
DISTRICT HEALTH BOARD EMPLOYED WORKFORCE QUARTERLY REPORT

1 JULY TO 30 SEPTEMBER 2017

HEALTH WORKFORCE INFORMATION

The Workforce Information team, in Strategic Workforce Services at TAS (Technical Advisory Services), 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 2017 to 30 September 2017 and is a snapshot in time at 30 September 2017. 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
- Junior medical
- 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 2017 to September 2017 inclusive and is a snapshot taken by the DHBs on 30 September 2017.
- While every effort has been made to ensure the report is correct this extract relies upon the quality of the data supplied. Consideration must be made to the fact that the data is extracted from multiple systems within the DHBs. TAS gives no guarantee that the information supplied is free from error.
- The data quality continues to improve as the Workforce Information team works closely with the DHBs to help manage and improve the data submitted.

Contact: DHBWI@tas.health.nz

Data source: DHB Workforce Information, held by Strategic Workforce Services at 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 and FTE by DHB and Occupation group.....	7
Tables and charts by Occupation grouping	8
Headcount and FTE by Occupation grouping and sex.....	8
Headcount by occupation group and ethnicity.....	9
Ages and length of service	11
Tables and charts by DHB	12
Count of Employees and mean FTE by sex and DHB.....	12
Mean ages and mean length of service by DHB and sex.....	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 sex	16
Ratio of annual leave balance and annual leave entitlement by DHB, occupation group and ethnicity by sex	18
Analysis by population.....	20
Distribution of overall DHB occupation by age, with national employee data	20
Ethnic representation of workforce to resident population	21
Population density by workforce and DHB	22

TABLE OF FIGURES

Figure 1: Count of employees	5
Figure 2: Occupation group headcount and mean FTE by sex.....	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 30 September 2017.	10
Figure 6: Mean ages and length of service by occupation group and sex	11
Figure 7: Headcount and mean FTE by sex and DHB	12
Figure 8: Mean ages and mean length of service by DHB and sex.....	13
Figure 9: Proportion of reported ethnicities by DHB	14
Figure 10: Average annual sick leave hours per FTE by DHB	16
Figure 11: Average annual sick leave hours per FTE by occupational group	17
Figure 13: Average annual sick leave hours per FTE by ethnicity by sex	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 sex.....	19
Figure 17: Distribution of overall DHB occupation 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 by DHB	24
Figure 23: Population density of Junior Medical 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 headcount and mean FTE by sex	8
Table 4: Count and proportion of ethnicities by occupation group	9
Table 5: Mean ages and length of service by occupation group and sex	11
Table 6: Headcount and mean FTE by sex and DHB.....	12
Table 7: Mean ages and mean length of service by DHB and sex	13
Table 8: Distribution of reported ethnicities by DHB	14
Table 9: Mean length of service by occupation group and DHB.....	15

OVERVIEW

DHB WORKFORCE AT A GLANCE

For data to 30 September 2017, 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.

<p>Total employees 70,495*** 55,389 female 15,100 male</p>	<p>59,141 FTE*** 45,330 FTE* females 13,805 FTE* males</p>	<p>Largest occupation group: Nurses – 27,053 Smallest occupation group: Midwives – 1,397</p>
<p>DHB employee average age 45.7 years 45.7 years for females 45.4 years for males</p>	<p>Oldest male occupation group: Senior Medical (mean age 51.2 years) Youngest male occupation group: Junior medical (mean age 31.1 years)</p>	<p>Oldest female occupation groups: Corporate and other (mean age 50.4 years) Youngest female occupation group: Junior medical (mean age 30.9 years)</p>
<p>Mean FTE rate 0.84 Mean FTE rate for females 0.82 Mean FTE rate for males 0.91</p>	<p>Longest Length of Service occupation group Senior medical (mean 10.0 years) Shortest Length of Service occupation group Junior medical (mean 1.4 years)</p>	<p>Employee reported ethnicities: Other** – 71% Asian – 18% Māori – 7% Pacific – 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'.
- *** Please note these totals exclude 6 employees reported as 'unknown' sex in Auckland DHB.

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 do not have 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

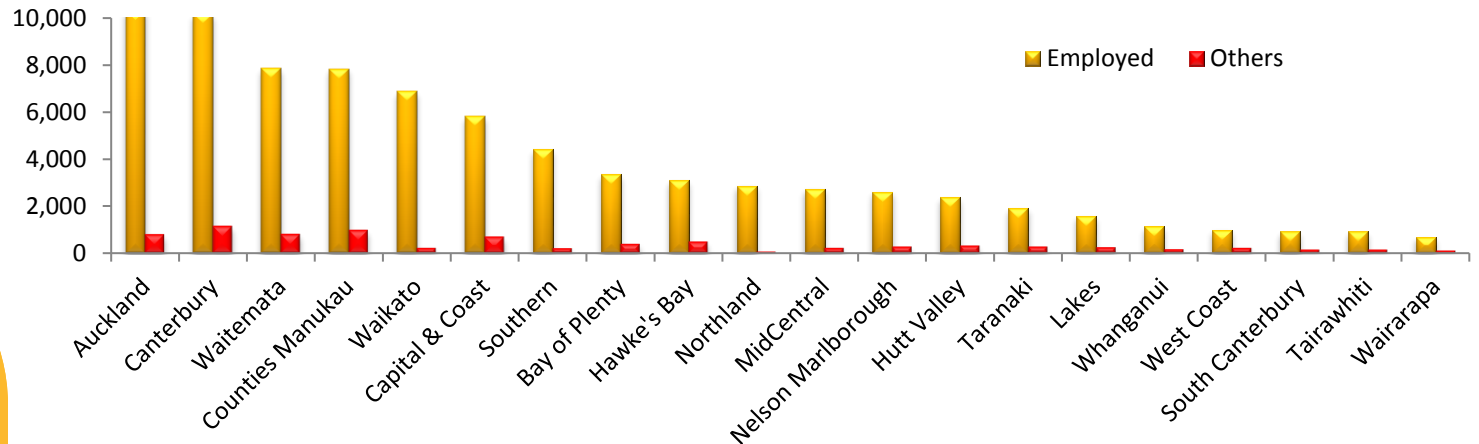


Table 1: Distribution of employment types

DHB	Employed	Others	Total	Proportion of DHB workforce
Auckland	9,507	787	10,294	13.1%
Canterbury	9,054	1,115	10,169	13.0%
Waitematā	7,060	797	7,857	10.0%
Counties Manukau	6,883	964	7,847	10.0%
Waikato	6,655	223	6,878	8.8%
Capital & Coast	5,134	684	5,818	7.4%
Southern	4,202	216	4,418	5.6%
Bay of Plenty	2,958	392	3,350	4.3%
Hawke's Bay	2,619	480	3,099	4.0%
Northland	2,793	67	2,860	3.6%
MidCentral	2,503	224	2,727	3.5%
Nelson Marlborough	2,330	272	2,602	3.3%
Hutt Valley	2,062	314	2,376	3.0%
Taranaki	1,616	284	1,900	2.4%
Lakes	1,338	245	1,583	2.0%
Whanganui	951	173	1,124	1.4%
West Coast	768	218	986	1.3%
South Canterbury	747	159	906	1.2%
Tairāwhiti	749	155	904	1.2%
Wairarapa	566	117	683	0.9%
Grand Total	70,495	7,886	78,381	100.0%

INCLUSIONS AND EXCLUSIONS

Specific caveats and definitions relevant to particular 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 maternity / parental leave 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 sex code has not been assigned then the employee will be excluded from that chart or table, and where an incorrect ANZSCO code has been assigned, then they will also be excluded).
- 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.
- 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			Senior medical			Junior medical			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	3550	2991.2	0.84	1640	1423.5	0.87	1907	1637.5	0.86	683	619.3	0.91	1033	832.2	0.81	541	533.4	0.99	153	115.1	0.75
Bay of Plenty	1200	921.2	0.77	615	544.1	0.88	411	347.5	0.85	299	248.7	0.83	208	171.1	0.82	172	169.9	0.99	53	39.1	0.74
Canterbury	3472	2860.5	0.82	1854	1598.7	0.86	1566	1289.7	0.82	976	764.8	0.78	567	477.3	0.84	490	481.5	0.98	129	83.9	0.65
Capital & Coast	2086	1683.1	0.81	1049	953.2	0.91	707	606.6	0.86	404	352.1	0.87	401	316.2	0.79	348	342.5	0.98	139	80.3	0.58
Counties Manukau	2641	2256.9	0.85	1321	1075.3	0.81	1135	988.7	0.87	703	590.7	0.84	538	445.6	0.83	384	376.8	0.98	161	119.1	0.74
Hawke's Bay	1031	729.6	0.71	544	469.5	0.86	430	355.4	0.83	270	212.2	0.79	143	124.2	0.87	138	137.2	0.99	63	38.9	0.62
Hutt Valley	702	574.8	0.82	469	421.9	0.90	340	279.9	0.82	230	197.3	0.86	148	115.5	0.78	129	127.0	0.98	44	32.1	0.73
Lakes	529	418.1	0.79	292	260.5	0.89	179	153.7	0.86	124	102.4	0.83	88	78.2	0.89	89	87.8	0.99	37	28.0	0.76
MidCentral	1013	830.1	0.82	578	527.2	0.91	340	301.1	0.89	177	143.2	0.81	172	151.5	0.88	155	152.6	0.98	68	45.2	0.67
Nelson Marlborough	777	582.0	0.75	498	409.2	0.82	300	226.6	0.76	469	340.3	0.73	159	128.7	0.81	85	84.8	1.00	42	29.7	0.71
Northland	1092	833.8	0.76	542	469.8	0.87	433	355.0	0.82	370	283.2	0.77	191	184.0	0.96	108	106.6	0.99	57	36.8	0.64
South Canterbury	316	246.5	0.78	164	130.0	0.79	92	70.5	0.77	81	54.6	0.67	53	38.7	0.73	23	22.9	1.00	18	14.4	0.80
Southern	1738	1374.9	0.79	839	744.1	0.89	644	545.5	0.85	334	268.3	0.80	296	238.2	0.80	280	269.9	0.96	71	49.8	0.70
Tairāwhiti	315	242.7	0.77	167	147.7	0.88	107	91.6	0.86	63	52.3	0.83	56	50.0	0.89	20	19.7	0.98	21	15.9	0.76
Taranaki	601	456.3	0.76	373	332.7	0.89	241	193.5	0.80	178	149.7	0.84	114	99.1	0.87	76	74.4	0.98	33	23.9	0.72
Waikato	2513	2095.0	0.83	1484	1314.3	0.89	1013	878.8	0.87	737	625.2	0.85	406	354.6	0.87	409	403.1	0.99	93	62.2	0.67
Wairarapa	259	182.7	0.71	133	102.5	0.77	65	48.3	0.74	43	32.8	0.76	35	30.3	0.87	13	12.4	0.95	18	11.4	0.63
Waitematā	2516	2122.1	0.84	1234	1082.0	0.88	1313	1086.6	0.83	999	896.6	0.90	507	431.1	0.85	330	320.5	0.97	161	109.1	0.68
West Coast	310	263.2	0.85	162	134.9	0.83	86	73.2	0.85	150	102.3	0.68	33	28.5	0.86	13	11.3	0.87	14	9.4	0.67
Whanganui	397	321.1	0.81	208	181.8	0.87	132	107.6	0.81	105	85.2	0.81	49	44.9	0.92	38	37.8	0.99	22	17.3	0.79
Grand Total	27058	21986.0	0.81	14166	12323.1	0.87	11441	9637.1	0.84	7395	6121.3	0.83	5197	4339.8	0.84	3841	3772.0	0.98	1397	961.6	0.69

TABLES AND CHARTS BY OCCUPATION GROUPING

HEADCOUNT AND FTE BY OCCUPATION GROUPING AND SEX

The bars represent the headcount (left hand axis) of employees by sex and occupation grouping, and the triangles represent the average FTE for those employees (right hand axis), also by sex and occupation grouping.

