



Prepared by:

Kahui tuitui tangata

**DISTRICT HEALTH BOARD
EMPLOYED WORKFORCE
QUARTERLY REPORT**

1 JULY TO 30 SEPTEMBER 2019

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 July 2019 to 30 September 2019 and is a snapshot in time at 30 September 2019. 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 July 2019 to September 2019 inclusive and is a snapshot taken by the DHBs on 30 September 2019.
- 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.

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OVERVIEW

DHB WORKFORCE AT A GLANCE

For data to 30 September 2019, 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.

<p>Total employees 75,956 59,621 female 16,335 male</p>	<p>64,025 FTE 49,062 FTE* females 14,963 FTE* males</p>	<p>Largest occupation group: Nurses – 29,089 Smallest occupation group: Midwives – 1,529</p>
<p>DHB employee average age 45.2 years 45.3 years for females 44.9 years for males</p>	<p>Oldest male occupation group: SMO (mean age 51.4 years) Youngest male occupation group: RMO (mean age 31.2 years)</p>	<p>Oldest female occupation groups: Corporate and other (mean age 50.1 years) Youngest female occupation group: RMO (mean age 30.8 years)</p>
<p>Mean FTE rate 0.84 Mean FTE rate for females 0.82 Mean FTE rate for males 0.92</p>	<p>Longest Length of Service occupation group SMO (mean 10.2 years) Shortest Length of Service occupation group RMO (mean 1.4 years)</p>	<p>Employee reported ethnicities:</p> <p>Other** – 66.9% Asian – 20.7% Māori – 8.1% Pacific – 4.4%</p>

- * 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 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). 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 employees

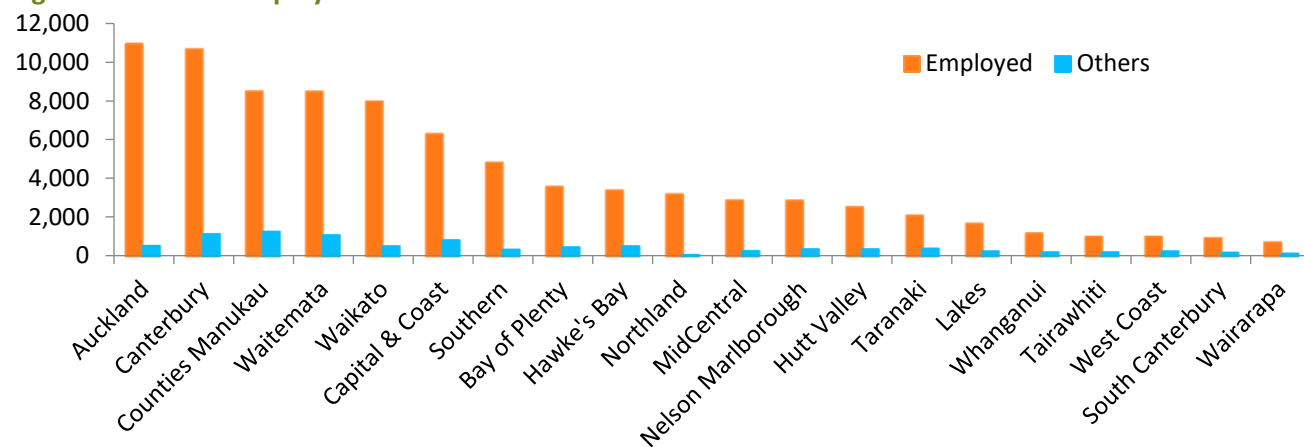


Table 1: Distribution of employment types

DHB	Employed	Others	Total	Proportion of DHB workforce
Auckland	10,415	507	10,922	12.9%
Canterbury	9,571	1,092	10,663	12.6%
Counties Manukau	7,292	1,201	8,493	10.0%
Waitematā	7,440	1,037	8,477	10.0%
Waikato	7,488	495	7,983	9.4%
Capital & Coast	5,516	795	6,311	7.4%
Southern	4,502	324	4,826	5.7%
Bay of Plenty	3,140	447	3,587	4.2%
Hawke's Bay	2,917	497	3,414	4.0%
Northland	3,134	72	3,206	3.8%
MidCentral	2,635	266	2,901	3.4%
Nelson Marlborough	2,536	340	2,876	3.4%
Hutt Valley	2,200	344	2,544	3.0%
Taranaki	1,729	389	2,118	2.5%
Lakes	1,443	254	1,697	2.0%
Whanganui	1,000	196	1,196	1.4%
Tairāwhiti	827	197	1,024	1.2%
West Coast	781	242	1,023	1.2%
South Canterbury	780	181	961	1.1%
Wairarapa	610	130	740	0.9%
Grand Total	75,956	9,006	84,962	100.0%

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.

HEADCOUNT AND FTE BY DHB AND OCCUPATION GROUP

The following table shows the headcount 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: Headcount and FTE by DHB and occupation group

DHB	Nursing			Corporate and other			Allied & scientific			Care and support			SMO			RMO			Midwifery		
	Head count	FTE	Mean FTE	Head count	FTE	Mean FTE	Head count	FTE	Mean FTE	Head count	FTE	Mean FTE	Head count	FTE	Mean FTE	Head count	FTE	Mean FTE	Head count	FTE	Mean FTE
Auckland	3,826	3,262.5	0.85	1,957	1,746.9	0.89	2,023	1,776.9	0.88	725	673.1	0.93	1,095	889.0	0.81	613	606.0	0.99	176	132.5	0.75
Bay of Plenty	1,252	956.4	0.76	646	566.8	0.88	460	387.5	0.84	314	260.3	0.83	230	188.2	0.82	184	182.1	0.99	54	37.3	0.69
Canterbury	3,618	3,001.0	0.83	2,015	1,771.7	0.88	1,646	1,350.6	0.82	1,011	797.0	0.79	617	518.5	0.84	539	527.8	0.98	125	82.8	0.66
Capital & Coast	2,301	1,844.7	0.80	1,115	1,022.9	0.92	735	628.5	0.86	428	375.9	0.88	426	338.3	0.79	392	383.6	0.98	119	83.8	0.70
Counties Manukau	2,771	2,350.2	0.85	1,342	1,142.6	0.85	1,169	1,015.8	0.87	800	700.6	0.88	559	468.3	0.84	430	420.5	0.98	221	165.4	0.75
Hawke's Bay	1,139	814.3	0.71	608	519.4	0.85	459	375.5	0.82	330	258.9	0.78	154	133.2	0.86	156	154.6	0.99	71	41.4	0.58
Hutt Valley	751	610.2	0.81	487	442.3	0.91	354	294.7	0.83	252	218.4	0.87	156	121.4	0.78	157	152.3	0.97	43	29.5	0.69
Lakes	567	444.7	0.78	329	292.4	0.89	190	159.5	0.84	129	105.9	0.82	97	87.3	0.90	91	91.0	1.00	40	29.7	0.74
MidCentral	1,061	873.3	0.82	643	588.0	0.91	361	320.3	0.89	186	155.1	0.83	166	147.7	0.89	162	160.8	0.99	56	38.6	0.69
Nelson Marlborough	839	614.1	0.73	567	466.1	0.82	352	262.4	0.75	479	332.5	0.69	158	124.2	0.79	97	96.0	0.99	44	28.6	0.65
Northland	1,234	936.6	0.76	594	518.0	0.87	469	397.3	0.85	437	322.7	0.74	204	194.1	0.95	128	125.9	0.98	68	42.4	0.62
South Canterbury	321	246.1	0.77	166	129.8	0.78	101	78.3	0.78	82	56.0	0.68	62	46.3	0.75	24	23.9	1.00	24	18.4	0.77
Southern	1,878	1,494.5	0.80	864	767.3	0.89	676	573.5	0.85	372	295.3	0.79	324	255.7	0.79	305	298.2	0.98	83	56.1	0.68
Tairāwhiti	325	257.0	0.79	198	178.7	0.90	113	93.6	0.83	89	74.2	0.83	60	53.3	0.89	22	21.7	0.99	20	16.1	0.81
Taranaki	653	502.7	0.77	391	347.7	0.89	239	194.9	0.82	194	161.5	0.83	134	113.0	0.84	88	86.7	0.99	30	22.5	0.75
Waikato	2,874	2,421.6	0.84	1,623	1,452.2	0.89	1,087	953.8	0.88	888	761.4	0.86	450	399.7	0.89	438	431.7	0.99	128	92.9	0.73
Wairarapa	274	192.5	0.70	129	105.0	0.81	68	48.8	0.72	71	47.5	0.67	34	29.5	0.87	15	14.4	0.96	19	11.8	0.62
Waitematā	2,648	2,236.5	0.84	1,326	1,151.7	0.87	1,371	1,125.7	0.82	1,047	928.2	0.89	526	445.5	0.85	350	339.7	0.97	172	109.4	0.64
West Coast	327	275.6	0.84	165	141.0	0.85	86	76.6	0.89	147	104.3	0.71	33	26.3	0.80	10	9.6	0.96	13	9.1	0.70
Whanganui	430	350.7	0.82	203	179.8	0.89	141	117.3	0.83	115	93.8	0.82	49	44.5	0.91	39	38.8	0.99	23	18.4	0.80
Grand Total	29,089	23,685.1	0.81	15,368	13,530.1	0.88	12,100	10,231.4	0.85	8,096	6,722.6	0.83	5,534	4,623.8	0.84	4,240	4,165.4	0.98	1,529	1,066.9	0.70

TABLES AND CHARTS BY OCCUPATION GROUPING

HEADCOUNT AND FTE BY OCCUPATION GROUPING AND GENDER

The bars represent the headcount (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.

