DISTRICT HEALTH BOARD EMPLOYED WORKFORCE QUARTERLY REPORT

1 JANUARY TO 31 MARCH 2017

HEALTH WORKFORCE INFORMATION

District Health Boards' Shared Services (DHBSS), through the Workforce Information team, 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 2017 to 31 March 2017 and is a snapshot in time at 31 March 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 January 2017 to March 2017 inclusive and is a snapshot taken by the DHBs on 31 March 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.

- 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@dhbsharedservices.health.nz

Data source: DHB Workforce Information, held by DHB Shared Services

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OVERVIEW

DHB WORKFORCE AT A GLANCE

For data to 31 March 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.

Total employees 69,950 **54,984 female** **14,966 male**	**58,544 FTE*** **44,856 FTE* females** **13,688 FTE* males**	**Largest occupation group:** **Nurses – 26,864** **Smallest occupation group:** **Midwives – 1,424**
DHB employee average age 45.6 years **45.7 years for females** **45.4 years for males**	**Oldest male occupation group:** **Senior Medical** (mean age 51.2 years)** **Youngest male occupation group:** **Junior medical (mean age 30.8 years)**	**Oldest female occupation groups:** **Corporate and other (mean age 50.5 years)** **Youngest female occupation group:** **Junior medical (mean age 30.6 years)**
Mean FTE rate 0.84 **Mean FTE rate for females 0.82** **Mean FTE rate for males 0.91**	**Longest Length of Service occupation group** **Senior medical (mean 9.9 years)** **Shortest Length of Service occupation group** **Junior medical (mean 1.2 years)**	**Employee reported ethnicities:** **Other** – 72%** **Asian – 17%** **Māori – 7%** **Pacific – 4%**

*   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 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
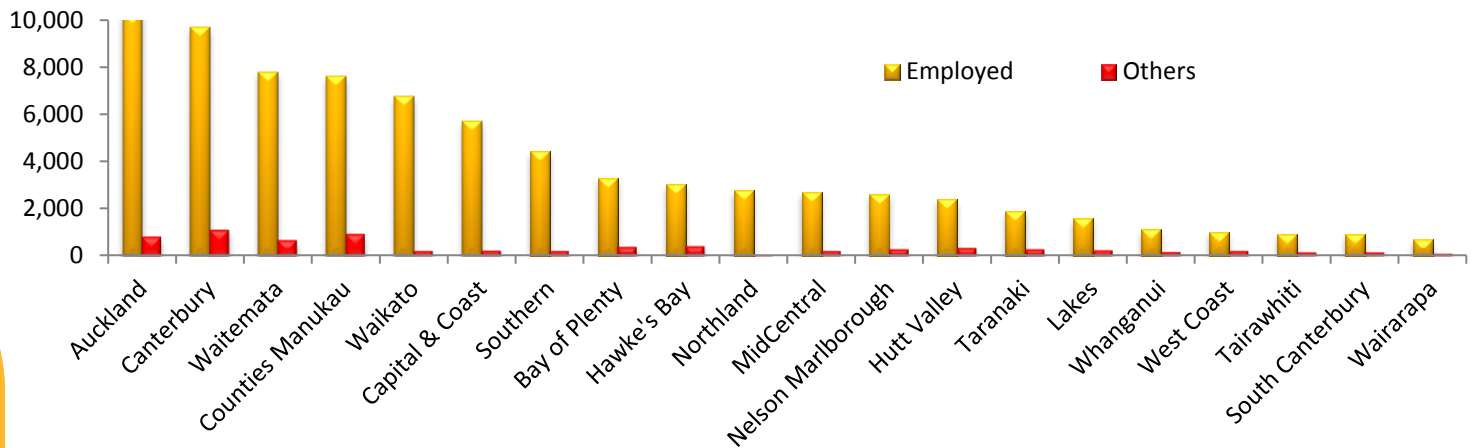
Table 1: Distribution of employment types

DHB	Employed	Others	Total	Proportion of DHB workforce
Auckland	9,480	778	10,258	13.3%
Canterbury	8,644	1055	9,699	12.6%
Waitemata	7,161	647	7,808	10.1%
Counties Manukau	6,734	886	7,620	9.9%
Waikato	6,531	218	6,749	8.8%
Capital & Coast	5,461	229	5,690	7.4%
Southern	4,195	218	4,413	5.7%
Bay of Plenty	2,909	374	3,283	4.3%
Hawke's Bay	2,611	406	3,017	3.9%
Northland	2,709	49	2,758	3.6%
MidCentral	2,484	207	2,691	3.5%
Nelson Marlborough	2,293	280	2,573	3.3%
Hutt Valley	2,039	329	2,368	3.1%
Taranaki	1,598	285	1,883	2.4%
Lakes	1,309	241	1,550	2.0%
Whanganui	944	170	1,114	1.4%
West Coast	785	211	996	1.3%
Tairawhiti	753	151	904	1.2%
South Canterbury	745	158	903	1.2%
Wairarapa	565	109	674	0.9%
Grand Total	**69,950**	**7,001**	**76,951**	**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.

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	3501	2937.9	0.84	1608	1406.0	0.87	1942	1668.4	0.86	638	577.7	0.91	1003	808.7	0.81	626	608.7	0.97	162	119.5	0.74
Bay of Plenty	1189	911.5	0.77	603	532.1	0.88	406	346.4	0.85	284	237.5	0.84	206	169.7	0.82	167	165.5	0.99	54	38.4	0.71
Canterbury	3399	2789.6	0.82	1655	1454.9	0.88	1553	1269.6	0.82	847	672.2	0.79	562	473.4	0.84	490	479.3	0.98	138	91.6	0.66
Capital & Coast	2208	1686.7	0.76	1074	962.0	0.90	730	616.7	0.84	553	430.9	0.78	393	308.0	0.78	359	344.4	0.96	144	77.1	0.54
Counties Manukau	2526	2161.5	0.86	1331	1092.6	0.82	1135	992.7	0.87	664	555.2	0.84	519	430.3	0.83	402	393.8	0.98	157	116.8	0.74
Hawke's Bay	1018	718.6	0.71	536	462.6	0.86	429	348.8	0.81	276	219.8	0.80	143	124.8	0.87	143	140.6	0.98	66	42.1	0.64
Hutt Valley	712	582.1	0.82	449	406.9	0.91	338	281.9	0.83	227	195.4	0.86	145	111.2	0.77	126	124.6	0.99	42	30.6	0.73
Lakes	528	416.0	0.79	288	259.0	0.90	180	155.1	0.86	113	93.9	0.83	88	76.8	0.87	80	78.8	0.98	32	23.3	0.73
MidCentral	1009	825.7	0.82	562	509.1	0.91	348	304.5	0.87	178	144.6	0.81	168	147.3	0.88	149	147.4	0.99	70	46.4	0.66
Nelson Marlborough	791	596.7	0.75	487	399.0	0.82	298	227.1	0.76	437	307.3	0.70	153	120.8	0.79	84	80.0	0.95	43	30.9	0.72
Northland	1076	821.6	0.76	539	469.2	0.87	414	338.1	0.82	320	258.1	0.81	184	178.5	0.97	111	110.2	0.99	65	39.6	0.61
South Canterbury	305	240.2	0.79	155	131.6	0.85	91	72.0	0.79	98	66.3	0.68	54	39.3	0.73	23	22.9	1.00	19	15.9	0.83
Southern	1742	1375.9	0.79	819	721.7	0.88	649	555.3	0.86	339	269.7	0.80	300	240.7	0.80	277	268.1	0.97	69	47.7	0.69
Tairawhiti	314	241.2	0.77	158	141.0	0.89	113	96.2	0.85	67	53.1	0.79	59	53.0	0.90	21	20.6	0.98	21	15.8	0.75
Taranaki	588	447.6	0.76	373	334.0	0.90	245	196.8	0.80	182	152.1	0.84	103	90.1	0.88	74	73.0	0.99	33	23.8	0.72
Waikato	2477	2046.2	0.83	1431	1262.9	0.88	1026	881.1	0.86	715	605.4	0.85	392	388.8	0.99	401	384.0	0.96	89	56.1	0.63
Wairarapa	259	179.4	0.69	129	99.6	0.77	65	49.4	0.76	42	30.7	0.73	37	31.7	0.86	16	15.4	0.96	17	9.5	0.56
Waitemata	2514	2114.7	0.84	1191	1049.4	0.88	1372	1144.1	0.83	1051	945.1	0.90	513	436.0	0.85	354	345.4	0.98	166	114.0	0.69
West Coast	310	262.9	0.85	172	141.8	0.82	88	76.0	0.86	158	107.4	0.68	32	27.9	0.87	11	10.5	0.95	14	9.2	0.66
Whanganui	398	320.5	0.81	204	179.0	0.88	133	107.9	0.81	99	83.5	0.84	50	45.7	0.91	37	36.7	0.99	23	18.4	0.80
Grand Total	26864	21676.4	0.81	13764	12014.7	0.87	11555	9728.3	0.84	7288	6005.9	0.82	5104	4302.8	0.84	3951	3850.0	0.97	1424	966.6	0.68