Figure 2: Occupation group headcount and mean FTE by sex

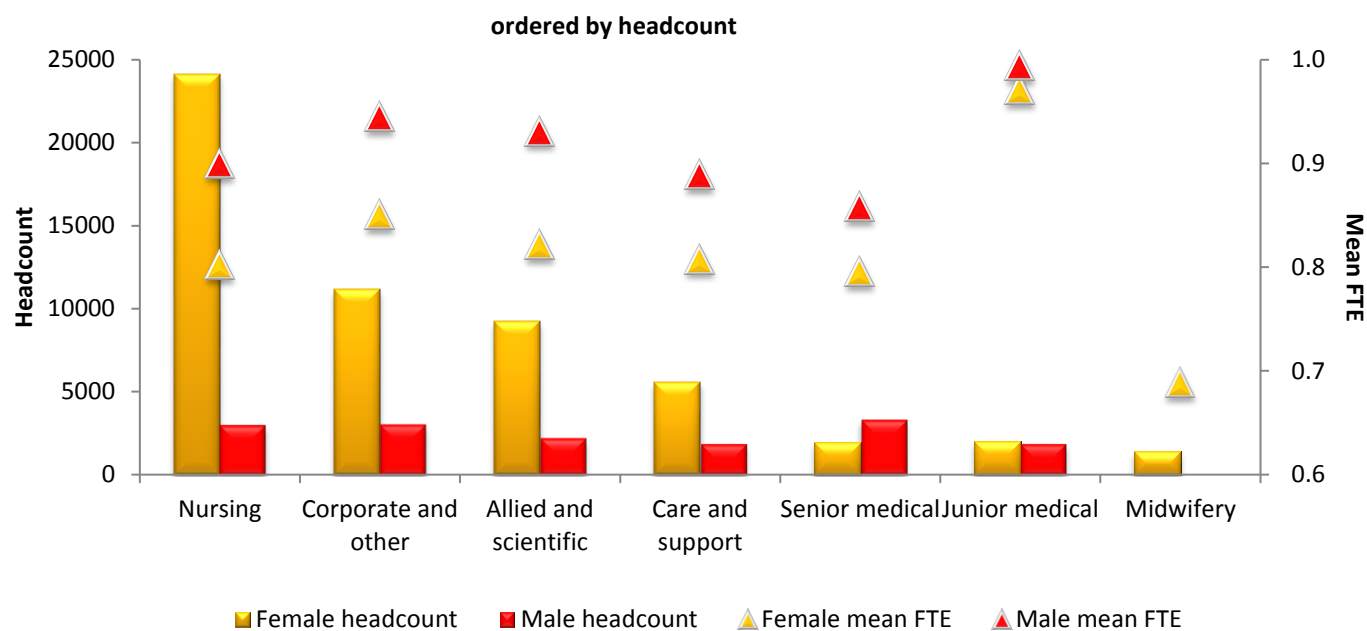


Table 3: Occupation group headcount and mean FTE by sex

Occupation group	Female		Male		Total	
	Headcount	Mean FTE	Headcount	Mean FTE	Headcount	Mean FTE
Nursing	24,098	0.80	2,955	0.90	27,053	0.81
Corporate and other	11,171	0.85	2,995	0.94	14,166	0.87
Allied and scientific	9,250	0.82	2,190	0.93	11,440	0.84
Care and support	5,546	0.81	1,849	0.89	7,395	0.83
Senior medical	1,930	0.80	3,267	0.86	5,197	0.84
Junior medical	>1,997	0.97	>1,838	0.99	3,841	0.98
Midwifery	>1,390	0.69	**	**	1,397	0.69
Grand Total	55,389	0.82	15,100	0.91	70,489	0.84

** Data suppressed due to low 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

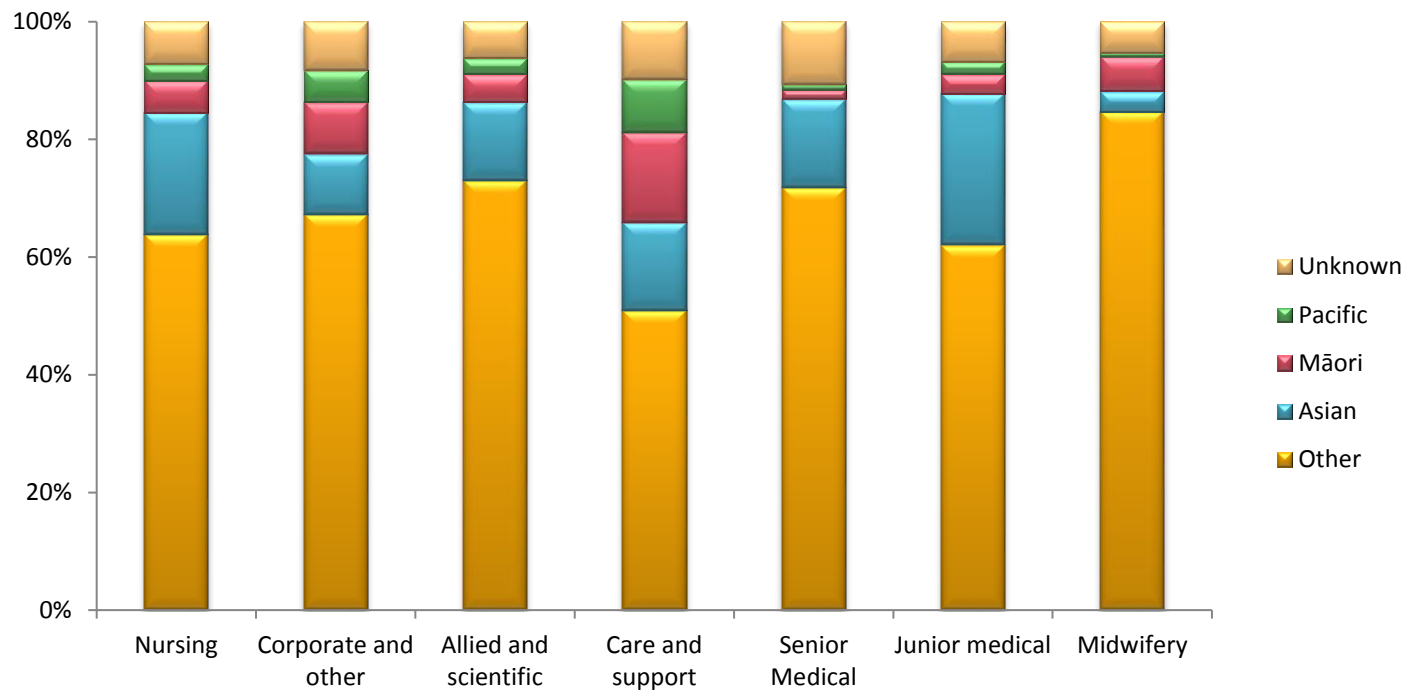


Table 4: Count and proportion of ethnicities by occupation group

Occupation group	Other*		Asian		Māori		Pacific		Unknown		Total
Nursing	17,272	63.8%	5,621	20.8%	1,472	5.4%	748	2.8%	1,945	7.2%	27,058
Corporate and other	9,531	67.3%	1,457	10.3%	1,244	8.8%	768	5.4%	1,166	8.2%	14,166
Allied and scientific	8,350	73.0%	1,531	13.4%	543	4.7%	313	2.7%	704	6.2%	11,441
Care and support	3,759	50.8%	1,110	15.0%	1,131	15.3%	665	9.0%	730	9.9%	7,395
Senior Medical	3,733	71.8%	784	15.1%	80	1.5%	45	0.9%	555	10.7%	5,197
Junior medical	2,384	62.1%	988	25.7%	128	3.3%	81	2.1%	260	6.8%	3,841
Midwifery	1,185	84.8%	49	3.5%	81	5.8%	8	0.6%	74	5.3%	1,397
Grand Total	46,214	65.6%	11,540	16.4%	4,679	6.6%	2,628	3.7%	5,434	7.7%	70,495

* '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 65,061 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 2017.

