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DISTRICT HEALTH BOARD EMPLOYED WORKFORCE QUARTERLY REPORT

1 APRIL TO 30 JUNE 2020

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 April 2020 to 30 June 2020 and is a snapshot in time at 30 June 2020. 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 April 2020 to June 2020 inclusive and is a snapshot taken by the DHBs on 30 June 2020.
- 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.

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Data source: DHB Workforce Information, held by TAS.

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OVERVIEW

DHB WORKFORCE AT A GLANCE

For data to 30 June 2020, only those employed with contracted hours greater than zero are included in the analysis except for the tables and charts that explicitly report on 'Other' employees on page 5. 'Other' includes those on maternity / parental leave, and those who have not been reported with an employment status code.

Total employees 78,606* **61,534 female** **> 17,065 male**	**66,335 FTE** **50,725 FTE* females** **15,608 FTE* males**	**Largest occupation group:** **Nurses – 30,059** **Smallest occupation group:** **Midwives – 1,548**
DHB employee average age 45.0 years **45.1 years for females** **44.7 years for males**	**Oldest male occupation group:** **SMO (mean age 51.4 years)** **Youngest male occupation group:** **RMO (mean age 31.0 years)**	**Oldest female occupation groups:** **Corporate and other (mean age 50.1 years)** **Youngest female occupation group:** **RMO (mean age 30.8 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** **SMO (mean 10.1 years)** **Shortest Length of Service occupation group** **RMO (mean 1.4 years)**	**Employee reported ethnicities:** **Other** – 66.1%** **Asian – 21.2%** **Māori – 8.2%** **Pacific – 4.5%**

* 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'.

*** There were fewer than five employees reported as gender diverse.

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

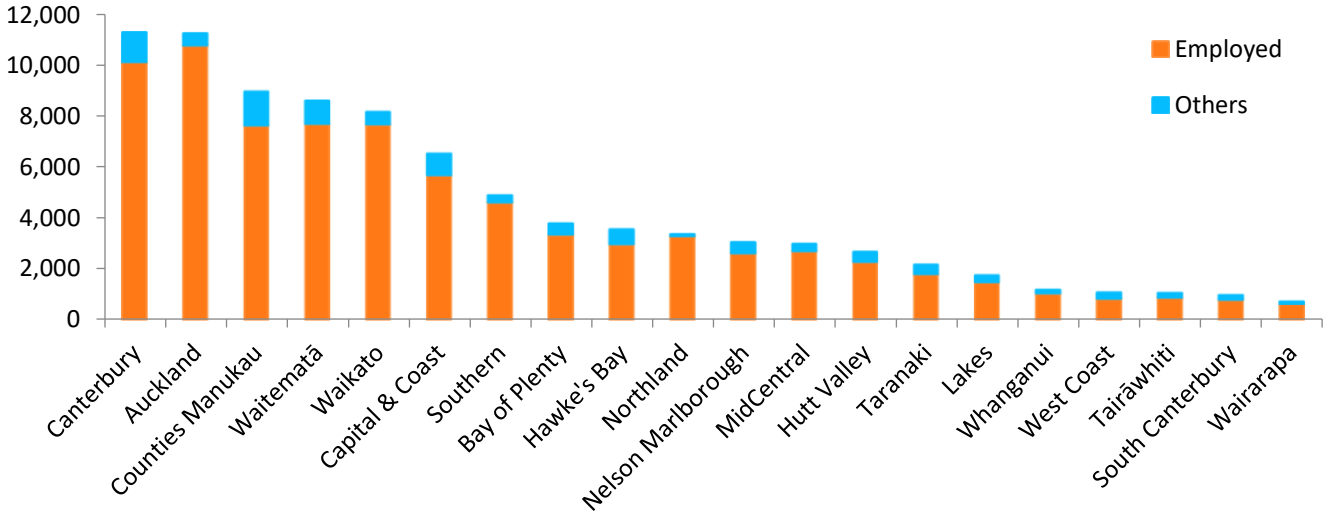


Table 1: Distribution of employment types

DHB	Employed	Others	Total	Proportion of DHB workforce
Canterbury	10,117	1,191	11,308	12.8%
Auckland	10,775	495	11,270	12.8%
Counties Manukau	7,626	1,339	8,965	10.2%
Waitematā	7,699	921	8,620	9.8%
Waikato	7,671	504	8,175	9.3%
Capital & Coast	5,676	861	6,537	7.4%
Southern	4,590	303	4,893	5.6%
Bay of Plenty	3,333	456	3,789	4.3%
Hawke's Bay	2,960	588	3,548	4.0%
Northland	3,276	89	3,365	3.8%
Nelson Marlborough	2,606	434	3,040	3.5%
MidCentral	2,682	296	2,978	3.4%
Hutt Valley	2,274	385	2,659	3.0%
Taranaki	1,788	365	2,153	2.4%
Lakes	1,458	279	1,737	2.0%
Whanganui	1,016	161	1,177	1.3%
West Coast	811	254	1,065	1.2%
Tairāwhiti	861	185	1,046	1.2%
South Canterbury	779	179	958	1.1%
Wairarapa	608	113	721	0.8%
Grand Total	**78,606**	**9,398**	**88,004**	**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	3,989	3,406.1	0.85	2,019	1,804.5	0.89	2,134	1,884.7	0.88	711	660.6	0.93	1,121	908.0	0.81	625	619.5	0.99	176	133.5	0.76
Bay of Plenty	1,355	1,039.4	0.77	658	576.8	0.88	501	420.7	0.84	324	267.0	0.82	244	202.9	0.83	198	196.9	0.99	53	36.3	0.68
Canterbury	3,810	3,156.1	0.83	2,206	1,921.4	0.87	1,715	1,416.3	0.83	1,058	841.0	0.79	632	536.7	0.85	560	552.9	0.99	136	88.7	0.65
Capital & Coast	2,360	1,879.9	0.80	1,162	1,058.0	0.91	763	653.4	0.86	416	366.2	0.88	439	347.2	0.79	413	399.0	0.97	123	86.4	0.70
Counties Manukau	2,895	2,457.3	0.85	1,403	1,202.4	0.86	1,219	1,054.0	0.86	820	715.7	0.87	593	502.0	0.85	476	466.3	0.98	220	165.8	0.75
Hawke's Bay	1,148	825.5	0.72	616	536.2	0.87	477	386.4	0.81	325	260.1	0.80	160	137.8	0.86	163	160.2	0.98	71	37.6	0.53
Hutt Valley	770	627.2	0.81	487	441.5	0.91	362	300.6	0.83	252	218.1	0.87	173	130.6	0.75	182	173.2	0.95	48	33.4	0.70
Lakes	565	441.1	0.78	331	295.9	0.89	202	173.1	0.86	129	108.1	0.84	107	92.3	0.86	89	89.0	1.00	35	27.4	0.78
MidCentral	1,109	916.5	0.83	624	576.8	0.92	377	333.5	0.88	191	158.8	0.83	169	151.1	0.89	155	153.3	0.99	57	38.6	0.68
Nelson Marlborough	856	629.5	0.74	591	486.4	0.82	376	281.8	0.75	467	325.7	0.70	159	130.0	0.82	102	99.4	0.97	55	36.3	0.66
Northland	1,273	966.2	0.76	621	537.4	0.87	494	419.1	0.85	483	345.9	0.72	207	201.0	0.97	126	125.0	0.99	72	43.6	0.61
South Canterbury	321	245.5	0.76	156	118.4	0.76	111	84.3	0.76	76	54.9	0.72	66	48.7	0.74	24	23.9	1.00	25	19.0	0.76
Southern	1,931	1,541.6	0.80	872	779.4	0.89	715	616.5	0.86	362	290.2	0.80	321	256.9	0.80	315	308.6	0.98	74	51.1	0.69
Tairāwhiti	339	270.0	0.80	207	187.5	0.91	118	101.0	0.86	94	78.9	0.84	58	51.5	0.89	27	26.8	0.99	18	14.0	0.78
Taranaki	686	513.9	0.75	409	363.2	0.89	255	205.5	0.81	188	154.8	0.82	130	109.7	0.84	90	88.7	0.99	30	20.6	0.69
Waikato	2,932	2,479.8	0.85	1,654	1,483.1	0.90	1,138	998.4	0.88	901	765.0	0.85	465	413.4	0.89	470	460.9	0.98	111	82.2	0.74
Wairarapa	274	189.7	0.69	137	109.9	0.80	71	51.1	0.72	66	44.6	0.68	26	22.3	0.86	14	14.0	1.00	20	13.1	0.65
Waitematā	2,675	2,264.9	0.85	1,394	1,207.4	0.87	1,423	1,187.5	0.83	1,068	947.6	0.89	560	475.0	0.85	392	381.4	0.97	187	120.2	0.64
West Coast	329	277.0	0.84	202	170.9	0.85	88	78.9	0.90	138	99.1	0.72	32	25.1	0.79	9	8.6	0.95	13	9.9	0.76
Whanganui	442	355.7	0.80	203	183.6	0.91	140	114.4	0.82	116	95.9	0.83	53	48.3	0.91	38	38.0	1.00	24	18.3	0.76
Grand Total	30,066	24,482.8	0.81	15,952	14,040.6	0.88	12,679	10,761.2	0.85	8,185	6,798.1	0.83	5,715	4,790.5	0.84	4,468	4,385.7	0.98	1,548	1,076.1	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

