



Prepared by:

Kahui tuitui tangata

DISTRICT HEALTH BOARD EMPLOYED WORKFORCE QUARTERLY REPORT

1 JANUARY TO 31 MARCH 2022

Health Workforce Information

The Health Workforce Information Programme (HWIP) is a well-established programme within Technical Advisory Services (TAS) and supports the District Health Boards (DHBs) through providing base information on DHB employee demographics, competencies and describing the current composition of the DHB workforce. Regular reports are based on a quarterly collection of data from the DHBs. DHB employee data has been collected on a quarterly basis since mid-2006 with a continued focus on improving data quality.

Purpose of the Report

This report covers all DHB employees for the period 1 January 2022 to 31 March 2022 and is a snapshot in time at 31 March 2022. The report provides information on the general make up and characteristics of the DHB health and disability workforce to help inform further data analysis and workforce planning. The format of the report is to provide tables and graphs on the demographics of the DHB workforce aligned to the seven occupational groupings. These groupings are:

- Senior Medical Officer (SMO)
- Resident Medical Officer (RMO)
- Nursing
- Midwifery
- Allied & scientific (the amalgamation of Allied Health and Technical and Scientific)
- Care and support
- Corporate and other

Data Extraction

Important notes about the data extraction:

- The data extract used for this report covers the period January 2022 to March 2022 inclusive and is a snapshot taken by the DHBs on 31 March 2022.
- The data quality continues to improve through working closely with the DHBs to help manage and improve the data submitted.

Disclaimer

While due care has been applied in the processing, analysing and extraction of data and information to ensure the accuracy of the work, TAS provides no warranty as to the accuracy, authenticity or validity of the data and information and/or that it is supplied free from error. TAS is not liable whatsoever, including for negligence or defamation, for all and any damages or liability in respect of or arising out of use, reliance or otherwise for this work, whether direct or indirect, including the provision of any incorrect, inaccurate or incomplete information.

Contact: HWIP@tas.health.nz

Data source: DHB Workforce Information, held by TAS.

TABLE OF CONTENTS

TABLE OF CONTENTS.....	3
TABLE OF FIGURES.....	3
TABLE OF TABLES.....	3
OVERVIEW	4
DHB WORKFORCE AT A GLANCE.....	4
DISTRIBUTION OF EMPLOYEES.....	5
INCLUSIONS AND EXCLUSIONS.....	6
HEADCOUNT (POSITIONS) AND FTE BY DHB AND OCCUPATION GROUP	7
TABLES AND CHARTS BY OCCUPATION GROUPING.....	8
EMPLOYEE COUNT AND FTE BY OCCUPATION GROUPING AND GENDER	8
EMPLOYEE COUNT BY OCCUPATION GROUP AND ETHNICITY.....	9
AGES AND LENGTH OF SERVICE.....	11
TABLES AND CHARTS BY DHB.....	12
HEADCOUNT AND MEAN FTE BY GENDER AND DHB.....	12
MEAN AGES AND MEAN LENGTH OF SERVICE BY DHB AND GENDER.....	13
ETHNICITIES BY DHB.....	14
ANALYSIS BY DHB AND OCCUPATION GROUP	15
LENGTH OF SERVICE BY OCCUPATION GROUP AND DHB	15
ANALYSIS BY SICK LEAVE & ANNUAL LEAVE	16
SICK LEAVE BY DHB, OCCUPATION GROUP, AGE GROUP AND ETHNICITY BY GENDER.....	16
RATIO OF ANNUAL LEAVE BALANCE AND ANNUAL LEAVE ENTITLEMENT BY DHB, OCCUPATION GROUP AND ETHNICITY BY GENDER.....	18
ANALYSIS BY POPULATION	20
DISTRIBUTION OF OVERALL DHB EMPLOYEES BY AGE, WITH NATIONAL EMPLOYEE DATA	20
ETHNIC REPRESENTATION OF WORKFORCE TO RESIDENT POPULATION	21
POPULATION DENSITY BY OCCUPATIONAL GROUP AND DHB.....	22

TABLE OF FIGURES

Figure 1: Count of individual employees.....	5
Figure 2: Occupation group distinct employee count and mean FTE by gender	8
Figure 3: Proportion of ethnicities by occupation group.....	9
Figure 4: Proportion of identifiable ethnicities for all DHB employees	10
Figure 5: Proportion of identifiable ethnicities for projected population data at 31 March 2022.....	10
Figure 6: Mean ages and length of service by occupation group and gender	11
Figure 7: Employee Count and mean FTE by gender and DHB	12
Figure 8: Mean ages and mean length of service by DHB and gender.....	13
Figure 9: Proportion of reported ethnicities by DHB	14
Figure 10: Average annualised sick leave hours per FTE by DHB.....	16
Figure 11: Average annual sick leave hours per FTE by occupational group	17
Figure 12: Average annual sick leave hours per FTE by age group by gender	17
Figure 13: Average annual sick leave hours per FTE by ethnicity by gender.....	17
Figure 14: Ratio of annual leave balance to annual leave entitlement hours per FTE by DHB	18
Figure 15: Ratio of annual leave balance to annual leave entitlement hours per FTE by occupational group.....	19
Figure 16: Ratio of annual leave balance to annual leave entitlement hours per FTE by ethnicity by gender.....	19
Figure 17: Distribution of overall DHB employees by age, with national employee data	20
Figure 18: Population density of Nurses by DHB	22
Figure 19: Population density of Corporate & Other by DHB	22
Figure 20: Population density of Allied & Scientific by DHB	23
Figure 21: Population density of Care & Support by DHB.....	23
Figure 22: Population density of Senior Medical Officer (SMO) by DHB.....	24
Figure 23: Population density of Resident Medical Officer (RMO) by DHB	24
Figure 24: Population density of Midwives by DHB.....	25
Figure 25: Population density of all DHB staff by DHB	25

TABLE OF TABLES

Table 1: Distribution of employment types.....	5
Table 2: Headcount and FTE by DHB and occupation group	7
Table 3: Occupation group employee count and mean FTE by gender	8
Table 4: Employee Count and proportion of ethnicities by occupation group.....	9
Table 5: Mean ages and length of service by occupation group and gender.....	11
Table 6: Employee Count and mean FTE by gender and DHB.....	12
Table 7: Mean ages and mean length of service by DHB and gender	13
Table 8: Distribution of reported ethnicities by DHB and Employee Count.....	14

OVERVIEW

DHB WORKFORCE AT A GLANCE

For data to 31 March 2022, only those employed with contracted hours greater than zero are included in the analysis except for the tables and charts that explicitly report on 'Other' employees on page 5. 'Other' includes those on maternity / parental leave, and those who have not been reported with an employment status code.

Total employees 82,561 in 83,756 positions* 64,540 female 17,982 male 39 Another Gender	70,727 FTE 54,105 FTE** females 16,591 FTE** males 32 FTE** Another Gender	Largest occupation group: Nurses – 31,240 employees in 31,835 positions Smallest occupation group: Midwives – 1,383 employees in 1,452 positions
DHB employee average age 44.6 years 44.6 years for females 44.5 years for males	Oldest male occupation group: SMO (mean age 51.2 years) Youngest male occupation group: RMO (mean age 31.0 years)	Oldest female occupation groups: Corporate and Other (mean age 49.6 years) Youngest female occupation group: RMO (mean age 30.7 years)
Mean FTE rate 0.86 per employee Mean FTE rate for females 0.84 Mean FTE rate for males 0.92	Longest Length of Service occupation group SMO (mean 10.0 years) Shortest Length of Service occupation group RMO (mean 1.3 years)	Employee reported ethnicities: Other*** – 62.1% Asian – 24.2% Māori – 8.8% Pacific – 4.9%

* The count of employees is a distinct count of individual employees. These employees may hold more than one role, so the Headcount quoted in this report (which is based on total number of positions) will often be larger.

** Contracted FTE (using a 2086 hour annual contract):
 N.B. local (DHB and / or occupation) interpretations of a 'full time equivalent' can vary. For example; a sonographer may be classed as 1.0 full time employee in one DHB where they are contracted to work 35 hours per week, whereas another sonographer in a different DHB may be classed as 1.0 full time employee where they are contracted to work 40 hours per week. The Contracted FTE definition used here allows a comparison to be made across DHBs and occupations through a universal standard.

*** To allow direct comparisons with reported ethnicity data from Statistics New Zealand, we have amalgamated ethnicities not associated with Asian, Māori or Pacific into the group 'Other'.

DISTRIBUTION OF EMPLOYEES

This chart shows the number of employees (a distinct count of employee numbers) within each DHB who are classed as either Employees (contracted hours greater than zero) or 'Other' (all others including those on maternity / parental leave, and those who have not been reported with an employment status code). If an individual has already been included in the Employed total but also holds a casual contract, they have not been counted again in the Others column. The chart has been ordered in descending order of DHB workforce size. The table below the chart gives the actual count of employees.

Figure 1: Count of individual employees

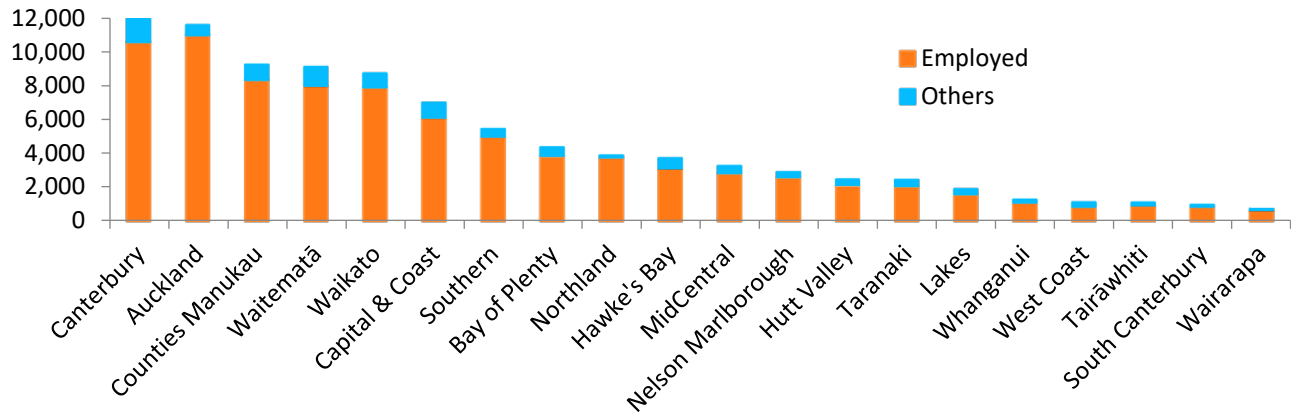


Table 1: Distribution of employment types

DHB	Employed	Others	Total	Proportion of DHB workforce
Canterbury	10,562	1,402	11,964	12.8%
Auckland	10,962	630	11,592	12.5%
Counties Manukau	8,314	940	9,254	10.0%
Waitematā	7,829	1,026	8,855	9.5%
Waikato	7,869	857	8,726	9.4%
Capital & Coast	6,083	915	6,998	7.5%
Southern	4,966	484	5,450	5.9%
Bay of Plenty	3,824	538	4,362	4.7%
Northland	3,723	154	3,877	4.2%
Hawke's Bay	3,081	625	3,706	4.0%
MidCentral	2,810	433	3,263	3.5%
Nelson Marlborough	2,580	321	2,901	3.1%
Hutt Valley	2,093	373	2,466	2.6%
Taranaki	2,035	407	2,442	2.6%
Lakes	1,563	323	1,886	2.0%
Whanganui	1,078	191	1,269	1.4%
West Coast	829	271	1,100	1.2%
Tairāwhiti	906	179	1,085	1.2%
South Canterbury	833	126	959	1.0%
Wairarapa	621	108	729	0.8%
Grand Total	82,561	10,323	92,884	100.0%

NOTE: Prior to June 2021, this table was based on a count of positions, which had the potential to count individual employees more than once if they held multiple positions with a DHB. Individuals may still be counted more than once if they hold positions with multiple DHBs.