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
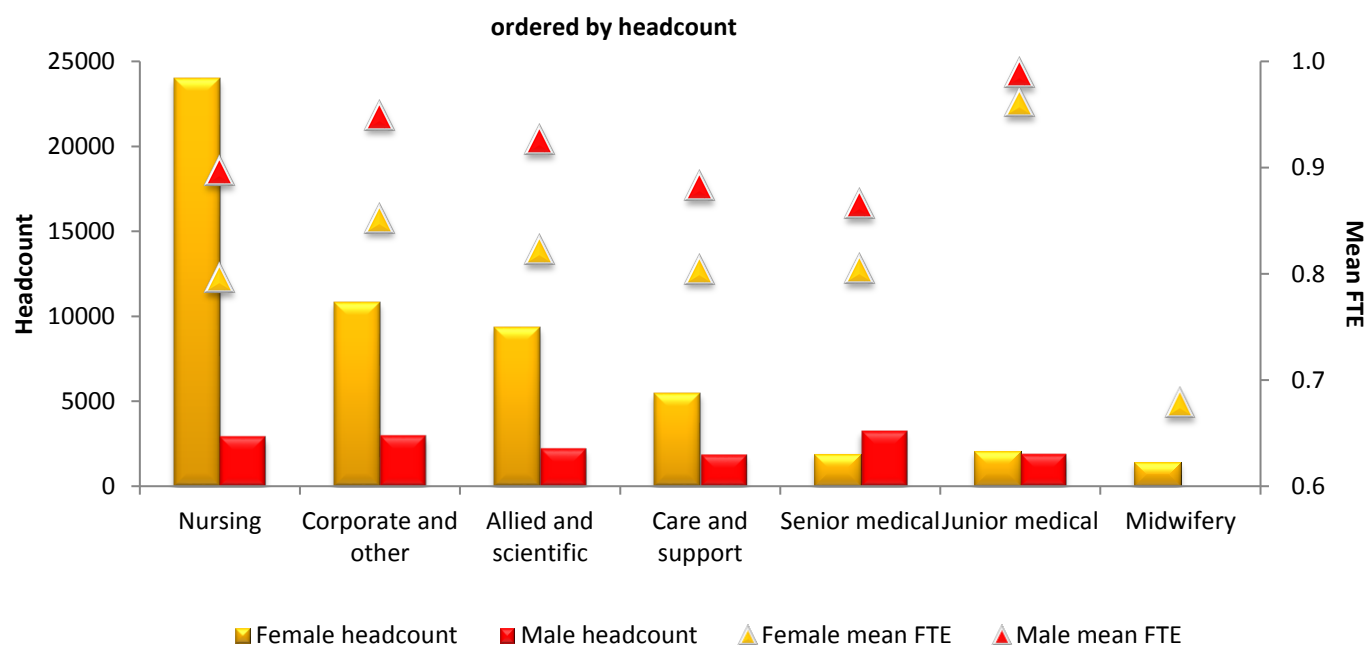
Table 3: Occupation group headcount and mean FTE by sex

	Female		Male		Total	
Occupation group	**Headcount**	**Mean FTE**	**Headcount**	**Mean FTE**	**Headcount**	**Mean FTE**
Nursing	23,974	0.80	2,890	0.90	26,864	0.81
Corporate and other	10,806	0.85	2,958	0.95	13,764	0.87
Allied and scientific	9,356	0.82	2,199	0.93	11,555	0.84
Care and support	5,455	0.80	1,833	0.88	7,288	0.82
Senior medical	1,896	0.80	3,208	0.87	5,104	0.84
Junior medical	>2,072	0.96	>1,871	0.99	3,951	0.97
Midwifery	>1,417	0.68	**	**	1,424	0.68
Grand Total	**54,984**	**0.82**	**14,966**	**0.91**	**69,950**	**0.84**

**   Data suppressed due to low headcounts (less than 5)

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
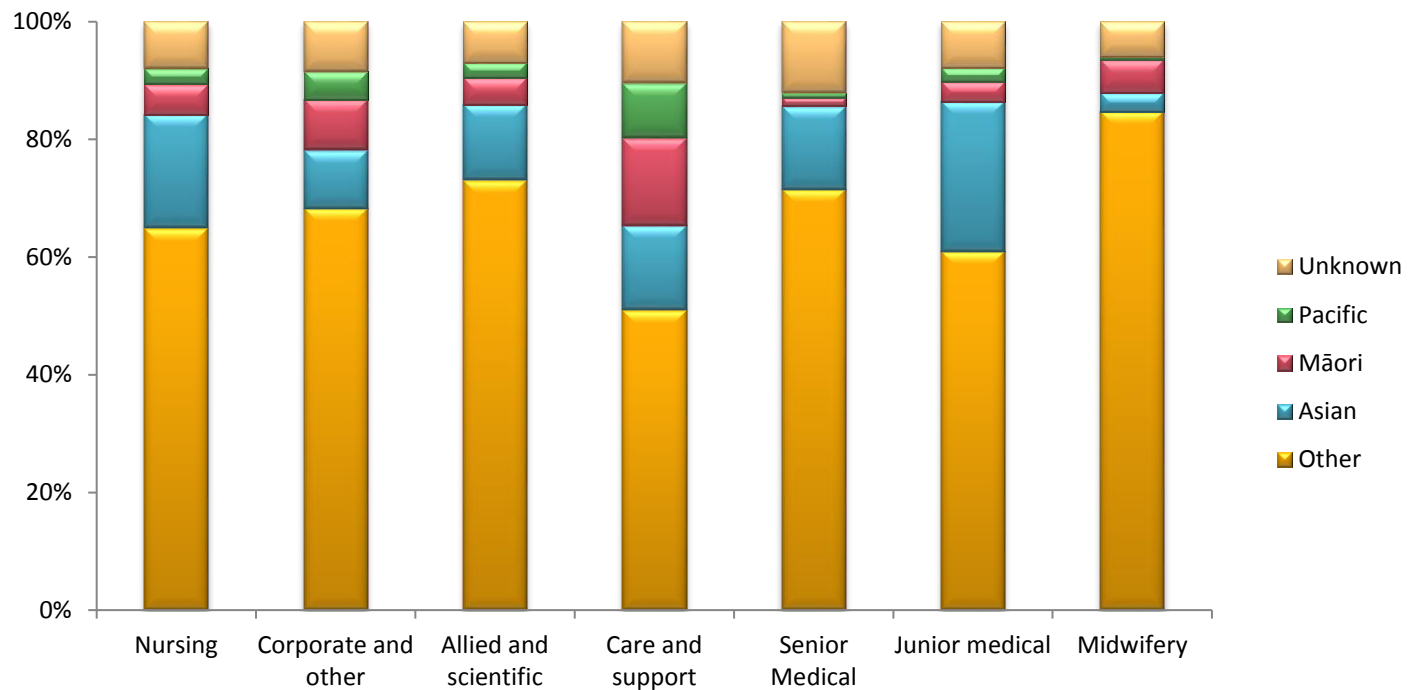
Table 4: Count and proportion of ethnicities by occupation group

Occupation group	Other*		Asian		Māori		Pacific		Unknown		Total
Nursing	17,439	64.9%	5,186	19.3%	1,386	5.2%	713	2.7%	2,140	8.0%	26,864
Corporate and other	9,391	68.2%	1,373	10.0%	1,175	8.5%	666	4.8%	1,159	8.4%	13,764
Allied and scientific	8,448	73.1%	1,482	12.8%	526	4.6%	304	2.6%	795	6.9%	11,555
Care and support	3,715	51.0%	1,047	14.4%	1,086	14.9%	685	9.4%	755	10.4%	7,288
Senior Medical	3,648	71.5%	723	14.2%	76	1.5%	39	0.8%	618	12.1%	5,104
Junior medical	2,408	60.9%	1,005	25.4%	139	3.5%	91	2.3%	308	7.8%	3,951
Midwifery	1,207	84.8%	46	3.2%	80	5.6%	7	0.5%	84	5.9%	1,424
Grand Total	46,256	66.1%	10,862	15.5%	4,468	6.4%	2,505	3.6%	5,859	8.4%	69,950

* '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 64,077 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 31 March 2017.

Figure 4: Proportion of identifiable ethnicities for all DHB employees
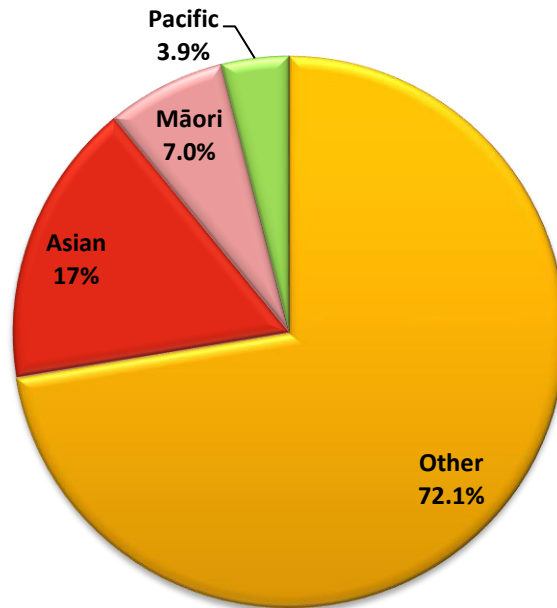

Pacific 3.9%
Māori 7.0%
Asian 17%
Other 72.1%

Figure 5: Proportion of identifiable ethnicities for projected population data at 31 March 2017

Pacific 6.0%
Māori 14%
Asian 16%
Other 64.0%
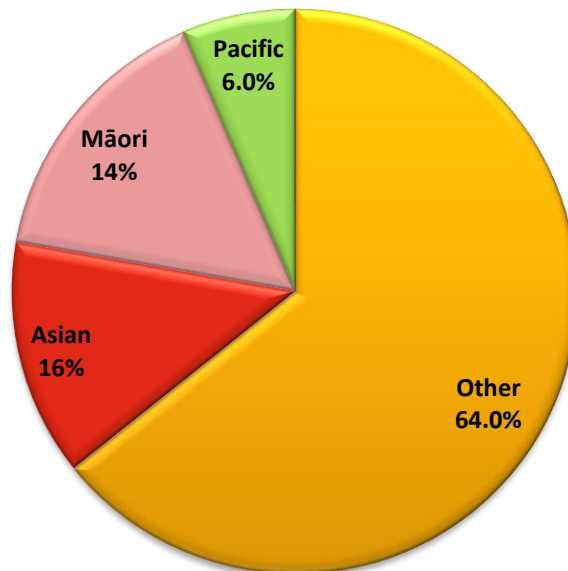
Figure 6: Mean ages and length of service by occupation group and sex

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.