Figure 2: Occupation group headcount and mean FTE by gender

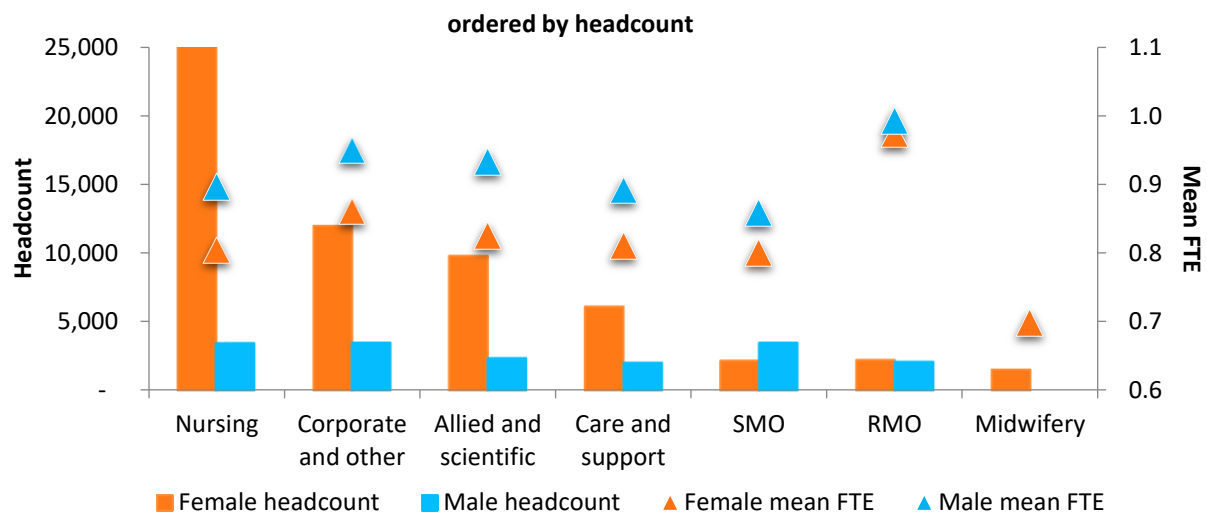


Table 3: Occupation group headcount and mean FTE by gender

Occupation group	Female		Male		Total	
	Headcount	Mean FTE	Headcount	Mean FTE	Headcount	Mean FTE
Nursing	25,759	0.80	3,330	0.90	29,089	0.81
Corporate and other	12,006	0.86	3,362	0.95	15,368	0.88
Allied and scientific	9,819	0.83	2,281	0.93	12,100	0.85
Care and support	6,131	0.81	1,965	0.89	8,096	0.83
SMO	2,171	0.80	3,363	0.86	5,534	0.84
RMO	>2,200	0.97	>2,025	0.99	4,240	0.98
Midwifery	>1,524	0.70	**	**	1,529	0.70
Grand Total	59,621	0.82	16,335	0.92	75,956	0.84

** Data suppressed (headcounts less than 5)

HEADCOUNT 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 actual count of employees for whom an ethnicity was reported.

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

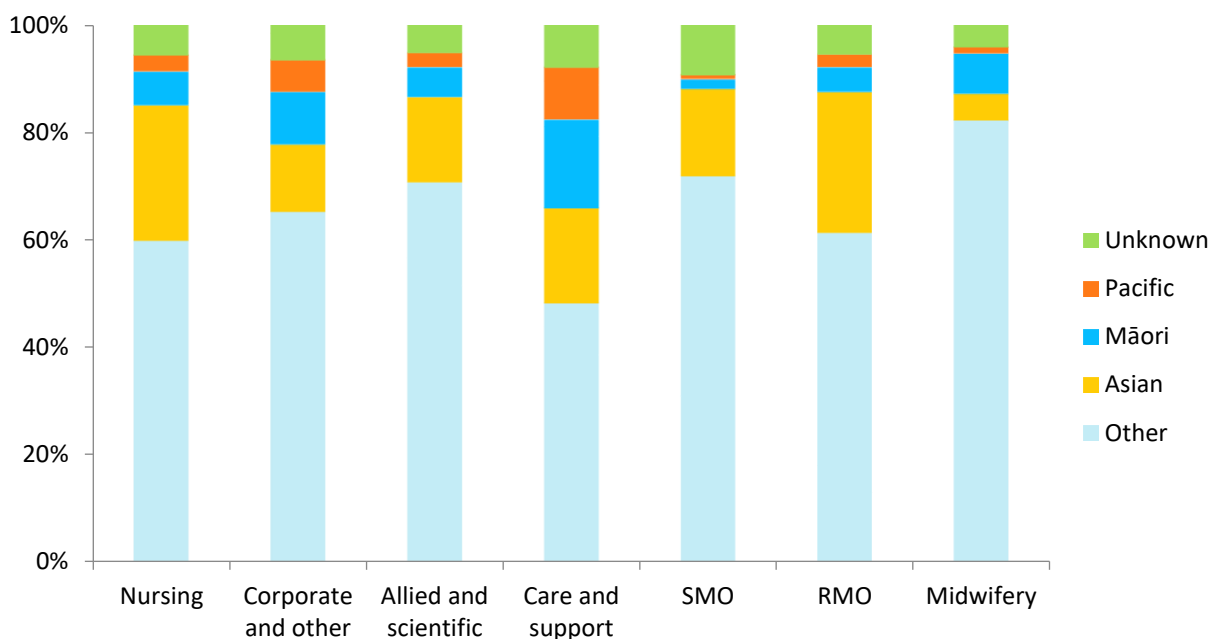


Table 4: Count and proportion of ethnicities by occupation group

Occupation group	Other*		Asian		Māori		Pacific		Unknown		Total
Nursing	17,402	59.8%	7,361	25.3%	1,824	6.3%	903	3.1%	1,599	5.5%	29,089
Corporate and other	10,023	65.2%	1,936	12.6%	1,506	9.8%	919	6.0%	984	6.4%	15,368
Allied and scientific	8,555	70.7%	1,922	15.9%	676	5.6%	329	2.7%	618	5.1%	12,100
Care and support	3,900	48.2%	1,443	17.8%	1,333	16.5%	789	9.7%	631	7.8%	8,096
SMO	3,976	71.8%	903	16.3%	98	1.8%	52	0.9%	505	9.1%	5,534
RMO	2,601	61.3%	1,113	26.3%	194	4.6%	103	2.4%	229	5.4%	4,240
Midwifery	1,258	82.3%	76	5.0%	114	7.5%	19	1.2%	62	4.1%	1,529
Grand Total	47,715	62.8%	14,754	19.4%	5,745	7.6%	3,114	4.1%	4,628	6.1%	75,956

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

This pie chart is based on the 71,328 permanent 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 30 September 2019.

Figure 4: Proportion of identifiable ethnicities for all DHB employees

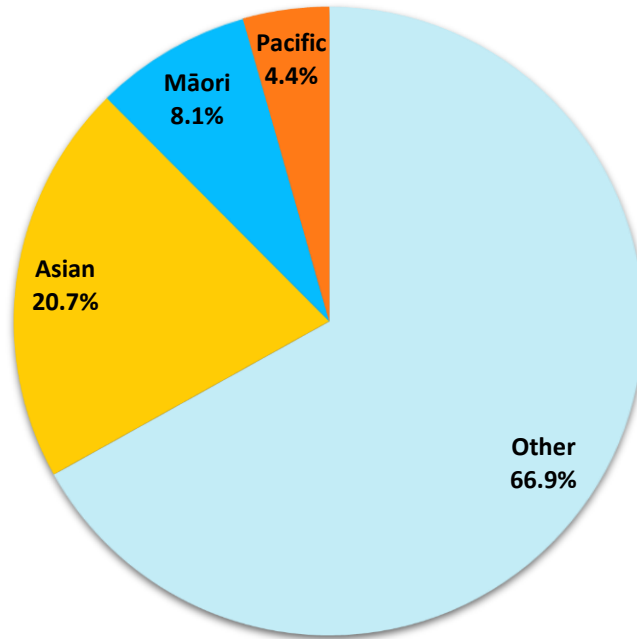
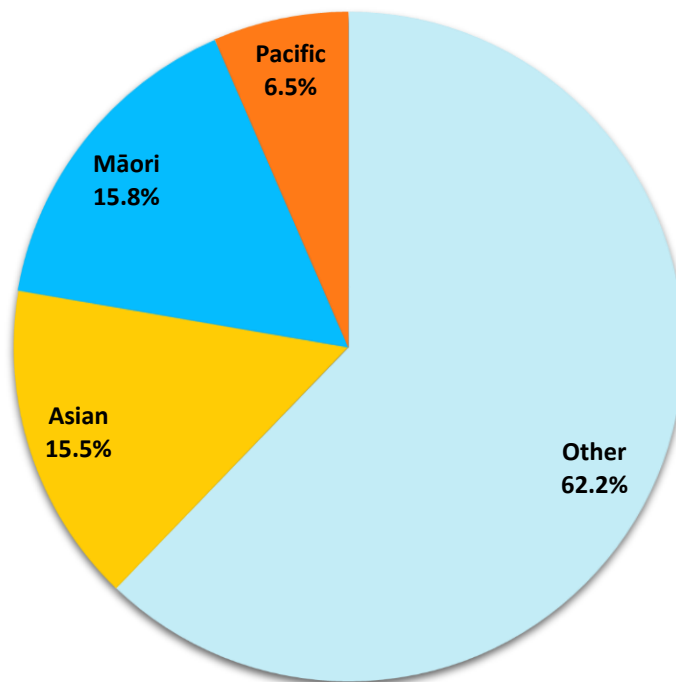