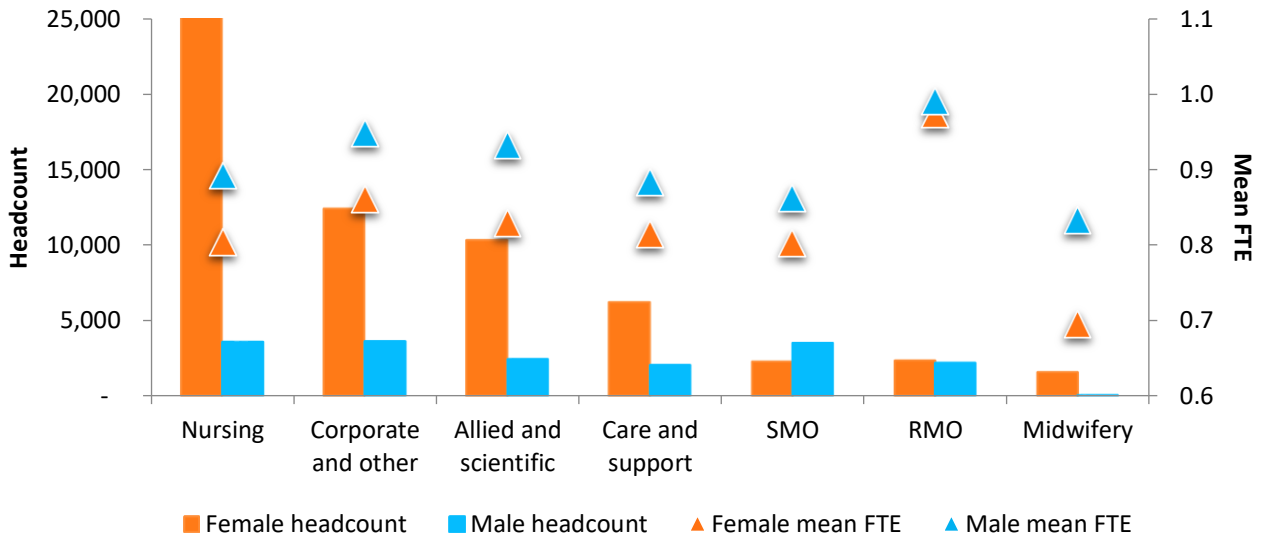


Table 3: Occupation group headcount and mean FTE by gender

	Female		Male		Total	
Occupation group	**Headcount**	**Mean FTE**	**Headcount**	**Mean FTE**	**Headcount**	**Mean FTE**
Nursing	26,519	0.80	3,538	0.89	30,059	0.81
Corporate and other	12,399	0.86	3,553	0.95	15,952	0.88
Allied and scientific	10,285	0.83	2,394	0.93	12,679	0.85
Care and support	< 6,190	0.81	> 1,992	0.88	8,185	0.83
SMO	2,265	0.80	3,450	0.86	5,715	0.84
RMO	2,334	0.97	2,134	0.99	4,468	0.98
Midwifery	> 1,540	0.69	**	0.83	1,548	0.70
Grand Total	**61,534**	**0.82**	**> 17,065**	**0.91**	**78,606**	**0.84**

** Data suppressed (headcounts less than 5)

Some values have been expressed as ranges to ensure anonymity of the small number of employees reported as gender diverse.

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

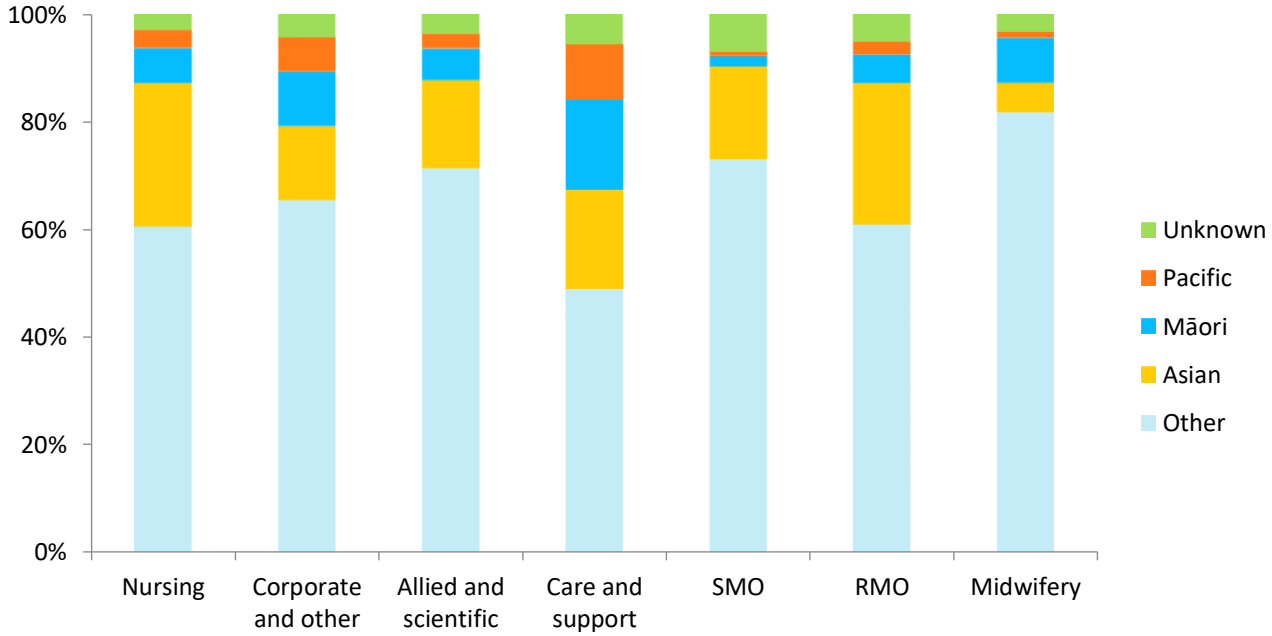


Table 4: Count and proportion of ethnicities by occupation group

Occupation group	Other*		Asian		Māori		Pacific		Unknown		Total
Nursing	18,237	60.7%	7,964	26.5%	1,977	6.6%	1,001	3.3%	880	2.9%	30,059
Corporate and other	10,451	65.5%	2,185	13.7%	1,626	10.2%	1,012	6.3%	678	4.3%	15,952
Allied and scientific	9,048	71.4%	2,077	16.4%	742	5.9%	355	2.8%	457	3.6%	12,679
Care and support	4,021	49.1%	1,498	18.3%	1,382	16.9%	832	10.2%	452	5.5%	8,185
SMO	4,173	73.0%	984	17.2%	113	2.0%	51	0.9%	394	6.9%	5,715
RMO	2,727	61.0%	1,169	26.2%	237	5.3%	112	2.5%	223	5.0%	4,468
Midwifery	1,264	81.7%	86	5.6%	129	8.3%	19	1.2%	50	3.2%	1,548
Grand Total	**49,921**	**63.5%**	**15,963**	**20.3%**	**6,206**	**7.9%**	**3,382**	**4.2%**	**3,134**	**4.0%**	**78,606**

* '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 75,472 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 June 2020.

Figure 4: Proportion of identifiable ethnicities for all DHB employees

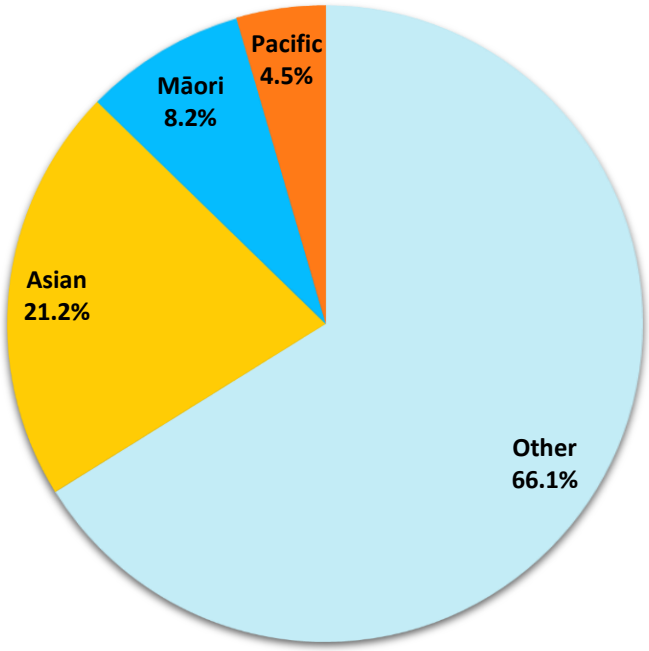
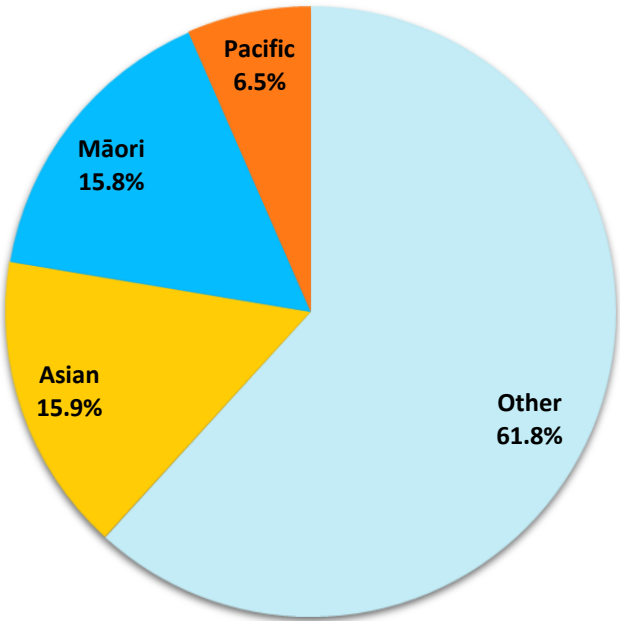


