practitioners				-	
Psychiatrist	-	-	-	-	
Other medical practitioners	-	-	-	-	
Medical practitioners subtotal	-	-	-	-	
Total clinical roles	102.8	22.8	125.7	100.0	18.2
Support workers subtotal	-	-	-	-	
Advisors, managers, administrators					
Consumer & whānau advisor	-	-	-	-	
Manager	-	-	-	-	
Administration & support	-	-	-	-	
Advisors, managers, administrators subtotal	-	-	-	-	
Total FTE workforce	102.8	22.8	125.7	100.0	18.2

Table 26. Central estimated Te Whatu Ora adult alcohol and drug FTE employed and vacant workforce on 31 March 2022

Role group	FTEs employed	FTEs vacant	FTE workforce	Share of workforce (%)	Vacancy rate (%)
Clinical roles					
Allied health					
Addiction practitioner	19.7	0.0	19.7	17.5	0.0
Occupational therapist	0.9	0.1	1.0	0.9	9.0
Psychologist	2.8	0.3	3.1	2.8	8.1
Social worker	8.7	0.8	9.5	8.5	8.8
Other allied health	3.7	0.3	4.0	3.6	7.9
Allied health subtotal	35.9	1.5	37.4	33.2	4.0
Nurses					
Enrolled nurse	-	-	-	-	
Registered nurse	39.7	5.3	45.0	40.0	11.7
Nurses subtotal	39.7	5.3	45.0	40.0	11.7
Medical practitioners					
Psychiatrist	6.9	1.4	8.4	7.4	17.2
Other medical practitioners	3.9	0.3	4.2	3.7	7.3
Medical practitioners subtotal	10.8	1.7	12.5	11.1	13.9
Total clinical roles	86.4	8.5	94.9	84.3	9.0
Support workers subtotal	3.5	0.4	3.9	3.5	9.6
Advisors, managers, administrators					
Consumer & whānau advisor	-	-	-	-	
Manager	3.9	0.3	4.2	3.8	7.8
Administration & support	8.7	0.8	9.5	8.4	7.9
Advisors, managers, administrators subtotal	12.7	1.1	13.7	12.2	7.9
Total FTE workforce	102.6	10.0	112.5	100.0	8.9

Table 27. Te Waipounamu estimated Te Whatu Ora adult alcohol and drug FTE employed and vacant workforce on 31 March 2022

Role group	FTEs employed	FTEs vacant	FTE workforce	Share of workforce (%)	Vacancy rate (%)
Clinical roles					
Allied health					
Addiction practitioner	14.5	1.9	16.4	11.8	11.8
Occupational therapist	5.6	0.6	6.2	4.5	9.0
Psychologist	3.3	0.3	3.6	2.6	9.0
Social worker	-	-	-	-	
Other allied health	-	-	-	-	
Allied health subtotal	23.5	2.8	26.3	18.9	10.8
Nurses					
Enrolled nurse	-	-	-	-	
Registered nurse	70.3	7.1	77.4	55.6	9.1
Nurses subtotal	70.3	7.1	77.4	55.6	9.1
Medical practitioners					
Psychiatrist	6.6	0.6	7.3	5.2	8.8
Other medical practitioners	0.5	0.1	0.6	0.4	9.9
Medical practitioners subtotal	7.1	0.7	7.8	5.6	8.9
Total clinical roles	100.9	10.6	111.5	80.1	9.5
Support workers subtotal	9.3	1.0	10.3	7.4	10.0
Advisors, managers, administrators					
Consumer & whānau advisor	-	-	-	-	
Manager	6.6	0.5	7.1	5.1	7.1
Administration & support	9.5	0.7	10.3	7.4	7.1
Advisors, managers, administrators subtotal	16.2	1.2	17.4	12.5	7.1
Total FTE workforce	126.4	12.8	139.2	100.0	9.2

Appendix E: Estimated Te Whatu Ora adult forensic mental health workforce tables

Table 28. National estimated Te Whatu Ora adult forensic mental health FTE employed and vacant workforce on 31 March 2022