Female mean age   Male mean age   Female mean length of service   Male mean length of service
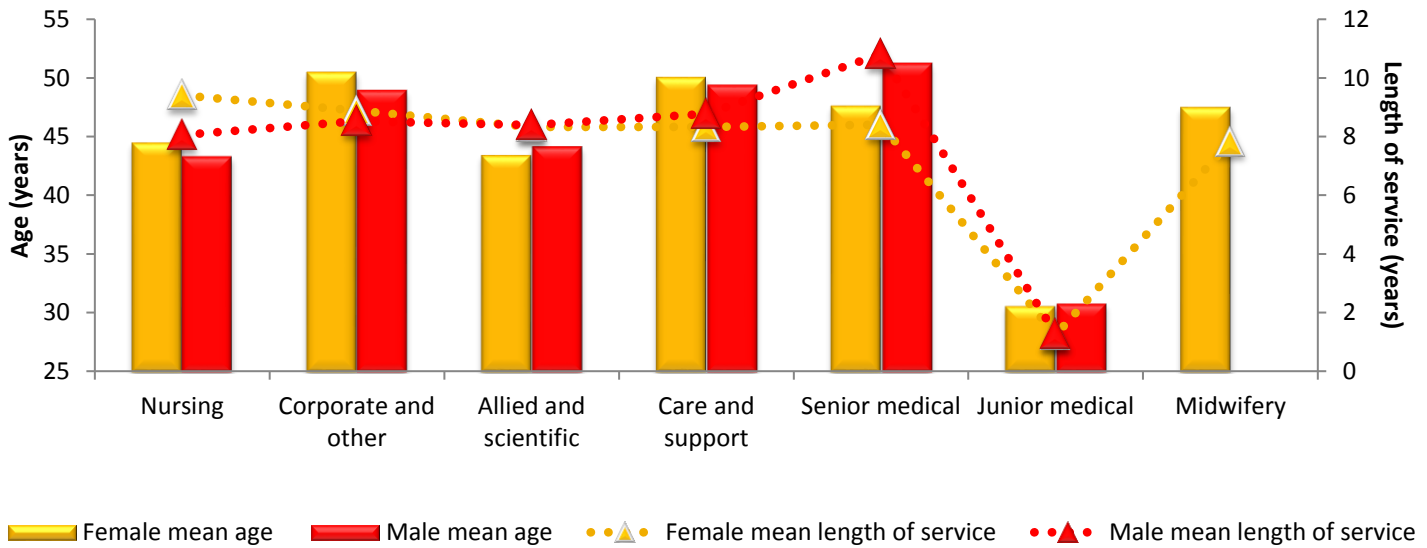
The following table gives the actual figures behind the chart above.

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	9.4	44.5	8.1	43.3	9.3	44.4
Corporate and other	8.9	50.5	8.5	48.9	8.8	50.1
Allied and scientific	8.3	43.4	8.4	44.1	8.3	43.6
Care and support	8.3	50.0	8.8	49.3	8.4	49.8
Senior medical	8.4	47.6	10.8	51.2	9.9	49.9
Junior medical	1.2	30.6	1.3	30.8	n	30.7
Midwifery	7.8	47.5	10.5	45.1	7.8	47.5
Grand Total	**8.6**	**45.7**	**8.0**	**45.4**	**8.5**	**45.6**

** 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
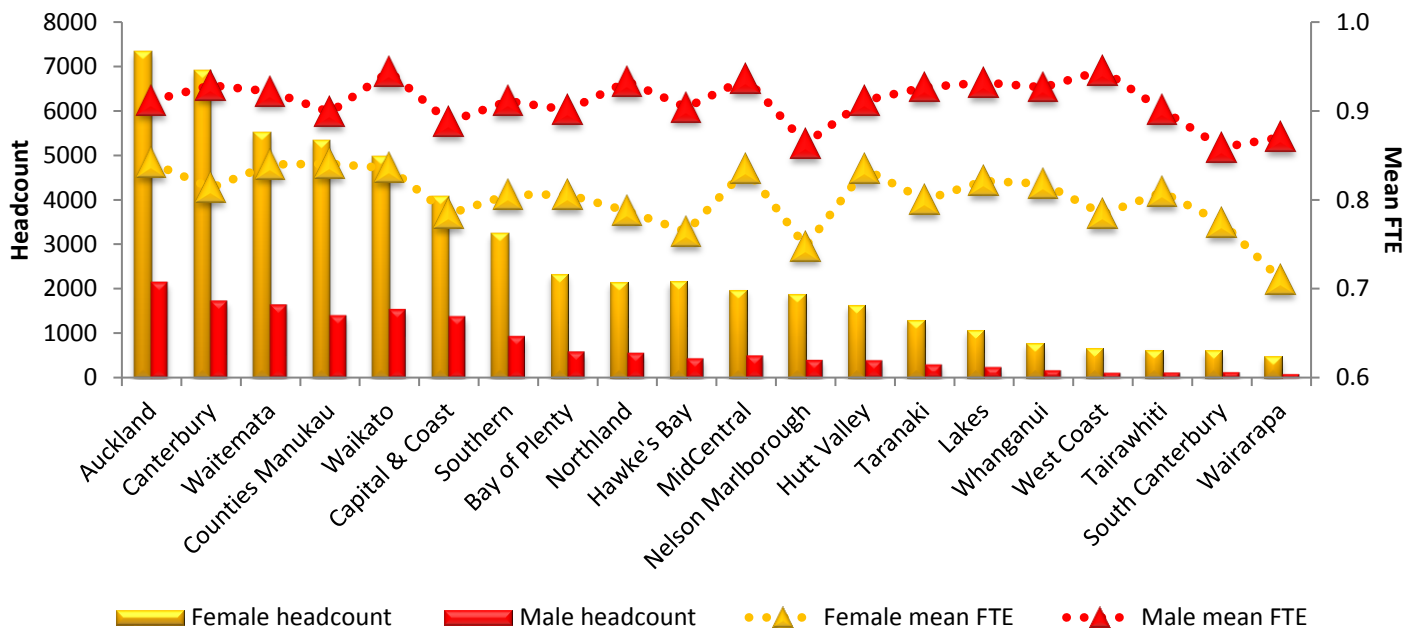
Table 6: Headcount and mean FTE by sex and DHB

		Auckland	Canterbury	Waitemata	Counties Manukau	Waikato	Capital & Coast	Southern	Bay of Plenty	Northland	Hawke's Bay	MidCentral	Nelson Marlborough	Hutt Valley	Taranaki	Lakes	Whanganui	West Coast	Tairawhiti	South Canterbury	Wairarapa
Female	Head count	7333	6913	5519	5330	4988	4075	3248	2313	2143	2166	1973	1880	1632	1287	1055	765	660	621	610	473
	Mean FTE	0.84	0.81	0.84	0.84	0.84	0.78	0.81	0.81	0.79	0.76	0.83	0.75	0.83	0.80	0.82	0.82	0.78	0.81	0.77	0.71
Male	Head count	2147	1731	1642	1404	1543	1386	947	596	566	445	511	413	407	311	254	179	125	132	135	92
	Mean FTE	0.91	0.93	0.92	0.90	0.94	0.89	0.91	0.90	0.93	0.90	0.94	0.86	0.91	0.93	0.93	0.93	0.95	0.90	0.86	0.87
Total	Head count	9480	8644	7161	6734	6531	5461	4195	2909	2709	2611	2484	2293	2039	1598	1309	944	785	753	745	565
	Mean FTE	0.86	0.84	0.86	0.85	0.86	0.81	0.83	0.83	0.82	0.79	0.86	0.77	0.85	0.82	0.84	0.84	0.81	0.82	0.79	0.74

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.

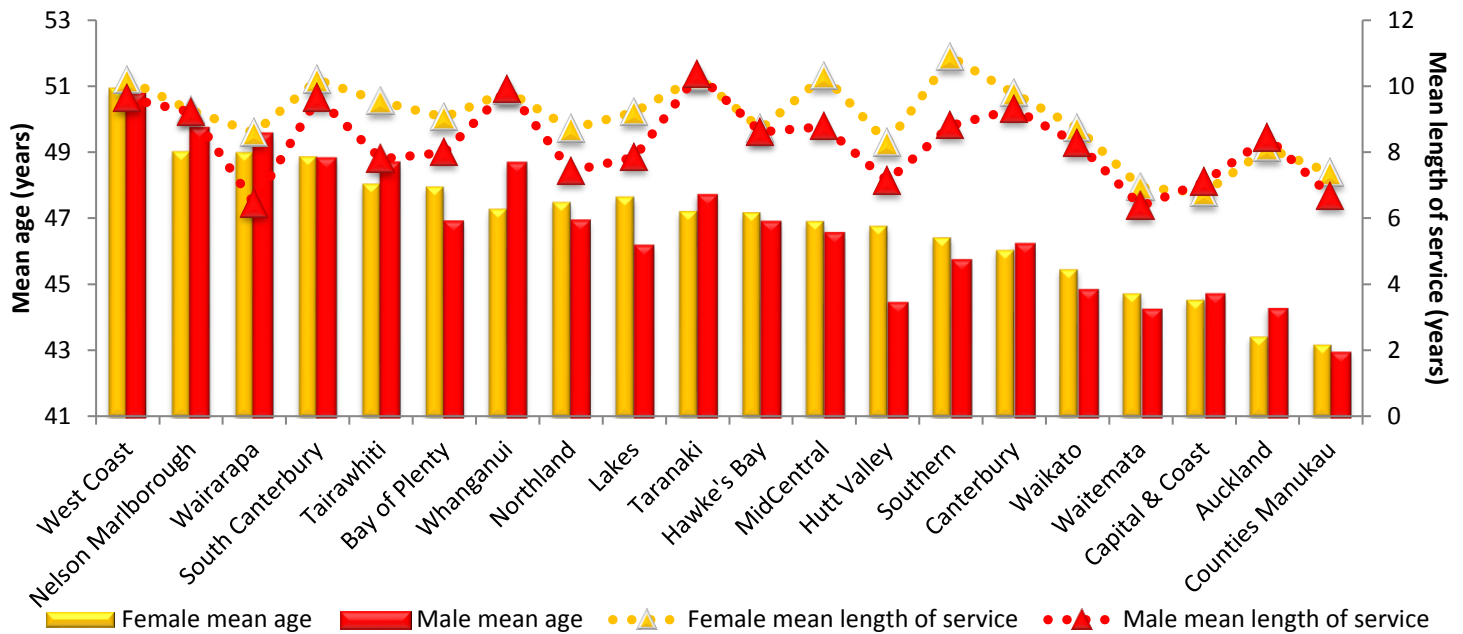**Figure 8: Mean ages and mean length of service by DHB and sex**