Main Employee ID has not been confirmed for all Waitematā DHB this quarter, so there is still the potential for a number of employees to be counted more than once.

INCLUSIONS AND EXCLUSIONS

Specific caveats and definitions relevant to charts and tables have been provided throughout the report and should be noted. Additionally, all charts and tables that follow in this document are derived from data using the following caveats:

Inclusions:

- Only employees who have positive contract hours have been included; those with zero contract hours or are classified as on parental leave or leave without pay have been excluded.
- Charts containing 'Age' include all employees who have a calculated age between 15 and 99.

Exclusions:

- Data has been excluded when it does not match the reporting variable standard format (i.e. if a gender code has not been assigned then the employee will be excluded from that chart or table).
- For privacy reasons some data has been suppressed for numbers less than five.
- Any employee who has an employment end date entered (before or during the reporting quarter) has also been excluded since they left employment before the end of the reporting quarter.
- Charts containing 'ethnicity', exclude employees who do not have a valid ethnicity code.

Calculations:

- Percentage sick leave hours is calculated by dividing the number of sick leave hours taken by the contracted hours (excluding those with zero contracted hours). It excludes staff who started or terminated employment in the reporting quarter.
- Annual leave balance to entitlement calculations exclude staff who started or terminated employment in the reporting quarter and those staff who have no reported entitlement to annual leave.
- Because of the way start dates are reported the length of service is most likely to be based on the length of service within the DHB rather than the length of service of the reported position. When a person is reported under multiple positions for a single occupation group, the greatest length of service value is used for the individual.

EMPLOYEE COUNT AND FTE BY DHB AND OCCUPATION GROUP

The following table shows the distinct count of employees by their occupation grouping and DHB. It also includes columns for full-time equivalent counts (Contracted FTE, using a 2086 hour annual contract) and mean FTE (the average FTE calculation for all employees). Employees who do not have a contract of more than zero hours are excluded.

Table 2: Employee count and FTE by DHB and occupation group

DHB	Nursing			Corporate and other			Allied & scientific			Care and support			SMO			RMO			Midwifery		
	Employee count	FTE	Mean FTE	Employee count	FTE	Mean FTE	Employee count	FTE	Mean FTE	Employee count	FTE	Mean FTE	Employee count	FTE	Mean FTE	Employee count	FTE	Mean FTE	Employee count	FTE	Mean FTE
Auckland	3,936	3,446.4	0.88	2,110	1,920.2	0.91	2,166	1,931.9	0.89	791	737.4	0.93	1,137	963.6	0.85	685	677.2	0.99	162	127.0	0.78
Bay of Plenty	1,469	1,136.3	0.77	822	719.8	0.88	579	487.3	0.84	394	323.3	0.82	277	229.2	0.83	223	221.8	0.99	60	41.8	0.70
Canterbury	4,033	3,356.9	0.83	2,327	2,035.0	0.87	1,743	1,439.8	0.83	1,058	850.5	0.80	677	571.7	0.84	599	585.9	0.98	125	84.7	0.68
Capital & Coast	2,455	2,082.2	0.85	1,331	1,233.9	0.93	805	704.0	0.87	521	464.8	0.89	479	397.7	0.83	422	406.0	0.96	96	71.9	0.75
Counties Manukau	3,141	2,737.0	0.87	1,529	1,335.8	0.87	1,234	1,106.9	0.90	1,082	962.8	0.89	629	533.7	0.85	501	489.0	0.98	208	163.2	0.78
Hawke's Bay	1,165	906.3	0.78	677	599.8	0.89	486	412.4	0.85	373	301.3	0.81	179	149.4	0.83	169	167.4	0.99	42	31.6	0.75
Hutt Valley	741	595.4	0.80	432	388.3	0.90	312	261.1	0.84	231	196.8	0.85	163	123.1	0.76	174	166.3	0.96	41	26.7	0.65
Lakes	628	493.3	0.79	359	317.3	0.88	203	171.1	0.84	141	119.9	0.85	111	95.9	0.86	93	93.0	1.00	28	21.1	0.75
MidCentral	1,147	935.6	0.82	666	619.7	0.93	407	356.2	0.88	198	166.1	0.84	174	157.7	0.91	168	167.0	0.99	50	34.9	0.70
Nelson Marlborough	801	617.4	0.77	610	515.5	0.85	376	294.2	0.78	481	354.3	0.74	164	129.5	0.79	107	106.0	0.99	52	35.9	0.69
Northland	1,413	1,084.1	0.77	754	643.9	0.85	545	463.8	0.85	537	371.6	0.69	242	230.6	0.95	157	152.0	0.97	75	45.3	0.60
South Canterbury	355	285.0	0.80	172	142.0	0.83	114	90.3	0.79	92	65.3	0.71	58	50.1	0.86	29	28.9	1.00	18	14.1	0.78
Southern	2,064	1,646.7	0.80	935	847.6	0.91	745	642.3	0.86	449	351.3	0.78	352	308.6	0.88	353	339.8	0.96	68	44.9	0.66
Tairāwhiti	356	282.6	0.79	221	202.3	0.92	124	104.8	0.85	93	80.2	0.86	61	55.6	0.91	33	32.8	0.99	18	13.4	0.74
Taranaki	761	566.3	0.74	494	434.4	0.88	279	222.8	0.80	223	181.8	0.82	147	121.2	0.82	106	104.5	0.99	25	18.0	0.72
Waikato	3,018	2,557.9	0.85	1,723	1,574.0	0.91	1,115	973.8	0.87	931	791.8	0.85	493	443.7	0.90	492	486.0	0.99	97	70.4	0.73
Wairarapa	285	191.8	0.67	144	108.9	0.76	66	48.8	0.74	63	40.8	0.65	28	25.6	0.91	16	16.0	1.00	21	14.1	0.67
Waitematā	2,720	2,350.5	0.86	1,525	1,340.4	0.88	1,381	1,193.2	0.86	1,077	950.6	0.88	580	493.7	0.85	411	403.3	0.98	159	107.0	0.67
West Coast	296	246.5	0.83	226	187.8	0.83	88	79.0	0.90	153	108.1	0.71	41	31.7	0.77	10	9.8	0.98	15	11.6	0.77
Whanganui	456	363.7	0.80	230	200.9	0.87	138	112.9	0.82	125	103.0	0.82	55	49.6	0.90	51	51.0	1.00	23	16.9	0.73
Grand Total	31,240	25,881.9	0.83	17,287	15,367.5	0.89	12,906	11,096.4	0.86	9,013	7,521.7	0.83	6,047	5,161.9	0.85	4,799	4,703.7	0.98	1,383	994.5	0.72

TABLES AND CHARTS BY OCCUPATION GROUPING

EMPLOYEE COUNT AND FTE BY OCCUPATION GROUPING AND GENDER

The bars represent the distinct count (left hand axis) of employees by gender and occupation grouping, and the triangles represent the average FTE for those employees (right hand axis), also by gender and occupation grouping. As some employees may have roles across multiple Occupation Groups, they may be counted more than once in the group totals, but only once in the Total Staff row in Table 3.

Figure 2: Occupation group distinct employee count and mean FTE by gender

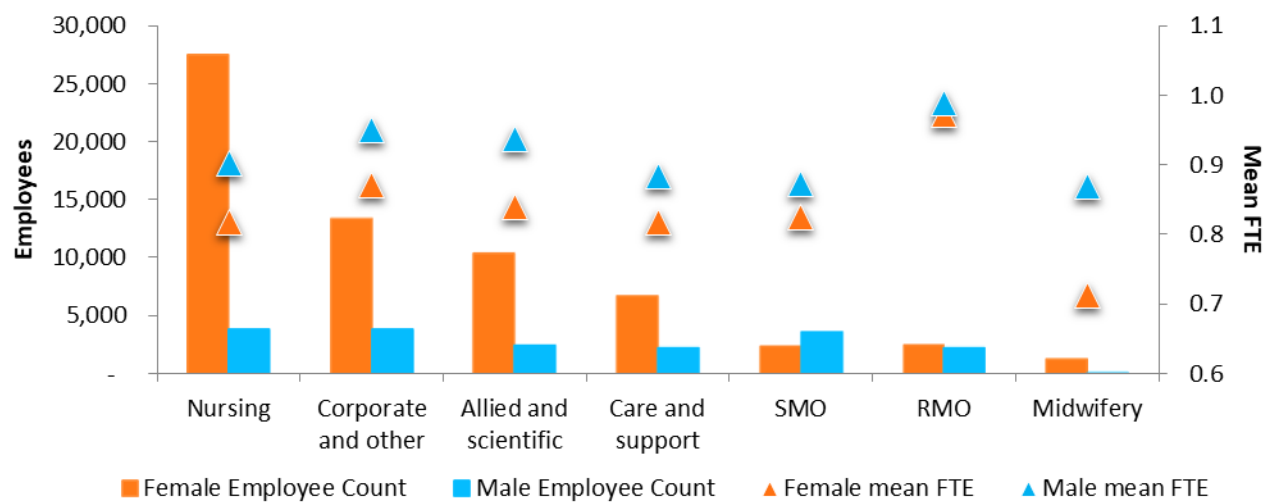


Table 3: Occupation group employee count and mean FTE by gender

Occupation group	Female		Male		Another Gender		Total	
	Employee Count	Mean FTE	Employee Count	Mean FTE	Employee Count	Mean FTE	Employee Count	Mean FTE
Nursing	27,465	0.82	3,763	0.91	12	0.82	31,240	0.83
Corporate and other	13,454	0.87	3,820	0.95	13	0.85	17,287	0.89
Allied and scientific	10,456	0.84	2,443	0.94	7	0.73	12,906	0.86
Care and support	6,781	0.82	<2,230	0.88	<5	N/A	9,013	0.83
SMO	2,518	0.83	<3,530	0.87	<5	N/A	6,047	0.85
RMO	2,578	0.97	2,221	0.99	0	N/A	4,799	0.98
Midwifery	1,377	0.72	<10	0.87	<5	N/A	1,383	0.72
Total Staff	64,540	0.84	17,982	0.92	39	0.83	82,561	0.86

Some values have been expressed as ranges to ensure anonymity of the small number of employees reported as Another Gender. Values in the Total Staff line are slightly lower than the sum of the Occupation Groups, as some individuals may be represented in more than one Occupation Group.

EMPLOYEE COUNT BY OCCUPATION GROUP AND ETHNICITY

This chart shows the proportion (not the actual count of employees) of ethnicities reported within each occupation group. The table below details the distinct count of employees for whom an ethnicity was reported. As some employees may have roles across multiple Occupation Groups, they may be counted more than once in the group totals, but only once in the Grand Total row in Table 4.

The pie chart, on the next page, shows the distribution of all reported ethnicities for all DHBs.