Role group	FTEs employed	FTEs vacant	FTE workforce	Share of workforce (%)	Vacancy rate (%)
Clinical roles					
Allied health					
Addiction practitioner	1.0	0.2	1.2	0.1	15.4
Occupational therapist	48.2	5.6	53.8	5.1	10.3
Psychologist	31.4	1.1	32.5	3.1	3.4
Social worker	27.3	2.9	30.3	2.9	9.7
Other allied health	2.5	0.4	2.9	0.3	14.5
Allied health subtotal	110.4	10.2	120.6	11.5	8.4
Nurses					
Enrolled nurse	23.7	3.0	26.7	2.5	11.3
Registered nurse	419.8	35.9	455.7	43.3	7.9
Nurses subtotal	443.4	38.9	482.4	45.8	8.1
Medical practitioners					
Psychiatrist	33.4	4.2	37.6	3.6	11.3
Other medical practitioners	39.5	6.1	45.5	4.3	13.3
Medical practitioners subtotal	72.9	10.3	83.2	7.9	12.4
Total clinical roles	626.7	59.5	686.2	65.2	8.7
Support workers subtotal	203.3	23.0	226.4	21.5	10.2
Advisors, managers, administrators					
Consumer & whānau advisor	-	-	-	-	
Manager	56.3	7.0	63.3	6.0	11.0
Administration & support	70.2	6.9	77.1	7.3	8.9
Advisors, managers, administrators subtotal	126.5	13.9	140.3	13.3	9.9
Total FTE workforce	956.5	96.4	1,052.8	100.0	9.2

Table 29. Northern estimated Te Whatu Ora adult forensic mental health FTE employed and vacant workforce on 31 March 2022

Role group	FTEs employed	FTEs vacant	FTE workforce	Share of workforce (%)	Vacancy rate (%)
Clinical roles					
Allied health					
Addiction practitioner	-	-	-	-	-
Occupational therapist	22.1	1.9	24.1	4.8	8.1
Psychologist	18.8	0.6	19.4	3.9	3.2
Social worker	13.6	1.2	14.8	2.9	7.9
Other allied health		-	-	-	
Allied health subtotal	54.5	3.7	58.3	11.6	6.4
Nurses					
Enrolled nurse	8.0	0.9	8.9	1.8	10.2
Registered nurse	195.9	17.1	213.0	42.5	8.0
Nurses subtotal	203.9	18.0	221.9	44.2	8.1
Medical practitioners					
Psychiatrist	18.1	2.9	21.0	4.2	13.8
Other medical practitioners	10.5	0.2	10.7	2.1	1.9
Medical practitioners subtotal	28.6	3.1	31.8	6.3	9.8
Total clinical roles	287.1	24.8	311.9	62.2	8.0
Support workers subtotal	111.9	11.6	123.4	24.6	9.4
Advisors, managers, administrators					
Consumer & whānau advisor				-	
Manager	16.9	1.7	18.6	3.7	9.0
Administration & support	43.6	4.0	47.5	9.5	8.3
Advisors, managers, administrators subtotal	60.5	5.6	66.1	13.2	8.5
Total FTE workforce	459.4	42.0	501.5	100.0	8.4

Table 30. Te Manawa Taki estimated Te Whatu Ora adult forensic mental health FTE employed and vacant workforce on 31 March 2022

Role group	FTEs employed	FTEs vacant	FTE workforce	Share of workforce (%)	Vacancy rate (%)
Clinical roles					
Allied health					
Addiction practitioner	0.4	0.1	0.5	0.4	23.6
Occupational therapist	11.6	2.0	13.6	9.8	14.7
Psychologist	4.5	0.3	4.8	3.4	6.2
Social worker	5.0	0.8	5.8	4.2	14.5
Other allied health	2.0	0.3	2.3	1.7	14.5
Allied health subtotal	23.5	3.6	27.1	19.5	13.3
Nurses					
Enrolled nurse	4.0	0.8	4.8	3.5	17.0
Registered nurse	31.5	4.9	36.4	26.2	13.6
Nurses subtotal	35.5	5.8	41.2	29.6	14.0
Medical practitioners					
Psychiatrist	1.0	0.2	1.2	0.9	20.3
Other medical practitioners	21.4	4.7	26.1	18.8	18.0
Medical practitioners subtotal	22.4	5.0	27.3	19.6	18.1
Total clinical roles	81.3	14.3	95.6	68.7	15.0
Support workers subtotal	17.2	3.3	20.5	14.8	16.1
Advisors, managers, administrators					
Consumer & whānau advisor	-	-	-	-	
Manager	14.3	2.8	17.1	12.3	16.4
Administration & support	4.9	0.9	5.8	4.2	16.2
Advisors, managers, administrators subtotal	19.2	3.7	22.9	16.5	16.3
Total FTE workforce	117.7	21.4	139.1	100.0	15.4

Table 31. Central estimated Te Whatu Ora adult forensic mental health FTE employed and vacant workforce on 31 March 2022