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	10.2	50.9	9.6	50.7	10.1	50.9
Nelson Marlborough	9.3	49.0	9.2	49.7	9.3	49.1
Wairarapa	8.6	49.0	6.4	49.5	8.2	49.1
South Canterbury	10.2	48.9	9.7	48.8	10.1	48.9
Tairawhiti	9.5	48.0	7.8	48.7	9.2	48.2
Bay of Plenty	9.1	48.0	8.0	46.9	8.8	47.7
Whanganui	9.8	47.3	9.9	48.7	9.9	47.5
Northland	8.7	47.5	7.4	46.9	8.4	47.4
Lakes	9.2	47.7	7.8	46.2	9.0	47.4
Taranaki	10.3	47.2	10.4	47.7	10.3	47.3
Hawke's Bay	8.7	47.2	8.6	46.9	8.7	47.1
MidCentral	10.3	46.9	8.8	46.5	10.0	46.8
Hutt Valley	8.3	46.8	7.1	44.4	8.1	46.3
Southern	10.9	46.4	8.8	45.7	10.4	46.3
Canterbury	9.8	46.0	9.3	46.2	9.7	46.1
Waikato	8.7	45.5	8.3	44.8	8.6	45.3
Waitemata	6.9	44.7	6.4	44.2	6.8	44.6
Capital & Coast	6.8	44.5	7.1	44.7	6.9	44.6
Auckland	8.1	43.4	8.4	44.3	8.2	43.6
Counties Manukau	7.4	43.2	6.7	42.9	7.2	43.1
Grand Total	**8.6**	**45.7**	**8.0**	**45.4**	**8.5**	**45.6**

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.
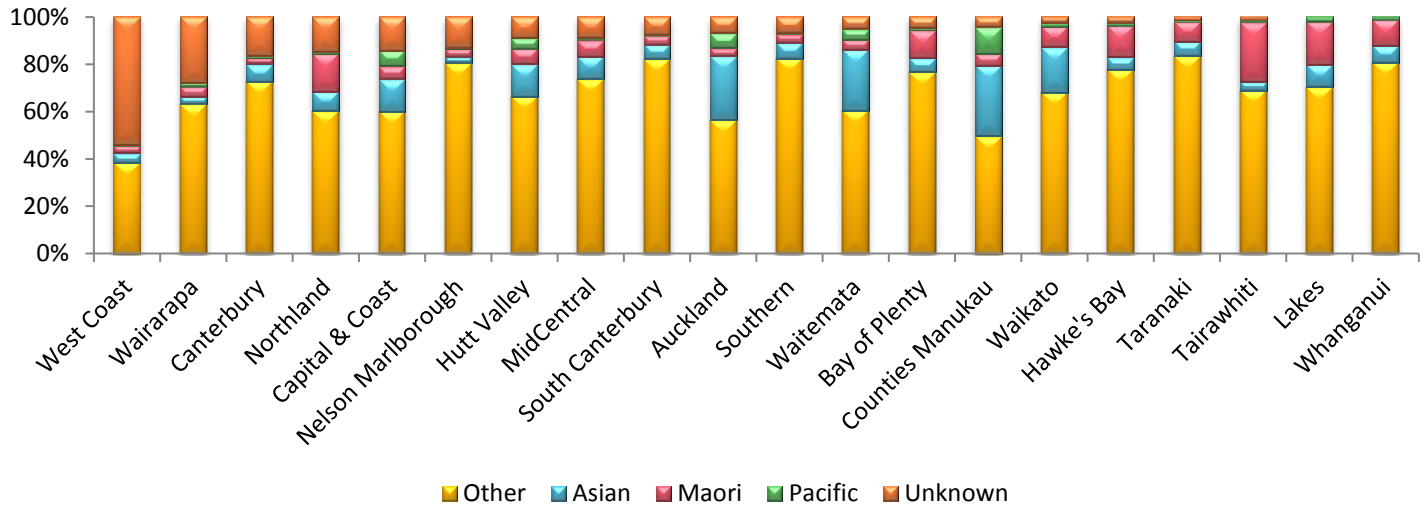
Figure 9: Proportion of reported ethnicities by DHB

Table 8: Distribution of reported ethnicities by DHB

DHB	Other*	Asian	Māori	Pacific	Unknown	Total
West Coast	301	32	>21	**	423	785
Wairarapa	357	18	25	8	157	565
Canterbury	6,295	642	215	80	1,412	8,644
Northland	1,634	221	436	26	392	2,709
Capital & Coast	3,276	761	291	365	768	5,461
Nelson Marlborough	1,849	59	76	10	299	2,293
Hutt Valley	1,354	279	133	93	180	2,039
MidCentral	1,834	235	173	26	216	2,484
South Canterbury	613	46	>24	**	56	745
Auckland	5,352	2,564	320	597	647	9,480
Southern	3,460	280	151	29	275	4,195
Waitemata	4,340	1,830	314	321	356	7,161
Bay of Plenty	2,230	175	345	23	136	2,909
Counties Manukau	3,342	2,012	346	754	280	6,734
Waikato	4,448	1,251	572	88	172	6,531
Hawke's Bay	2,034	139	346	29	63	2,611
Taranaki	1,334	98	136	10	20	1,598
Tairawhiti	519	28	191	8	7	753
Lakes	922	124	240	23	0	1,309
Whanganui	762	68	105	9	0	944
Grand Total	**46,256**	**10,862**	**4,468**	**2,505**	**5,859**	**69,950**

* '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	12.3	10.5	9.4	9.9	10.1	1.8	9.8	10.4
Taranaki	11.9	10.7	9.6	10.5	8.5	1.3	6.9	10.3
West Coast	11.5	8.5	10.7	10.3	6.7	0.7	8.8	10.1
South Canterbury	11.0	9.9	10.3	10.0	10.1	1.0	7.2	10.1
MidCentral	11.2	10.1	9.3	10.7	10.8	1.4	9.1	10.0
Whanganui	9.8	10.5	11.1	10.8	10.1	0.9	9.2	9.9
Canterbury	10.7	9.3	9.6	9.8	11.1	2.2	9.9	9.7
Nelson Marlborough	10.5	8.5	8.5	9.7	10.4	0.9	8.0	9.3
Tairawhiti	10.8	9.4	7.5	9.5	7.7	0.6	5.7	9.2
Lakes	9.9	9.4	9.8	8.9	8.2	1.1	7.7	9.0
Bay of Plenty	10.0	9.4	8.2	7.8	9.6	1.2	9.3	8.8
Hawke's Bay	9.1	9.5	8.7	8.7	10.0	1.4	8.8	8.7
Waikato	9.5	9.2	8.2	8.0	10.6	2.0	6.2	8.6
Northland	9.2	9.4	8.8	6.5	8.6	1.3	8.4	8.4
Wairarapa	8.9	7.5	10.6	5.9	7.5	0.3	9.1	8.2
Auckland	8.2	9.0	8.2	9.2	10.7	0.8	7.9	8.2
Hutt Valley	9.1	8.1	7.6	8.9	9.3	0.7	7.6	8.1
Counties Manukau	7.7	7.8	6.7	7.8	9.5	0.6	6.7	7.2
Capital & Coast	7.2	7.0	6.5	7.8	9.6	1.1	5.9	6.9
Waitemata	6.9	6.9	7.7	6.2	8.7	0.7	7.6	6.8
Grand Total	**9.3**	**8.8**	**8.3**	**8.4**	**9.9**	**1.2**	**7.8**	**8.5**

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 Tairawhiti shows that the majority of staff took no sick leave in the March quarter, and 75% of staff took 57.4 hours or less sick leave per FTE. The data for Waitemata shows that the majority of staff took 36 hours or less sick leave per FTE, and that 75% of staff took 96.3 hours or less of sick leave per FTE.