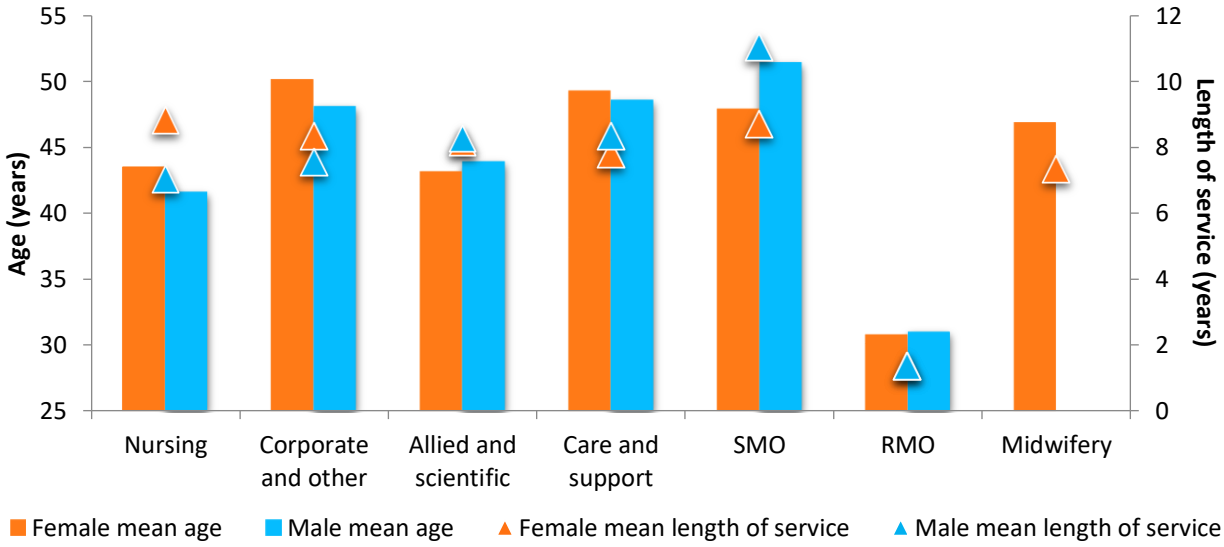
Figure 5: Proportion of identifiable ethnicities for projected population data at 30 June 2020



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

	Female		Male		Total	
Occupation group	**Mean length of service**	**Mean age**	**Mean length of service**	**Mean age**	**Mean length of service**	**Mean age**
Nursing	8.8	43.5	7.0	41.6	8.6	43.3
Corporate and other	8.4	50.1	7.5	48.1	8.2	49.7
Allied and scientific	8.1	43.1	8.3	43.9	8.2	43.3
Care and support	7.8	49.2	8.3	48.6	7.9	49.1
SMO	8.7	47.9	11.1	51.4	10.1	50.0
RMO	1.4	30.8	1.4	31.0	1.4	30.9
Midwifery	7.3	46.8	12.6	48.3	7.3	46.8
Grand Total	**8.2**	**45.1**	**7.6**	**44.7**	**8.1**	**45.0**

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

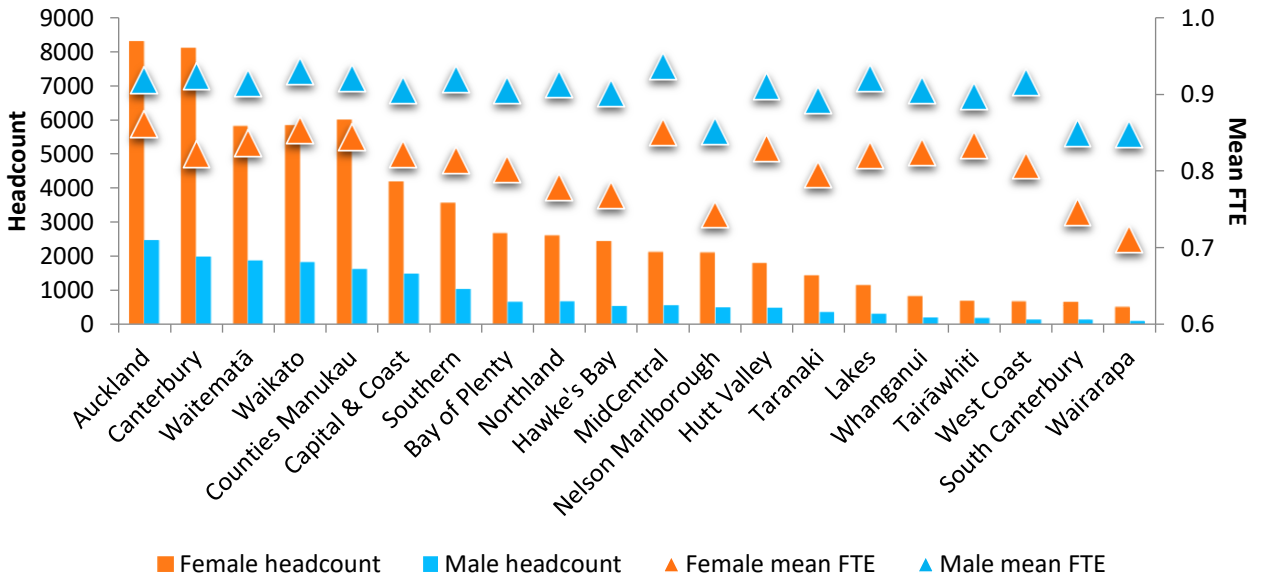


Table 6: Headcount and mean FTE by gender and DHB

		Auckland	Canterbury	Waitematā	Waikato	Counties Manukau	Capital & Coast	Southern	Bay of Plenty	Northland	Hawke's Bay	MidCentral	Nelson Marlborough	Hutt Valley	Taranaki	Lakes	Whanganui	Tairāwhiti	West Coast	South Canterbury	Wairarapa
Female	Headcount	8,304	8,129	5,828	5,850	6,010	4,193	3,564	2,676	2,613	2,431	2,126	2,111	1,789	1,429	1,146	817	682	673	647	516
	Mean FTE	0.86	0.82	0.84	0.85	0.84	0.82	0.81	0.80	0.78	0.77	0.85	0.74	0.83	0.80	0.82	0.83	0.83	0.81	0.75	0.71
Male	Headcount	2,469	1,988	1,871	1,821	1,616	1,483	1,026	657	663	529	556	495	485	359	312	198	179	138	132	92
	Mean FTE	0.92	0.92	0.91	0.93	0.92	0.91	0.92	0.91	0.91	0.90	0.94	0.85	0.91	0.89	0.92	0.91	0.90	0.92	0.85	0.85
Total	Headcount	10,775	10,117	7,699	7,671	7,626	5,676	4,590	3,333	3,276	2,960	2,682	2,606	2,274	1,788	1,458	1,015	861	811	779	608
	Mean FTE	0.87	0.84	0.86	0.87	0.86	0.84	0.84	0.82	0.81	0.79	0.87	0.76	0.85	0.81	0.84	0.84	0.85	0.83	0.76	0.73