Figure 3: Proportion of ethnicities by occupation group

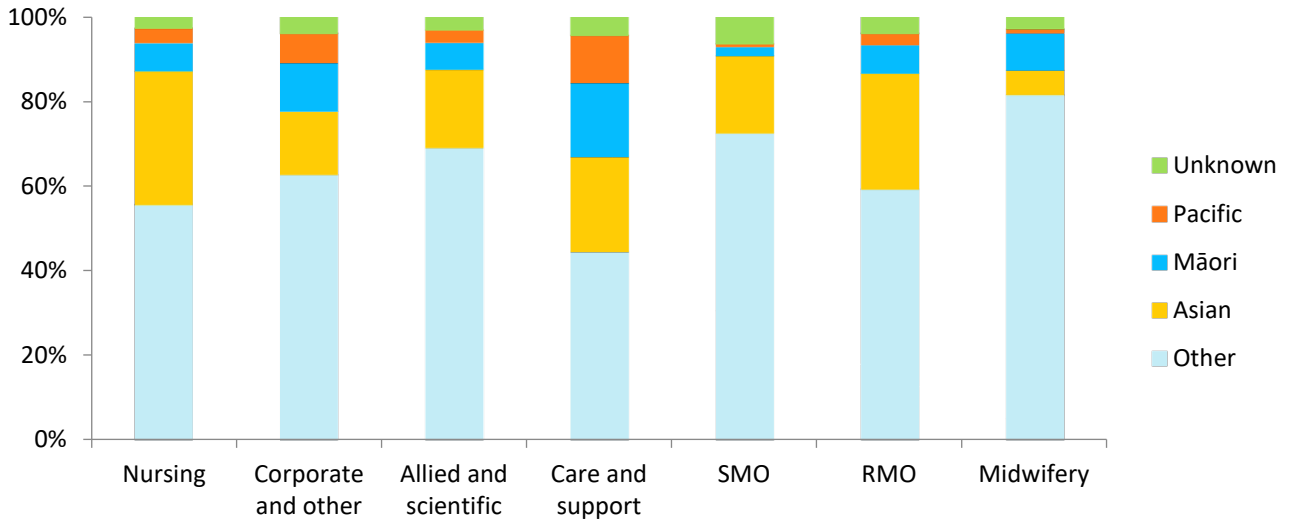


Table 4: Employee Count and proportion of ethnicities by occupation group

Occupation group	Other*		Asian		Māori		Pacific		Unknown		Total
Nursing	17,402	55.7%	9,799	31.4%	2,076	6.6%	1,094	3.5%	869	2.8%	31,240
Corporate and other	10,841	62.7%	2,573	14.9%	1,987	11.5%	1,216	7.0%	670	3.9%	17,287
Allied and scientific	8,902	69.0%	2,381	18.4%	815	6.3%	406	3.1%	402	3.1%	12,906
Care and support	4,018	44.6%	2,012	22.3%	1,583	17.6%	1,007	11.2%	393	4.4%	9,013
SMO	4,377	72.4%	1,103	18.2%	130	2.1%	57	0.9%	380	6.3%	6,047
RMO	2,845	59.3%	1,311	27.3%	320	6.7%	137	2.9%	186	3.9%	4,799
Midwifery	1,127	81.5%	79	5.5%	121	8.7%	16	1.1%	40	2.9%	1,383
Grand Total	49,437	59.9%	19,238	23.3%	7,025	8.5%	3,928	4.8%	2,933	3.5%	82,561

* 'Other' is a group amalgamation of all ethnicities that do not fall into the groups Asian, Māori or Pacific.

Employee counts in the Grand Total line are slightly lower than the sum of the Occupation Groups, as some individuals may be represented in more than one Occupation Group.

This pie chart is based on the 79,628 permanent distinct employees who declared their ethnicity as Asian, Māori, Pacific or Other. Below this is a similar pie chart of ethnicity proportions in the New Zealand population based on projections of population data by Statistics New Zealand for 31 March 2022.

Figure 4: Proportion of identifiable ethnicities for all DHB employees

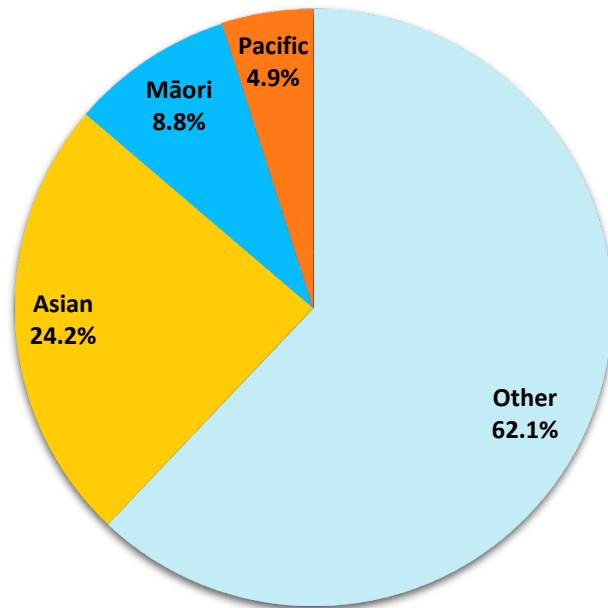
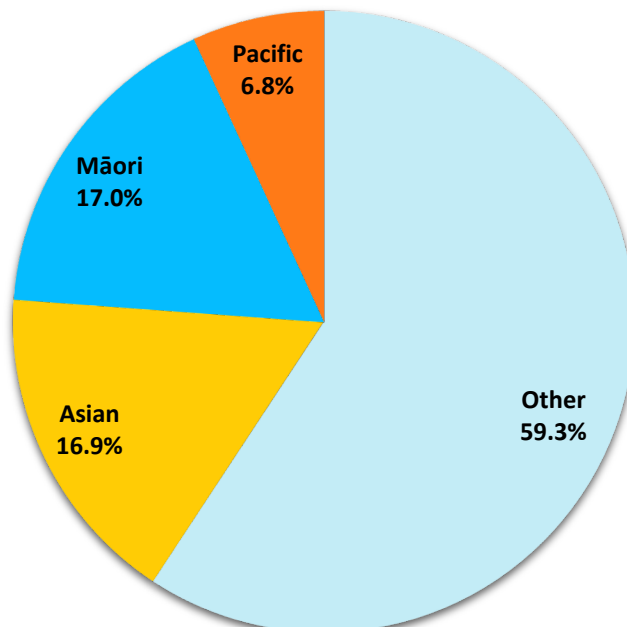


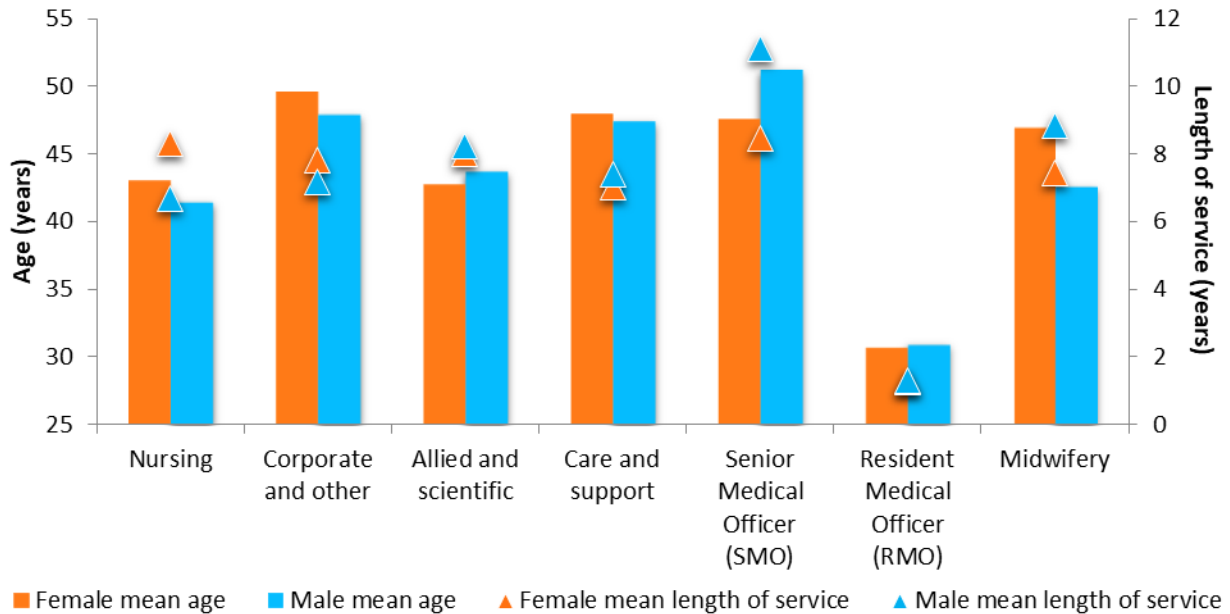
Figure 5: Proportion of identifiable ethnicities for projected population data at 31 March 2022



AGES AND LENGTH OF SERVICE

Figure 6: Mean ages and length of service by occupation group and gender

The bars in this chart show the average age (left hand axis) for each occupation group by gender. The triangles represent the average length of service (right hand axis), also by occupation group and gender.



The following table gives the actual figures behind the chart above.

Table 5: Mean ages and length of service by occupation group and gender

Occupation group	Female		Male		Total	
	Mean length of service	Mean age	Mean length of service	Mean age	Mean length of service	Mean age
Nursing	8.3	43.0	6.7	41.5	8.1	42.8
Corporate and other	7.8	49.6	7.2	47.9	7.7	49.2
Allied and scientific	8.0	42.8	8.2	43.8	8.1	43.0
Care and support	7.0	48.0	7.4	47.5	7.1	47.9
SMO	8.5	47.6	11.1	51.2	10.0	49.7
RMO	1.2	30.7	1.3	31.0	1.3	30.8
Midwifery	7.4	46.9	8.8	42.6	7.5	46.9
Grand Total	7.7	44.6	7.3	44.5	7.6	44.6

TABLES AND CHARTS BY DHB

This section looks at the same statistics given in the first section but broken down by DHB rather than occupation group. Page 7 has a table of figures for FTE and headcount which looks at both DHB and occupation grouping.

EMPLOYEE COUNT AND MEAN FTE BY GENDER AND DHB

This chart examines the distinct count of employees by gender and DHB (left hand axis). The DHBs have been ordered in descending size of employee count. The right-hand axis refers to the mean FTE for all positions (by DHB and gender). The following table shows the employee count and mean FTE by gender for each DHB. Staff identified as Another Gender have not been included in these charts, due to the overall low numbers of people.