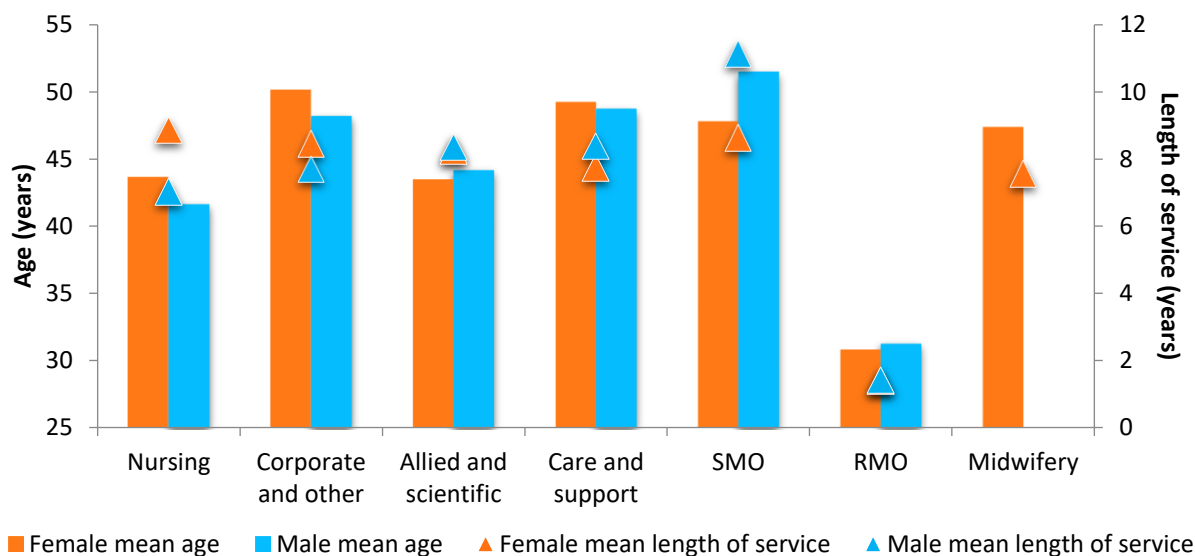
Figure 5: Proportion of identifiable ethnicities for projected population data at 30 September 2019



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	8.9	43.7	7.0	41.6	8.6	43.4
Corporate and other	8.5	50.1	7.7	48.2	8.3	49.7
Allied and scientific	8.3	43.5	8.3	44.1	8.3	43.6
Care and support	7.7	49.2	8.4	48.7	7.9	49.1
SMO	8.6	47.8	11.1	51.4	10.2	50.0
RMO	1.4	30.8	1.4	31.2	1.4	31.0
Midwifery	7.6	47.4	12.7	49.6	7.6	47.4
Grand Total	8.2	45.3	7.7	44.9	8.1	45.2

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.

COUNT OF EMPLOYEES AND MEAN FTE BY GENDER AND DHB

This chart examines the number (headcount) of employees by gender and DHB (left hand axis). The DHBs have been ordered in descending size of employee headcount. The right hand axis refers to the mean FTE for all employees (by DHB and gender). The following table shows the count of employees and mean FTE by gender for each DHB.

Figure 7: Headcount and mean FTE by gender and DHB

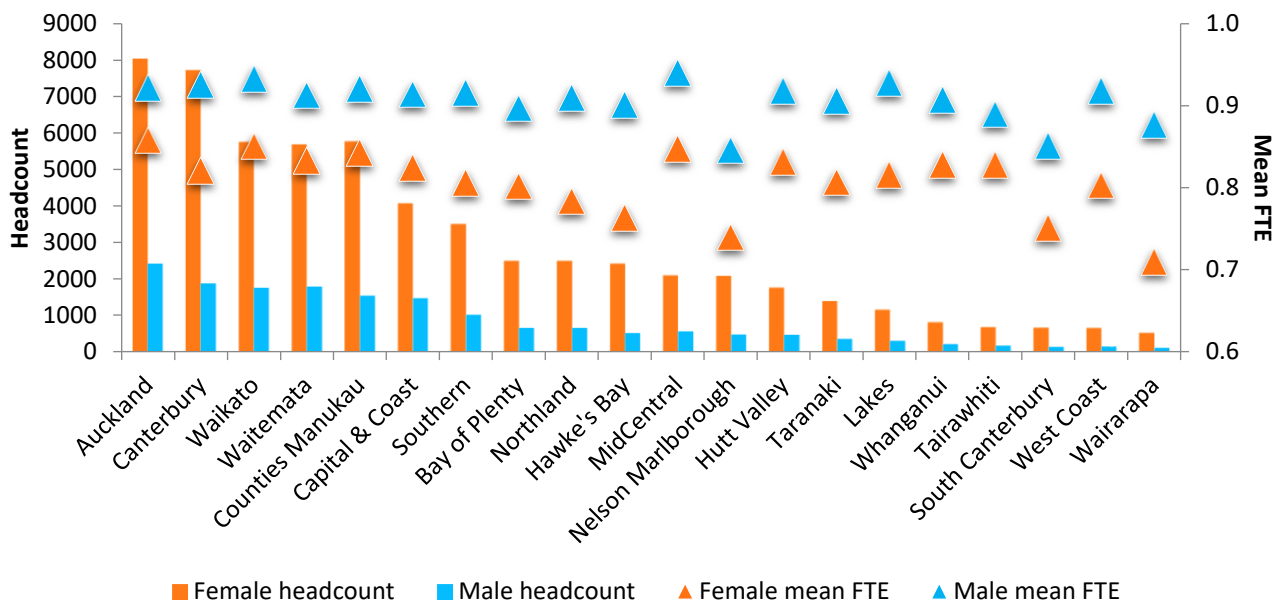


Table 6: Headcount and mean FTE by gender and DHB

		Auckland	Canterbury	Waikato	Waitematā	Counties Manukau	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	Headcount	8,025	7,719	5,750	5,674	5,768	4,065	3,498	2,493	2,488	2,409	2,089	2,076	1,750	1,386	1,146	806	670	650	648	511	
	Mean FTE	0.86	0.82	0.85	0.83	0.84	0.82	0.81	0.80	0.78	0.76	0.85	0.74	0.83	0.81	0.82	0.83	0.83	0.83	0.75	0.80	0.71
Male	Headcount	2,390	1,852	1,738	1,766	1,524	1,451	1,004	647	646	508	546	460	450	343	297	194	157	130	133	99	
	Mean FTE	0.92	0.93	0.93	0.91	0.92	0.91	0.92	0.90	0.91	0.90	0.94	0.85	0.92	0.91	0.93	0.91	0.89	0.85	0.92	0.88	
Total	Headcount	10,415	9,571	7,488	7,440	7,292	5,516	4,502	3,140	3,134	2,917	2,635	2,536	2,200	1,729	1,443	1,000	827	780	781	610	
	Mean FTE	0.87	0.84	0.87	0.85	0.86	0.85	0.83	0.82	0.81	0.79	0.87	0.76	0.85	0.83	0.84	0.84	0.84	0.84	0.77	0.82	0.74

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.

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

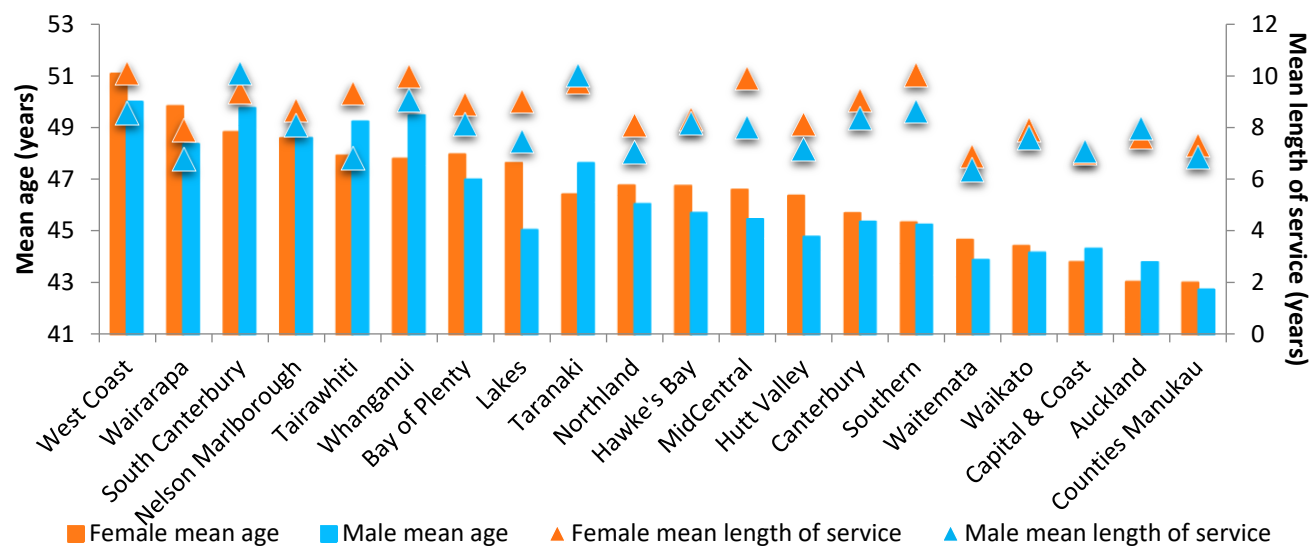


Table 7: Mean ages and mean length of service by DHB and gender

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	10.1	51.1	8.5	50.0	9.8	50.9
Wairarapa	7.9	49.8	6.8	48.3	7.7	49.6
South Canterbury	9.4	48.8	10.1	49.7	9.5	49.0
Nelson Marlborough	8.7	48.6	8.1	48.6	8.6	48.6
Tairāwhiti	9.3	47.9	6.8	49.2	8.8	48.2
Whanganui	10.0	47.8	9.1	49.4	9.8	48.1
Bay of Plenty	8.9	48.0	8.1	47.0	8.7	47.8
Lakes	9.0	47.6	7.5	45.0	8.7	47.1
Taranaki	9.8	46.4	10.0	47.6	9.8	46.6
Northland	8.1	46.8	7.0	46.0	7.9	46.6
Hawke's Bay	8.3	46.7	8.2	45.7	8.3	46.6
MidCentral	9.9	46.6	8.0	45.5	9.5	46.4
Hutt Valley	8.1	46.4	7.2	44.8	7.9	46.0
Canterbury	9.0	45.7	8.4	45.4	8.9	45.6
Southern	10.0	45.3	8.6	45.2	9.7	45.3
Waitematā	6.9	44.7	6.4	43.9	6.8	44.5
Waikato	7.9	44.4	7.6	44.2	7.8	44.4
Capital & Coast	7.0	43.8	7.1	44.3	7.0	43.9
Auckland	7.6	43.0	8.0	43.8	7.7	43.2
Counties Manukau	7.3	43.0	6.8	42.7	7.2	43.0
Grand Total	8.2	45.3	7.7	44.9	8.1	45.2