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

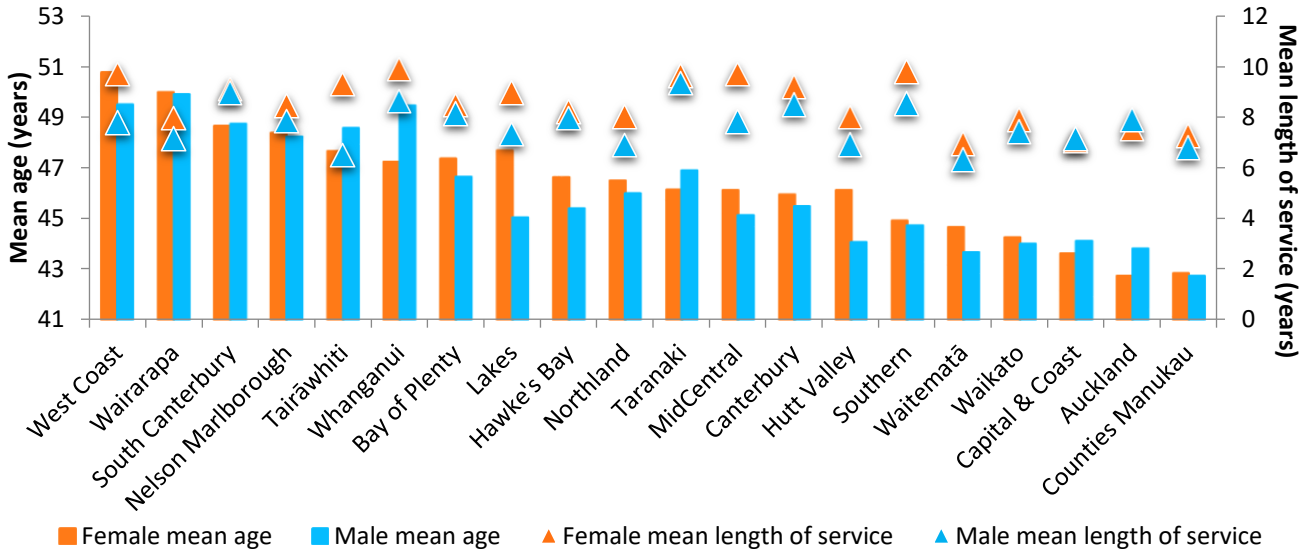


Table 7: Mean ages and mean length of service by DHB and gender

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	9.7	50.7	7.8	49.5	9.4	50.5
Wairarapa	7.9	50.0	7.2	49.9	7.8	50.0
South Canterbury	9.1	48.7	9.0	48.7	9.1	48.7
Nelson Marlborough	8.5	48.4	7.8	48.2	8.3	48.3
Tairāwhiti	9.3	47.7	6.5	48.6	8.7	47.9
Whanganui	9.9	47.3	8.6	49.5	9.6	47.7
Bay of Plenty	8.5	47.4	8.1	46.6	8.4	47.2
Lakes	9.0	47.7	7.3	45.0	8.6	47.1
Hawke's Bay	8.2	46.6	8.0	45.4	8.2	46.4
Northland	8.0	46.5	6.9	46.0	7.8	46.4
Taranaki	9.6	46.1	9.3	46.9	9.6	46.3
MidCentral	9.7	46.1	7.8	45.1	9.3	45.9
Canterbury	9.2	45.9	8.5	45.5	9.1	45.9
Hutt Valley	8.0	46.1	6.9	44.1	7.8	45.7
Southern	9.8	44.9	8.5	44.7	9.5	44.9
Waitematā	6.9	44.7	6.3	43.7	6.8	44.4
Waikato	7.9	44.3	7.4	44.0	7.8	44.2
Capital & Coast	7.0	43.6	7.2	44.1	7.1	43.8
Auckland	7.5	42.7	7.9	43.8	7.6	43.0
Counties Manukau	7.3	42.8	6.8	42.7	7.2	42.8
Grand Total	**8.2**	**45.1**	**7.6**	**44.7**	**8.1**	**45.0**

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

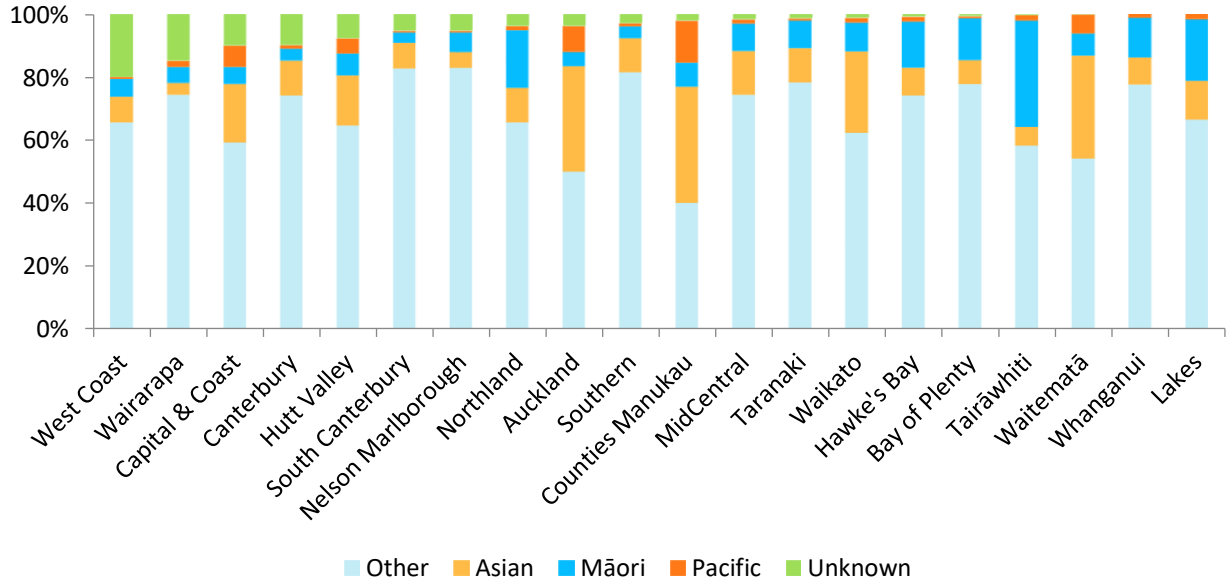


Table 8: Distribution of reported ethnicities by DHB

DHB	Other*	Asian	Māori	Pacific	Unknown	Total
West Coast	533	67	> 40	> 4	160	811
Wairarapa	452	24	31	12	89	608
Capital & Coast	3,376	1,048	313	379	560	5,676
Canterbury	7,498	1,119	404	123	973	10,117
Hutt Valley	1,470	365	159	105	175	2,274
South Canterbury	644	64	26	**	41	779
Nelson Marlborough	2,158	135	164	14	135	2,606
Northland	2,151	365	592	44	124	3,276
Auckland	5,417	3,585	491	891	391	10,775
Southern	3,738	491	185	42	134	4,590
Counties Manukau	3,075	2,808	585	1,008	150	7,626
MidCentral	1,995	372	233	39	43	2,682
Taranaki	1,401	194	157	12	24	1,788
Waikato	4,789	1,977	694	129	82	7,671
Hawke's Bay	2,197	261	434	43	25	2,960
Bay of Plenty	2,592	257	440	25	19	3,333
Tairāwhiti	502	54	288	> 10	**	861
Waitematā	4,174	2,508	553	> 450	> 4	7,699
Whanganui	788	89	128	11	0	1,016
Lakes	971	180	283	24	0	1,458
Grand Total	**49,921**	**15,963**	**6,206**	**3,382**	**3,134**	**78,606**

* '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
Whanganui	10.0	9.7	10.5	9.8	9.6	1.1	10.2	9.6
Taranaki	10.4	10.3	9.7	10.1	8.3	1.5	8.5	9.6
Southern	10.9	9.8	8.8	8.6	10.9	2.2	8.9	9.5
West Coast	9.9	7.6	9.7	11.2	7.6	1.3	10.8	9.4
MidCentral	10.5	9.3	9.0	8.0	10.8	1.8	8.6	9.3
South Canterbury	10.1	8.5	9.2	11.1	7.1	1.0	6.4	9.1
Canterbury	10.1	7.9	9.5	9.2	11.3	2.2	8.7	9.1
Tairāwhiti	10.7	7.8	7.7	8.1	8.1	1.0	6.0	8.7
Lakes	9.8	9.3	8.2	8.4	7.8	1.4	7.2	8.6
Bay of Plenty	9.5	9.1	7.6	7.3	9.7	1.5	6.5	8.4
Nelson Marlborough	9.4	7.1	7.9	9.2	10.4	1.3	6.5	8.3
Hawke's Bay	8.6	8.6	8.7	7.6	10.3	1.5	7.1	8.2
Wairarapa	8.7	6.5	8.9	7.4	9.6	0.3	4.8	7.8
Waikato	8.4	8.2	8.2	6.8	9.9	1.9	7.0	7.8
Northland	8.4	9.0	8.4	5.4	8.5	1.3	7.4	7.8
Hutt Valley	8.8	8.2	7.7	8.5	8.8	0.8	6.2	7.8
Auckland	7.4	7.8	7.9	8.8	10.6	0.8	6.9	7.6
Counties Manukau	7.1	8.1	6.9	7.4	10.3	0.7	7.3	7.2
Capital & Coast	7.2	7.2	7.0	8.6	10.3	1.2	6.9	7.1
Waitematā	6.7	7.0	7.4	6.5	9.7	0.7	6.8	6.8
Grand Total	**8.6**	**8.2**	**8.2**	**7.9**	**10.1**	**1.4**	**7.3**	**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 Taranaki shows that (if the June quarter is indicative) 50% of staff would have taken 32.1 hours sick leave or less (note comments on negative sick leave values above) per FTE over the course of a year, and 75% of staff would have taken 80.2 hours or less of sick leave per FTE over the course of a year.