Figure 7: Employee Count and mean FTE by gender and DHB

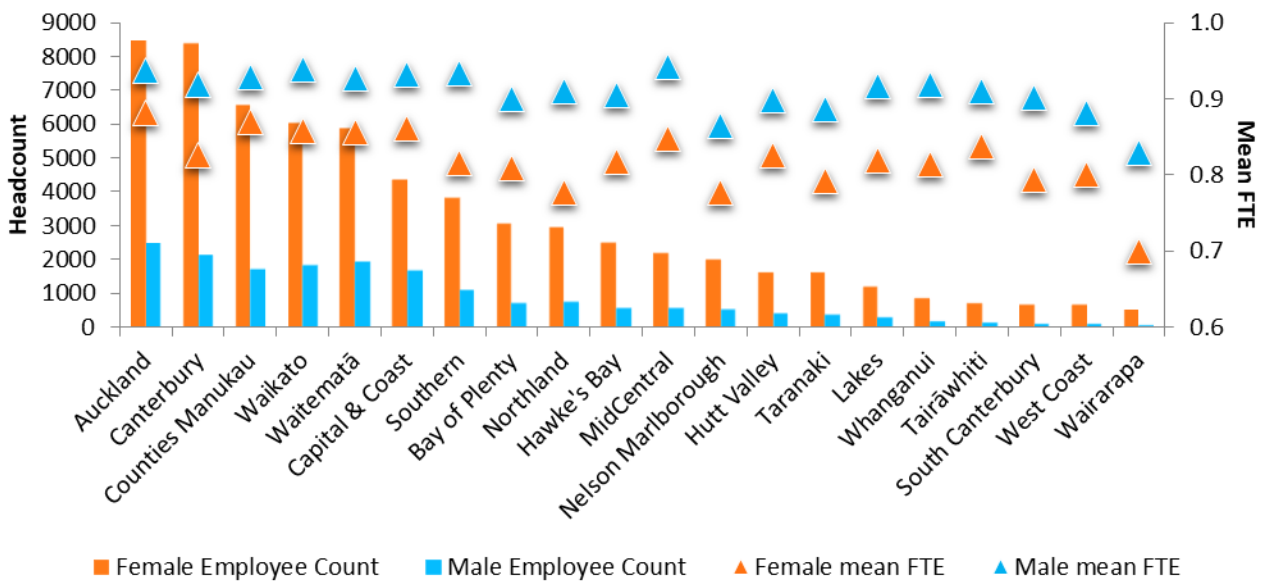


Table 6: Employee Count and mean FTE by gender and DHB

	Auckland	Canterbury	Countries Manukau	Waikato	Waitematā	Capital & Coast	Southern	Bay of Plenty	Northland	Hawke's Bay	MidCentral	Nelson Marlborough	Hutt Valley	Taranaki	Lakes	Whanganui	Tairāwhiti	South Canterbury	West Coast	Wairarapa
Female																				
Employees	8,459	8,410	6,595	6,046	5,883	4,393	3,864	3,077	2,967	2,502	2,217	2,045	1,665	1,642	1,241	883	735	703	682	531
Mean FTE	0.88	0.83	0.87	0.86	0.86	0.86	0.82	0.81	0.78	0.82	0.85	0.78	0.82	0.79	0.82	0.81	0.84	0.79	0.80	0.70
Male																				
Employees	<2,505	<2,130	1,719	1,823	1,946	<1,690	<1,105	747	756	579	<595	535	428	<395	322	<195	171	130	<145	90
Mean FTE	0.94	0.92	0.93	0.94	0.93	0.93	0.93	0.90	0.91	0.90	0.94	0.86	0.90	0.89	0.92	0.92	0.91	0.90	0.88	0.83
Total																				
Employees	10,962	10,562	8,314	7,869	7,829	6,083	4,966	3,824	3,723	3,081	2,810	2,580	2,093	2,035	1,563	1,078	906	833	829	621
Mean FTE	0.89	0.84	0.88	0.88	0.88	0.88	0.84	0.83	0.80	0.83	0.87	0.80	0.84	0.81	0.84	0.83	0.85	0.81	0.81	0.72

MEAN AGES AND MEAN LENGTH OF SERVICE BY DHB AND GENDER

This chart shows the mean age of employees in each DHB by gender (left hand axis) and has been ordered by descending average age. The triangles represent the average length of service (right hand axis) by gender and DHB. This has been calculated on an employee count basis, using the maximum reported length of service for each individual staff member across all relevant roles.

Figure 8: Mean ages and mean length of service by DHB and gender

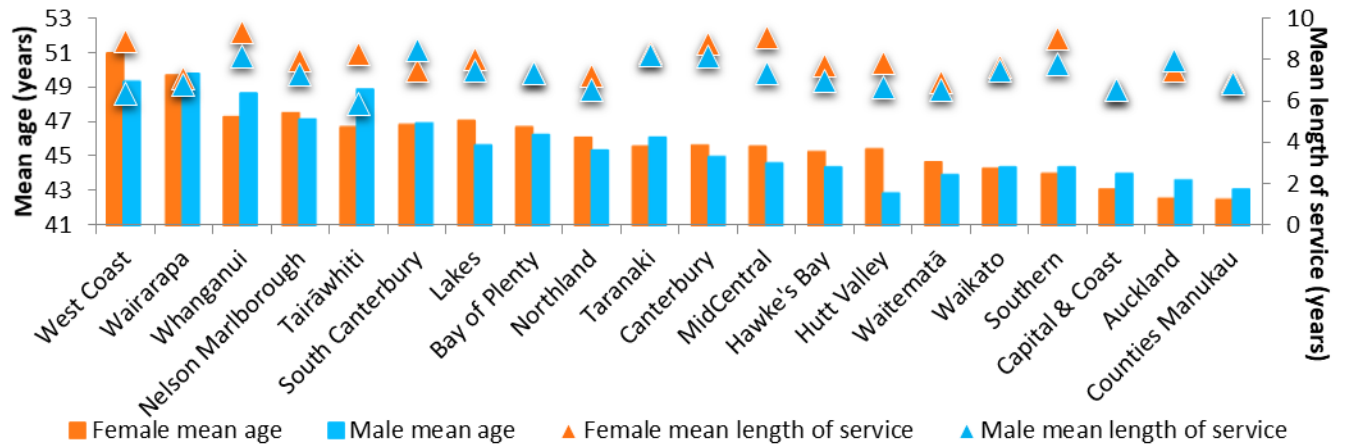


Table 7: Mean ages and mean length of service by DHB and gender

DHB	Female mean length of service	Female mean age	Male mean length of service	Male mean age	All staff mean length of service	All staff mean age
West Coast	8.9	50.9	6.3	49.3	8.4	50.6
Wairarapa	7.1	49.6	6.8	49.7	7.1	49.6
Whanganui	9.3	47.2	8.2	48.6	9.1	47.4
Nelson Marlborough	8.0	47.5	7.3	47.1	7.8	47.4
Tairāwhiti	8.3	46.6	5.8	48.8	7.8	47.0
South Canterbury	7.5	46.8	8.5	46.9	7.6	46.8
Lakes	8.0	47.0	7.5	45.6	7.9	46.7
Bay of Plenty	7.4	46.6	7.3	46.2	7.4	46.5
Northland	7.2	46.1	6.5	45.3	7.1	45.9
Taranaki	8.3	45.6	8.2	46.0	8.3	45.6
Canterbury	8.8	45.6	8.1	44.9	8.7	45.5
MidCentral	9.1	45.5	7.4	44.6	8.7	45.3
Hawke's Bay	7.7	45.2	7.0	44.3	7.6	45.1
Hutt Valley	7.9	45.4	6.6	42.8	7.6	44.9
Waitematā	7.0	44.5	6.6	43.8	6.9	44.4
Waikato	7.7	44.2	7.5	44.3	7.6	44.2
Southern	9.0	43.9	7.8	44.3	8.7	44.0
Capital & Coast	6.5	43.0	6.6	44.0	6.5	43.3
Auckland	7.4	42.5	7.9	43.6	7.6	42.8
Counties Manukau	7.0	42.5	6.8	43.1	6.9	42.6
Grand Total	7.7	44.6	7.3	44.5	7.6	44.6

ETHNICITIES BY DHB

The following chart shows the proportion of ethnicities within each DHB employee population (ordered by descending proportion of 'unknown' ethnicities). It does not represent the actual number of people by each ethnicity; this is detailed in the table further below.

Figure 9: Proportion of reported ethnicities by DHB

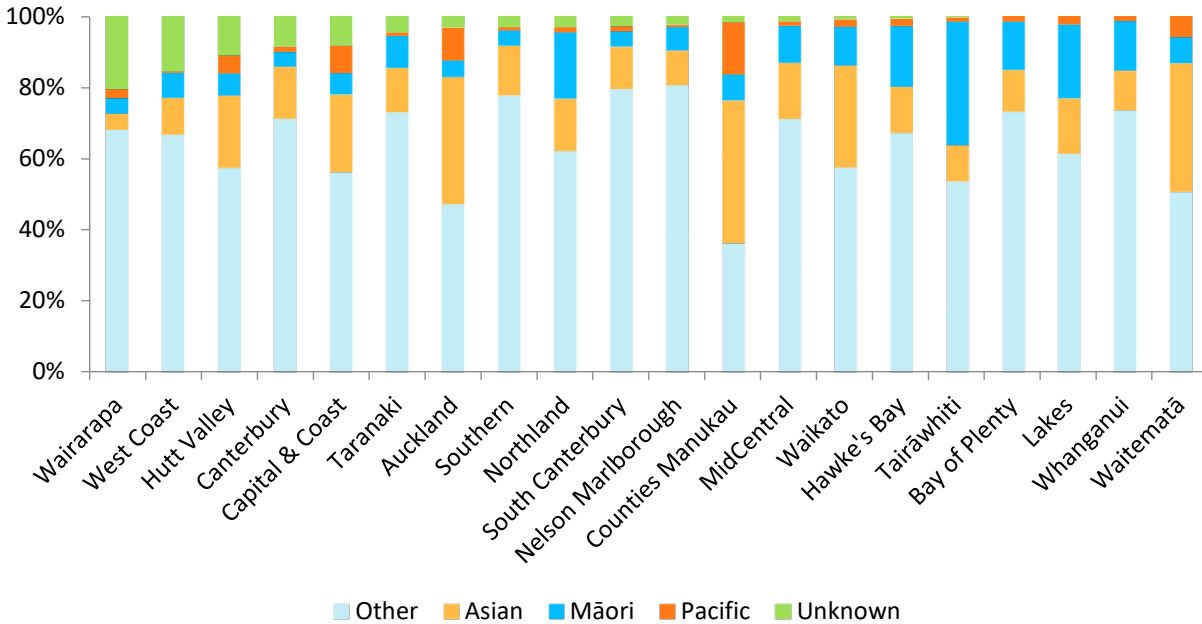


Table 8: Distribution of reported ethnicities by DHB and Employee Count

DHB	Other*	Asian	Māori	Pacific	Unknown	Total
Wairarapa	424	28	<30***	<20***	125	621
West Coast	555	85	<60***	<5**	126	829
Hutt Valley	1,205	423	133	105	227	2,093
Canterbury	7,530	1,535	453	156	888	10,562
Capital & Coast	3,429	1,323	372	465	494	6,083
Taranaki	1,489	251	184	20	91	2,035
Auckland	5,202	3,888	532	992	348	10,962
Southern	3,866	687	217	42	154	4,966
Northland	2,320	545	691	53	114	3,723
South Canterbury	663	99	36	12	23	833
Nelson Marlborough	2,082	250	170	16	62	2,580
Counties Manukau	3,039	3,321	610	1,203	141	8,314
MidCentral	2,001	442	290	37	40	2,810
Waikato	4,540	2,244	849	162	74	7,869
Hawke's Bay	2,075	398	523	<65***	<25***	3,081
Tairāwhiti	488	91	313	<15***	<5**	906
Bay of Plenty	2,805	444	518	57	0	3,824
Lakes	961	243	322	37	0	1,563
Whanganui	794	120	149	15	0	1,078
Waitematā	3,969	2,821	576	468	0	7,829
Grand Total	49,437	19,238	7,025	3,928	2,933	82,713

* 'Other' is a group amalgamation of all ethnicities that do not fall into the groups Asian, Māori or Pacific.

** Data suppressed (headcounts less than 5)

*** Data anonymised as range to protect data suppression in other fields.

ANALYSIS BY DHB AND OCCUPATION GROUP

LENGTH OF SERVICE BY OCCUPATION GROUP AND DHB

The following table shows the mean length of service for each occupation group by DHB. To read this table, look at the occupation column. The green colours represent a longer than national average length of service, the yellow colours are close to the national average while red colours are lower than the national average. The final column (all staff) has ordered the DHBs by longer to shorter lengths of service. Length of service is based on reported time employed in the current position, so if an employee is reported with multiple positions, this metric picks up the maximum length of service across their positions.