Role group	FTEs employed	FTEs vacant	FTE workforce	Share of workforce (%)	Vacancy rate (%)
Clinical roles					
Allied health					
Addiction practitioner		-	-	-	-
Occupational therapist	9.1	1.1	10.1	5.3	10.5
Psychologist	5.8	0.1	5.9	3.1	1.3
Social worker	5.2	0.6	5.8	3.0	9.7
Other allied health	0.5	0.1	0.6	0.3	14.5
Allied health subtotal	20.6	1.8	22.4	11.6	8.0
Nurses					
Enrolled nurse	4.5	0.6	5.1	2.7	11.3
Registered nurse	77.9	5.1	83.0	43.1	6.1
Nurses subtotal	82.4	5.7	88.1	45.7	6.4
Medical practitioners					
Psychiatrist	6.2	0.6	6.8	3.5	8.2
Other medical practitioners	7.6	1.2	8.7	4.5	13.3
Medical practitioners subtotal	13.8	1.7	15.5	8.0	11.1
Total clinical roles	116.8	9.2	126.0	65.4	7.3
Support workers subtotal	36.1	4.4	40.6	21.0	10.9
Advisors, managers, administrators					
Consumer & whānau advisor	-	-	-	-	-
Manager	10.4	1.3	11.7	6.1	11.4
Administration & support	13.1	1.3	14.4	7.5	9.1
Advisors, managers, administrators subtotal	23.5	2.7	26.2	13.6	10.2
Total FTE workforce	176.5	16.3	192.7	100.0	8.4

Table 32. Te Waipounamu estimated Te Whatu Ora adult forensic mental health FTE employed and vacant workforce on 31 March 2022

Role group	FTEs employed	FTEs vacant	FTE workforce	Share of workforce (%)	Vacancy rate (%)
Clinical roles					
Allied health					
Addiction practitioner	0.6	0.1	0.7	0.3	9.0
Occupational therapist	5.4	0.5	5.9	2.7	9.2
Psychologist	2.3	0.1	2.4	1.1	3.7
Social worker	3.5	0.3	3.8	1.8	9.0
Other allied health		-	-	-	
Allied health subtotal	11.8	1.0	12.9	5.9	8.1
Nurses					
Enrolled nurse	7.1	0.7	7.8	3.6	9.1
Registered nurse	114.5	8.8	123.3	56.2	7.1
Nurses subtotal	121.7	9.5	131.2	59.7	7.2
Medical practitioners					
Psychiatrist	8.1	0.5	8.6	3.9	6.3
Other medical practitioners		-	-	-	-
Medical practitioners subtotal	8.1	0.5	8.6	3.9	6.3
Total clinical roles	141.5	11.1	152.6	69.5	7.3
Support workers subtotal	38.1	3.7	41.8	19.0	8.9
Advisors, managers, administrators					
Consumer & whānau advisor	-	-	-	-	-
Manager	14.7	1.2	15.9	7.2	7.3
Administration & support	8.6	0.7	9.3	4.2	7.3
Advisors, managers, administrators subtotal	23.3	1.8	25.1	11.4	7.3
Total FTE workforce	202.9	16.7	219.5	100.0	7.6

Appendix F: Estimated Te Whatu Ora adult mental health workforce tables

Table 33. National estimated Te Whatu Ora adult mental health FTE employed and vacant workforce on 31 March 2022

Role group	FTEs employed	FTEs vacant	FTE workforce	Share of workforce (%)	Vacancy rate (%)
Clinical roles					
Allied health					
Addiction practitioner	-	-	-	-	-
Occupational therapist	183.7	25.6	209.3	3.7	12.2
Psychologist	243.3	26.8	270.2	4.8	9.9
Social worker	291.9	48.5	340.4	6.1	14.3
Other allied health	54.7	8.7	63.4	1.1	13.7
Allied health subtotal	773.6	109.7	883.2	15.7	12.4
Nurses					
Enrolled nurse	115.9	13.6	129.6	2.3	10.5
Registered nurse	2,051.0	253.6	2,304.6	41.1	11.0
Nurses subtotal	2,166.9	267.2	2,434.1	43.4	11.0
Medical practitioners					
Psychiatrist	303.2	74.2	377.4	6.7	19.7
Other medical practitioners	216.7	24.4	241.1	4.3	10.1
Medical practitioners subtotal	519.8	98.6	618.5	11.0	15.9
Total clinical roles	3,460.3	475.5	3,935.8	70.1	12.1
Support workers subtotal	761.9	98.5	860.4	15.3	11.4
Advisors, managers, administrators					
Consumer & whānau advisor	40.5	3.6	44.1	0.8	8.2
Manager	266.8	30.1	296.9	5.3	10.1
Administration & support	428.1	48.3	476.4	8.5	9.8
Advisors, managers, administrators subtotal	735.3	82.0	817.3	14.6	10.0
Total FTE workforce	4,957.5	656.0	5,613.5	100.0	11.7