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

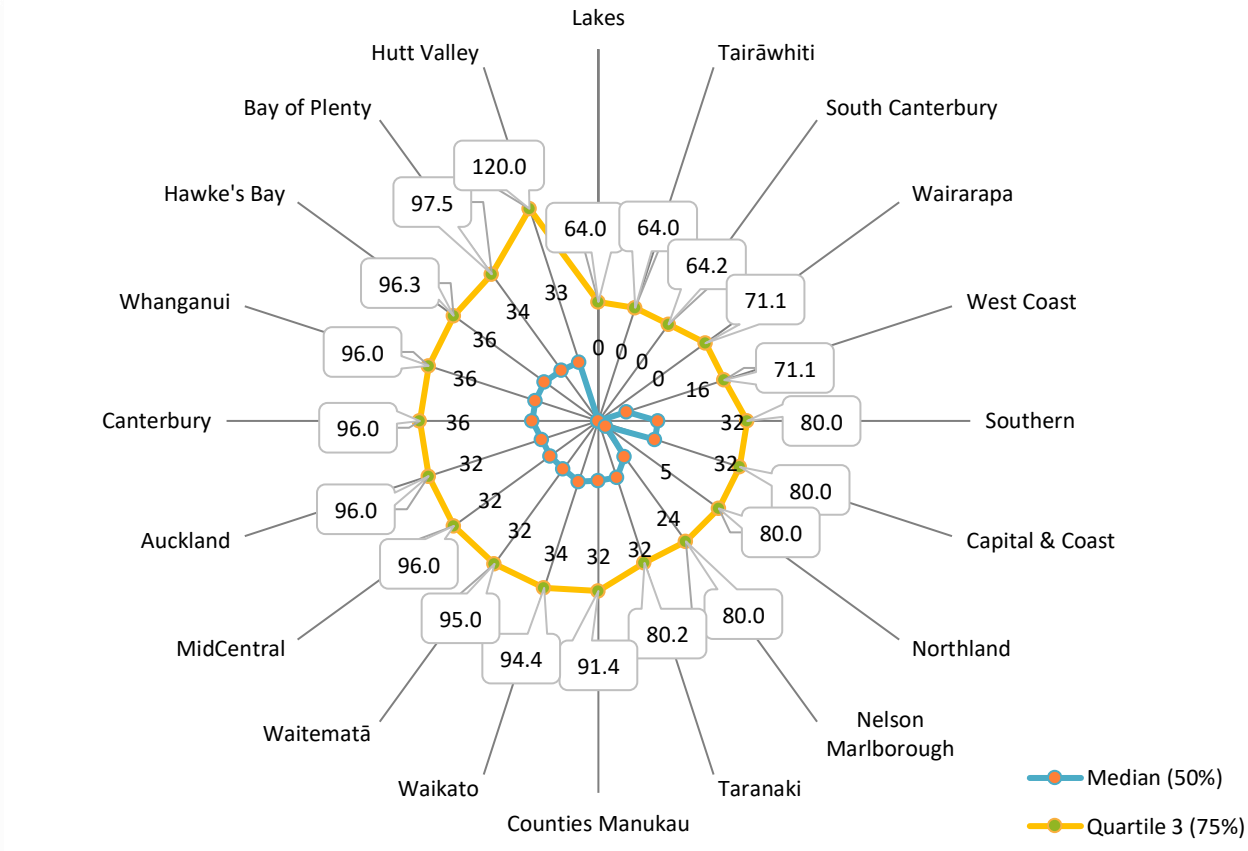


Figure 11: Average annual sick leave hours per FTE by occupational group

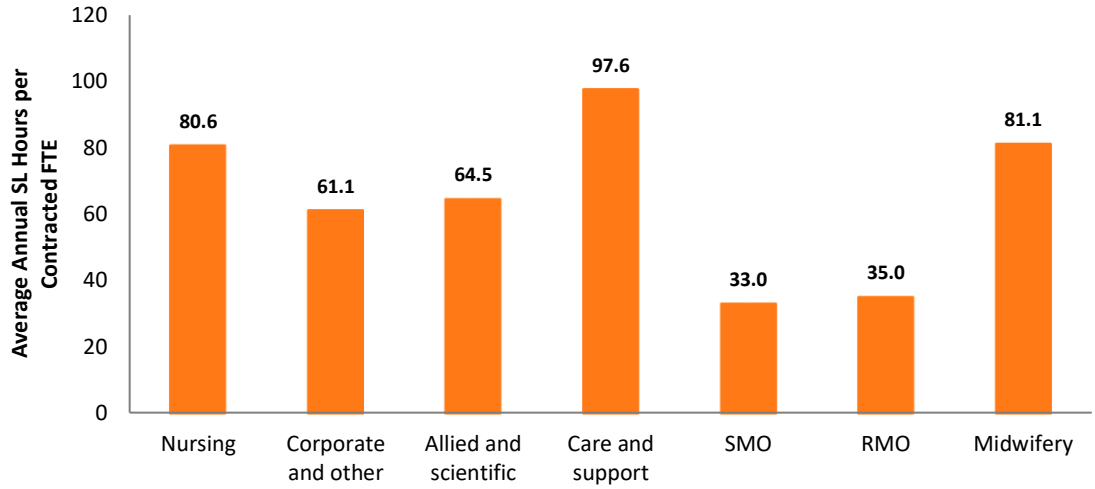


Figure 12: Average annual sick leave hours per FTE by age group by gender

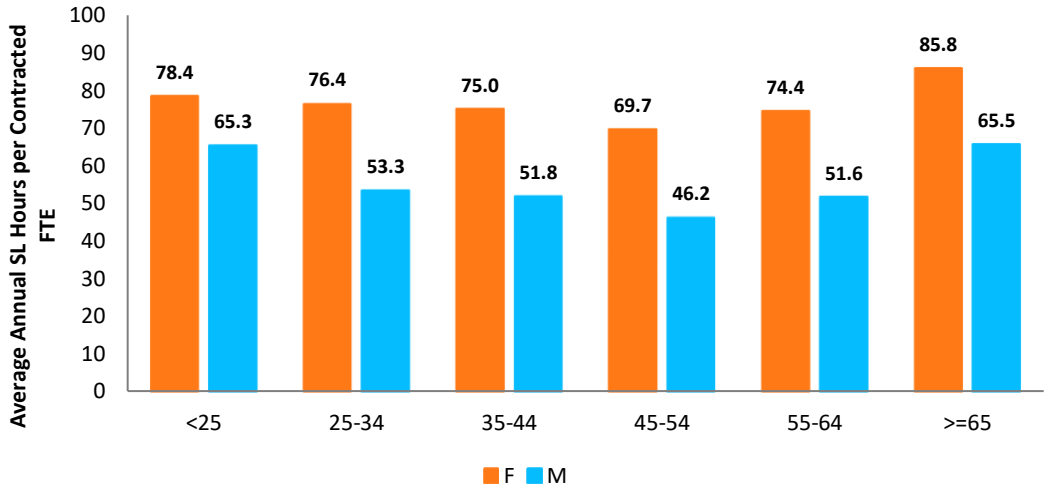
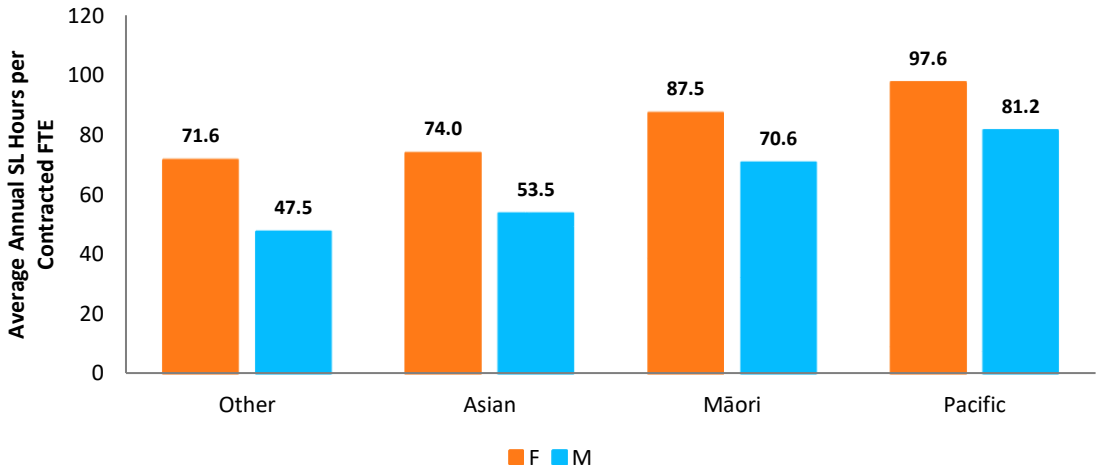