Table 9: Mean length of service by occupation group and DHB

DHB	Nursing	Corporate and other	Allied and scientific	Care and support	SMO	RMO	Midwifery	All staff
Whanganui	9.7	8.0	10.9	9.3	10.5	1.1	11.0	9.1
MidCentral	9.8	8.6	8.9	7.2	10.7	1.4	7.9	8.7
Southern	9.8	9.1	8.5	7.2	10.4	2.2	7.8	8.7
Canterbury	9.4	7.5	9.4	8.9	11.3	2.1	9.4	8.7
West Coast	9.5	6.3	9.2	10.3	5.8	1.2	7.2	8.4
Taranaki	9.0	8.8	8.6	7.9	8.2	1.2	8.4	8.3
Lakes	8.8	8.5	8.1	6.2	8.4	1.2	6.8	7.9
Nelson Marlborough	9.2	7.0	7.7	7.6	10.1	1.1	6.6	7.8
Tairāwhiti	9.8	6.8	8.0	6.9	5.8	0.6	5.2	7.8
Waikato	8.1	8.0	8.2	6.6	10.0	1.9	7.4	7.6
South Canterbury	8.4	7.3	7.7	6.9	8.0	1.0	6.4	7.6
Hutt Valley	7.9	8.7	8.1	8.5	9.0	0.5	7.1	7.6
Hawke's Bay	7.9	8.0	8.2	6.6	9.2	1.5	9.1	7.6
Auckland	7.4	7.8	8.0	7.9	10.7	0.7	7.4	7.6
Bay of Plenty	8.4	7.3	7.1	6.2	8.8	1.3	6.9	7.4
Northland	7.7	8.0	7.8	4.7	8.2	1.1	6.9	7.1
Wairarapa	8.0	5.7	8.6	6.8	8.2	0.2	3.4	7.1
Counties Manukau	6.9	7.9	7.1	6.3	10.4	0.7	7.1	6.9
Waitematā	6.9	6.7	7.7	6.7	10.0	0.7	6.6	6.9
Capital & Coast	6.7	6.3	6.7	6.7	9.9	1.1	8.1	6.5
Grand Total	8.1	7.7	8.1	7.1	10.0	1.3	7.5	7.6

ANALYSIS BY SICK LEAVE & ANNUAL LEAVE

SICK LEAVE BY DHB, OCCUPATION GROUP, AGE GROUP AND ETHNICITY BY GENDER

The following radar chart shows the dispersion of sick leave by DHB by looking at the average annualised sick leave hours per contracted FTE. It is based on all contracted employees not on long term leave and excluding those who commenced employment during the reporting quarter, regardless of the amount of sick leave taken during this reporting quarter. The process of annualising the quarter's reported sick leave hours may amplify the impact of outlier events, whether these are negative values (reported to correct an over-statement in a previous quarter) or a potential over-reporting, where a person reportedly took more sick leave than we would expect them to have worked based on their contracted FTE.

To read this graph, the blue line indicates the median (50%) sick leave hours per FTE; i.e. 50% of staff took sick leave hours (per FTE) at or below this value. The yellow line indicates the 3rd quartile (75%) sick leave hours per FTE; i.e. 75% of staff took sick leave hours (per FTE) at or below this value. The order of least sick leave hours per FTE to the most sick leave hours per FTE taken runs clockwise from 12 o'clock.

For example, the data for Southern shows that (if the March quarter is indicative) 50% of staff would have taken 32 hours sick leave or less (note comments on negative sick leave values above) per FTE over the course of a year, and 75% of staff would have taken 80.0 hours or less of sick leave per FTE over the course of a year.

Figure 10: Average annualised sick leave hours per FTE by DHB

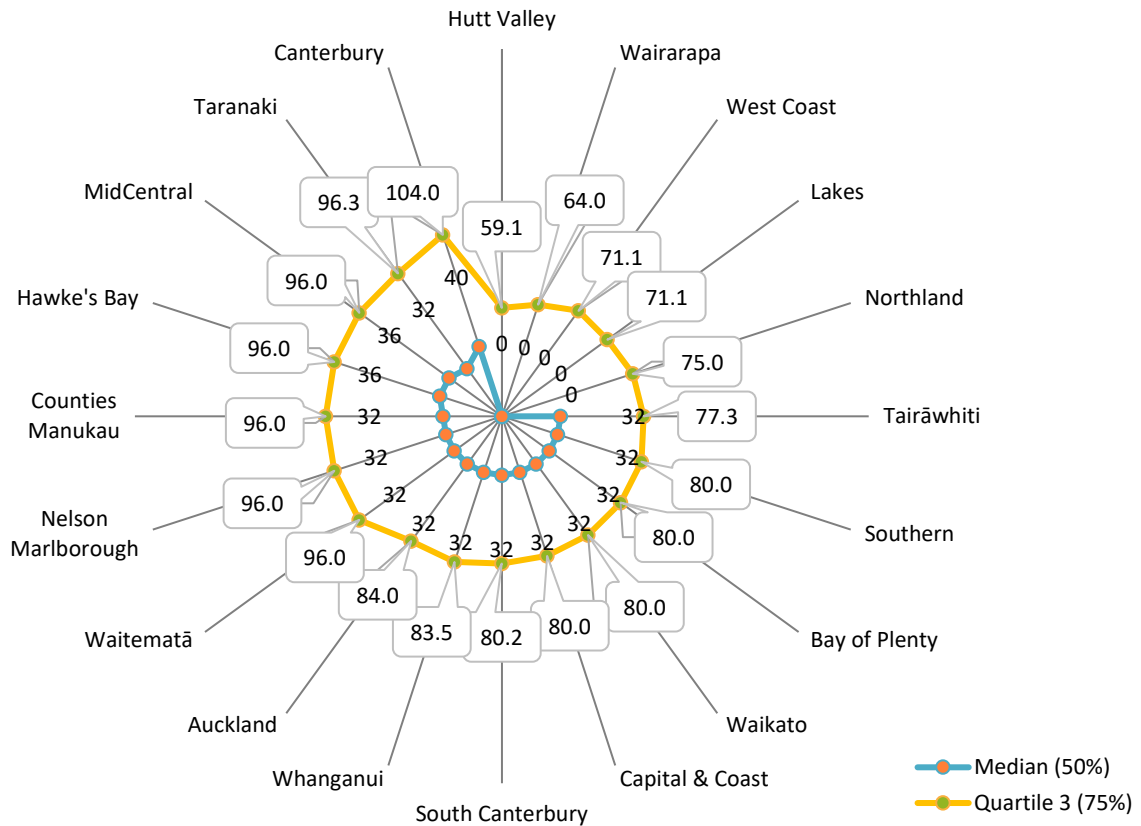


Figure 11: Average annual sick leave hours per FTE by occupational group

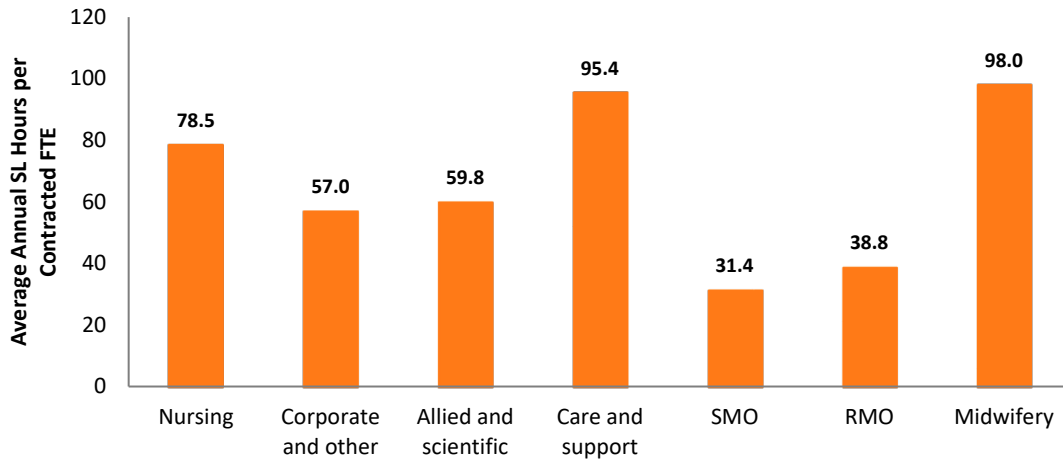


Figure 12: Average annual sick leave hours per FTE by age group by gender

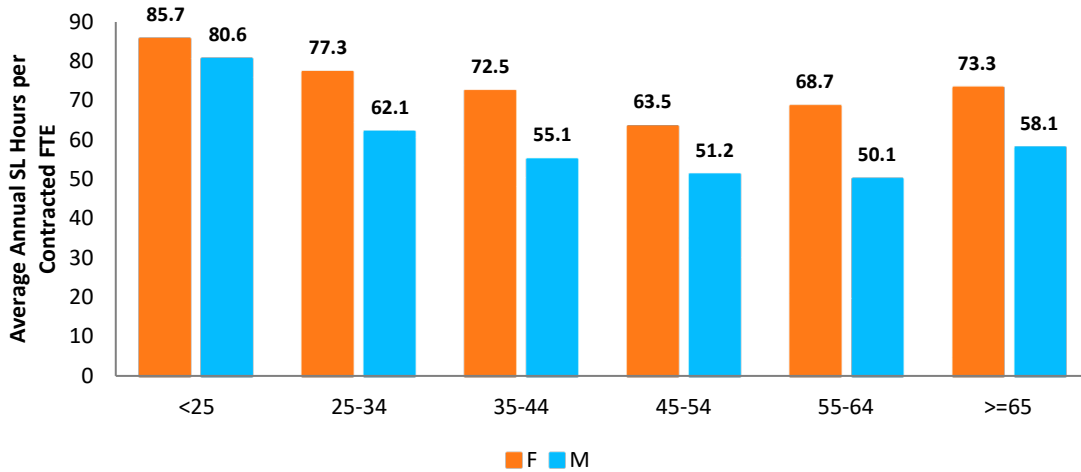
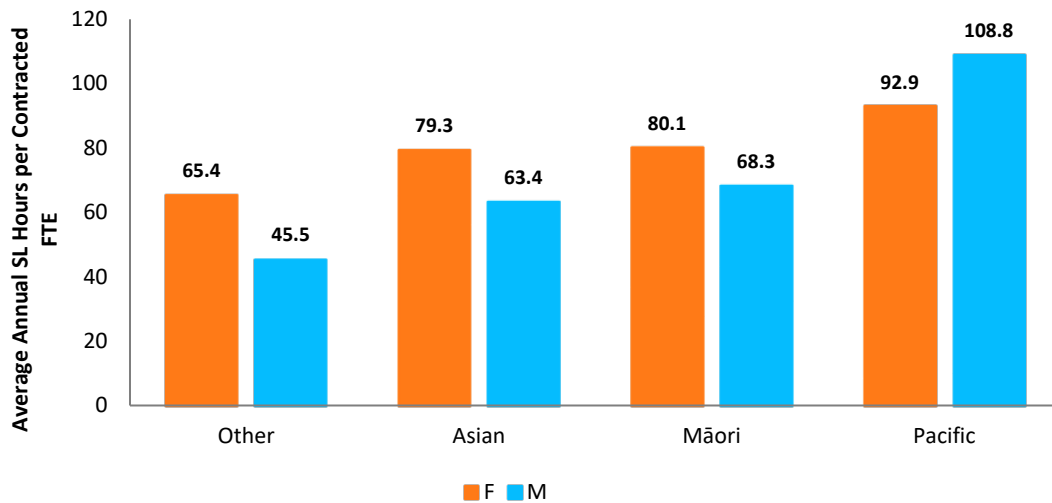


Figure 13: Average annual sick leave hours per FTE by ethnicity by gender



RATIO OF ANNUAL LEAVE BALANCE AND ANNUAL LEAVE ENTITLEMENT BY DHB, OCCUPATION GROUP AND ETHNICITY BY GENDER

In the first chart, the bars represent the ratios of annual leave balance to annual leave entitlement and the blue dotted line represents the national average. For example, a value of 100% means that on average the DHB employees have an annual leave balance equal to their annual leave entitlement. The chart shows that for the first fourteen DHBs, on average their employees have more annual leave balance than annual leave entitlement.