Figure 4: Proportion of identifiable ethnicities for all DHB employees

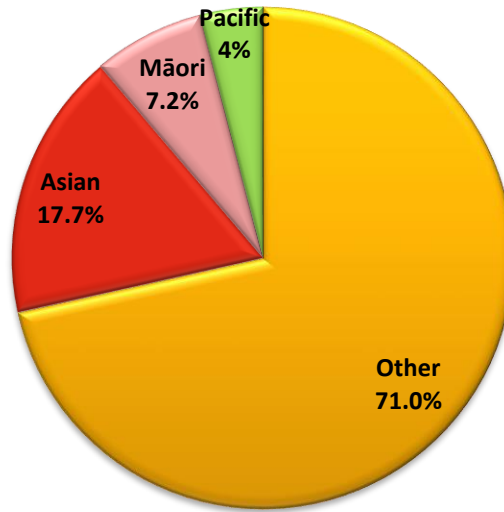
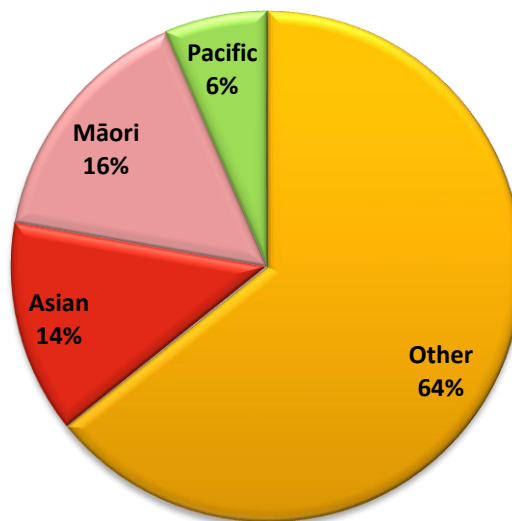


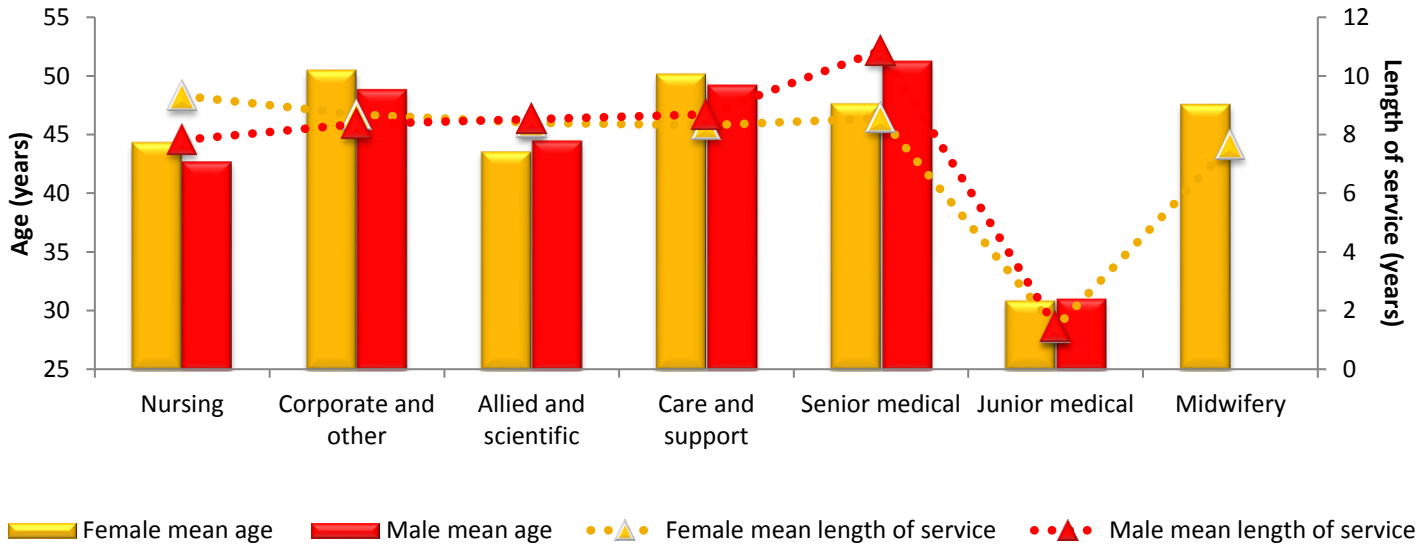
Figure 5: Proportion of identifiable ethnicities for projected population data at 30 September 2017



AGES AND LENGTH OF SERVICE

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

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



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

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

Occupation group	Female		Male		Total	
	Mean length of service	Mean age	Mean length of service	Mean age	Mean length of service	Mean age
Nursing	9.3	44.4	7.8	42.7	9.2	44.2
Corporate and other	8.7	50.4	8.4	48.8	8.6	50.1
Allied and scientific	8.4	43.6	8.5	44.5	8.4	43.7
Care and support	8.3	50.1	8.7	49.2	8.4	49.9
Senior medical	8.6	47.6	10.9	51.2	10.0	49.9
Junior medical	1.4	30.9	1.5	31.1	1.4	31.0
Midwifery	7.6	47.6	**	**	7.7	47.6
Grand Total	8.6	45.7	8.0	45.4	8.5	45.7

** Data suppressed for privacy (headcount less than 5)

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 SEX AND DHB

This chart examines the number (headcount) of employees by sex 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 sex). The following table shows the count of employees and mean FTEs by sex for each DHB.

Figure 7: Headcount and mean FTE by sex and DHB

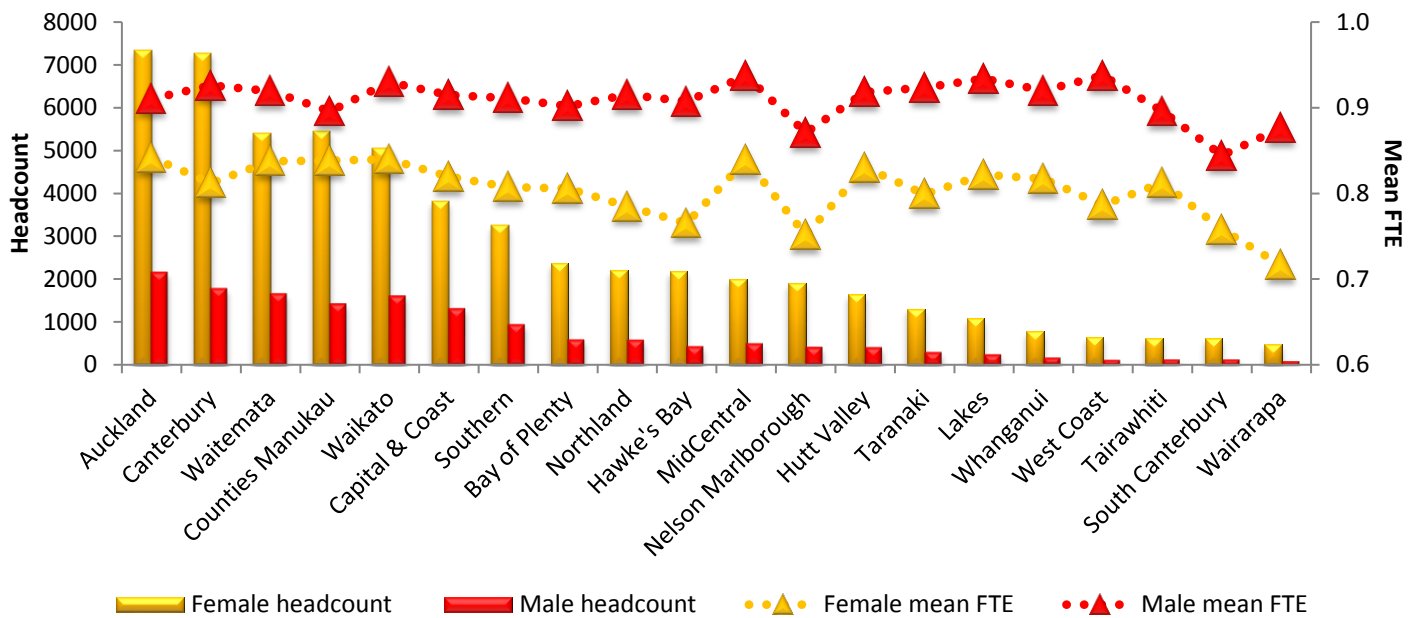


Table 6: Headcount and mean FTE by sex and DHB

		Auckland *	Canterbury	Waitematā	Counties Manukau	Waikato	Capital & Coast	Southern	Bay of Plenty	Northland	Hawke's Bay	MidCentral	Nelson Marlborough	Hutt Valley	Taranaki	Lakes	Whanganui	West Coast	Tairāwhiti	South Canterbury	Wairarapa
Female	Head count	7347	7276	5401	5456	5049	3822	3255	2359	2205	2175	1993	1907	1645	1307	1080	770	643	613	614	472
	Mean FTE	0.84	0.81	0.84	0.84	0.84	0.82	0.81	0.81	0.78	0.77	0.84	0.75	0.83	0.80	0.82	0.82	0.79	0.81	0.76	0.72
Male	Head count	2154	1778	1659	1427	1606	1312	947	599	588	444	510	423	417	309	258	181	125	136	133	94
	Mean FTE	0.91	0.93	0.92	0.90	0.93	0.92	0.91	0.90	0.92	0.91	0.94	0.87	0.92	0.92	0.93	0.92	0.94	0.90	0.84	0.88
Total	Head count	9501	9054	7060	6883	6655	5134	4202	2958	2793	2619	2503	2330	2062	1616	1338	951	768	749	747	566
	Mean FTE	0.86	0.83	0.86	0.85	0.86	0.84	0.83	0.83	0.81	0.79	0.86	0.77	0.85	0.82	0.84	0.84	0.81	0.83	0.77	0.74

* Please note 6 Auckland employees have a sex of 'Unknown' so are excluded from this table.

MEAN AGES AND MEAN LENGTH OF SERVICE BY DHB AND SEX

This chart shows the mean age of employees in each DHB by sex (left hand axis) and has been ordered by descending average age. The triangles represent the average length of service (right hand axis) by sex and DHB.