Figure 13: Average annual sick leave hours per FTE by ethnicity by gender



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

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

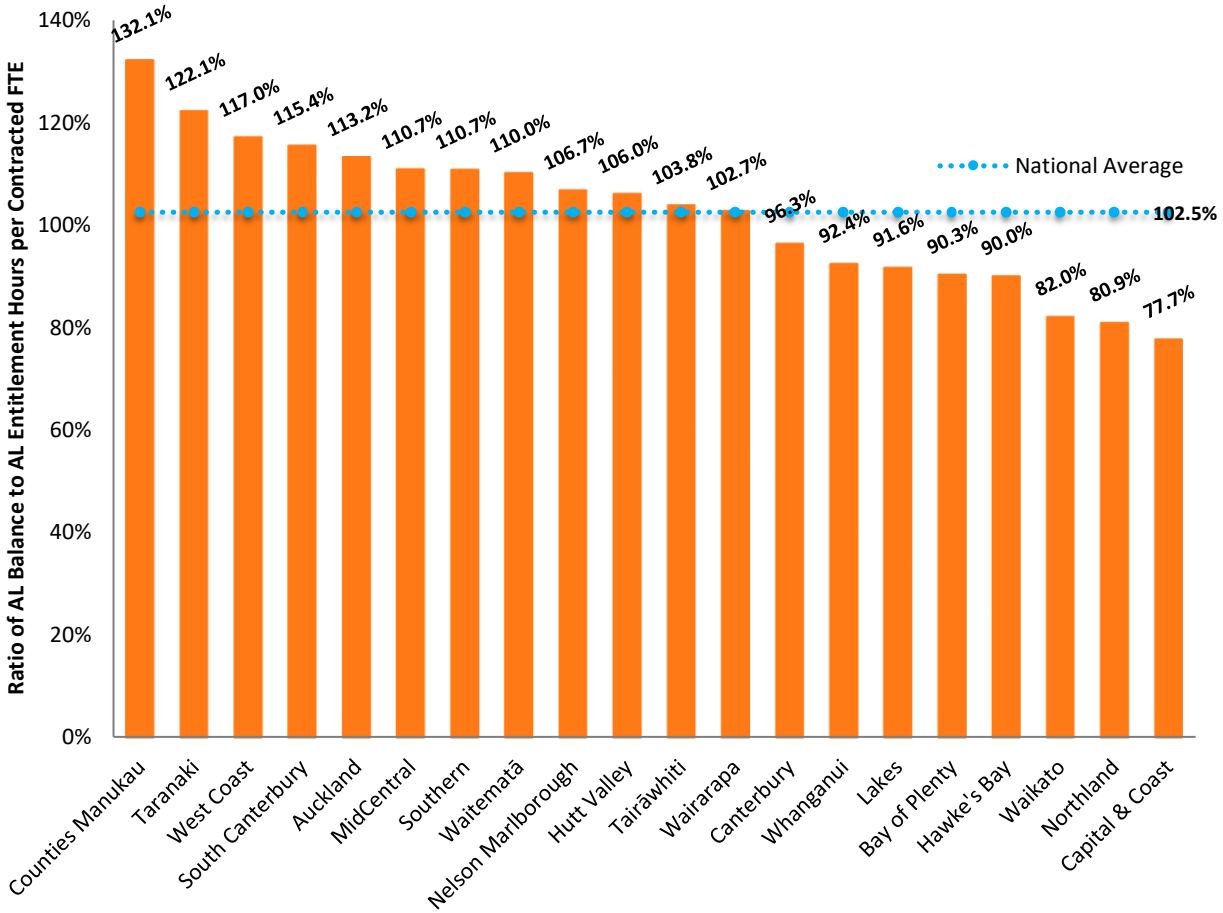


Figure 15: Ratio of annual leave balance to annual leave entitlement hours per FTE by occupational group

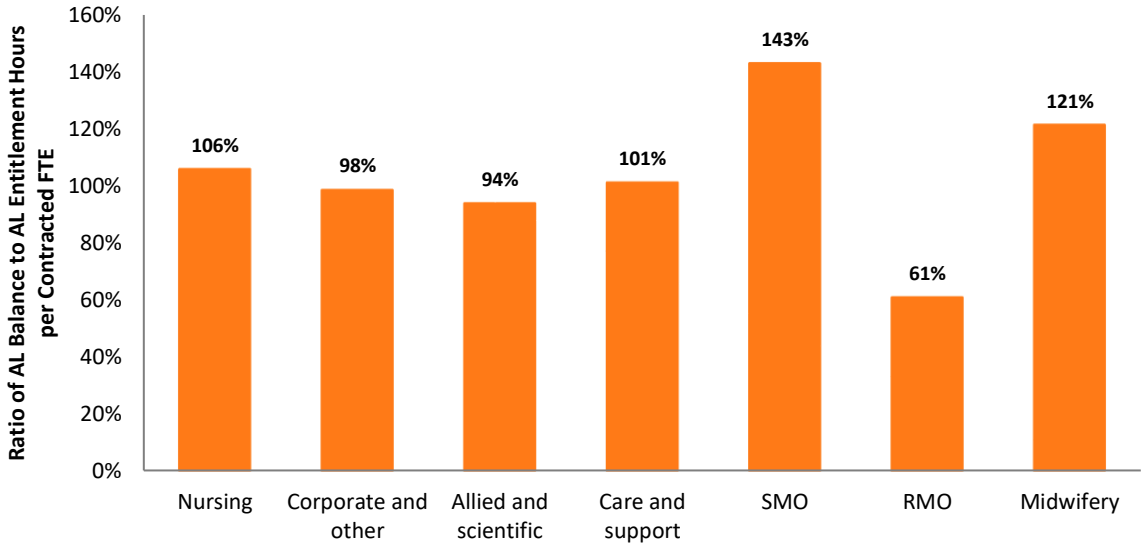
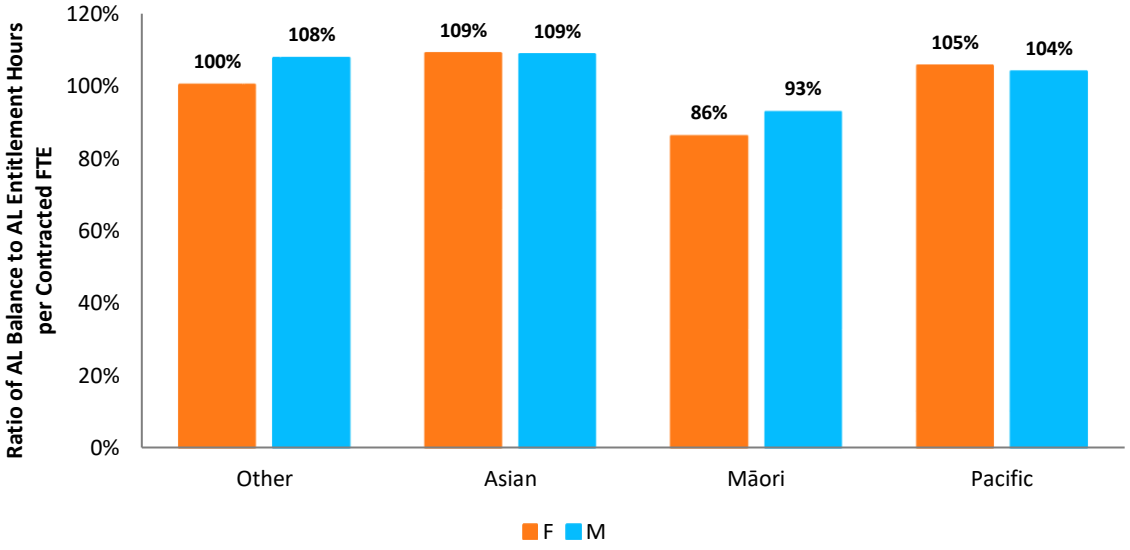


Figure 16: Ratio of annual leave balance to annual leave entitlement hours per FTE by ethnicity by gender

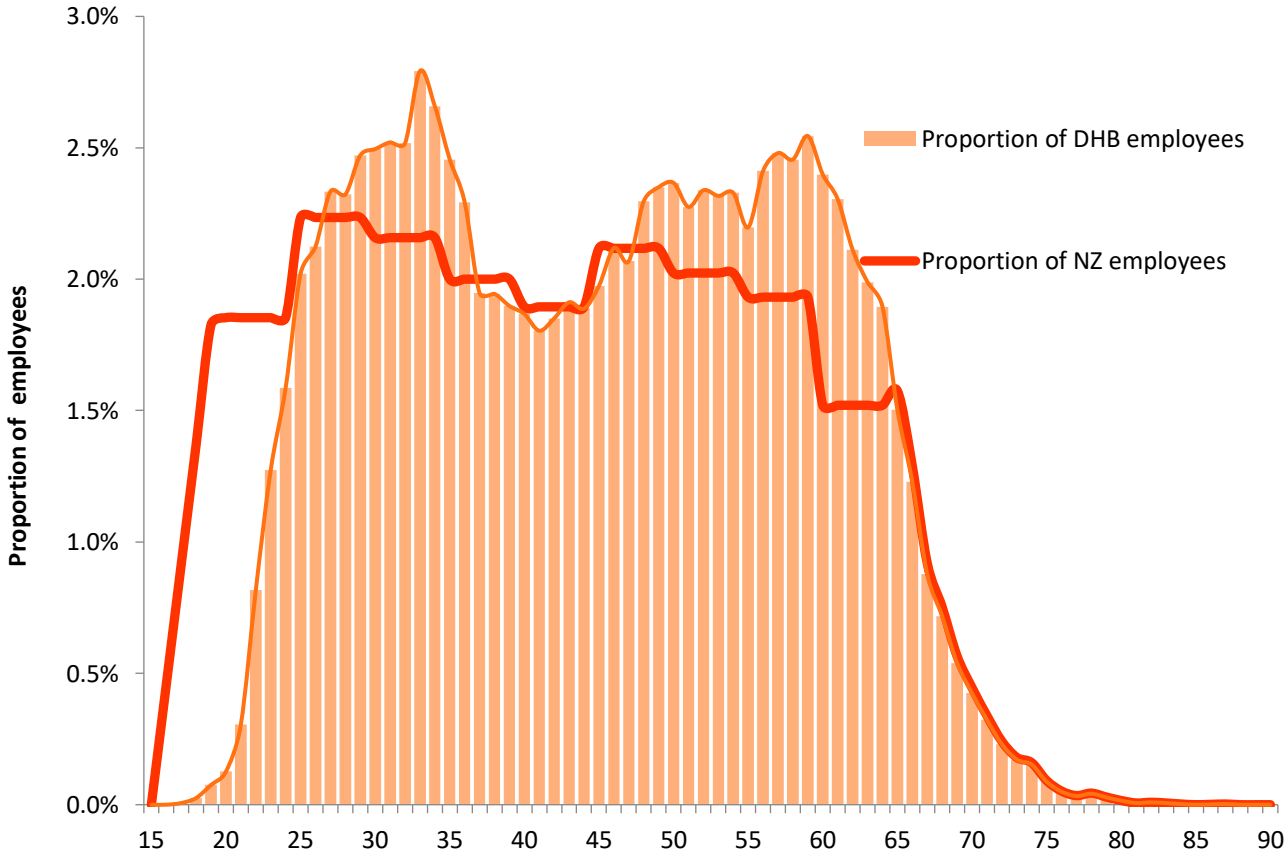


ANALYSIS BY POPULATION

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 June 2020 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