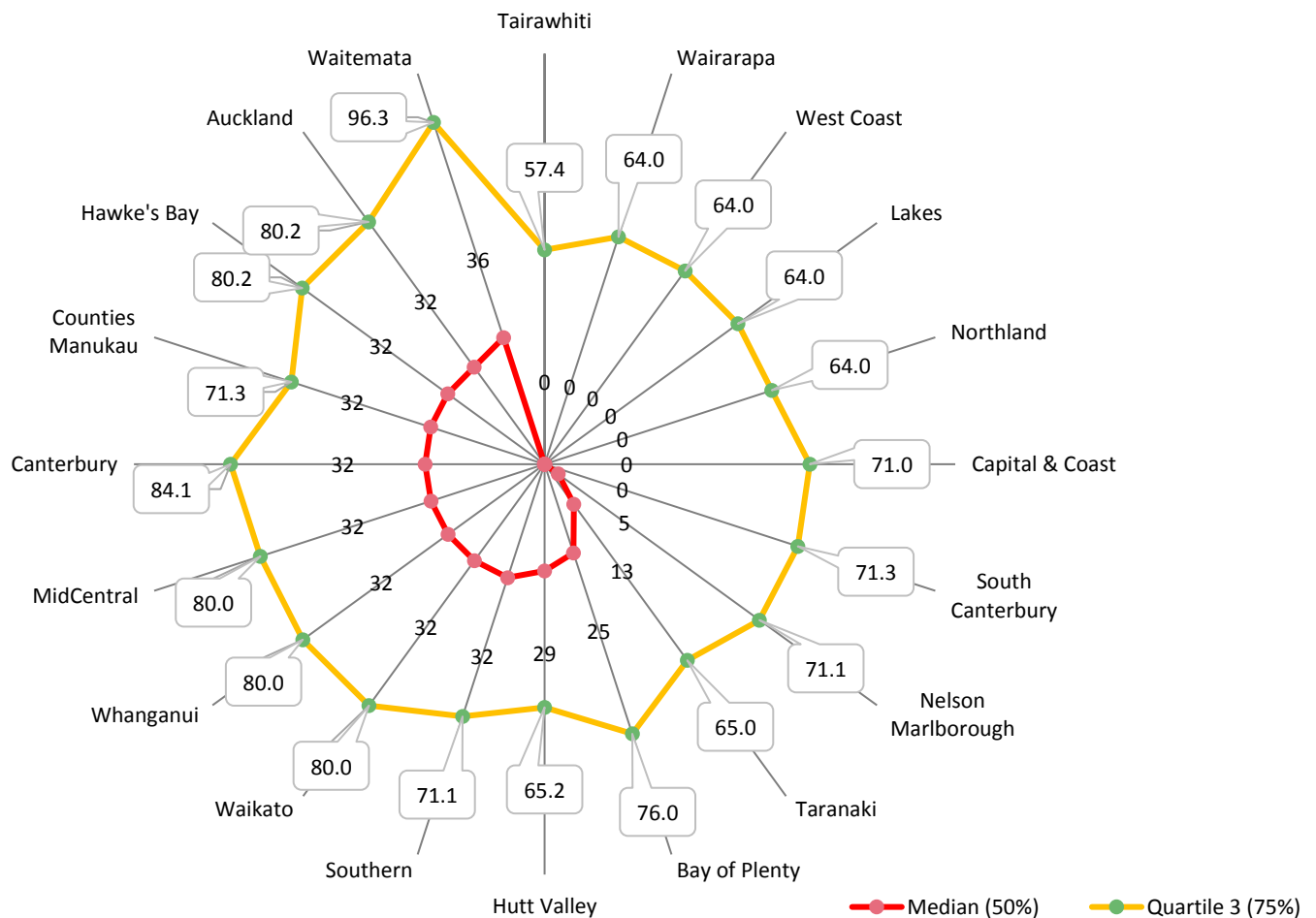**Figure 10: Average annualized sick leave hours per FTE by DHB**

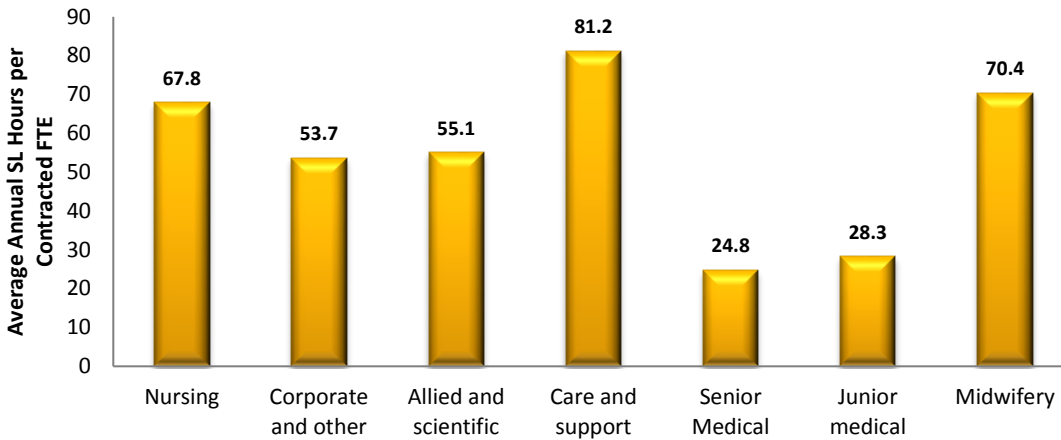**Figure 11: Average annual sick leave hours per FTE by occupational group**

Average Annual SL Hours per Contracted FTE:
- Nursing: 67.8
- Corporate and other: 53.7
- Allied and scientific: 55.1
- Care and support: 81.2
- Senior Medical: 24.8
- Junior medical: 28.3
- Midwifery: 70.4

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

Average Annual SL Hours per Contracted FTE:
- <25: F 54.7, M 47.0
- 25-34: F 61.2, M 47.8
- 35-44: F 62.5, M 42.8
- 45-54: F 61.8, M 44.7
- 55-64: F 62.2, M 52.0
- >=65: F 76.9, M 56.2

F ■ M
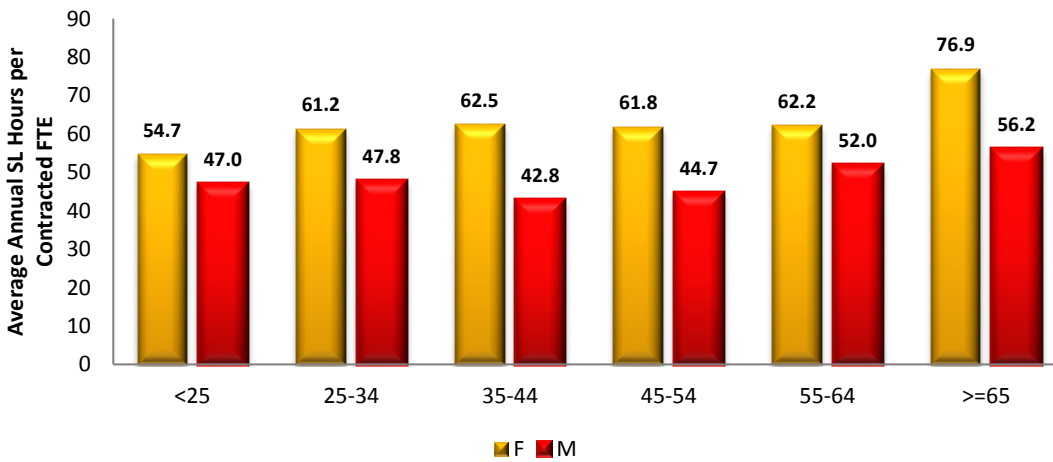
Figure 13: Average annual sick leave hours per FTE by ethnicity by sex
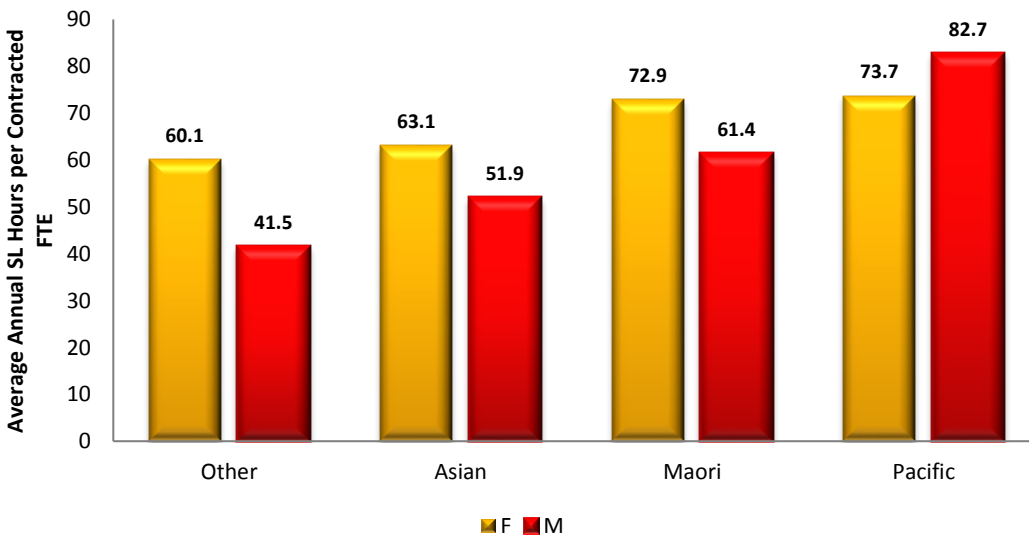
Average Annual SL Hours per Contracted FTE:
- Other: F 60.1, M 41.5
- Asian: F 63.1, M 51.9
- Maori: F 72.9, M 61.4
- Pacific: F 73.7, M 82.7