Table 34. Northern estimated Te Whatu Ora adult mental health FTE employed and vacant workforce on 31 March 2022

Role group	FTEs employed	FTEs vacant	FTE workforce	Share of workforce (%)	Vacancy rate (%)
Clinical roles					
Allied health					
Addiction practitioner	-	-	-	-	-
Occupational therapist	80.2	8.8	89.0	4.5	9.9
Psychologist	98.3	3.3	101.6	5.1	3.3
Social worker	113.5	16.0	129.5	6.6	12.3
Other allied health	4.0	1.8	5.8	0.3	30.9
Allied health subtotal	296.0	29.9	325.9	16.5	9.2
Nurses					
Enrolled nurse	29.2	3.3	32.5	1.6	10.2
Registered nurse	741.5	80.2	821.7	41.6	9.8
Nurses subtotal	770.6	83.5	854.2	43.2	9.8
Medical practitioners					
Psychiatrist	134.5	28.1	162.6	8.2	17.3
Other medical practitioners	86.8	2.7	89.4	4.5	3.0
Medical practitioners subtotal	221.2	30.8	252.1	12.8	12.2
Total clinical roles	1,287.9	144.3	1,432.2	72.5	10.1
Support workers subtotal	279.1	28.9	308.0	15.6	9.4
Advisors, managers, administrators					
Consumer & whānau advisor	15.0	1.0	16.0	0.8	6.3
Manager	80.9	8.2	89.1	4.5	9.2
Administration & support	117.5	12.2	129.8	6.6	9.4
Advisors, managers, administrators subtotal	213.4	21.4	234.9	11.9	9.1
Total FTE workforce	1,780.4	194.6	1,975.0	100.0	9.9

Table 35. Te Manawa Taki estimated Te Whatu Ora adult mental health FTE employed and vacant workforce on 31 March 2022

Role group	FTEs employed	FTEs vacant	FTE workforce	Share of workforce (%)	Vacancy rate (%)
Clinical roles					
Allied health					
Addiction practitioner	-	-	-	-	-
Occupational therapist	29.4	6.5	36.0	4.2	18.2
Psychologist	48.0	9.5	57.6	6.7	16.5
Social worker	21.0	9.5	30.4	3.5	31.1
Other allied health	2.2	1.2	3.5	0.4	35.0
Allied health subtotal	100.7	26.7	127.4	14.7	21.0
Nurses					
Enrolled nurse	14.0	2.9	16.9	2.0	17.0
Registered nurse	271.6	59.0	330.6	38.2	17.8
Nurses subtotal	285.6	61.9	347.4	40.2	17.8
Medical practitioners					
Psychiatrist	52.2	23.0	75.2	8.7	30.6
Other medical practitioners	25.5	5.9	31.5	3.6	18.9
Medical practitioners subtotal	77.7	29.0	106.7	12.3	27.2
Total clinical roles	463.9	117.6	581.5	67.3	20.2
Support workers subtotal	137.4	24.6	162.0	18.7	15.2
Advisors, managers, administrators					
Consumer & whānau advisor	6.5	0.5	7.0	0.8	7.1
Manager	51.2	9.8	61.0	7.1	16.1
Administration & support	42.3	10.6	52.9	6.1	20.0
Advisors, managers, administrators subtotal	100.0	20.9	120.9	14.0	17.3
Total FTE workforce	701.4	163.0	864.4	100.0	18.9

Table 36. Central estimated Te Whatu Ora adult mental health FTE employed and vacant workforce on 31 March 2022

Role group	FTEs employed	FTEs vacant	FTE workforce	Share of workforce (%)	Vacancy rate (%)
Clinical roles					
Allied health					
Addiction practitioner	-	-	-	-	-
Occupational therapist	24.7	3.9	28.6	2.1	13.7
Psychologist	31.6	5.4	37.0	2.7	14.7
Social worker	69.3	12.4	81.7	6.0	15.2
Other allied health	11.8	2.0	13.8	1.0	14.6
Allied health subtotal	137.4	23.8	161.2	11.9	14.7
Nurses					
Enrolled nurse	11.7	1.3	13.0	1.0	10.0
Registered nurse	504.0	58.2	562.2	41.5	10.4
Nurses subtotal	515.7	59.5	575.2	42.5	10.3
Medical practitioners					
Psychiatrist	47.4	16.2	63.6	4.7	25.5
Other medical practitioners	41.8	9.7	51.5	3.8	18.8
Medical practitioners subtotal	89.2	25.9	115.1	8.5	22.5
Total clinical roles	742.3	109.2	851.5	62.9	12.8
Support workers subtotal	236.5	32.8	269.4	19.9	12.2
Advisors, managers, administrators					
Consumer & whānau advisor	11.5	2.1	13.6	1.0	15.4
Manager	50.2	5.8	55.9	4.1	10.3
Administration & support	149.5	14.3	163.8	12.1	8.7
Advisors, managers, administrators subtotal	211.2	22.1	233.3	17.2	9.5
Total FTE workforce	1,190.0	164.2	1,354.2	100.0	12.1