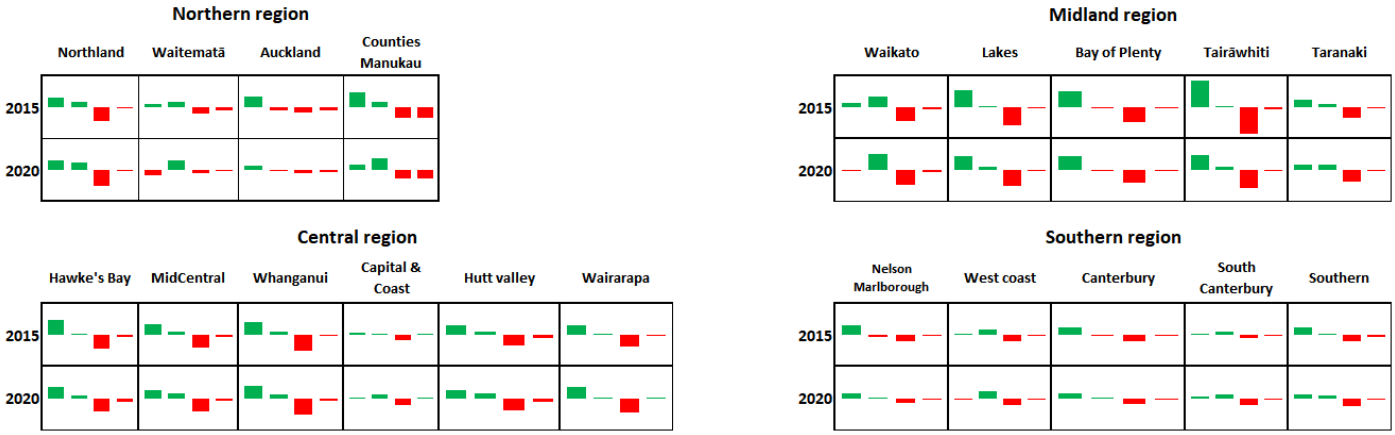
The following charts look at the ethnic representation of DHB staff to the resident population.

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 95.9 percent, compared to 87.8 percent in June 2015.

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 +26% - so comparisons between DHBs are possible. The data for 2015 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 fewer 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. Overall, the distributions have changed only slightly between 2015 and 2020; the 'Other' ethnicities have reduced closer to zero (from nine down to four 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