The other two charts on page 19 display the ratio of annual leave balance to entitlement per FTE at the national level, grouped by both Occupation Group and Ethnicity (with gender split).

Figure 14: Ratio of annual leave balance to annual leave entitlement hours per FTE by DHB

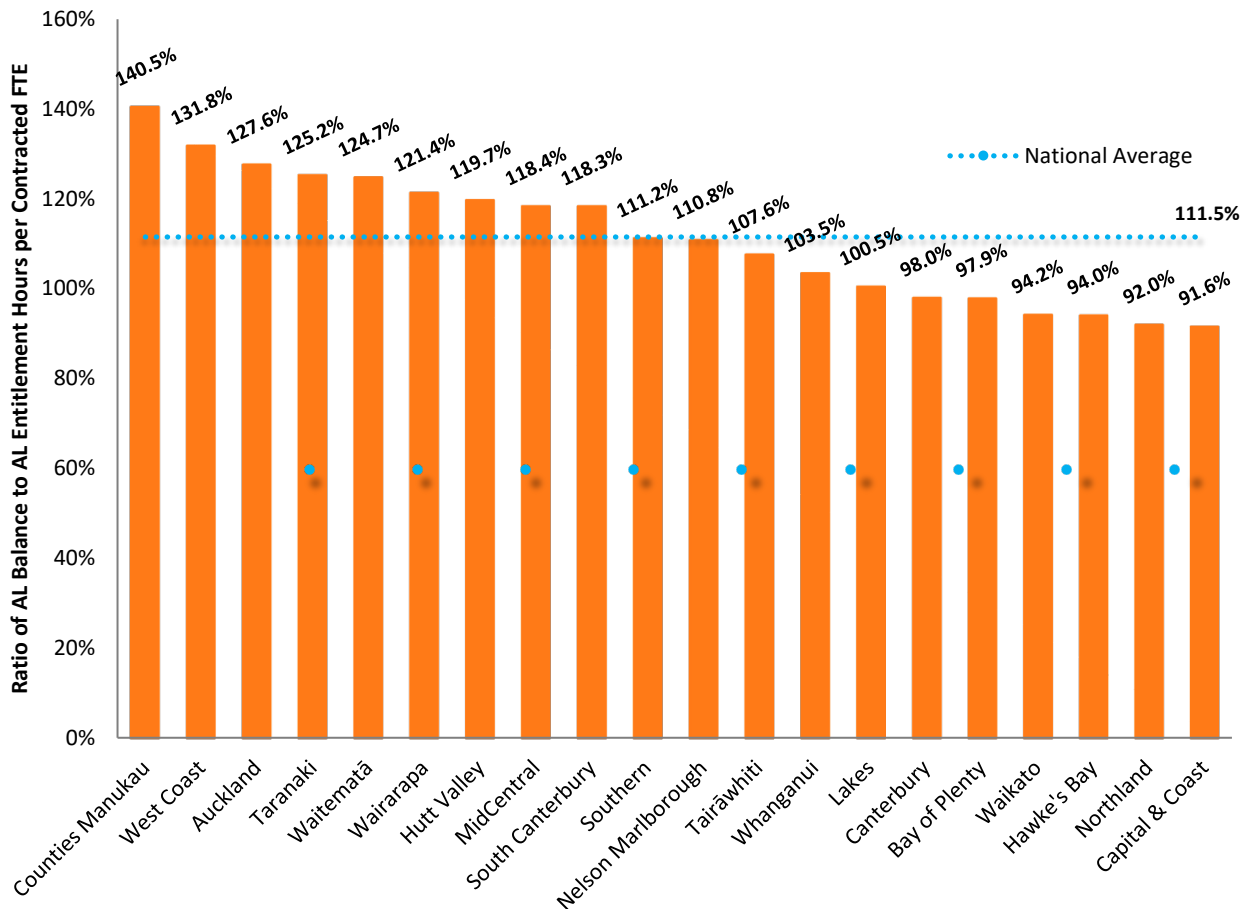


Figure 15: Ratio of annual leave balance to annual leave entitlement hours per FTE by occupational group

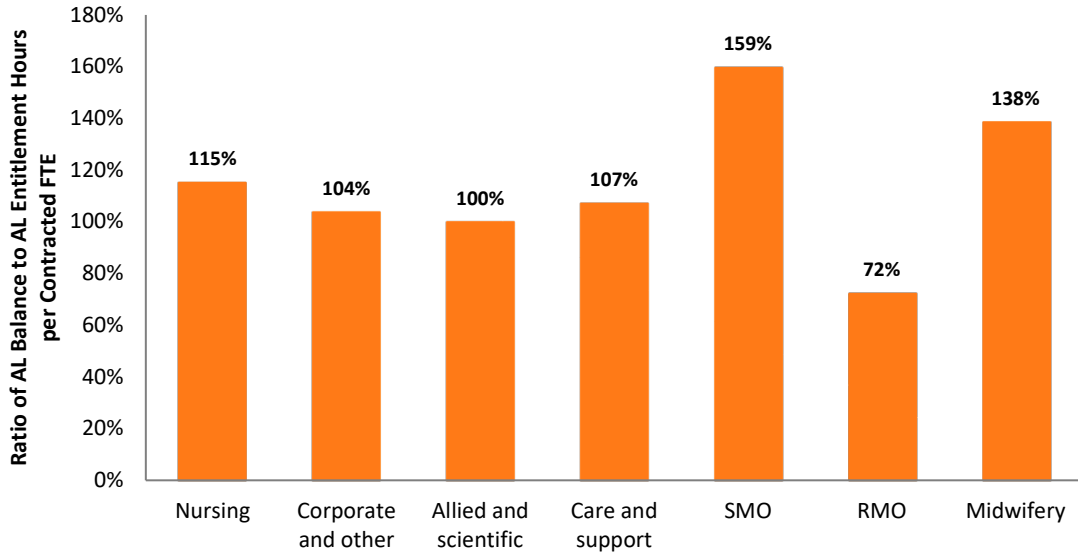
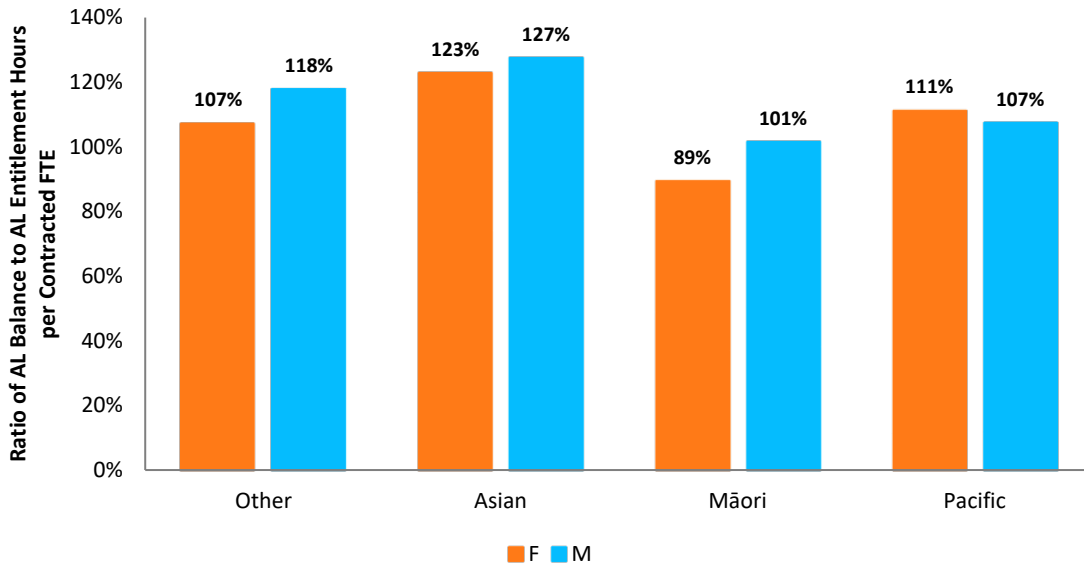


Figure 16: Ratio of annual leave balance to annual leave entitlement hours per FTE by ethnicity by gender

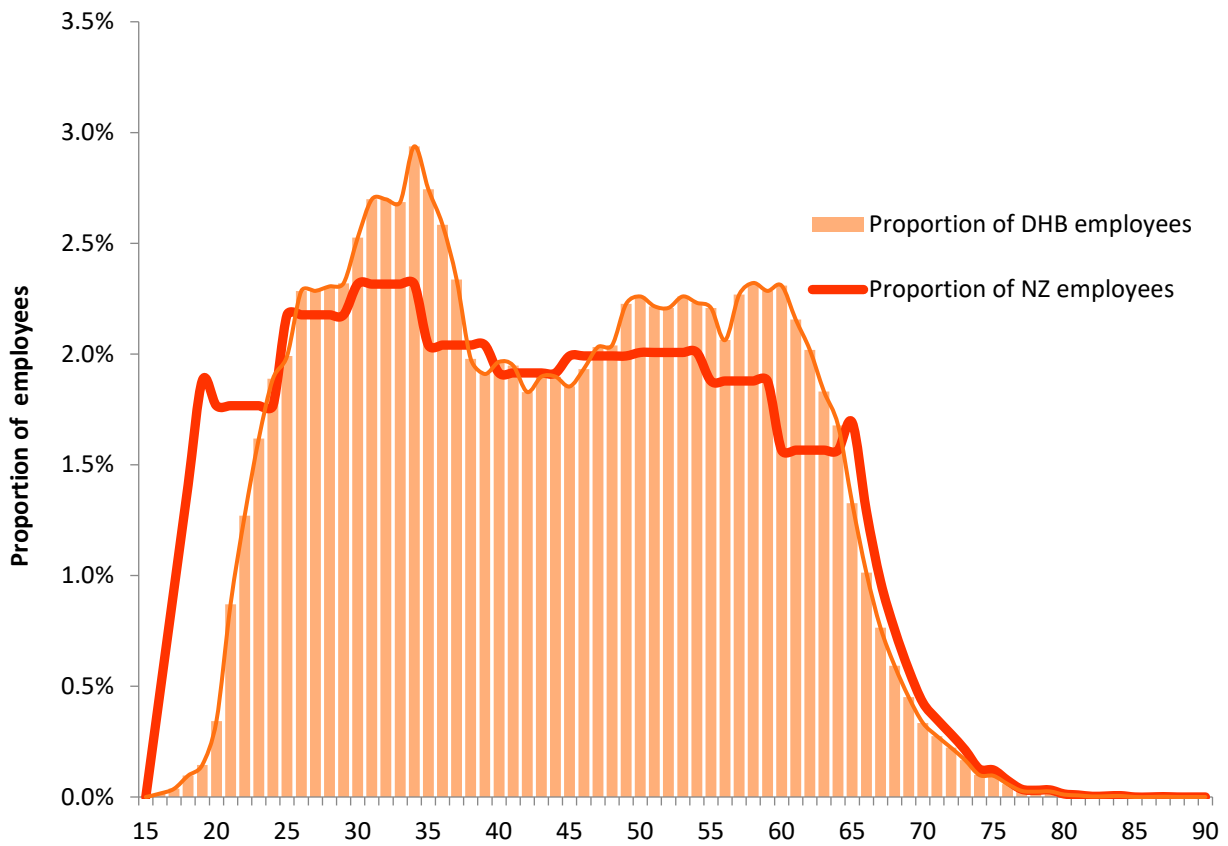


ANALYSIS BY POPULATION

DISTRIBUTION OF OVERALL DHB EMPLOYEES BY AGE, WITH NATIONAL EMPLOYEE DATA

The following chart shows the distribution of ages of DHB employees (histogram with light orange outline). The DHB employee distribution is on a position basis. The staggered dark orange line is the distribution of all New Zealand employees for the March 2022 quarter as reported in the Household Labour Force Survey (HLFS) by Statistics New Zealand.