F ■ M

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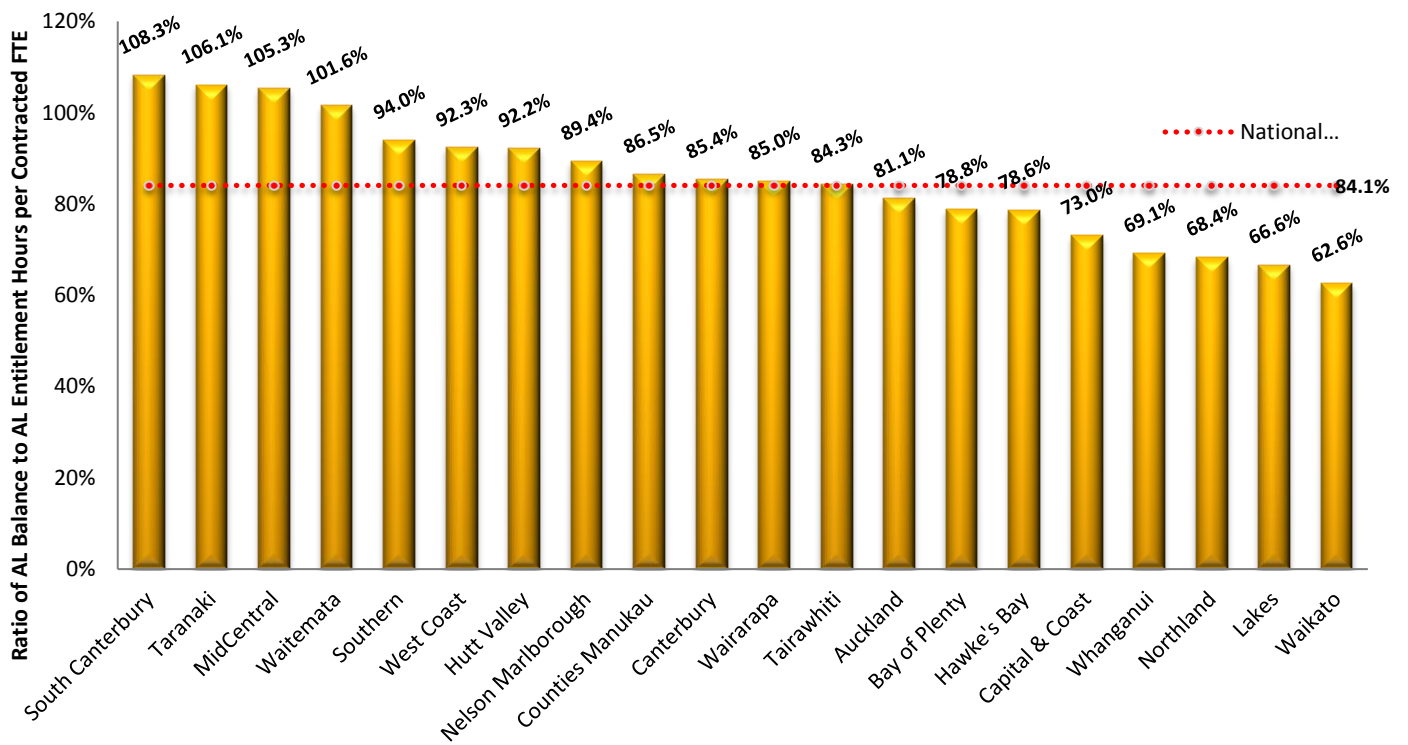
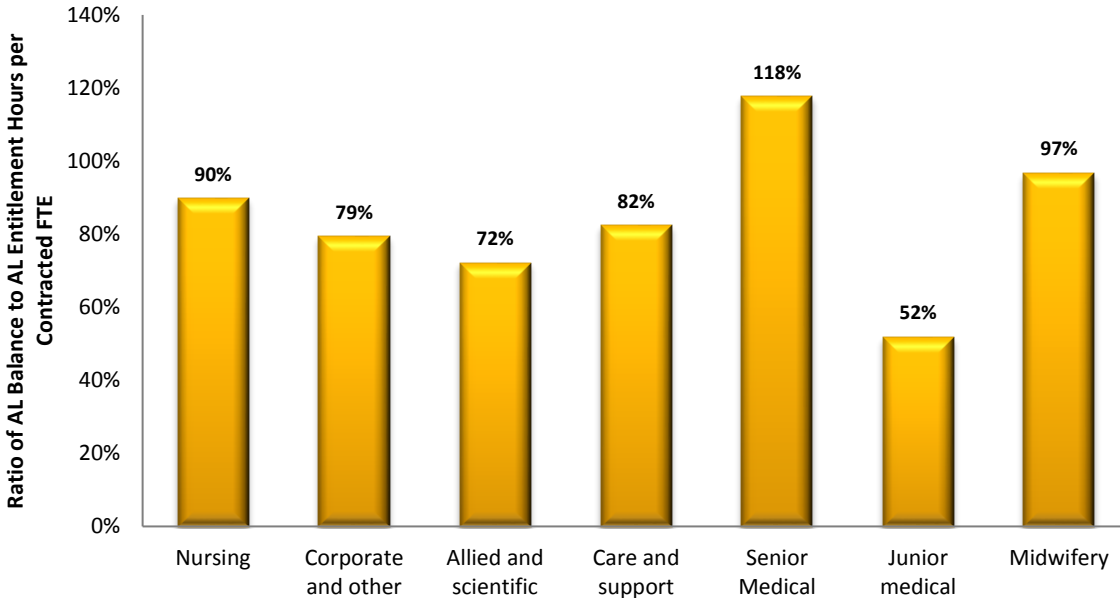**Figure 15: Ratio of annual leave balance to annual leave entitlement hours per FTE by occupational group**

Ratio of AL Balance to AL Entitlement Hours per Contracted FTE

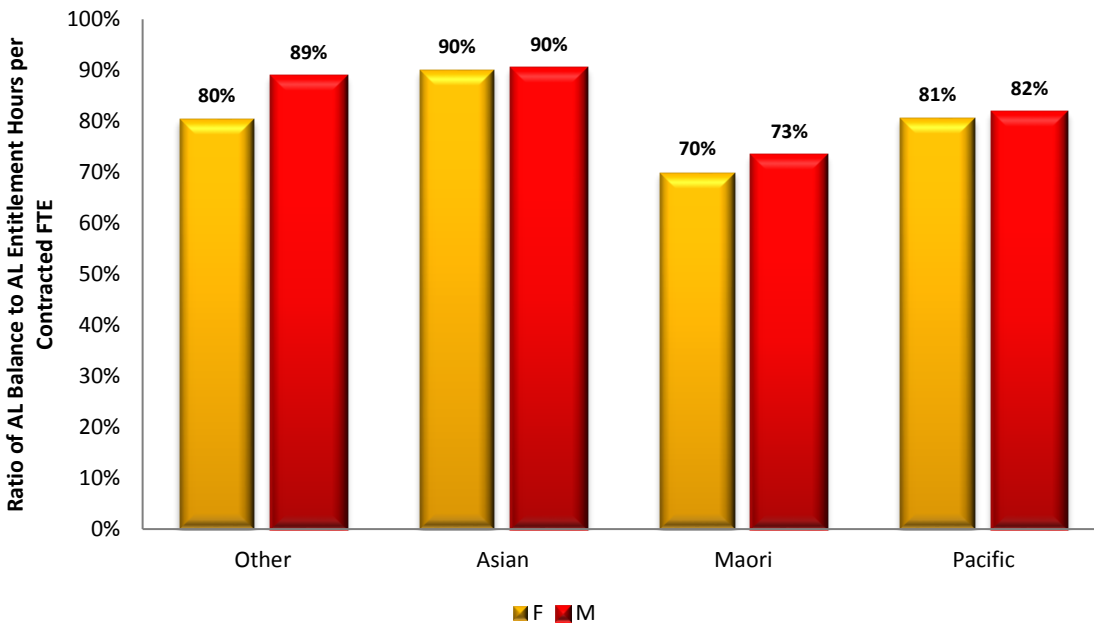| Occupational group	Ratio
Nursing	90%
Corporate and other	79%
Allied and scientific	72%
Care and support	82%
Senior Medical	118%
Junior medical	52%
Midwifery	97%

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

Ratio of AL Balance to AL Entitlement Hours per Contracted FTE

Ethnicity	F	M
Other	80%	89%
Asian	90%	90%
Maori	70%	73%
Pacific	81%	82%

F M

## 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 March 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
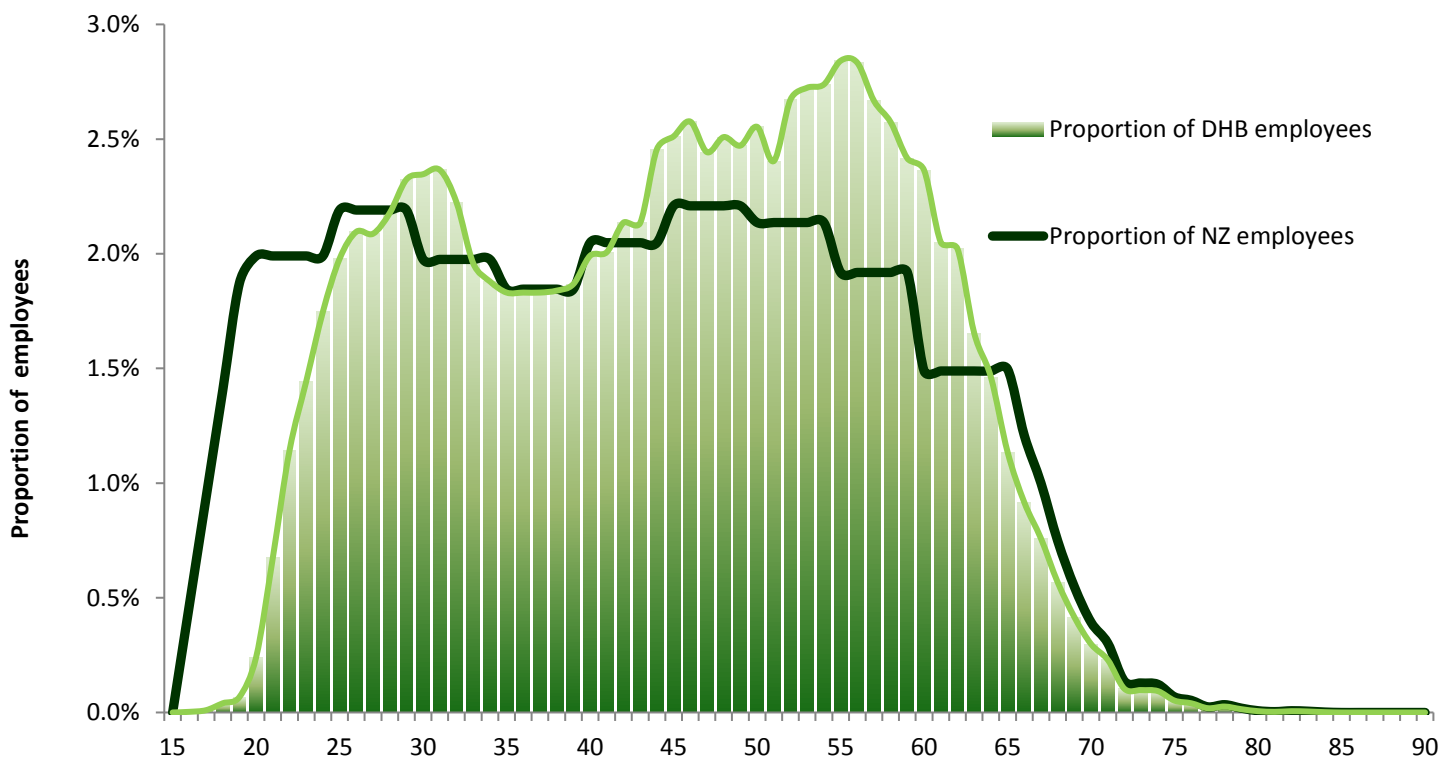
## ETHNIC REPRESENTATION OF WORKFORCE TO RESIDENT POPULATION