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

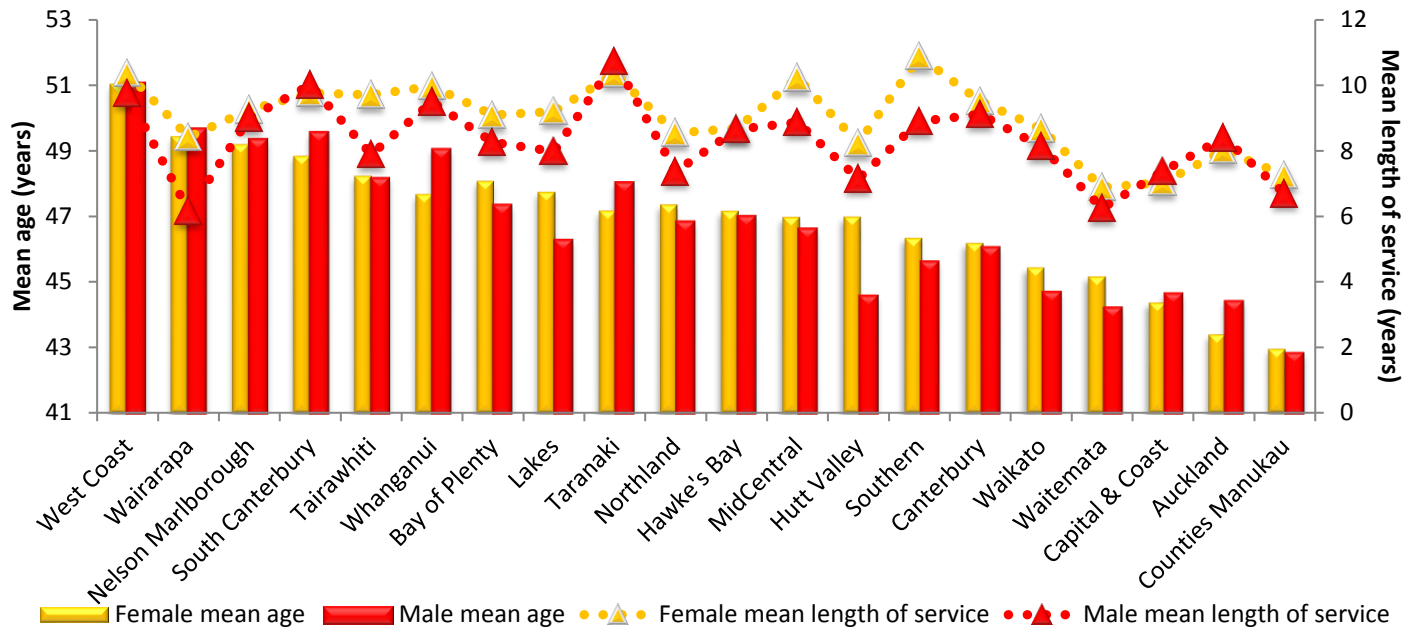


Table 7: Mean ages and mean length of service by DHB and sex

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	10.4	51.0	9.7	51.1	10.3	51.0
Wairarapa	8.4	49.4	6.2	49.7	8.0	49.5
Nelson Marlborough	9.3	49.2	9.0	49.3	9.2	49.2
South Canterbury	9.8	48.8	10.0	49.6	9.8	49.0
Tairāwhiti	9.7	48.2	7.9	48.2	9.4	48.2
Whanganui	10.0	47.7	9.5	49.0	9.9	47.9
Bay of Plenty	9.1	48.1	8.3	47.4	8.9	47.9
Lakes	9.2	47.7	8.0	46.3	9.0	47.5
Taranaki	10.4	47.2	10.7	48.0	10.4	47.3
Northland	8.6	47.3	7.4	46.8	8.3	47.2
Hawke's Bay	8.7	47.2	8.7	47.0	8.7	47.1
MidCentral	10.2	47.0	8.9	46.6	9.9	46.9
Hutt Valley	8.2	47.0	7.1	44.6	8.0	46.5
Southern	10.9	46.3	8.9	45.6	10.4	46.2
Canterbury	9.5	46.2	9.1	46.1	9.4	46.2
Waikato	8.7	45.4	8.1	44.7	8.5	45.3
Waitematā	6.9	45.2	6.3	44.2	6.7	44.9
Capital & Coast	7.0	44.4	7.4	44.7	7.1	44.4
Auckland	8.0	43.4	8.4	44.4	8.1	43.6
Counties Manukau	7.3	43.0	6.7	42.8	7.1	42.9
Grand Total	8.6	45.7	8.0	45.4	8.5	45.7

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

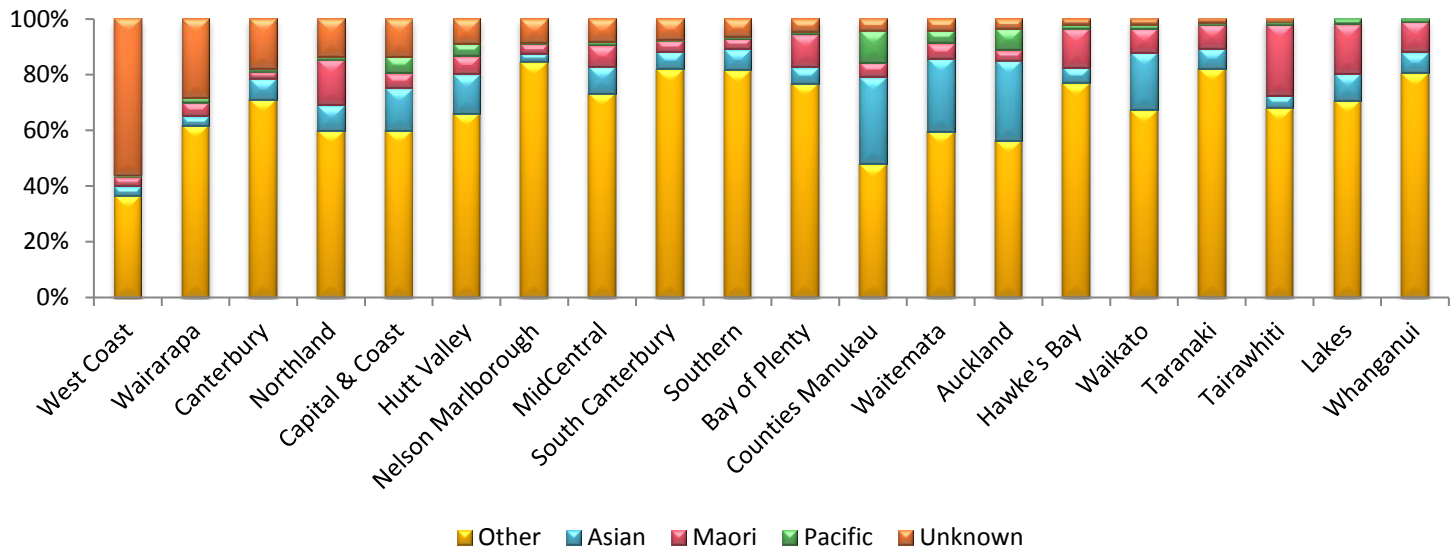


Table 8: Distribution of reported ethnicities by DHB

DHB	Other*	Asian	Māori	Pacific	Unknown	Total
West Coast	281	27	25	**	>427	768
Wairarapa	349	20	28	9	160	566
Canterbury	6,438	694	221	83	1,618	9,054
Northland	1,672	259	457	26	379	2,793
Capital & Coast	3,079	783	274	308	690	5,134
Hutt Valley	1,363	292	134	92	181	2,062
Nelson Marlborough	1,972	70	81	10	197	2,330
MidCentral	1,836	242	191	28	206	2,503
South Canterbury	613	46	31	**	>51	747
Southern	3,434	315	159	28	266	4,202
Bay of Plenty	2,272	176	352	24	134	2,958
Counties Manukau	3,296	2,154	359	792	282	6,883
Waitematā	4,211	1,845	394	322	288	7,060
Auckland	5,349	2,751	357	721	329	9,507
Hawke's Bay	2,016	147	367	33	56	2,619
Waikato	4,483	1,366	576	95	135	6,655
Taranaki	1,328	117	140	10	21	1,616
Tairāwhiti	510	34	190	9	6	749
Lakes	945	131	239	23	0	1,338
Whanganui	767	71	104	9	0	951
Grand Total	46,214	11,540	4,679	2,628	5,434	70,495

* '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	Senior medical	Junior medical	Midwifery	All staff
Southern	12.1	10.5	9.5	10.1	10.5	2.1	10.7	10.4
Taranaki	12.1	10.8	9.8	10.6	8.1	1.7	7.7	10.4
West Coast	11.3	8.6	11.4	10.8	6.9	1.0	9.3	10.3
MidCentral	11.3	10.0	9.3	10.6	10.6	1.7	7.9	9.9
Whanganui	10.0	9.9	11.6	10.3	10.0	1.0	10.4	9.9
South Canterbury	10.7	9.2	9.5	10.9	10.0	1.4	7.0	9.8
Canterbury	10.7	8.3	9.6	9.4	11.2	2.5	9.1	9.4
Tairāwhiti	11.1	8.5	7.7	10.6	8.4	1.1	5.5	9.4
Nelson Marlborough	10.5	8.2	8.8	9.5	10.1	1.1	8.6	9.2
Lakes	10.0	9.1	10.0	9.1	8.4	1.2	7.0	9.0
Bay of Plenty	10.1	9.4	8.3	7.6	9.7	1.5	9.0	8.9
Hawke's Bay	9.0	9.2	9.0	8.8	10.1	1.6	8.6	8.7
Waikato	9.4	9.0	8.3	7.7	10.7	2.2	6.5	8.5
Northland	9.0	9.3	8.7	6.3	8.6	1.4	7.3	8.3
Auckland	7.9	8.9	8.3	8.7	10.6	0.8	8.1	8.1
Wairarapa	9.0	6.8	9.7	6.1	7.8	0.3	8.2	8.0
Hutt Valley	9.1	7.8	8.0	8.7	9.1	0.7	7.1	8.0
Counties Manukau	7.4	7.9	6.7	7.2	9.8	0.7	6.5	7.1
Capital & Coast	7.4	7.1	6.8	9.0	9.8	1.2	6.1	7.1
Waitemata	6.6	6.9	7.6	6.4	9.1	0.7	6.9	6.7
Grand Total	9.2	8.6	8.4	8.4	10.0	1.4	7.6	8.5

ANALYSIS BY SICK LEAVE & ANNUAL LEAVE

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

The following radar chart shows the dispersion of sick leave by DHB by looking at the average annualized 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.

To read this graph, the red 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 West Coast shows that 50% of staff took 32 hours sick leave or less per FTE in the September quarter, and 75% of staff also took 96.0 hours or less of sick leave per FTE. The data for Waitematā shows that 50% of staff took 64 hours or less sick leave per FTE, and that 75% of staff took 128.4 hours or less of sick leave per FTE.