Figure 17: Distribution of overall DHB employees by age, with national employee data



ETHNIC REPRESENTATION OF WORKFORCE TO RESIDENT POPULATION

The following charts look at the ethnic representation of DHB staff to the resident population.

The calculations look at the percentage of staff with a known ethnicity and compare it to the percentage of DHB residents with a known ethnicity. This latter data has been interpolated from data produced by Statistics New Zealand and is representative for the quarter being reported on. The proportion of staff with a known ethnicity this quarter was 96.5 percent, compared to 91.6 percent in March 2017. This comparison is on a position count level, as we do not have comparable distinct employee counts for 2017.

The four ethnicity groups used are: Other, Asian, Māori and Pacific – ‘Other’ is an amalgamation of all other ethnicities but is primarily European including the ‘New Zealander’ ethnicity. Throughout these charts this is the order of presentation.

When a bar on a chart is green it means the proportion of that ethnicity in the DHB workforce is greater than the population. If a bar is red then the proportion of the DHB workforce is less than that of the resident population. All charts use the same axis scale (as these are spark lines the numbers are not written against the axes), which range from -24% to +25% - so comparisons between DHBs are possible. The data for 2016 has also been added to show any changes over the last five years.

It is important to note that some DHBs have very small counts by ethnicity; for example West Coast has fewer than five employees who have identified their ethnicity as Pacific. This means the data can be quite volatile. Also, those DHBs that are heavily weighted towards a particular ethnicity in their population such as Pacific people in Counties Manukau or Māori in Waikato, will tend to show greater deviations between the DHB workforce ethnicities and the resident population.



Note: The four bars are ordered as: Other, Asian, Māori and Pacific

For some DHBs the ethnic distribution of their staff closely mirrors that of the resident population, such as Waitematā. Nationally, the distributions have changed only slightly between 2016 and 2021; the ‘Other’ ethnicities have reduced closer to zero (from eight down to three percentage points difference), whereas Māori and Pacific have less under-representation (from negative nine to negative eight, and negative three to negative two, percentage points difference, respectively).

POPULATION DENSITY BY OCCUPATIONAL GROUP AND DHB

This section looks at the number of staff per resident population. Staff numbers are contracted FTE figures and they are compared to every 100,000 resident population. Midwives has been compared to the fertile female population (aged 15-49). The important factor to consider in this section is that each DHB may have different models of care (the way services are delivered to the population). For example, only six DHBs provide radiation therapy services, so they may appear to have more staff per head of population but they are actually serving the population from many other DHBs.