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 sparklines 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 Tairawhiti, will tend to show greater deviations between the DHB workforce ethnicities and the resident population.
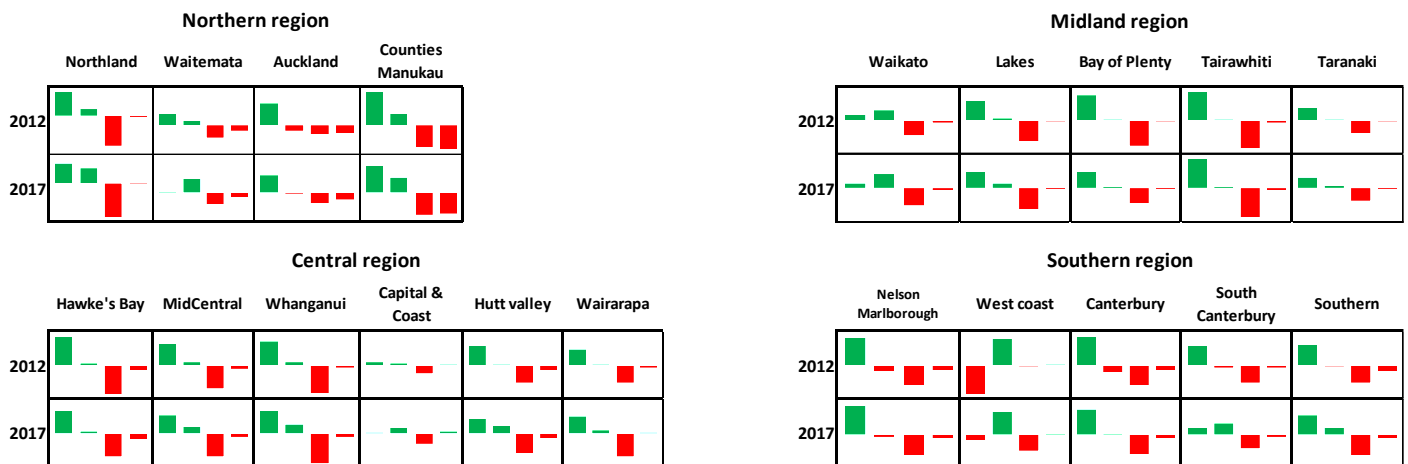
Note: The four bars are ordered as: Other, Asian, Māori and Pacific

For some DHBs the ethnic distribution of their staff closely mirrors that of the resident population, such as Capital & Coast, Taranaki and South Canterbury. Overall, the distributions have changed only slightly between 2012 and 2017; the 'Other' ethnicities have reduced closer to zero (from nine down to seven percentage points difference), whereas Māori have been under-representation (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.

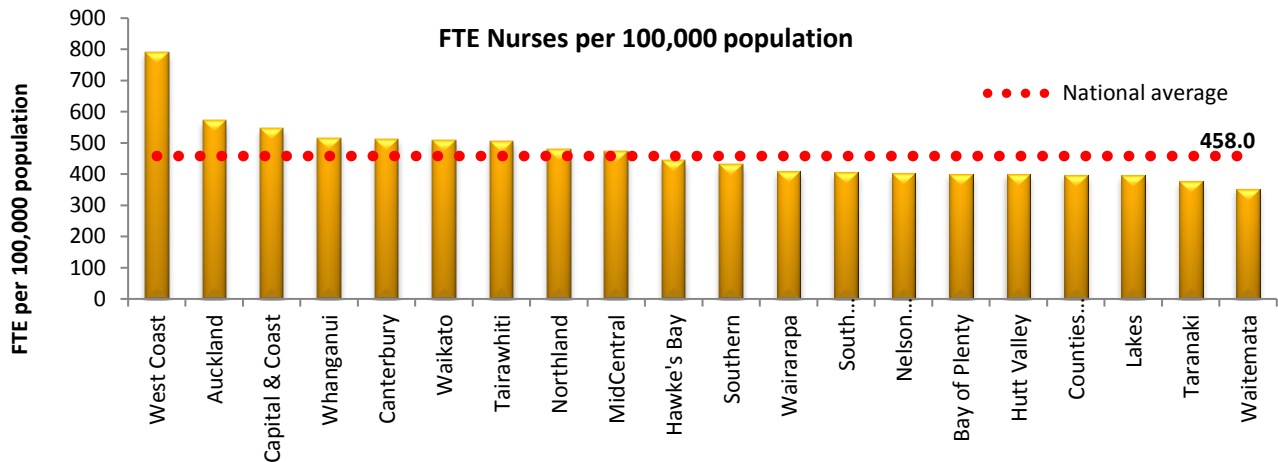**Figure 18: Population density of Nurses by DHB**

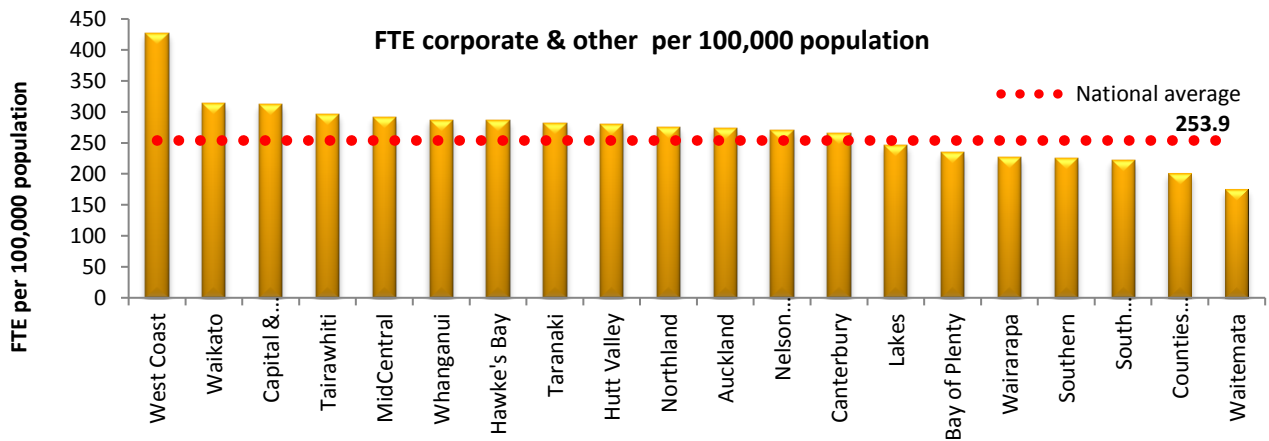**Figure 19: Population density of Corporate & Other by DHB**

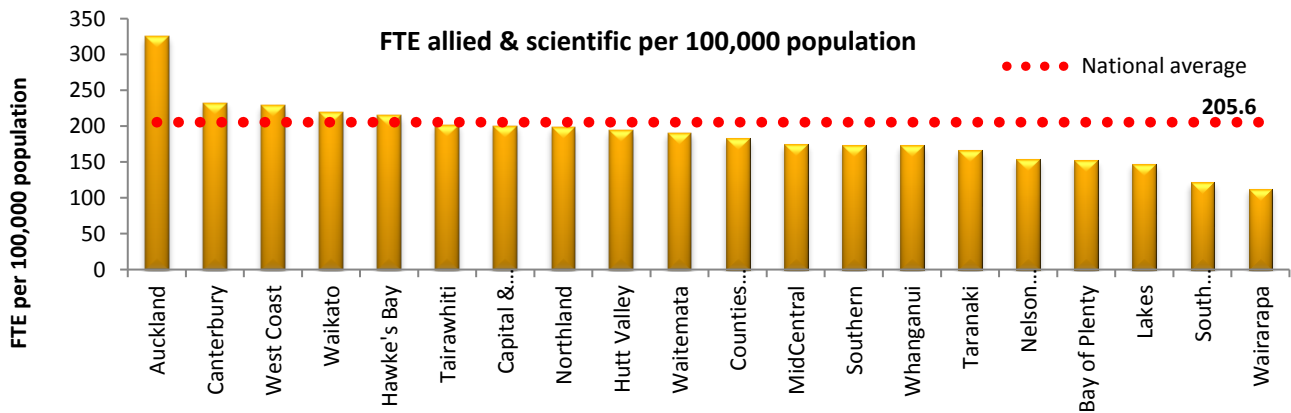**Figure 20: Population density of Allied & Scientific by DHB**
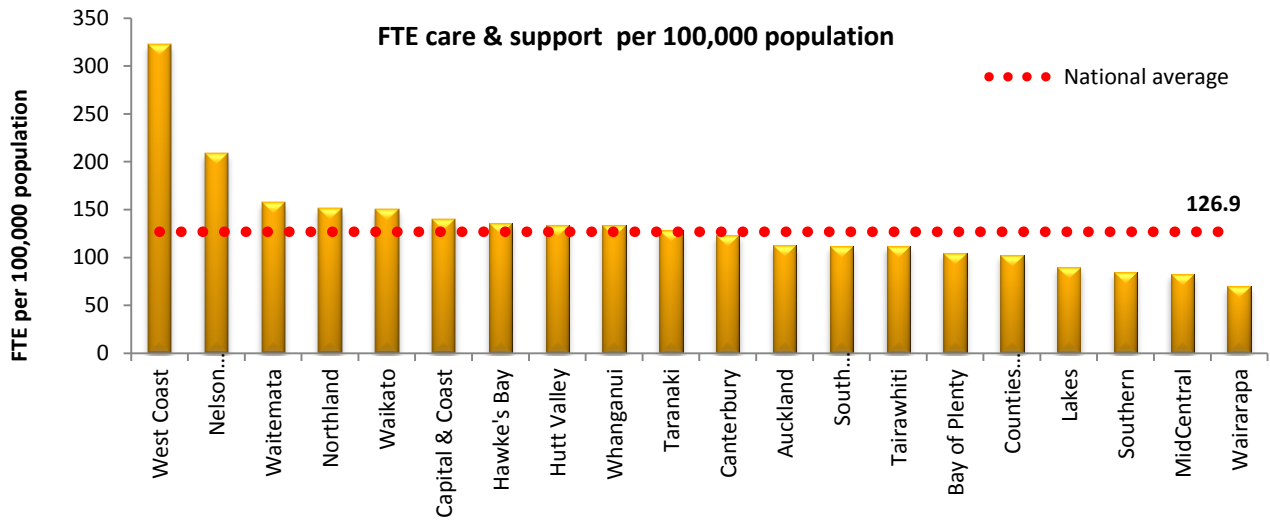