Table 37. Te Waipounamu estimated Te Whatu Ora adult mental health FTE employed and vacant workforce on 31 March 2022

Role group	FTEs employed	FTEs vacant	FTE workforce	Share of workforce (%)	Vacancy rate (%)
Clinical roles					
Allied health					
Addiction practitioner	-	-	-	-	-
Occupational therapist	49.4	6.3	55.7	3.9	11.4
Psychologist	65.5	8.5	74.0	5.2	11.5
Social worker	88.0	10.7	98.8	7.0	10.9
Other allied health	36.6	3.7	40.3	2.8	9.1
Allied health subtotal	239.5	29.2	268.7	18.9	10.9
Nurses					
Enrolled nurse	61.1	6.1	67.2	4.7	9.1
Registered nurse	533.9	56.2	590.1	41.6	9.5
Nurses subtotal	595.0	62.3	657.3	46.3	9.5
Medical practitioners					
Psychiatrist	69.1	6.8	75.9	5.3	9.0
Other medical practitioners	62.6	6.1	68.7	4.8	8.9
Medical practitioners subtotal	131.7	12.9	144.6	10.2	8.9
Total clinical roles	966.1	104.5	1,070.6	75.4	9.8
Support workers subtotal	108.8	12.2	121.0	8.5	10.1
Advisors, managers, administrators					
Consumer & whānau advisor	7.5	-	7.5	0.5	-
Manager	84.5	6.3	90.8	6.4	6.9
Administration & support	118.7	11.2	129.9	9.2	8.6
Advisors, managers, administrators subtotal	210.7	17.5	228.2	16.1	7.7
Total FTE workforce	1,285.7	134.2	1,419.8	100.0	9.5

Appendix G: Change in workforce size since 2018

Table 38. Comparison of 2018 DHB and 2022 Te Whatu Ora adult mental health and addiction workforce (employed and vacant) showing FTE and proportionate growth

Role group	2018 FTE workforce	2022 FTE workforce	FTE growth	Growth (%)
Clinical roles				
Allied health				
Addiction practitioner	185.9	176.8	-9.1	-4.9
Occupational therapist	218.1	270.3	52.2	23.9
Psychologist	279.8	315.6	35.8	12.8
Social worker	378.9	411.3	32.4	8.5
Other allied health	33.8	80.3	46.5	137.6
Allied health subtotal	1,096.6	1,254.3	157.7	14.4
Nurses				
Enrolled nurse	141.7	156.2	14.5	10.3
Registered nurse	2,892.3	3,028.8	136.5	4.7
Nurses subtotal	3,034.0	3,185.1	151.1	5.0
Medical practitioners				
Psychiatrist	374.7	448.4	73.7	19.7
Other medical practitioners	295.6	301.5	5.9	2.0
Medical practitioners subtotal	670.3	749.9	79.6	11.9
Total clinical roles	4,800.8	5,189.2	388.4	8.1
Support workers subtotal	1,001.2	1,106.4	105.2	10.5
Advisors, managers, administrators				
Manager including advisors	220.4	421.6	201.2	91.3
Administration & support	580.2	594.1	13.9	2.4
Advisors, managers, administrators subtotal	800.6	1,015.7	215.1	26.9
Total FTE workforce	6,602.7	7,311.3	708.6	10.7

Table 39. Comparison of 2018 DHB and 2022 Te Whatu Ora adult alcohol and drug workforce (employed and vacant) showing FTE and proportionate growth