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

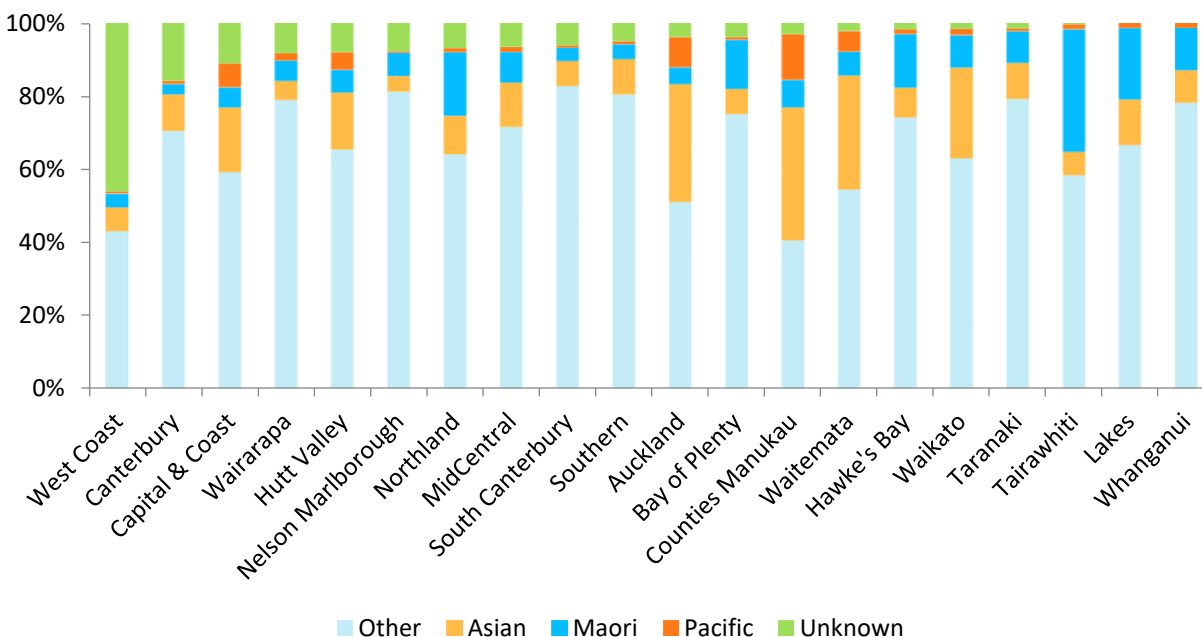


Table 8: Distribution of reported ethnicities by DHB

DHB	Other*	Asian	Māori	Pacific	Unknown	Total
West Coast	338	51	>25	**	359	781
Canterbury	6,755	956	269	84	1,507	9,571
Capital & Coast	3,270	976	307	358	605	5,516
Wairarapa	482	32	34	12	50	610
Hutt Valley	1,441	344	135	107	173	2,200
Nelson Marlborough	2,061	110	160	12	193	2,536
Northland	2,011	334	540	34	215	3,134
MidCentral	1,887	323	220	33	172	2,635
South Canterbury	646	54	>25	>4	47	780
Southern	3,622	440	180	39	221	4,502
Auckland	5,325	3,357	475	863	395	10,415
Bay of Plenty	2,360	218	418	26	118	3,140
Counties Manukau	2,968	2,650	547	912	215	7,292
Waitematā	4,059	2,319	489	410	163	7,440
Hawke's Bay	2,167	238	426	38	48	2,917
Waikato	4,725	1,857	665	121	120	7,488
Taranaki	1,371	171	149	14	24	1,729
Tairāwhiti	483	54	276	11	3	827
Lakes	962	180	282	19	0	1,443
Whanganui	782	90	116	12	0	1,000
Grand Total	47,715	14,754	5,745	3,114	4,628	75,956

* '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)

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 similar 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.

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
West Coast	10.2	9.2	9.7	10.8	7.3	1.1	11.8	9.8
Whanganui	10.1	10.0	10.7	10.0	10.5	1.0	10.8	9.8
Taranaki	10.5	10.6	10.3	10.1	7.9	1.7	9.6	9.8
Southern	11.1	10.0	9.3	8.6	10.3	2.2	8.8	9.7
MidCentral	10.9	9.4	9.1	8.3	10.6	1.7	10.0	9.5
South Canterbury	10.4	8.9	9.1	11.0	9.0	1.2	6.8	9.5
Canterbury	9.7	8.1	9.5	8.9	11.1	2.3	9.7	8.9
Tairāwhiti	10.9	7.7	7.9	7.9	8.2	1.3	5.7	8.8
Bay of Plenty	10.0	9.2	8.1	7.5	9.7	1.5	7.9	8.7
Lakes	9.8	9.0	9.1	8.8	7.9	1.5	5.8	8.7
Nelson Marlborough	10.0	7.2	8.0	9.1	10.4	1.4	6.9	8.6
Hawke's Bay	8.7	8.6	8.9	7.7	10.7	1.7	7.3	8.3
Hutt Valley	9.1	8.0	7.6	8.4	9.4	0.7	7.1	7.9
Northland	8.4	9.2	8.6	5.5	8.6	1.4	7.2	7.9
Waikato	8.4	8.3	8.1	6.8	10.1	2.0	6.2	7.8
Wairarapa	8.7	6.5	8.7	6.9	9.0	0.5	5.3	7.7
Auckland	7.5	7.9	8.1	8.8	10.7	0.8	6.9	7.7
Counties Manukau	7.2	8.3	6.9	7.4	10.4	0.7	7.5	7.2
Capital & Coast	7.1	7.2	7.0	8.6	10.1	1.2	7.3	7.0
Waitematā	6.6	7.1	7.4	6.2	9.9	0.8	6.9	6.8
Grand Total	8.6	8.3	8.3	7.9	10.2	1.4	7.6	8.1

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 South Canterbury shows that (if the September 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 96 hours or less of sick leave per FTE over the course of a year. The data for Waikato shows that 50% of staff would have taken 64 hours or less sick leave per FTE (if the September quarter were indicative of the year), and that 75% of staff would have taken 128.0 hours or less of sick leave per FTE.