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Figure 21: Population density of Care & Support by DHB

FTE care & support per 100,000 population

Bars (left to right): West Coast, Nelson..., Waitemata, Northland, Waikato, Capital & Coast, Hawke's Bay, Hutt Valley, Whanganui, Taranaki, Canterbury, Auckland, South..., Tairawhiti, Bay of Plenty, Counties..., Lakes, Southern, MidCentral, Wairarapa

National average: 126.9

Figure 22: Population density of Senior Medical by DHB

FTE senior medical per 100,000 population

Bars (left to right): Auckland, Tairawhiti, Northland, Capital & Coast, Waikato, Canterbury, MidCentral, West Coast, Nelson..., Counties Manukau, Hawke's Bay, Hutt Valley, Taranaki, Southern, Bay of Plenty, Whanganui, Lakes, Waitemata, Wairarapa, South Canterbury

National average: 90.9
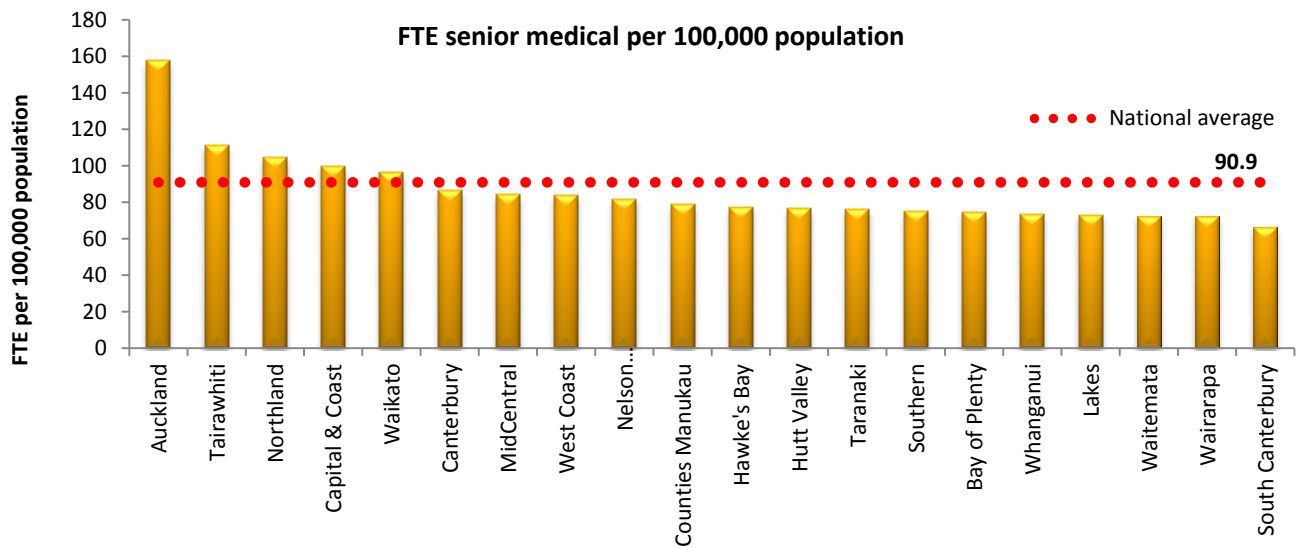
Figure 23: Population density of Junior Medical by DHB

FTE junior medical per 100,000 population

Bars (left to right): Auckland, Capital & Coast, Waikato, Canterbury, Hawke's Bay, Hutt Valley, MidCentral, Southern, Lakes, Bay of Plenty, Counties Manukau, Northland, Taranaki, Whanganui, Waitemata, Nelson Marlborough, Tairawhiti, South Canterbury, Wairarapa, West Coast

National average: 81.4

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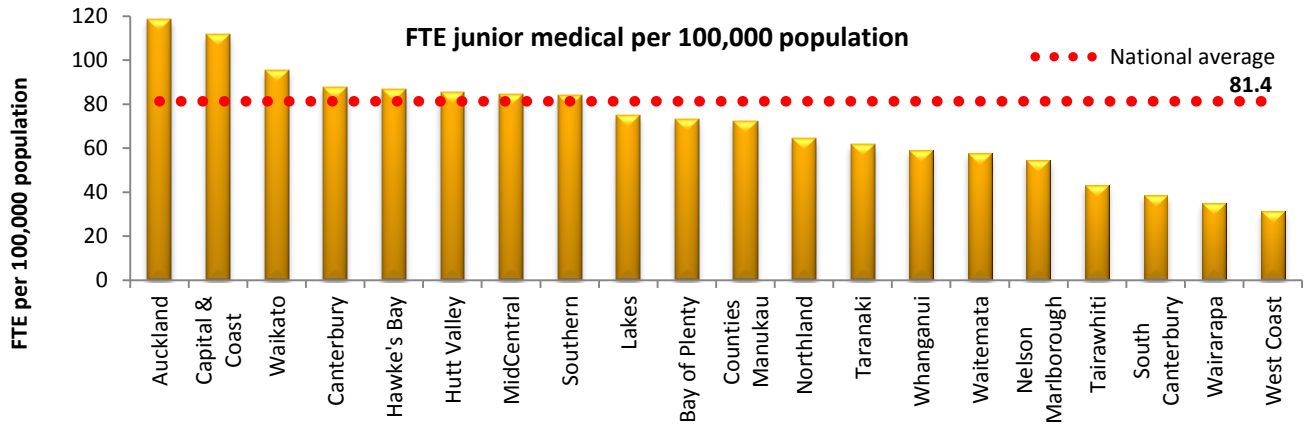
Figure 24: Population density of Midwives by DHB

FTE midwives per 100,000 population

National average

20.4

X-axis (left to right): Tairawhiti, Whanganui, West Coast, South Canterbury, MidCentral, Hawke's Bay, Capital & Coast, Auckland, Northland, Lakes, Wairarapa, Counties Manukau, Hutt Valley, Nelson Marlborough, Taranaki, Waitemata, Bay of Plenty, Canterbury, Southern, Waikato

Y-axis: FTE per 100,000 population
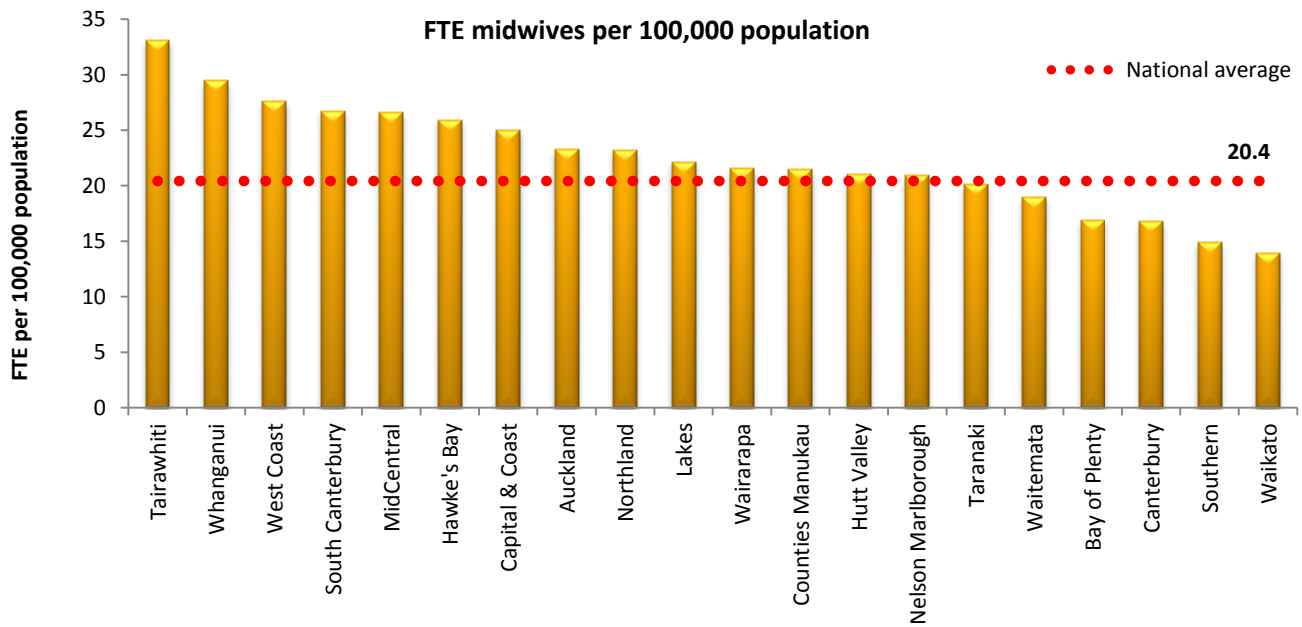
Figure 25: Population density of all DHB staff by DHB

FTE all staff per 100,000 population

National average

1237.1

X-axis (left to right): West Coast, Auckland, Capital & Coast, Waikato, Canterbury, Tairawhiti, Northland, Whanganui, Hawke's Bay, MidCentral, Nelson Marlborough, Hutt Valley, Taranaki, Southern, Bay of Plenty, Counties Manukau, Lakes, Waitemata, South Canterbury, Wairarapa

Y-axis: FTE per 100,000 population