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

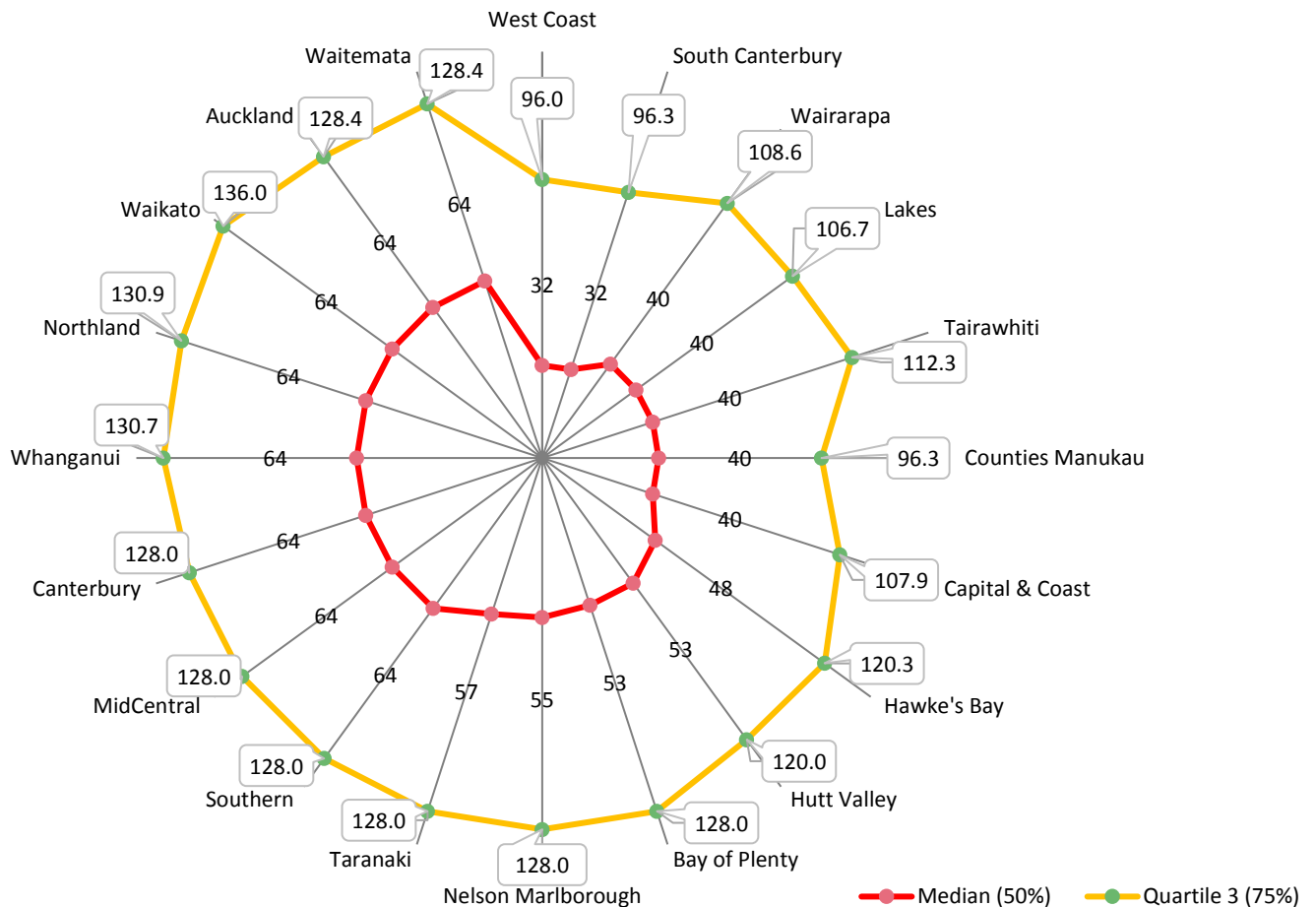


Figure 11: Average annual sick leave hours per FTE by occupational group

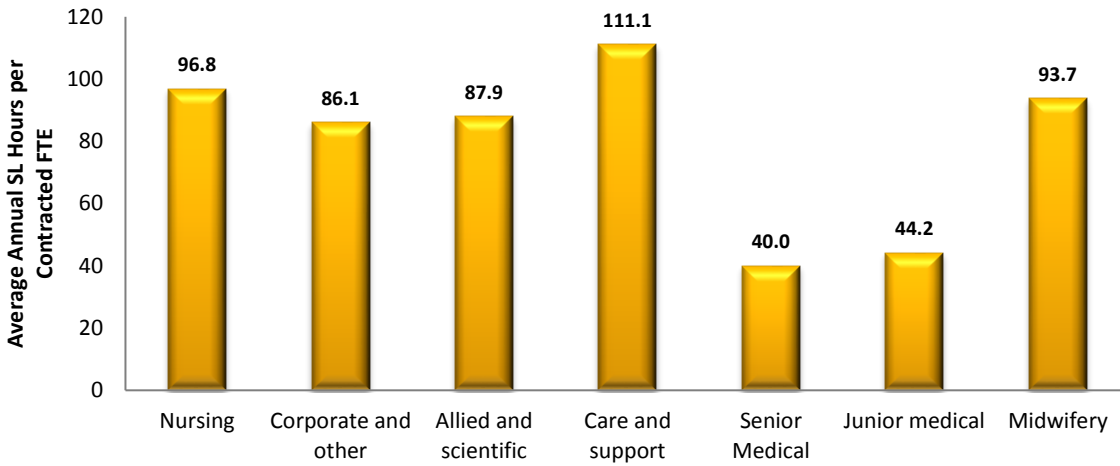


Figure 12: Average annual sick leave hours per FTE by age group by sex

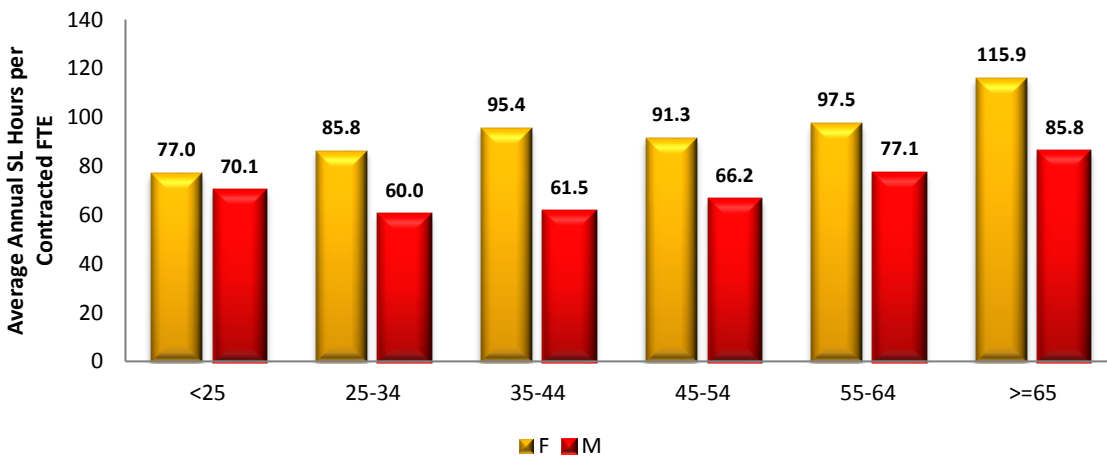
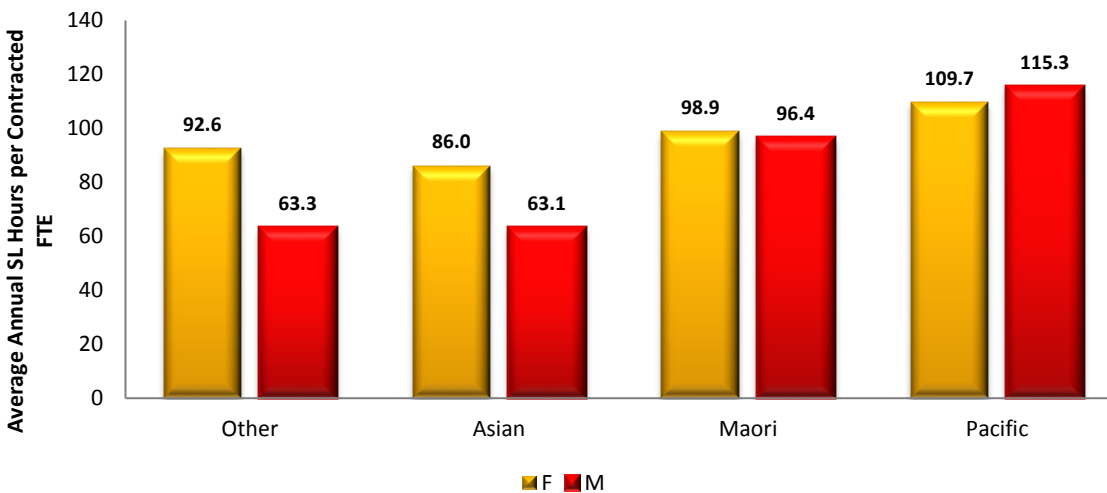


Figure 13: Average annual sick leave hours per FTE by ethnicity by sex



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

In the first chart, the bars represent the ratios of annual leave balance to annual leave entitlement and the red 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 nine DHBs, on average their employees have more annual leave balance than annual leave entitlement.

The other two charts on page 19 are self-explanatory.

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

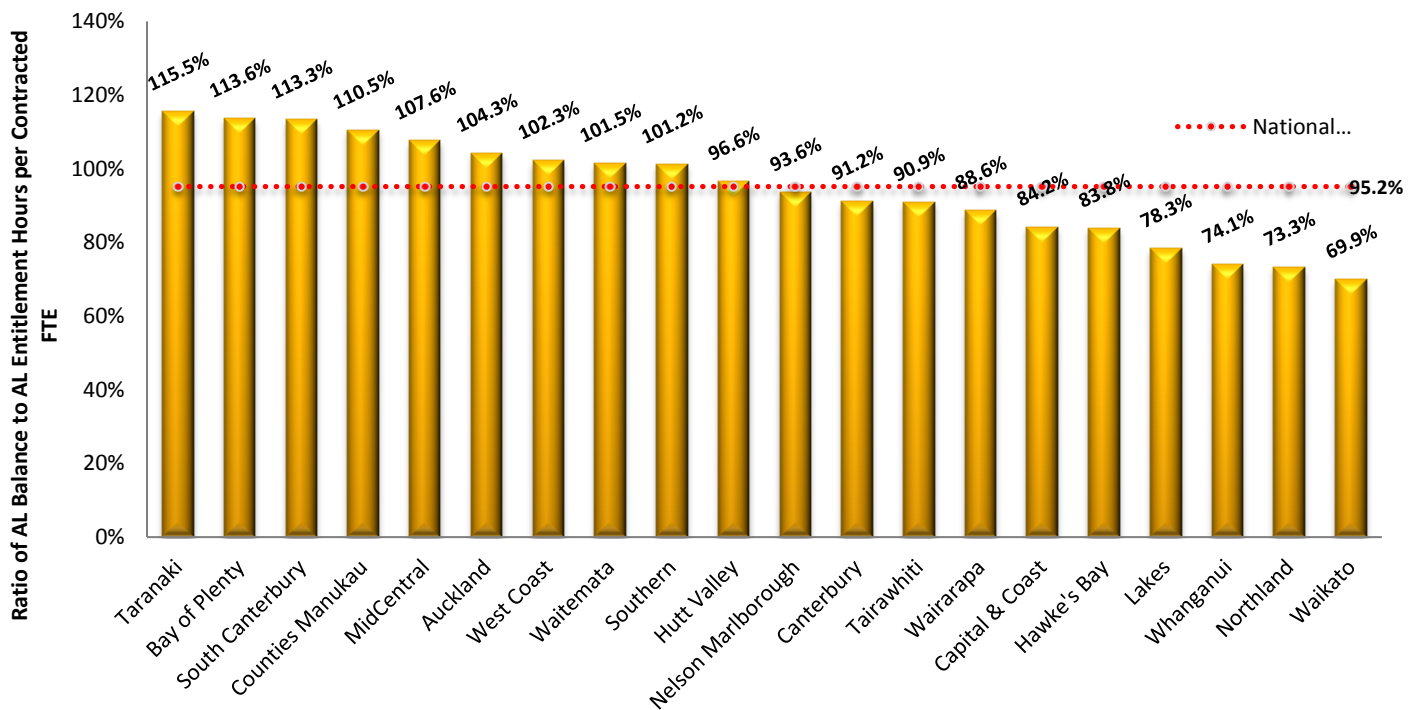


Figure 15: Ratio of annual leave balance to annual leave entitlement hours per FTE by occupational group