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

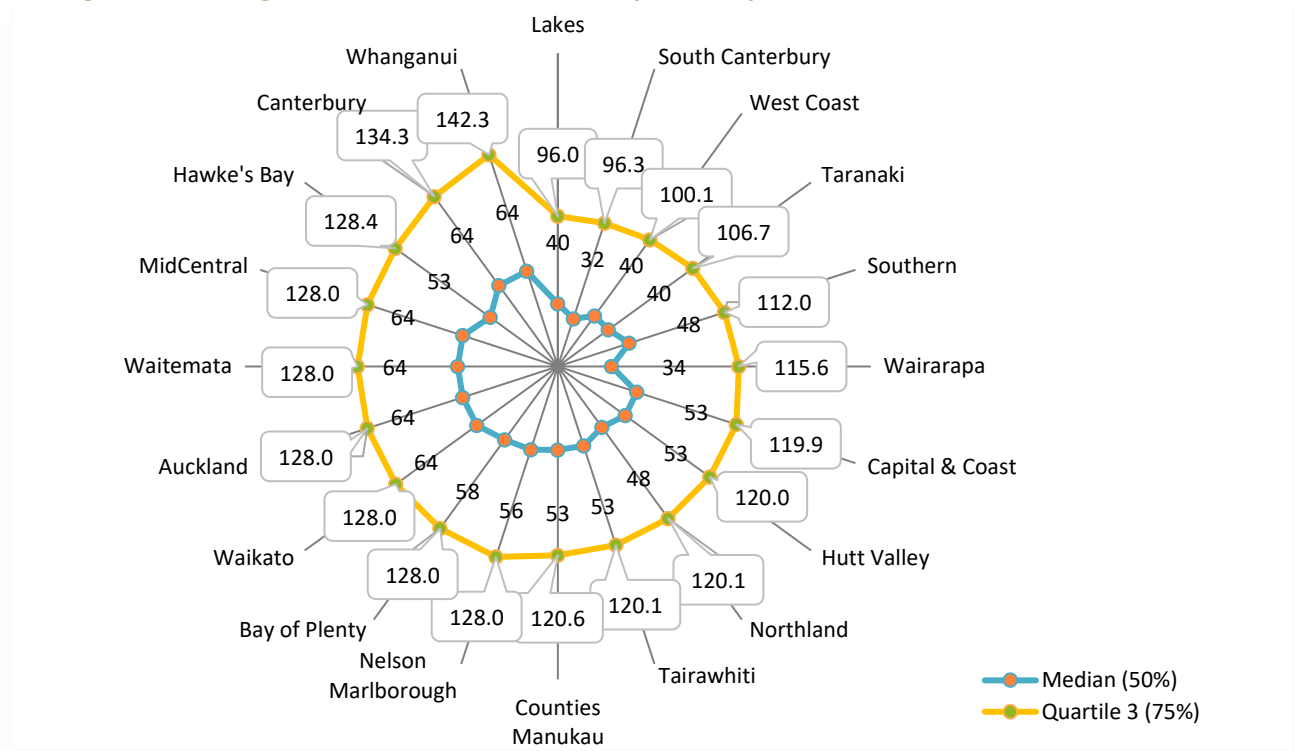


Figure 11: Average annual sick leave hours per FTE by occupational group

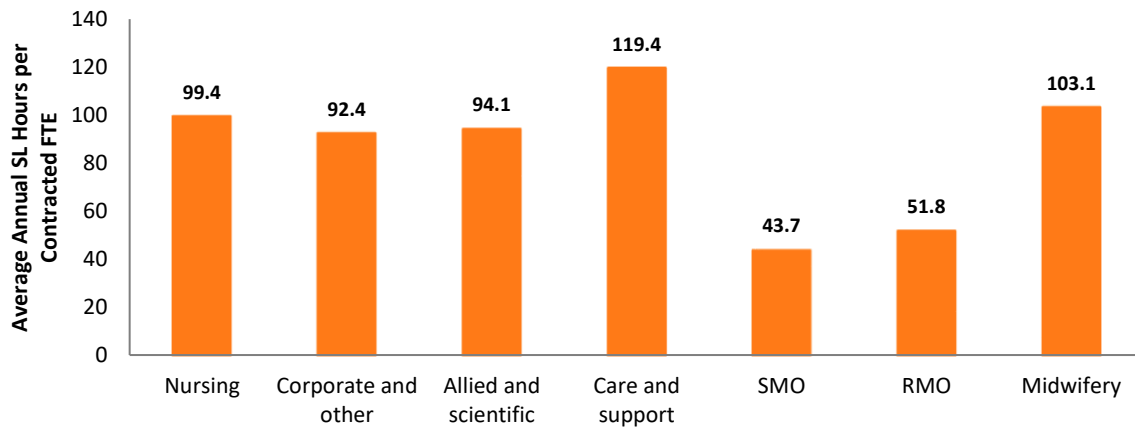


Figure 12: Average annual sick leave hours per FTE by age group by gender

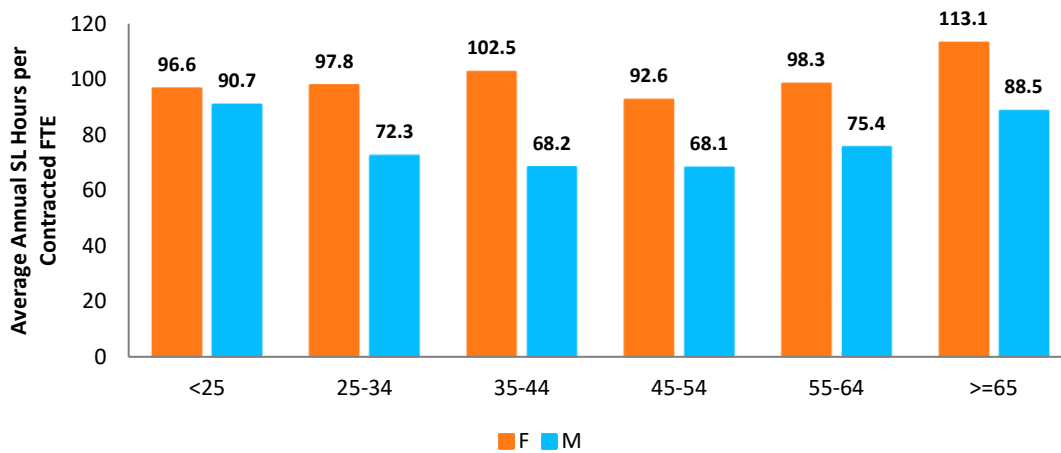
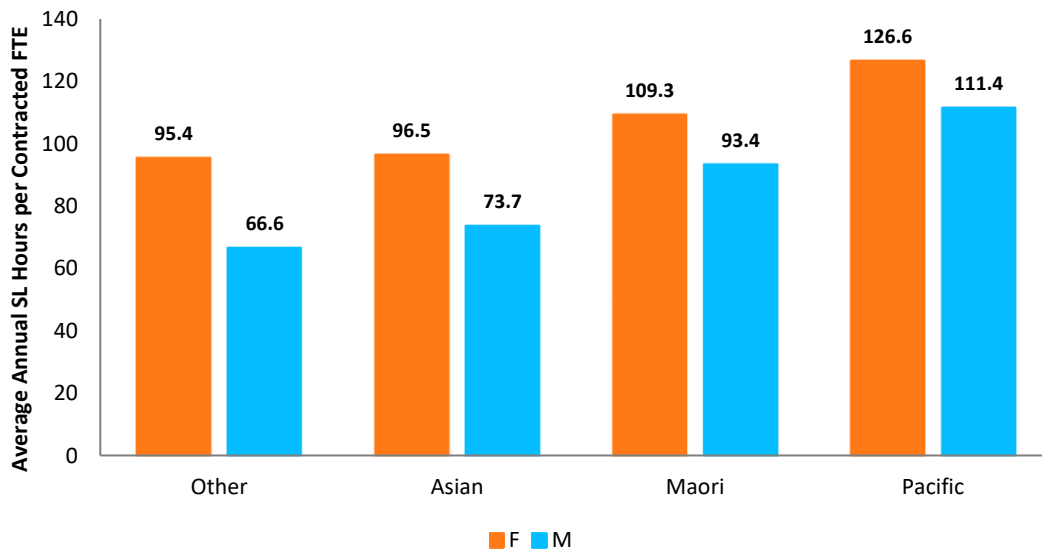


Figure 13: Average annual sick leave hours per FTE by ethnicity by gender



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 11 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

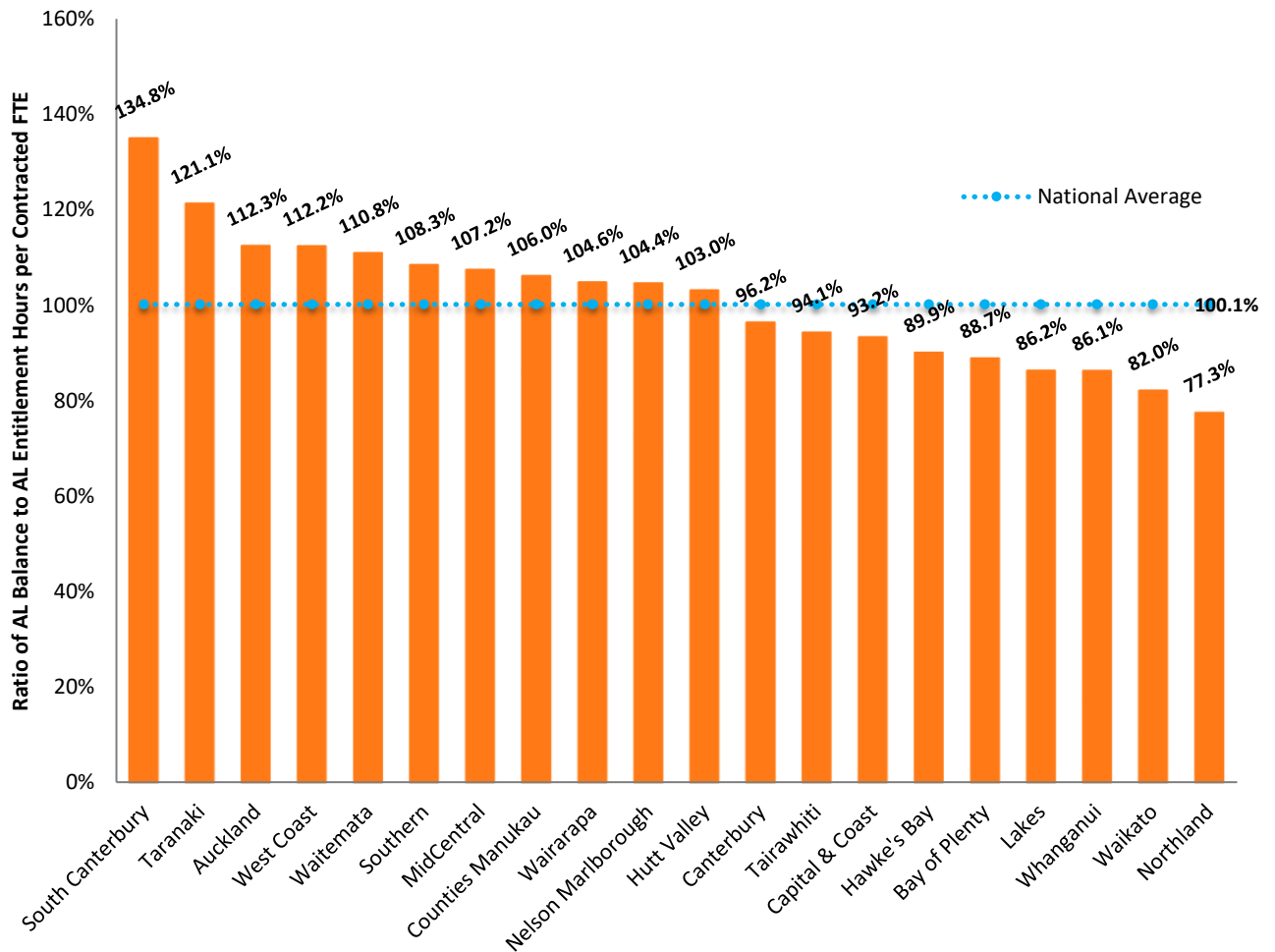


Figure 15: Ratio of annual leave balance to annual leave entitlement hours per FTE by occupational group