Role group	2018 FTE workforce	2022 FTE workforce	FTE growth	Growth (%)
Clinical roles				
Allied health				
Addiction practitioner	171.3	175.7	4.4	2.6
Occupational therapist	2.2	7.2	5.0	232.3
Psychologist	15.4	12.9	(2.5)	(16.0)
Social worker	83.2	40.6	(42.6)	(51.2)
Other allied health	16.9	14.0	(2.9)	(17.4)
Allied health subtotal	289.0	250.4	(38.6)	(13.4)
Nurses				
Enrolled nurse	2.0	267.6	265.6	13,345.7
Registered nurse	211.1	268.6	57.5	27.2
Nurses subtotal	213.1	268.6	55.5	26.1
Medical practitioners				
Psychiatrist	31.7	33.4	1.7	5.5
Other medical practitioners	8.3	14.9	6.6	80.5
Medical practitioners subtotal	39.9	48.2	8.3	20.7
Total clinical roles	542.0	567.2	25.2	4.7
Support workers subtotal	16.0	19.7	3.7	23.5
Advisors, managers, administrators				
Manager including advisors	32.5	18.9	(13.6)	(41.8)
Administration & support	30.4	39.1	8.7	28.6
Advisors, managers, administrators subtotal	62.9	58.1	(4.8)	(7.6)
Total FTE workforce	620.8	645.0	24.2	3.9

Table 40. Comparison of 2018 DHB and 2022 Te Whatu Ora adult forensic mental health workforce (employed and vacant) showing FTE and proportionate growth

Role group	2018 FTE workforce	2022 FTE workforce	FTE growth	Growth (%)
Clinical roles				
Allied health				
Addiction practitioner	1.9	1.2	(0.7)	(36.8)
Occupational therapist	46.5	53.8	7.3	15.8
Psychologist	39.6	32.5	(7.1)	(18.0)
Social worker	31.9	30.3	(1.6)	(5.0)
Other allied health	1.6	2.9	1.3	78.0
Allied health subtotal	121.5	120.6	(0.9)	(0.7)
Nurses				
Enrolled nurse	15.4	26.7	11.3	73.3
Registered nurse	433.8	455.7	21.9	5.0
Nurses subtotal	449.3	482.4	33.1	7.4
Medical practitioners				
Psychiatrist	38.1	37.6	(0.5)	(1.4)
Other medical practitioners	44.1	45.5	1.4	3.1
Medical practitioners subtotal	82.3	83.2	0.9	1.1
Total clinical roles	653.0	686.2	33.2	5.1
Support workers subtotal	226.9	226.4	(0.5)	(0.2)
Advisors, managers, administrators				
Manager including advisors	55.0	63.3	8.3	15.1
Administration & support	53.6	77.1	23.5	43.8
Advisors, managers, administrators subtotal	108.6	140.3	31.7	29.2
Total FTE workforce	988.5	1,052.8	64.3	6.5

Table 41. Comparison of 2018 DHB and 2022 Te Whatu Ora adult mental health workforce (employed and vacant) showing FTE and proportionate growth

Role group	2018 FTE workforce	2022 FTE workforce	FTE growth	Growth (%)
Clinical roles				
Allied health				
Addiction practitioner	-	-	-	-
Occupational therapist	169.5	209.3	39.8	23.5
Psychologist	224.8	270.2	45.4	20.2
Social worker	263.8	340.4	76.6	29.0
Other allied health	27.9	63.4	35.5	127.0
Allied health subtotal	686.1	883.2	197.1	28.7
Nurses				
Enrolled nurse	124.3	129.6	5.3	4.3
Registered nurse	2,247.4	2,304.6	57.2	2.5
Nurses subtotal	2,371.7	2,434.1	62.4	2.6
Medical practitioners				
Psychiatrist	304.9	377.4	72.5	23.8
Other medical practitioners	243.2	241.1	(2.1)	(0.9)
Medical practitioners subtotal	548.1	618.5	70.4	12.9
Total clinical roles	3,605.8	3,935.8	330.0	9.2
Support workers subtotal	758.4	860.4	102.0	13.5
Advisors, managers, administrators				
Manager including advisors	133.0	339.4	206.4	155.3
Administration & support	496.2	478.0	(18.2)	(3.7)
Advisors, managers, administrators subtotal	629.1	817.3	188.2	29.9
Total FTE workforce	4,993.3	5,613.5	620.2	12.4