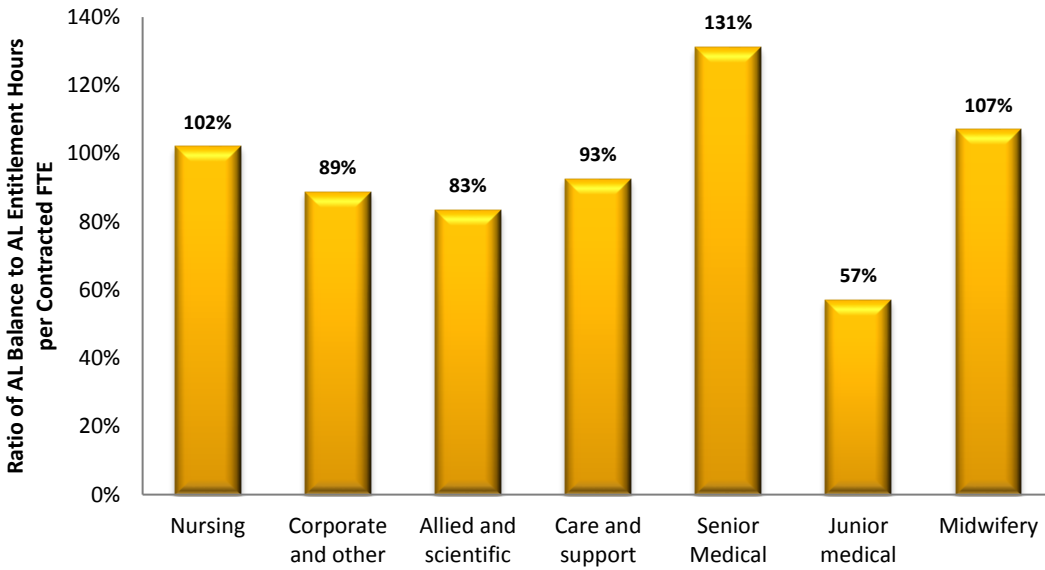
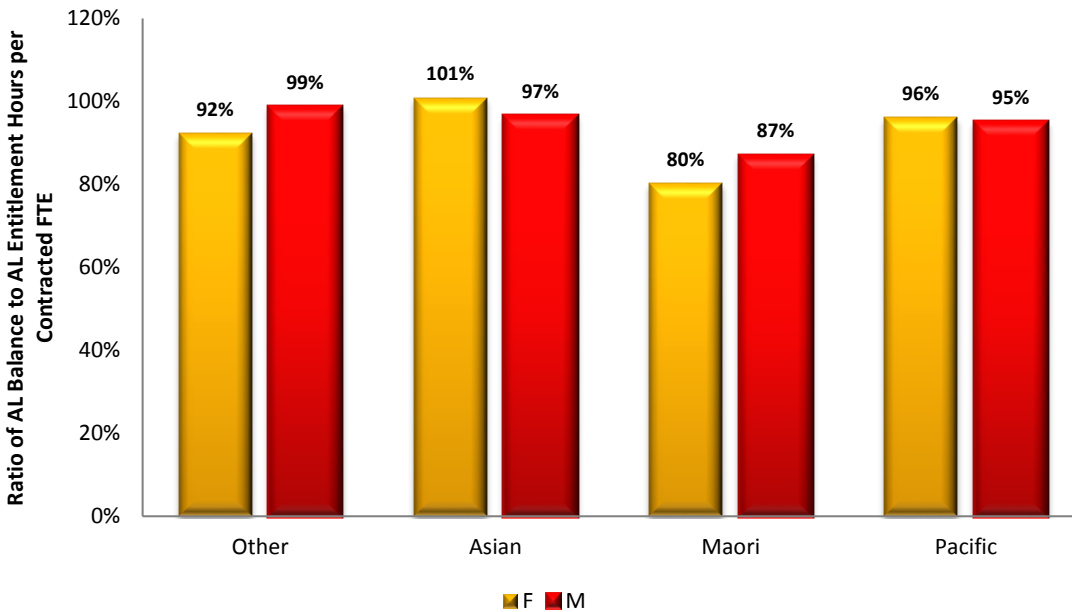


Figure 16: Ratio of annual leave balance to annual leave entitlement hours per FTE by ethnicity by sex

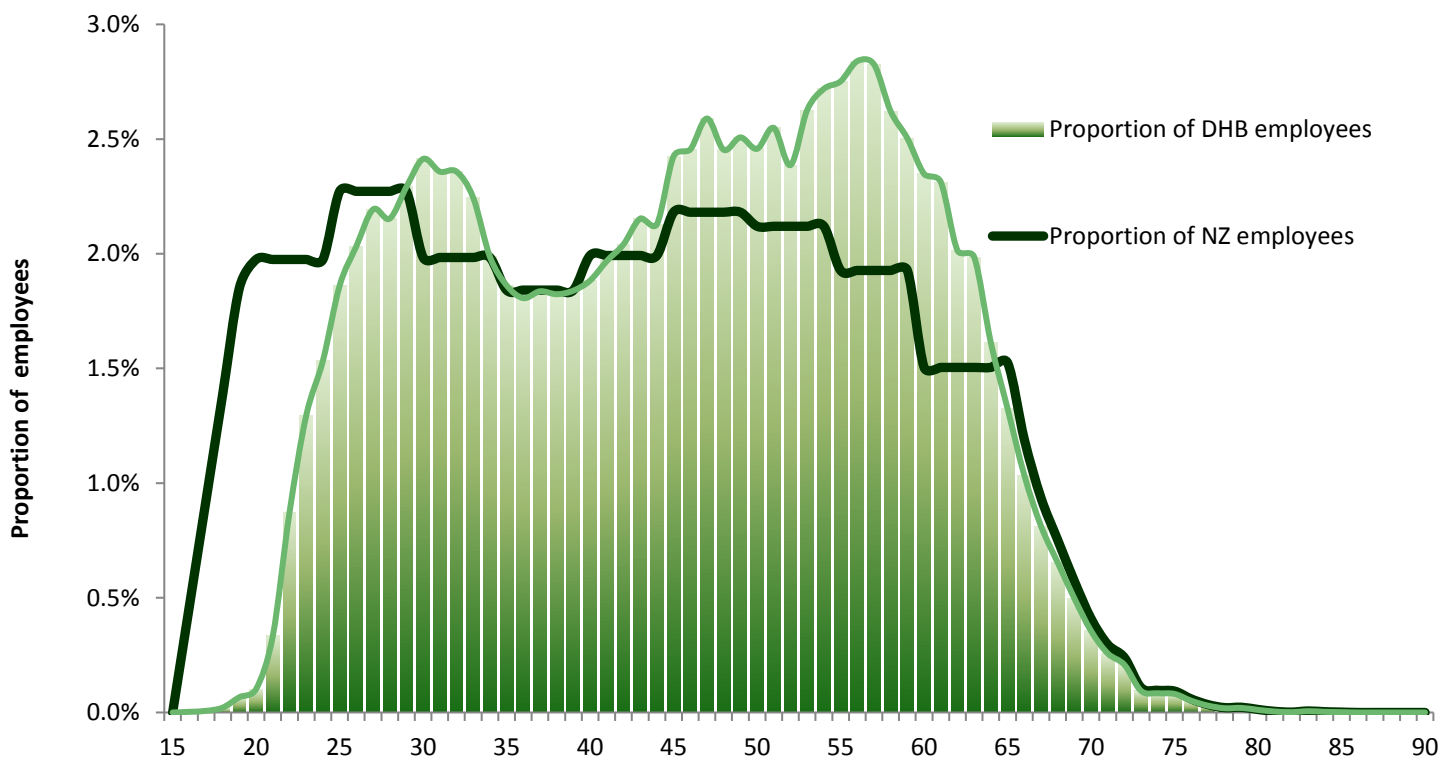


ANALYSIS BY POPULATION

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

The following chart shows the distribution of ages of DHB employees (histogram with light green outline). The staggered dark green line is the distribution of all New Zealand employees for the September 2017 quarter as reported in the Household Labour Force Survey (HLFS) by Statistics New Zealand.

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



ETHNIC REPRESENTATION OF WORKFORCE TO RESIDENT POPULATION

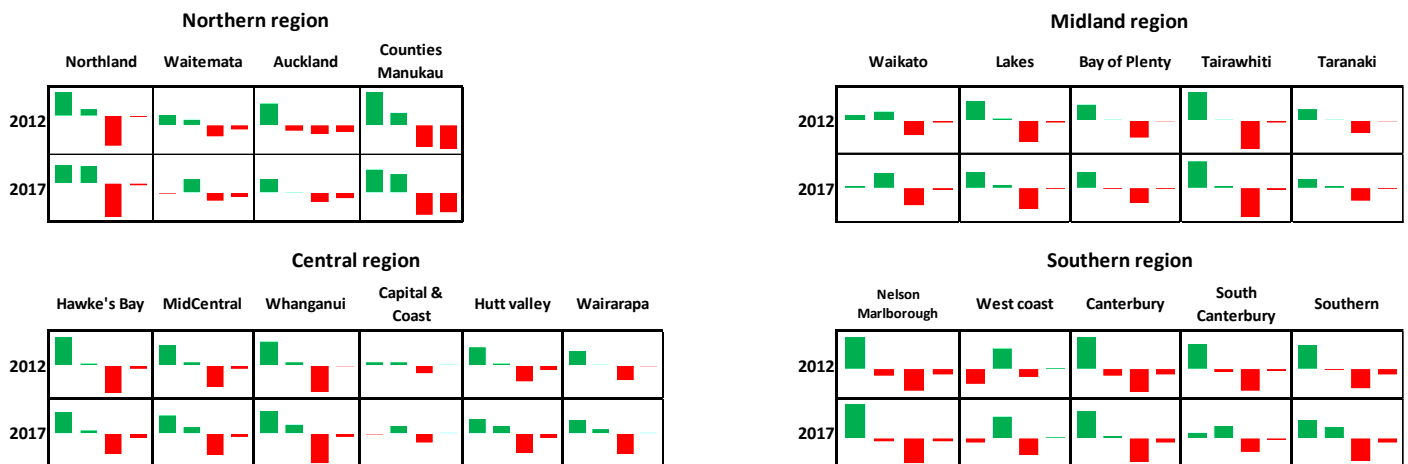
The following charts look at the ethnic representation of DHB staff to the resident population.