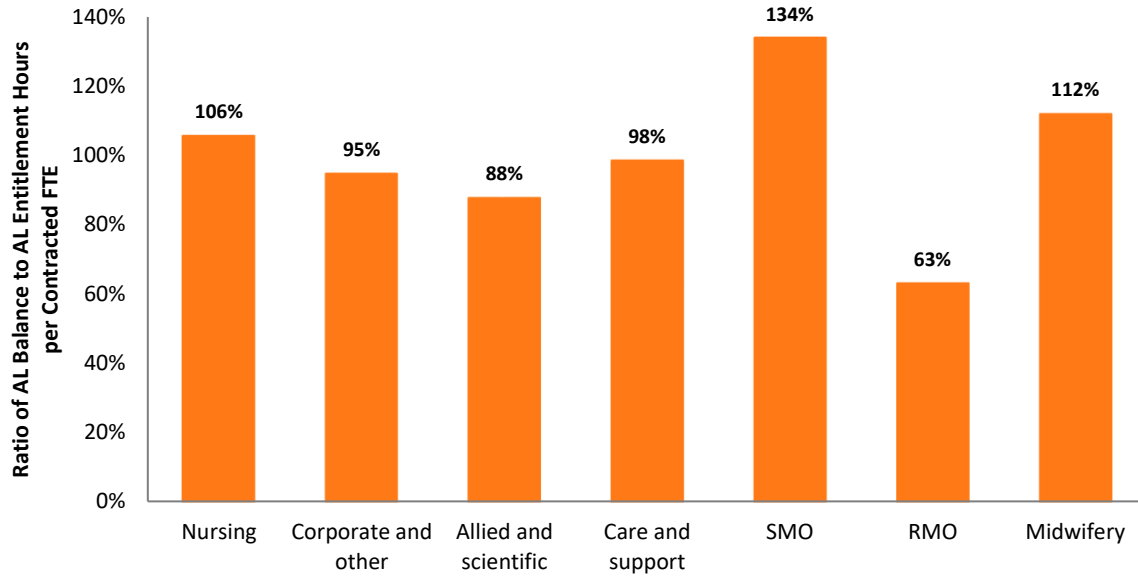
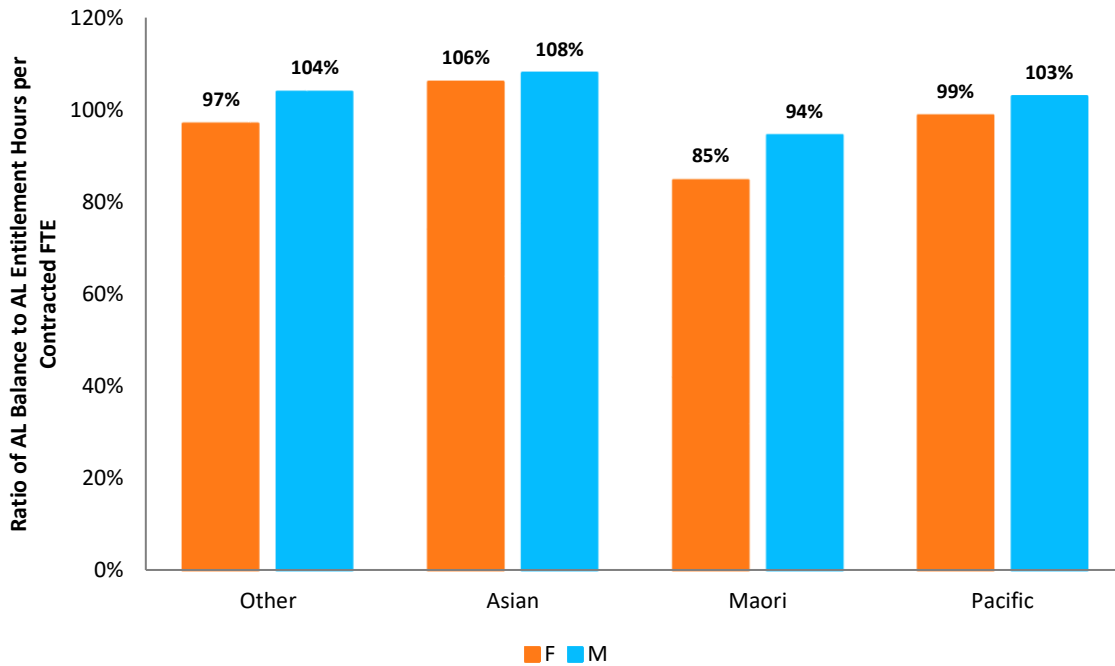


Figure 16: Ratio of annual leave balance to annual leave entitlement hours per FTE by ethnicity by gender

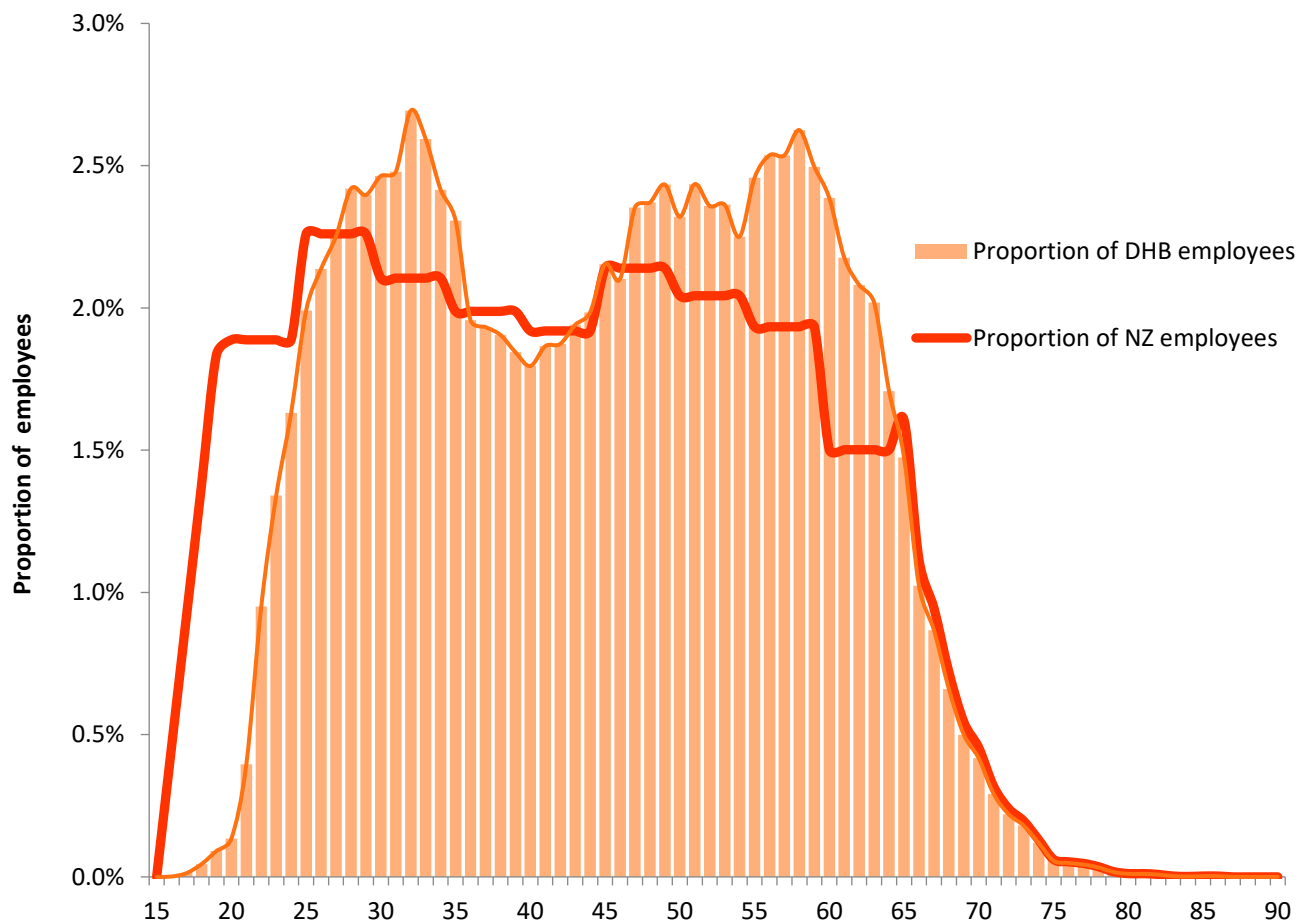


ANALYSIS BY POPULATION

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 staggered dark orange line is the distribution of all New Zealand employees for the September 2019 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

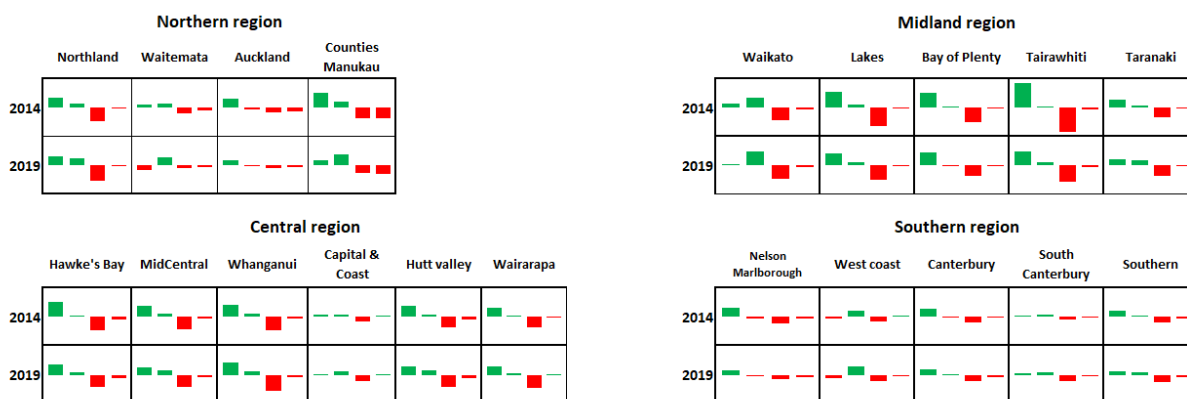
The following charts look at the ethnic representation of DHB staff to the resident population.