References

- Amorim Lopes, M., Santos Almeida, A., & Almada-Lobo, B. (2015). Handling healthcare workforce planning with care: Where do we stand? *Human Resources for Health*, 13(38). <https://doi.org/10.1186/s12960-015-0028-0>
- Beck, A. J., Singer, P. M., Buche, J., Manderscheid, R. W., & Buerhaus, P. (2018). Improving Data for Behavioral Health Workforce Planning: Development of a Minimum Data Set. *American Journal of Preventive Medicine*, 54(6, Supplement 3), S192–S198. <https://doi.org/10.1016/j.amepre.2018.01.035>
- Buchan, J., & Dal Poz, M. (2002). Skill mix in the health care workforce: Reviewing the evidence. *Bulletin of the World Health Organization*, 80(7), 575–580.
- Buchan, J., Naccarella, L., & Brooks, P. (2011). Is health workforce sustainability in Australia and New Zealand a realistic policy goal? *Australian Health Review*, 35(2), 152–155.
- Chambers, C. N. L., & Frampton, C. M. A. (2022). Burnout, stress and intentions to leave work in New Zealand psychiatrists; a mixed methods cross sectional study. *BMC Psychiatry*, 22(380). <https://doi.org/10.1186/s12888-022-03980-6>
- Cheung, G., Sims, A., Copeland, B., Collins, C., & Bharathan, S. (2018). The third New Zealand psychiatry of old age services and workforce survey. *Australian Psychiatry*, 26(4), 405–409.
- Government Inquiry into Mental Health and Addiction. (2018). *He Ara Oranga: Report of the Government Inquiry into Mental Health and Addiction*. Department of Internal Affairs.
- Health Workforce Information Programme. (2016). *DHB Shared Services Health Workforce Information Programme (HWIP): Base data*. Health Workforce Information Programme.
- Health Workforce New Zealand. (2012). *Retention of the nursing workforce in their 'third age'*. Health Workforce New Zealand.
- Logan, S. (2018). Addressing mental health nursing workforce shortages. *Kai Tiaki: Nursing New Zealand*, 24(8), 17–19.
- Ministry of Health. (2017). *Mental Health and Addiction Workforce Action Plan 2017-2021*. Ministry of Health.
- Ministry of Health. (2020a). *Ola Manuia: Pacific health and wellbeing action plan 2020-2025*. Ministry of Health. <https://www.health.govt.nz/publication/ola-manuia-pacific-health-and-wellbeing-action-plan-2020-2025>
- Ministry of Health. (2020b). *Treaty of Waitangi principles*. Ministry of Health NZ. <https://www.health.govt.nz/our-work/populations/maori-health/he-korowai-oranga/strengthening-he-korowai-oranga/treaty-waitangi-principles>
- Ministry of Health. (2020c). *Whakamaua: Māori Health Action Plan 2020-2025*. Ministry of Health. <https://www.health.govt.nz/publication/whakamaua-maori-health-action-plan-2020-2025>
- Ministry of Health. (2021a). *Kia Manawanui Aotearoa: Long-term pathway to mental wellbeing*. Ministry of Health.
- Ministry of Health. (2021b). *Mental health and addiction expenditure for adults and older people, 2020/21*.

- Ministry of Health. (2021c). *Office of the Director of Mental Health and Addiction Services: Annual Report 2018 and 2019*. Ministry of Health.
- Ministry of Health. (2021d). *PP6: Improving the health status of people with severe mental illness through improved access*. Ministry of Health.
- New Zealand Health & Disability System Review. (2020). *Health and Disability System Review: Final report Pūrongo Whakamutunga*. New Zealand Health & Disability System Review. <https://systemreview.health.govt.nz/assets/Uploads/hdsr/health-disability-system-review-final-report.pdf>
- New Zealand Mental Health and Wellbeing Commission. (2021). *Access and Choice Programme: Report on the first two years—Te Hōtaka mō Ngā Whai Wāhitanga me Ngā Kōwhiringa: He purongo mo ngā rua tau tuatahi*. New Zealand Mental Health and Wellbeing Commission. <https://www.mhwc.govt.nz/assets/Our-reports/MHWC-Access-and-Choice-report-Final.pdf>
- OECD. (2017). *Health at a Glance 2017: OECD Indicators*. OECD Publishing.
- Segal, L., & Bolton, T. (2009). Issues facing the future health care workforce: The importance of demand modelling. *Australia and New Zealand Health Policy*, 6. <https://wisegroup434.sharepoint.com/sites/TePouServiceandInformationDevelopment/Workforce%20Planning/Forms/AllItems.aspx?id=%2Fsites%2FTePouServiceandInformationDevelopment%2FWorkforce%20Planning%2FLibrary%2FIndicators%2FSegal%20supply%20demand%2Epdf&parent=%2Fsites%2FTePouServiceandInformationDevelopment%2FWorkforce%20Planning%2FLibrary%2FIndicators>
- Smith, M., & Jury, A. F. (2017). Key initiatives in New Zealand's adult mental health workforce development. In M. Smith & A. F. Jury (Eds.), *Workforce development theory and practice in the mental health sector*. IGI Global.
- Statistics New Zealand. (2021). *Projections produced by Statistics New Zealand according to assumptions specified by the Ministry of Health—2021 update*. Ministry of Health.
- Statistics New Zealand. (2023). *Projections produced by Statistics New Zealand according to assumptions specified by the Ministry of Health—2021 update*. Ministry of Health.
- Te Kāhui Raraunga. (2021). *Māori data governance co-design review*. Te Kāhui Raraunga.
- Te Pou. (2020). *Mental health & addiction consumer, peer support & lived experience workforce: Strategy 2020 to 2025*. Te Pou.
- Te Pou. (2021). *DHB mental health and addiction employees: 2020 profile*. Te Pou.
- Te Pou. (2022a). *DHB mental health and addiction employees profile: July 2020 to June 2021*. Te Pou. <https://www.tepou.co.nz/initiatives/workforce-planning-and-development/workforce-and-other-data-reports>
- Te Pou. (2022b). *Mental health and addiction workforce information gaps* [Unpublished].
- Te Pou. (2023). *NGO workforce challenges: 2022 survey of adult alcohol and drug and mental health services*. Te Pou.
- Te Pou o te Whakaaro Nui. (2014). *Scope it right: Working to top of scope literature review summary*. Te Pou o te Whakaaro Nui.
- Te Pou o te Whakaaro Nui. (2015). *Adult mental health and addiction workforce: 2014 survey of Vote Health funded services*. Te Pou o te Whakaaro Nui.