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 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 -23% to +26% - so comparisons between DHBs are possible. The data for 2012 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 South Canterbury 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 Tairāwhiti, 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 2012 and 2017; the ‘Other’ ethnicities have reduced closer to zero (from nine down to six percentage points difference), whereas Māori have been under-representation (from negative nine to negative nine percentage points difference).

POPULATION DENSITY BY WORKFORCE 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. 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

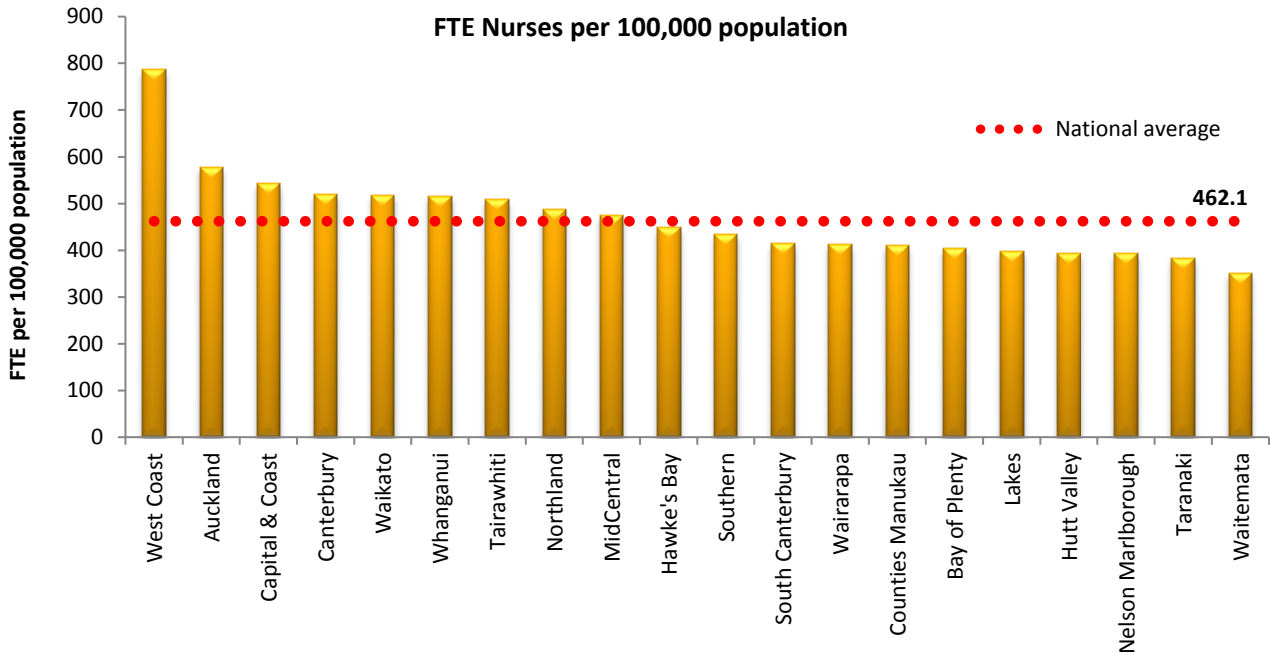


Figure 19: Population density of Corporate & Other by DHB

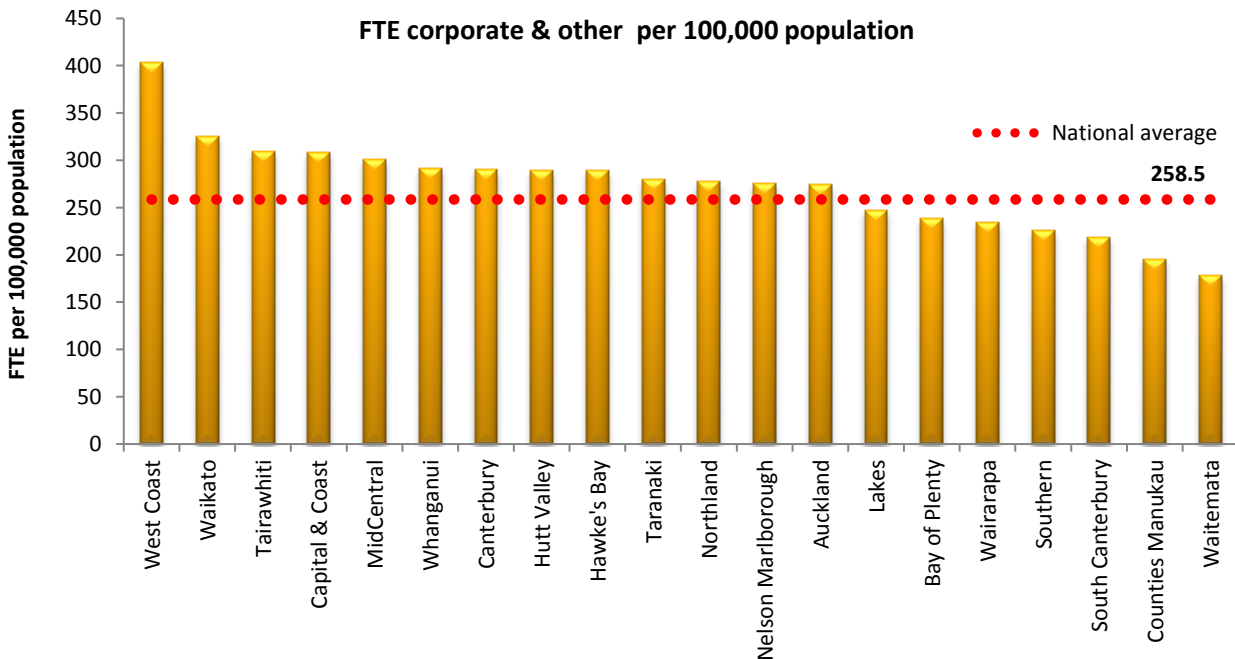


Figure 20: Population density of Allied & Scientific by DHB

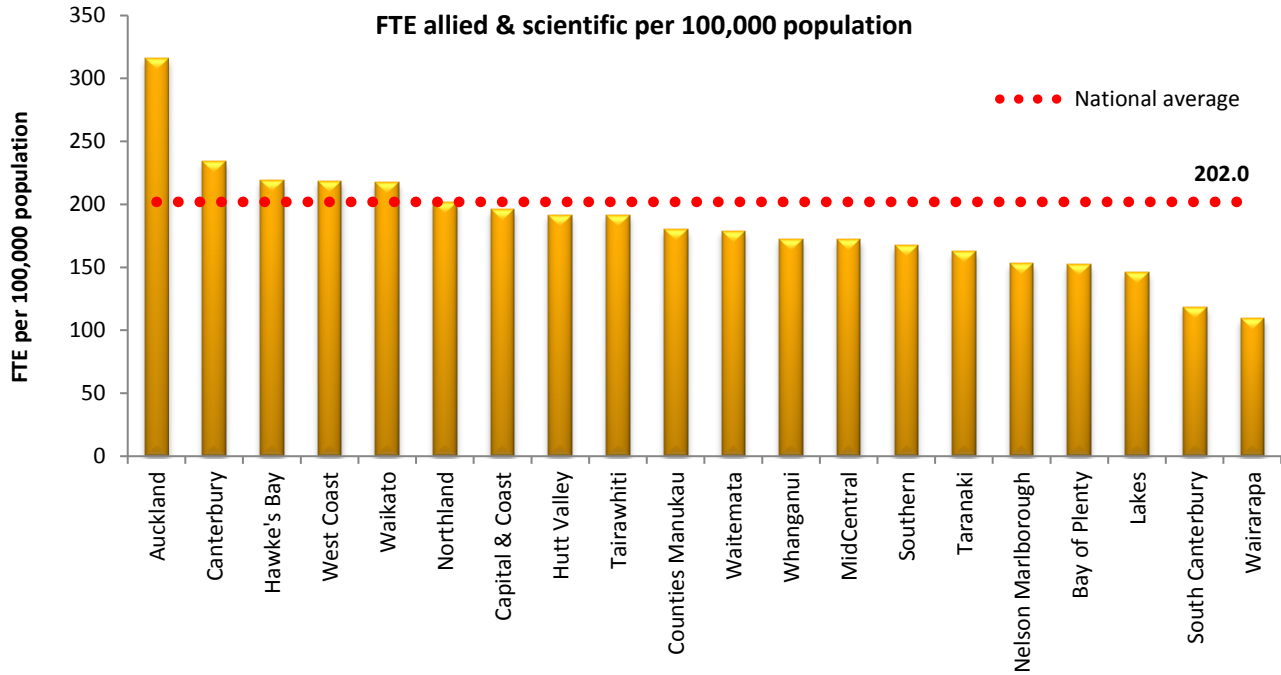


Figure 21: Population density of Care & Support by DHB

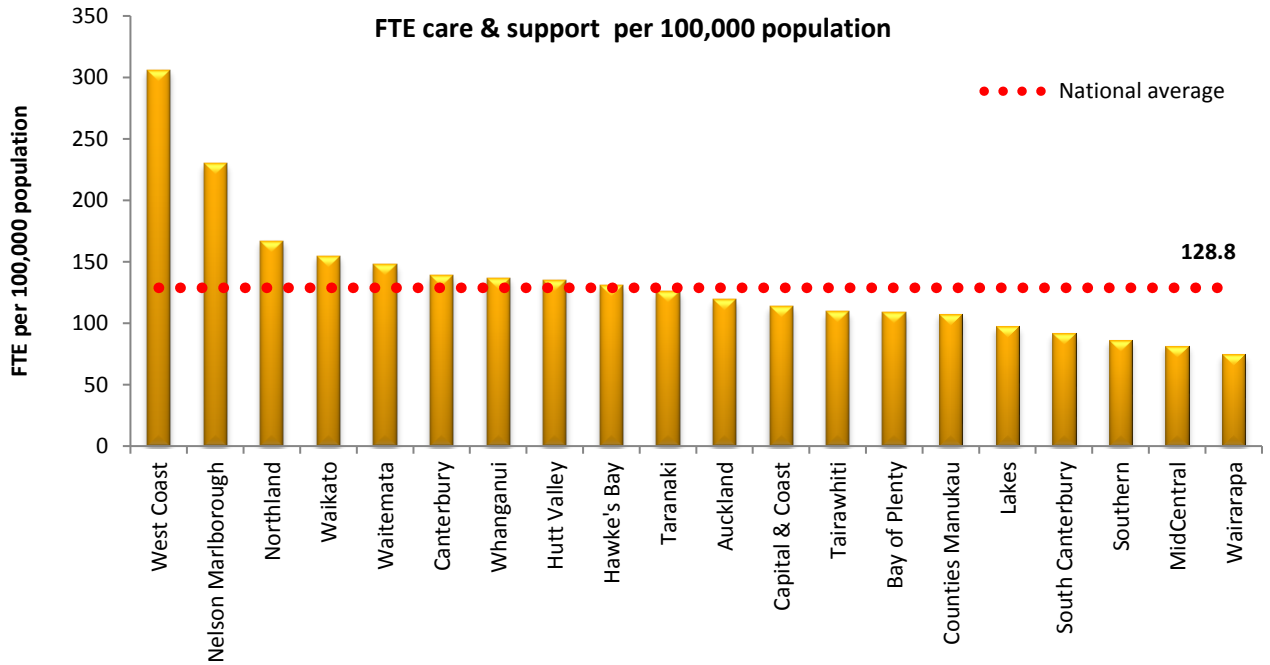


Figure 22: Population density of Senior Medical by DHB

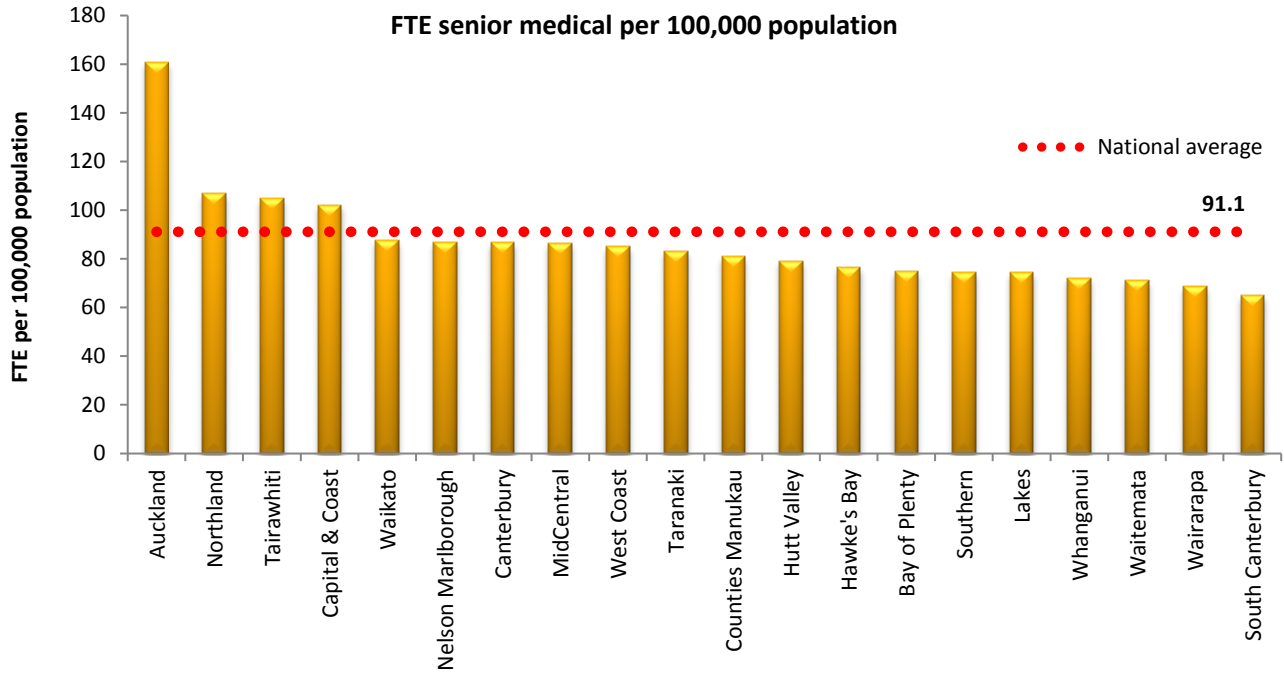


Figure 23: Population density of Junior Medical by DHB

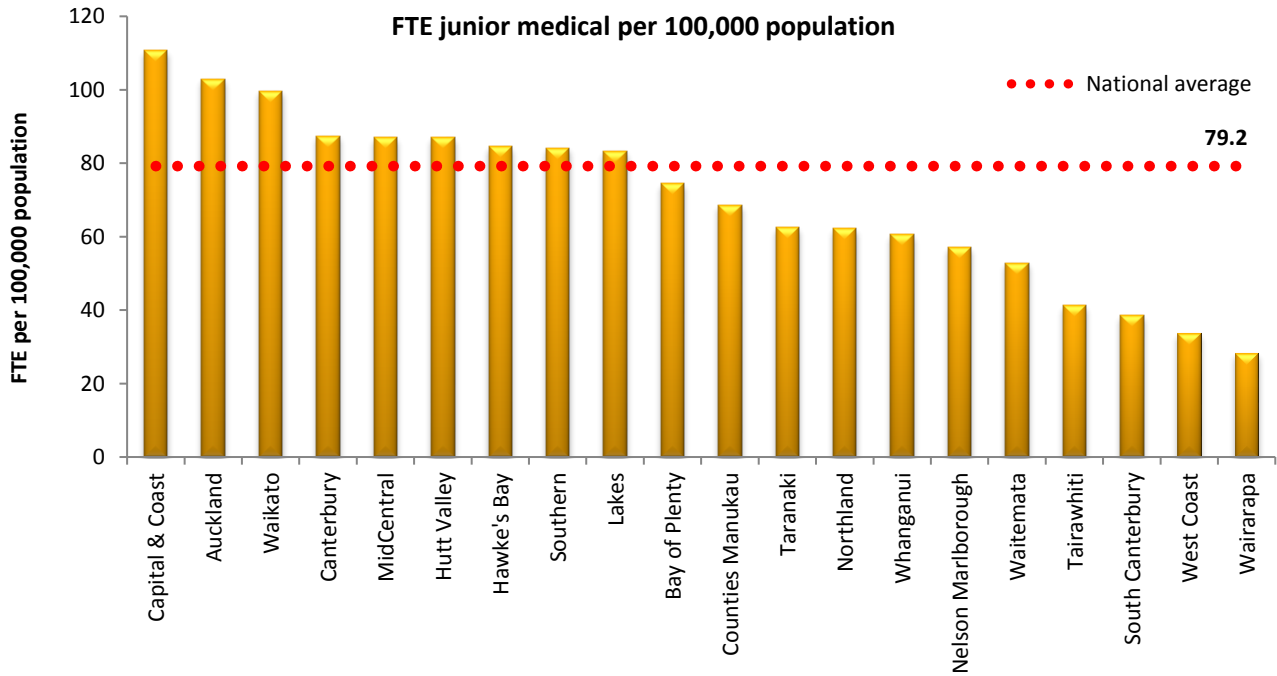


Figure 24: Population density of Midwives by DHB

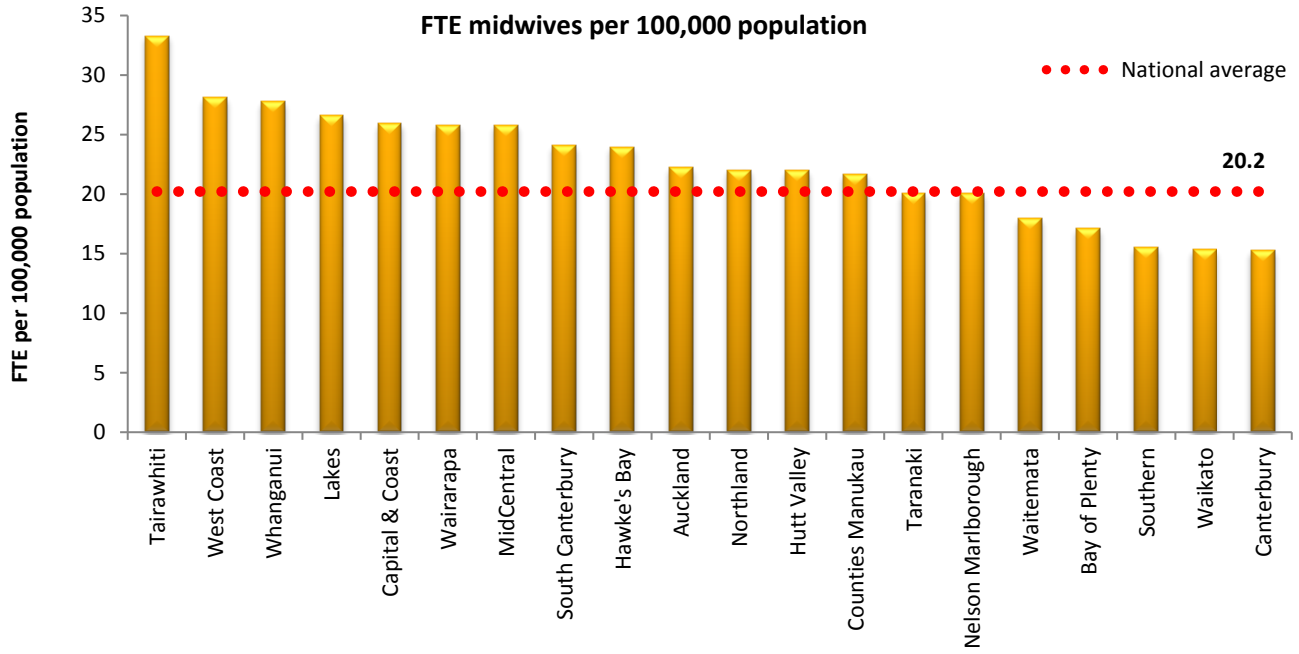


Figure 25: Population density of all DHB staff by DHB