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 93.9 percent, compared to 86.5 percent in September 2014.

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 -25% to +25% - so comparisons between DHBs are possible. The data for 2014 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 less than five Pacific employees. 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 Capital & Coast and Taranaki. Overall, the distributions have changed only slightly between 2014 and 2019; the ‘Other’ ethnicities have reduced closer to zero (from nine down to five percentage points difference), whereas Māori have marginally less under-representation (from negative nine to negative eight percentage points difference).

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

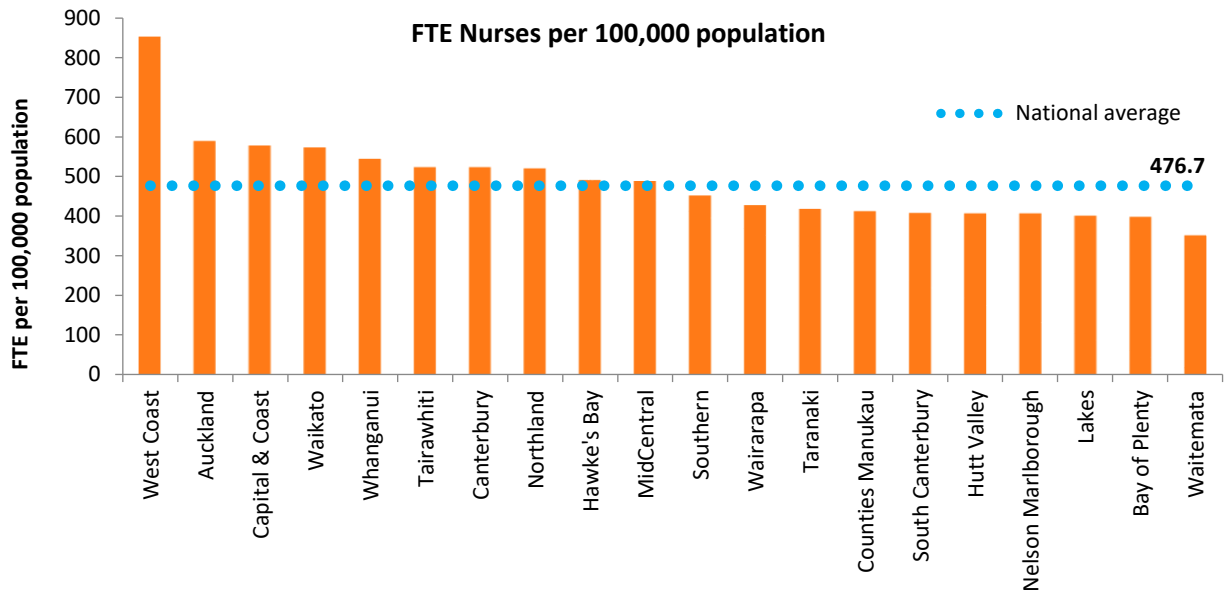


Figure 19: Population density of Corporate & Other by DHB

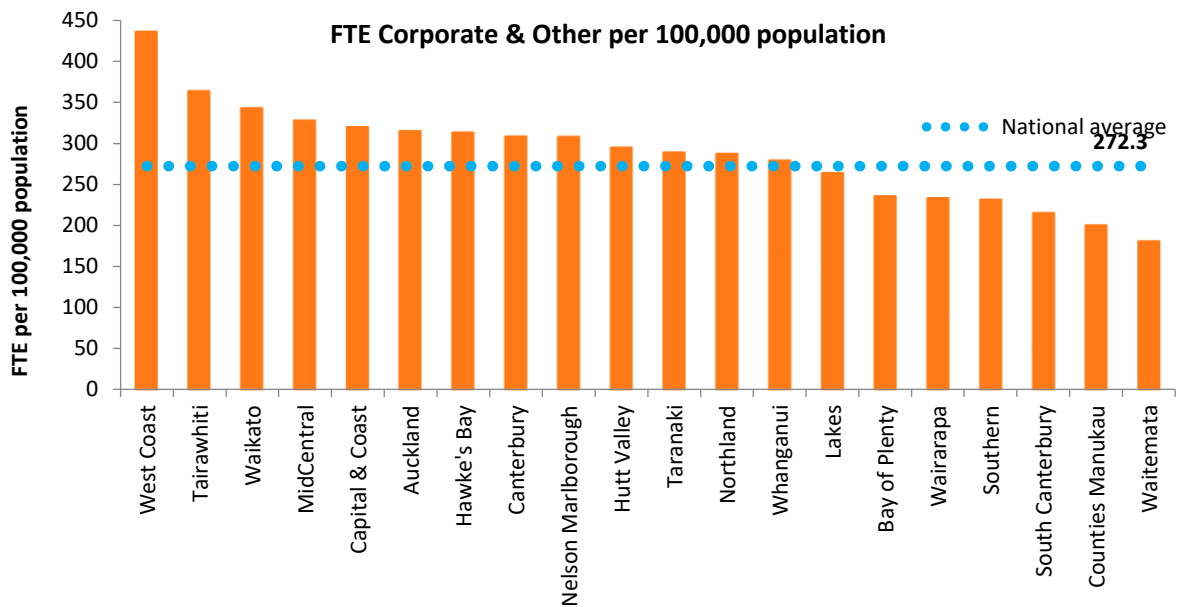


Figure 20: Population density of Allied & Scientific by DHB

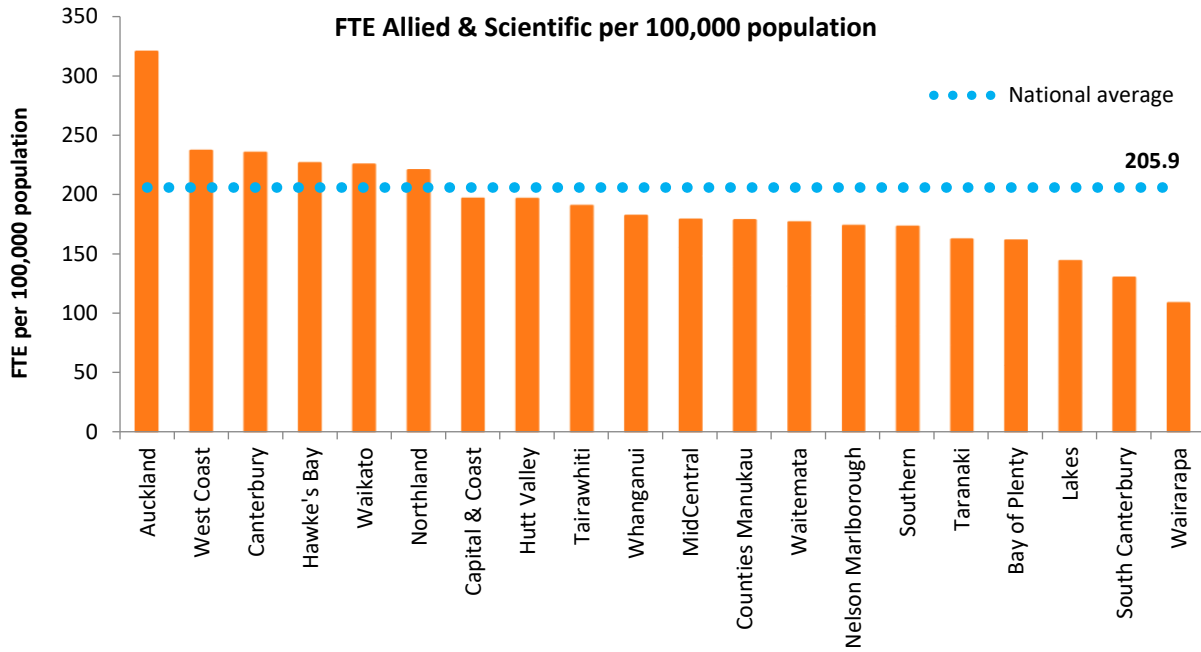


Figure 21: Population density of Care & Support by DHB

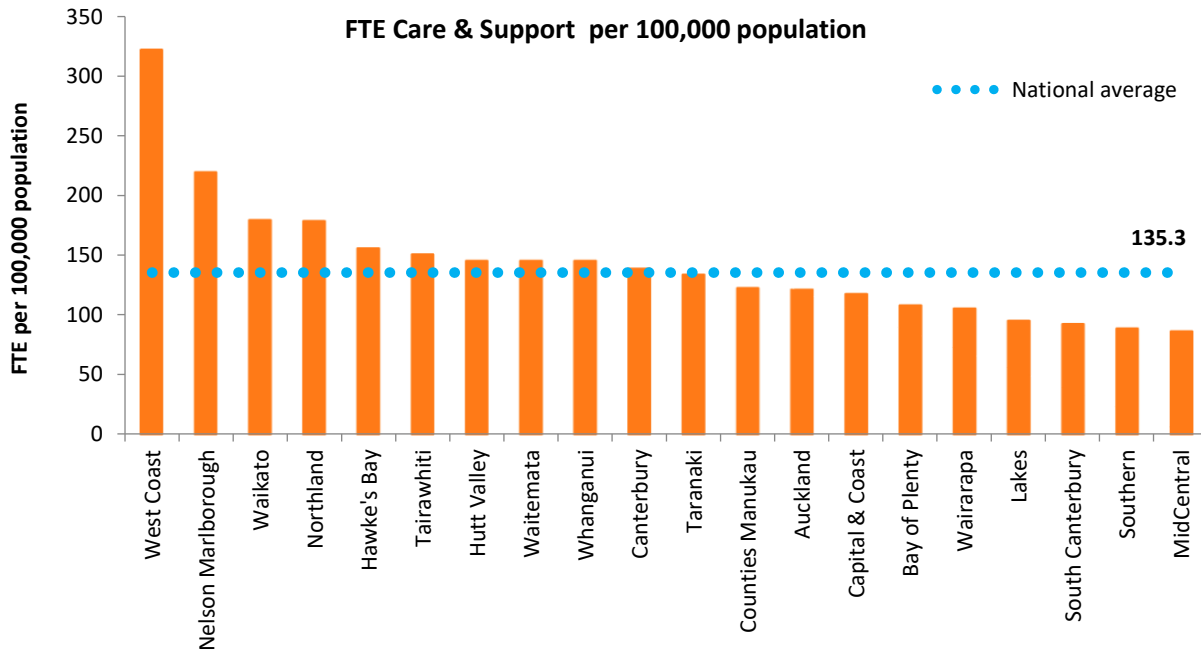


Figure 22: Population density of Senior Medical Officer (SMO) by DHB

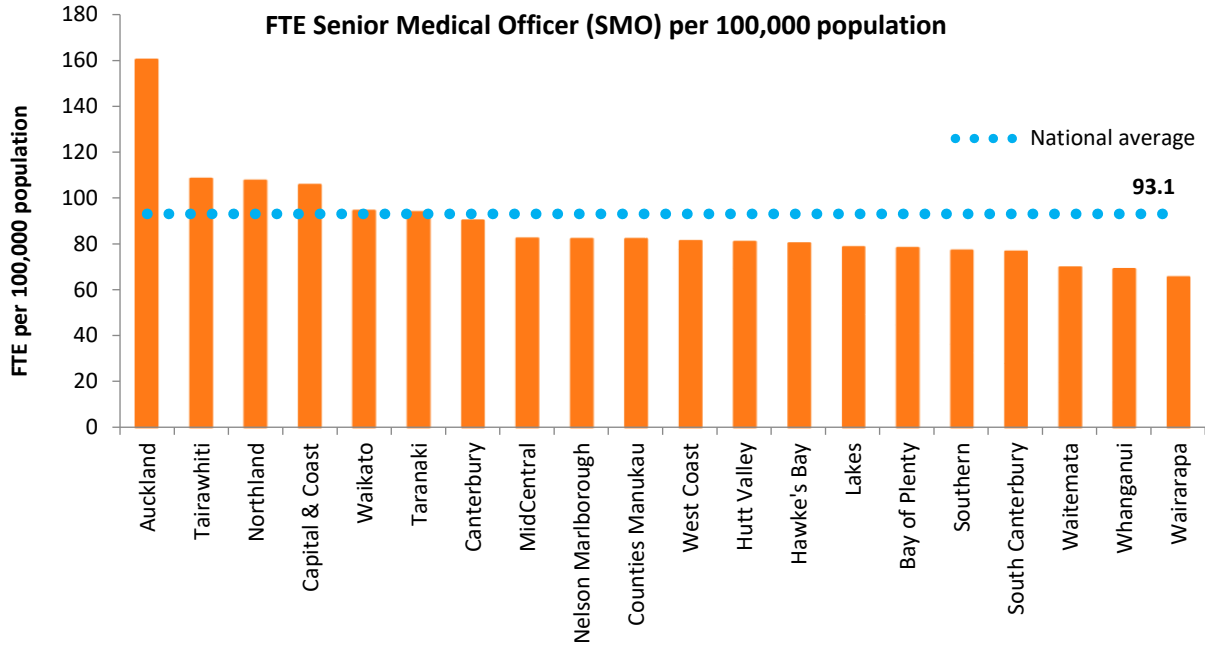


Figure 23: Population density of Resident Medical Officer (RMO) by DHB

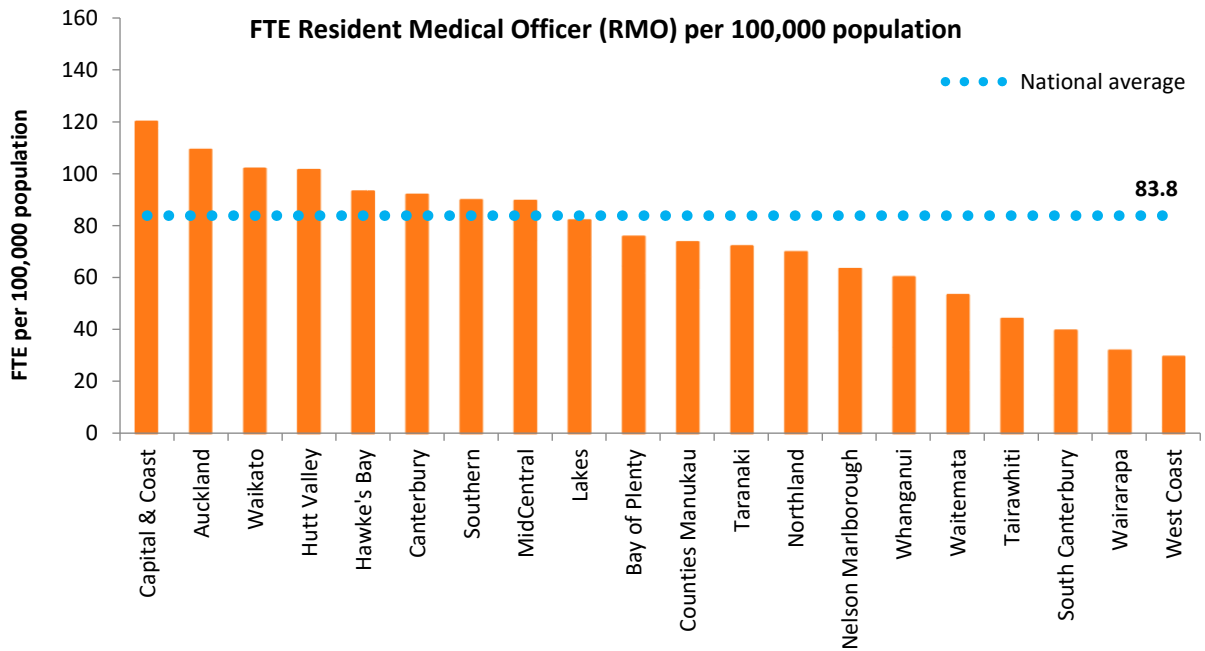


Figure 24: Population density of Midwives by DHB

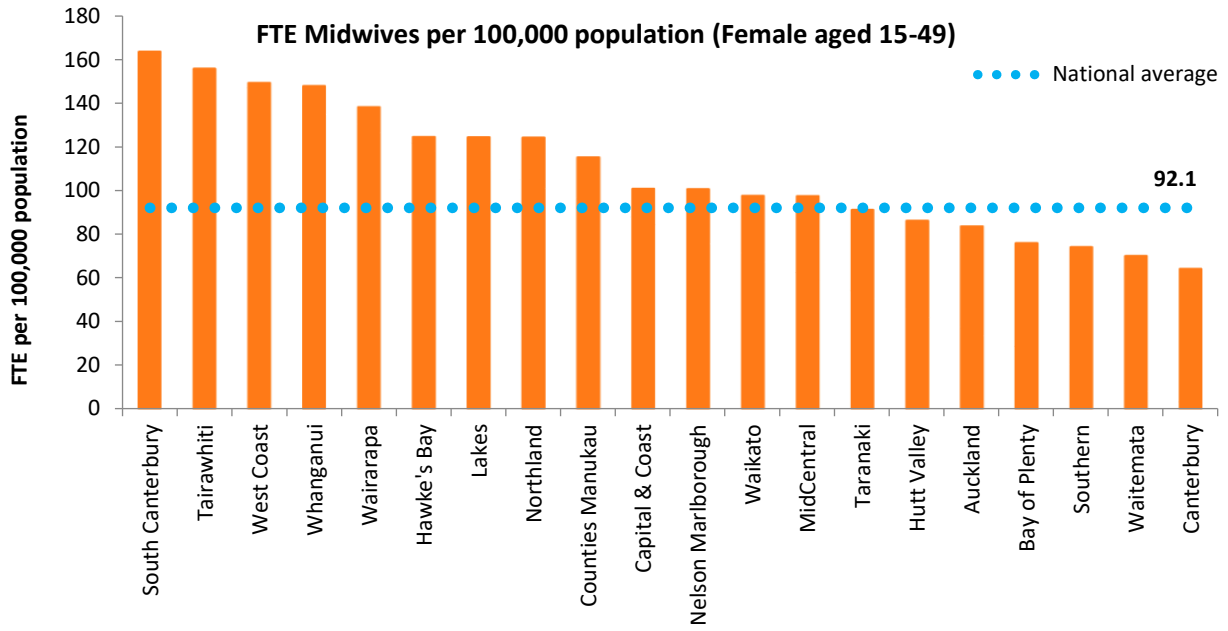


Figure 25: Population density of all DHB staff by DHB