- Te Pou o te Whakaaro Nui. (2017). *Workforce planning guide: Getting the right people and skills in the future workforce*. Te Pou o te Whakaaro Nui.
- Te Pou o te Whakaaro Nui. (2018a). *NGO adult mental health and addiction workforce: 2018 survey of secondary care health services*. Te Pou o te Whakaaro Nui.
- Te Pou o te Whakaaro Nui. (2018b). *Skills Matter Review Report, December 2018*. Te Pou o te Whakaaro Nui.
- Te Pou o te Whakaaro Nui. (2019a). *Adult mental health and addiction workforce: 2018 secondary care health services*. Te Pou o te Whakaaro Nui.
- Te Pou o te Whakaaro Nui. (2019b). *DHB adult mental health and addiction workforce: 2018 provider arm services*. Te Pou o te Whakaaro Nui.
- Te Whatu Ora Health New Zealand, & Te Aka Whai Ora. (2022). *Te Pae Tata: Interim New Zealand Health Plan*. Te Whatu Ora Health New Zealand.
<https://www.tewhatauora.govt.nz/about-us/publications/te-pae-tata-interim-new-zealand-health-plan-2022/>
- Waitangi Tribunal. (2019). *Hauora: Report on Stage One of the Health Services and Outcomes Kaupapa Inquiry*. Waitangi Tribunal.
https://forms.justice.govt.nz/search/Documents/WT/wt_DOC_152801817/Hauora%20W.pdf
- Walker, L., Clendon, J., & Willis, J. (2018). Why older nurses leave the profession. *Kai Tiaki Nursing Research*, 9(1), 5–11. <https://doi.org/10.3316/informit.080406975795719>
- Werry Workforce Whāraurau. (2019). *2018 Stocktake of Infant, Child and Adolescent Mental Health and Alcohol and Other Drug Services in New Zealand*. Werry Workforce Whāraurau.
- Whāraurau. (2021). *2020 Stocktake of Infant, Child and Adolescent Mental Health and Alcohol and Other Drug Services in New Zealand*. Whāraurau, The University of Auckland.
https://wharaurau.org.nz/sites/default/files/pdf/Stocktake/2020%20ICAMH_AOD%20Workforce%20Stocktake%20National%20Report%202021%20Final.pdf
- World Health Organization. (2005). *Mental health information systems*. World Health Organization.
- World Health Organization. (2010a). *Models and tools for health workforce planning and projections* (Vol. 3). World Health Organization.
- World Health Organization. (2010b). *Report of the first meeting of the Health Workforce Information Reference Group*. World Health Organization.
https://apps.who.int/iris/bitstream/handle/10665/70332/WHO_HSS_HRH_HIG_2010.1_eng.pdf?sequence=1&isAllowed=y

Auckland

PO Box 108-244, Symonds Street
Auckland 1150, New Zealand
t +64 (9) 300 6770

Hamilton

PO Box 307, Waikato Mail Centre
Hamilton 3240, New Zealand
t +64 (7) 857 1200

Wellington

PO Box 7443, Wellington South
Wellington 6011, New Zealand
t +64 (4) 473 9009

  @tepounz

tepou.co.nz