Figure 18: Population density of Nurses by DHB

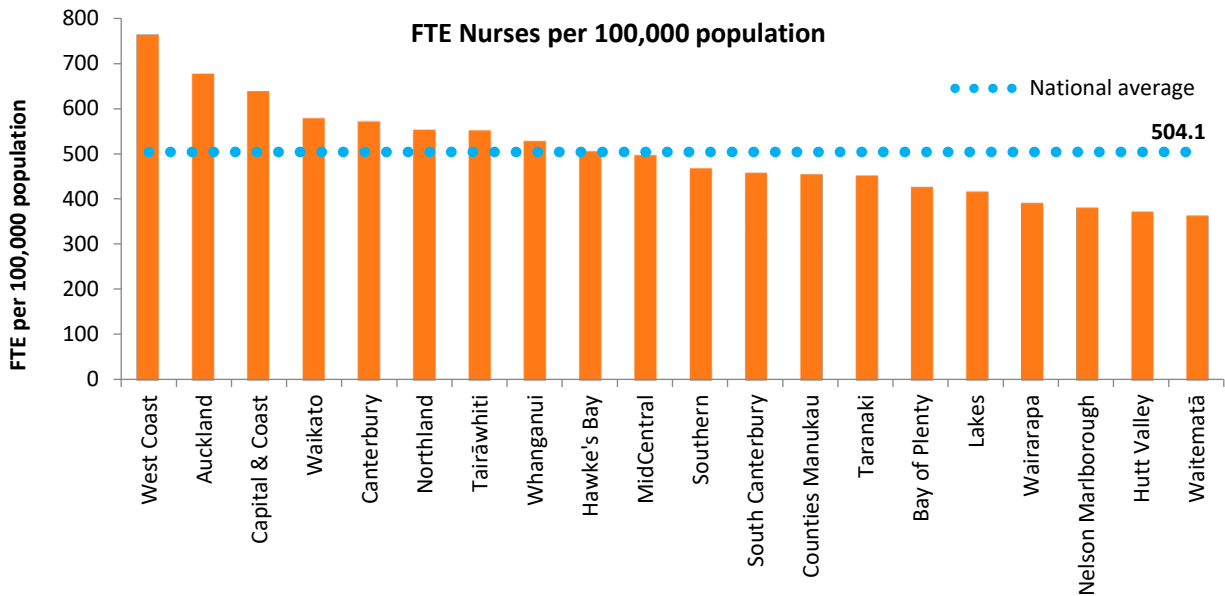


Figure 19: Population density of Corporate & Other by DHB

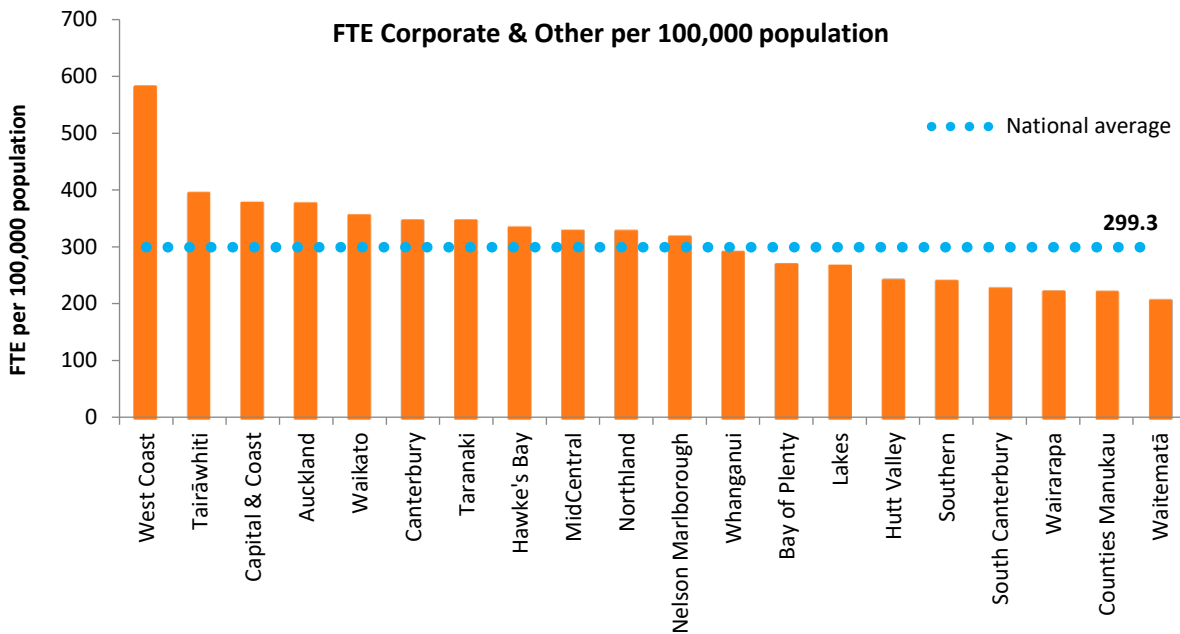


Figure 20: Population density of Allied & Scientific by DHB

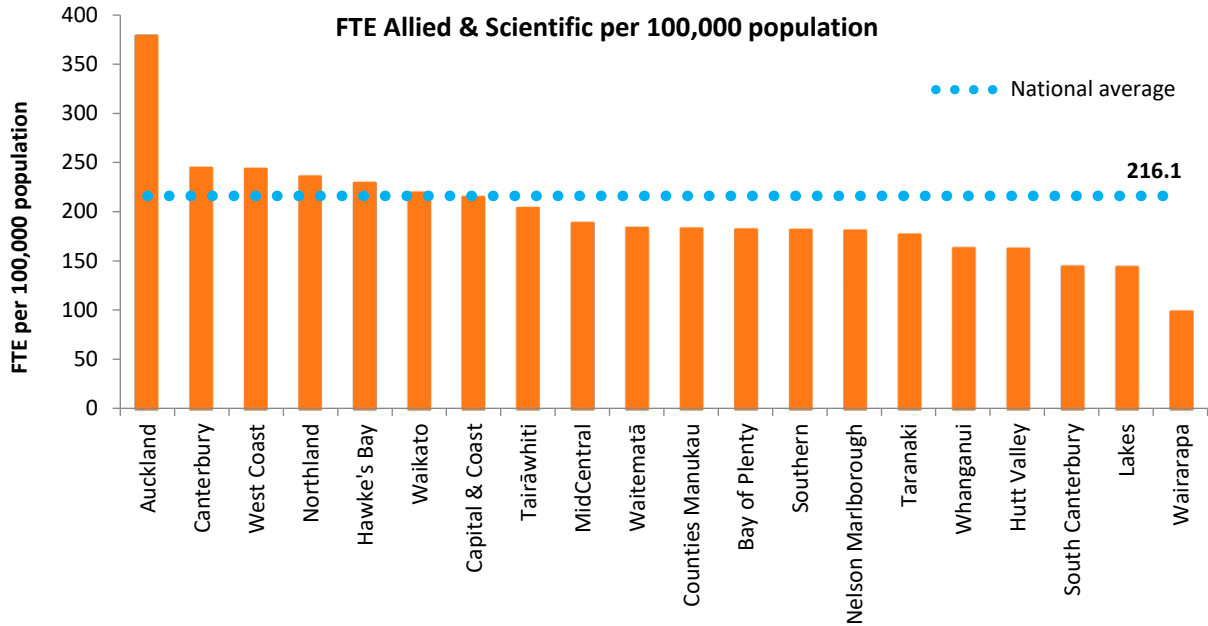


Figure 21: Population density of Care & Support by DHB

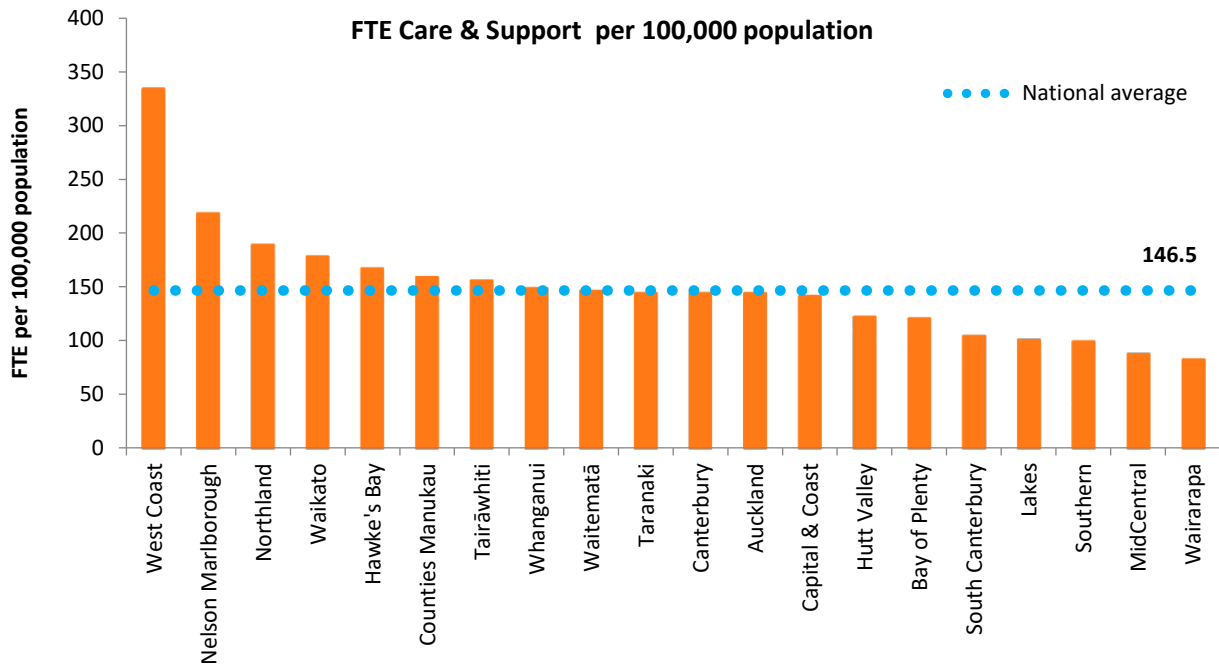


Figure 22: Population density of Senior Medical Officer (SMO) by DHB

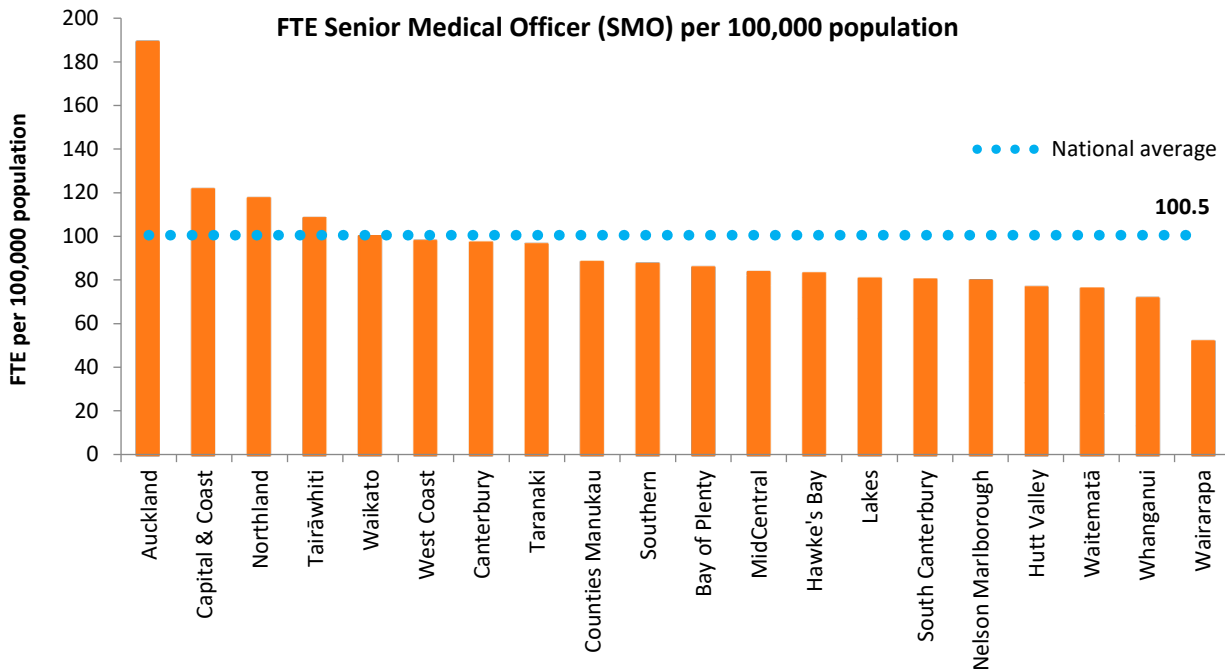


Figure 23: Population density of Resident Medical Officer (RMO) by DHB

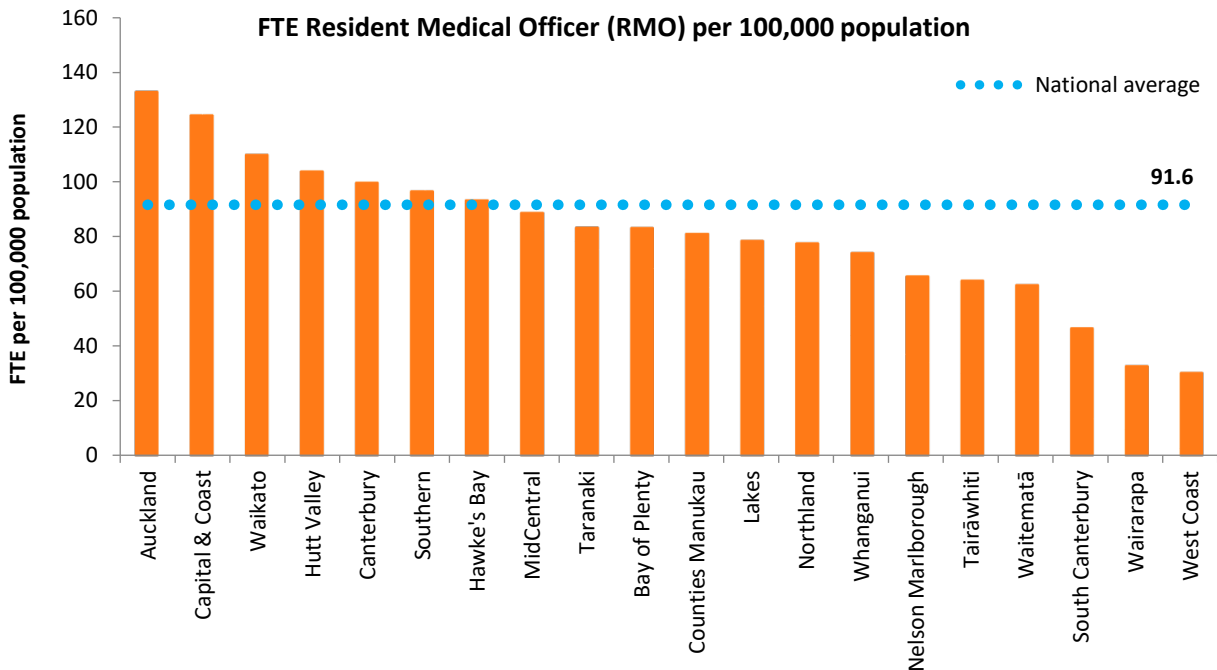


Figure 24: Population density of Midwives by DHB

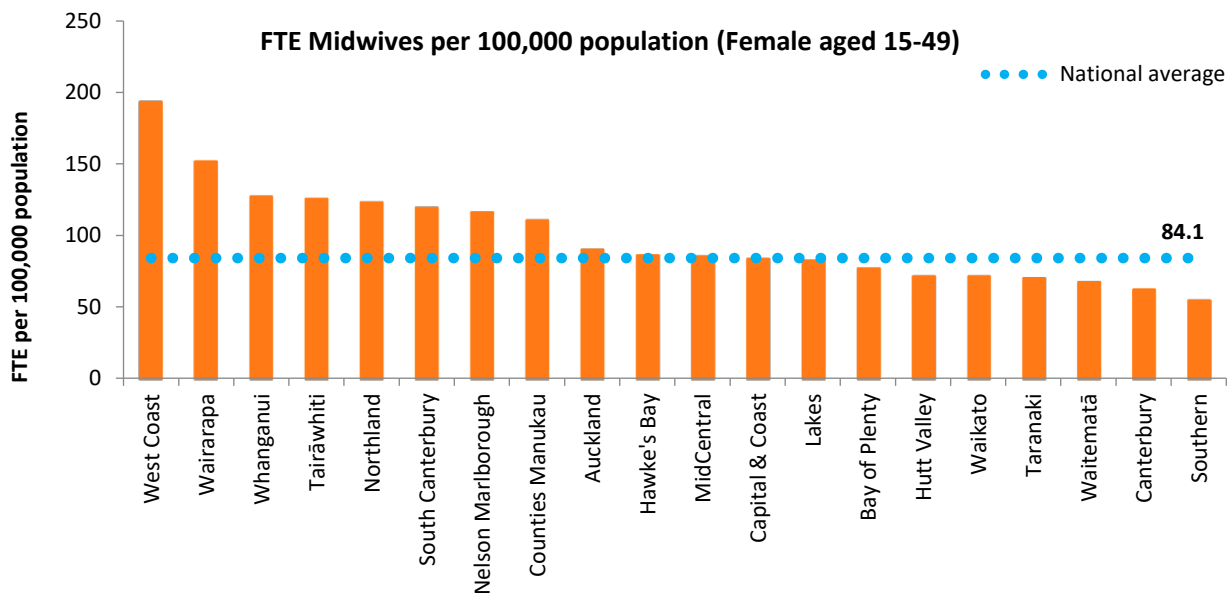
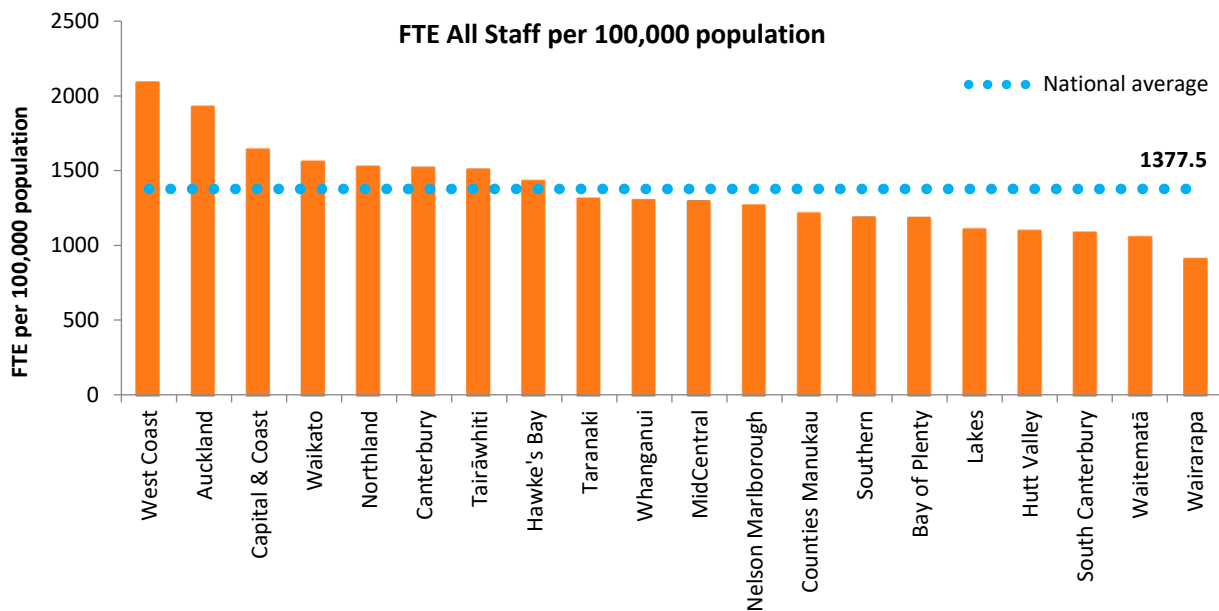


Figure 25: Population density of all DHB staff by DHB



UNCLASSIFIED