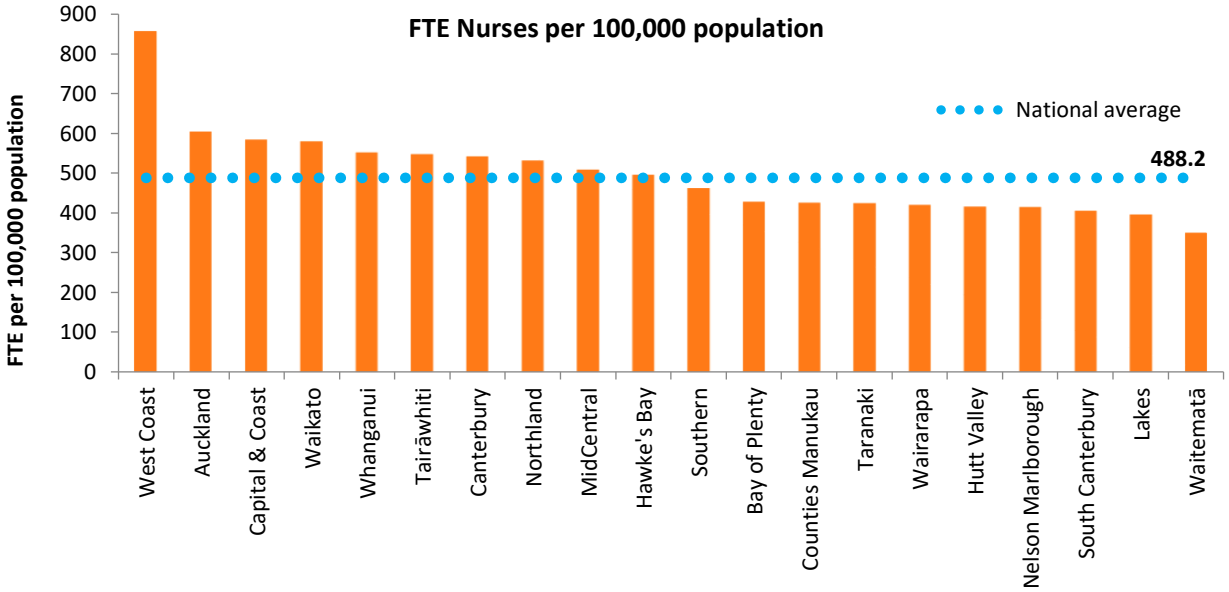


Figure 19: Population density of Corporate & Other by DHB

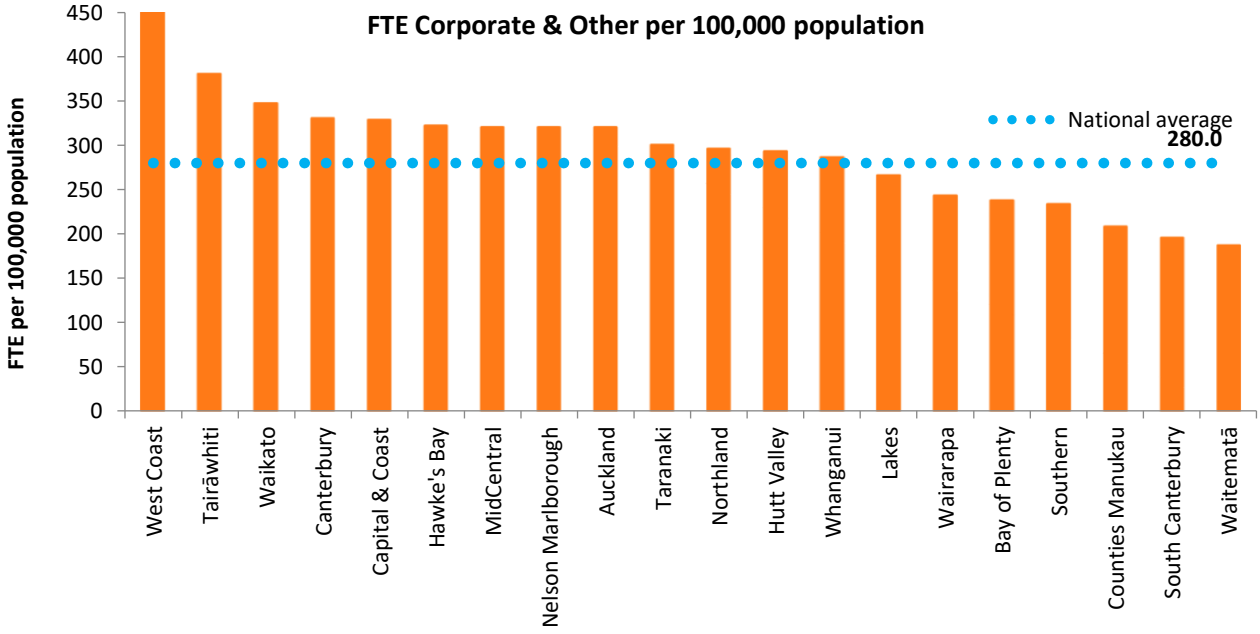


Figure 20: Population density of Allied & Scientific by DHB

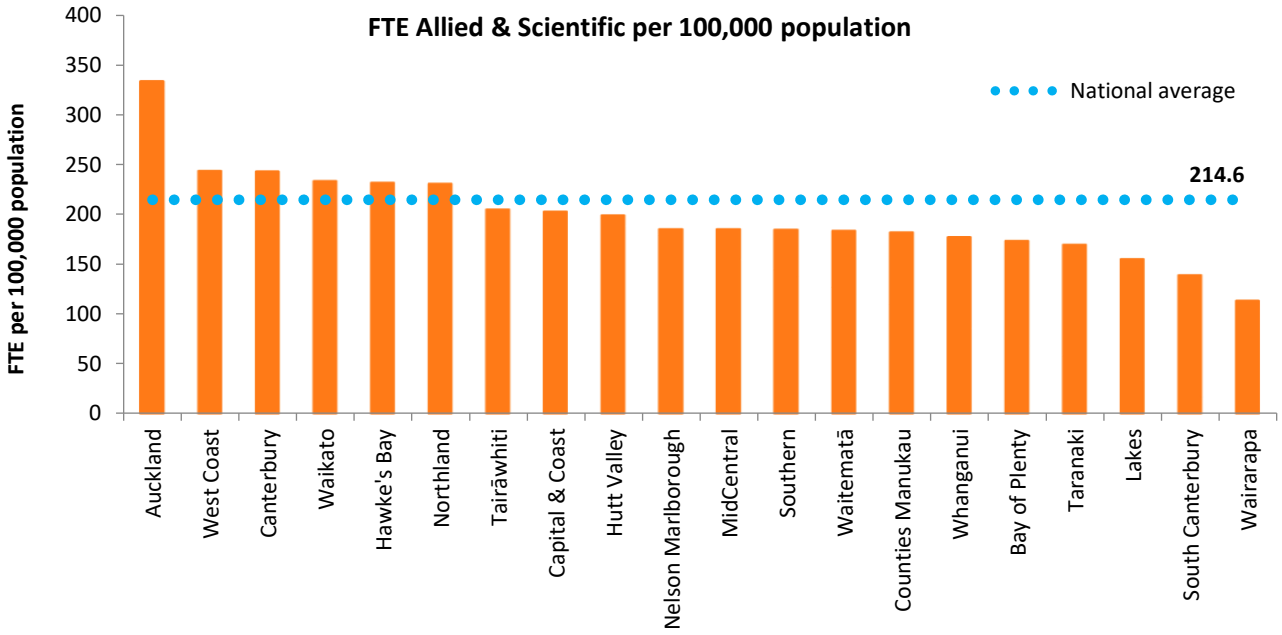


Figure 21: Population density of Care & Support by DHB

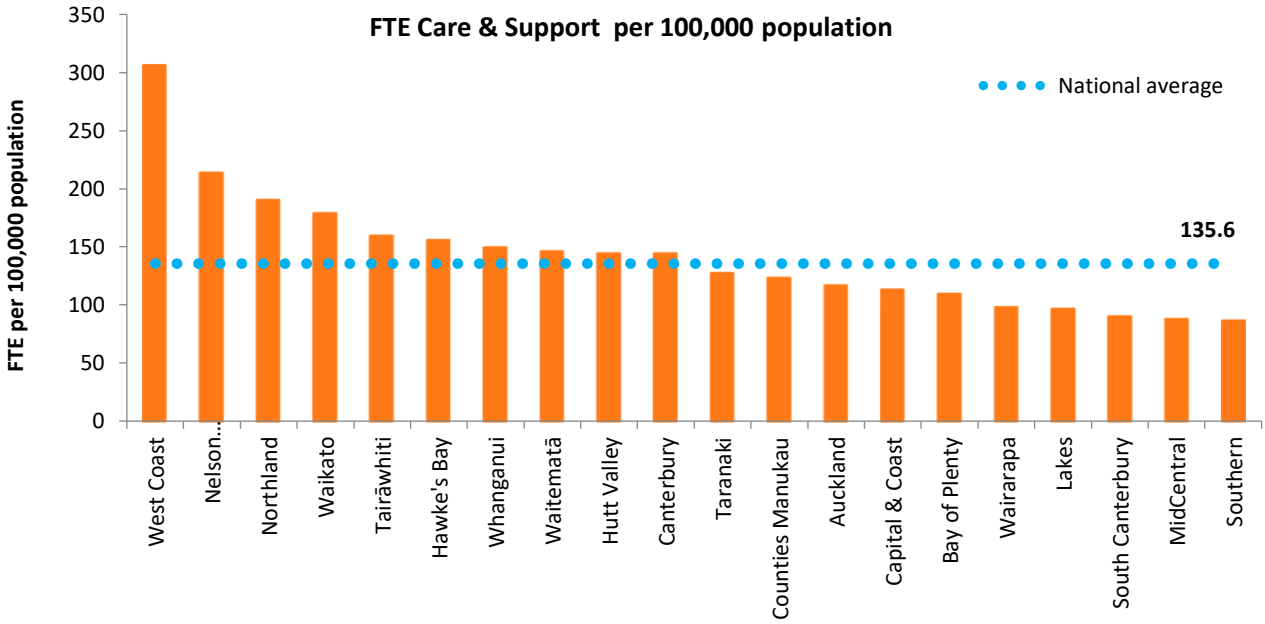


Figure 22: Population density of Senior Medical Officer (SMO) by DHB

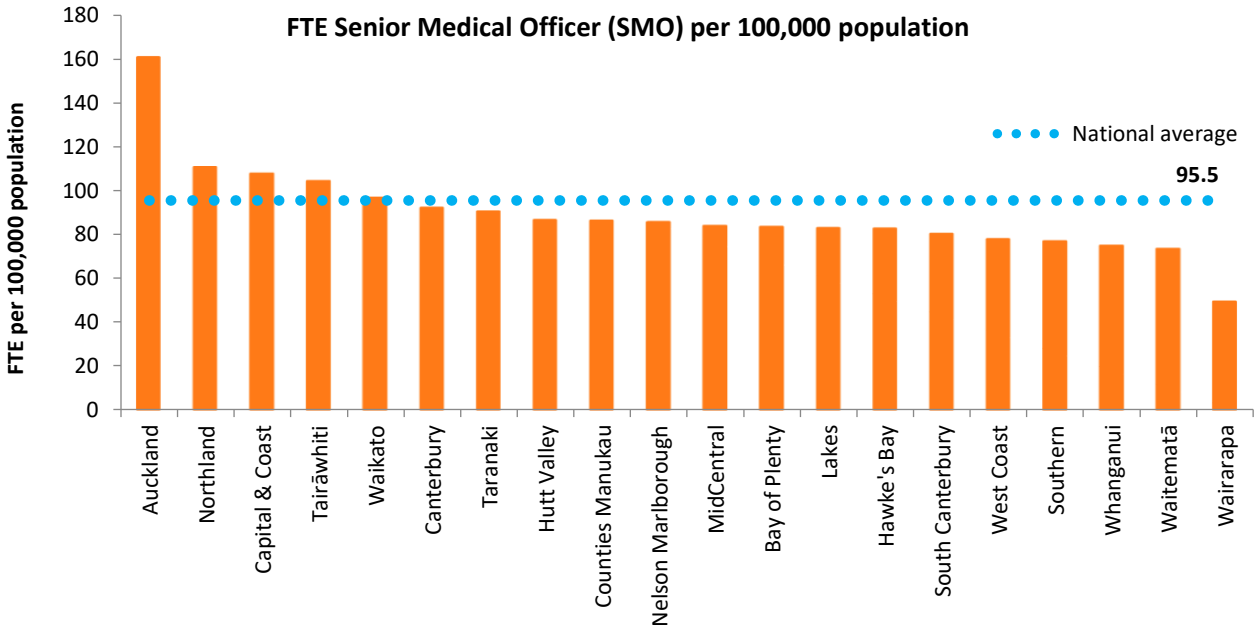


Figure 23: Population density of Resident Medical Officer (RMO) by DHB

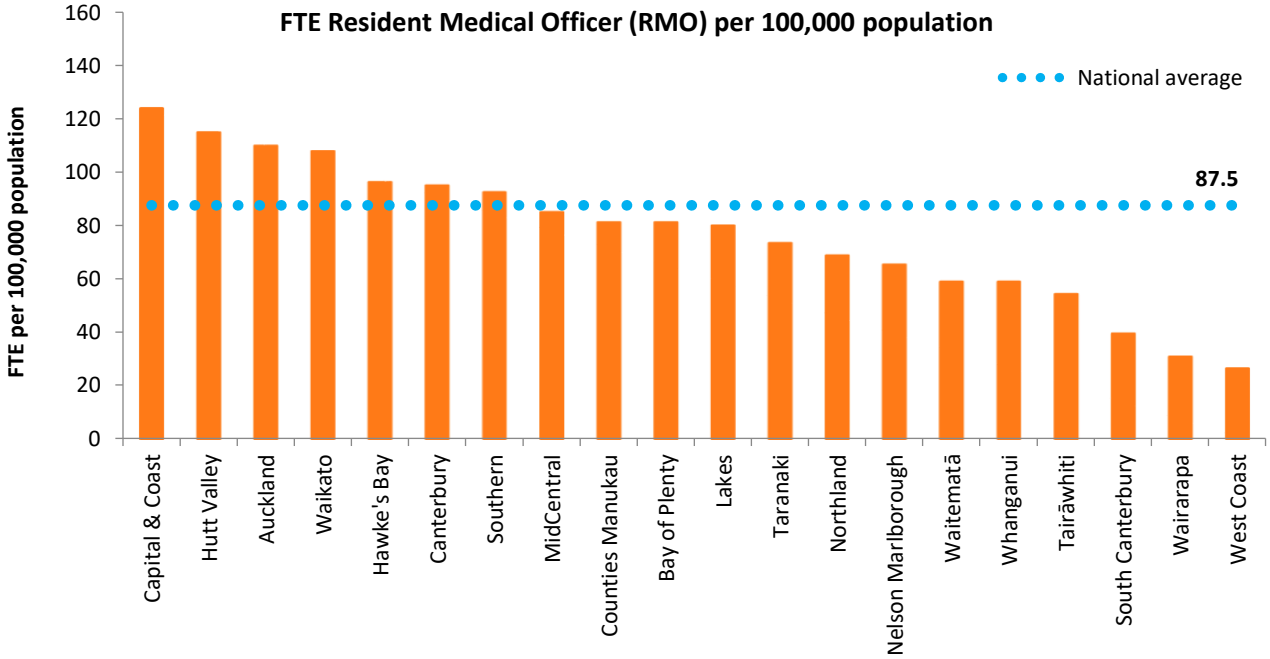


Figure 24: Population density of Midwives by DHB

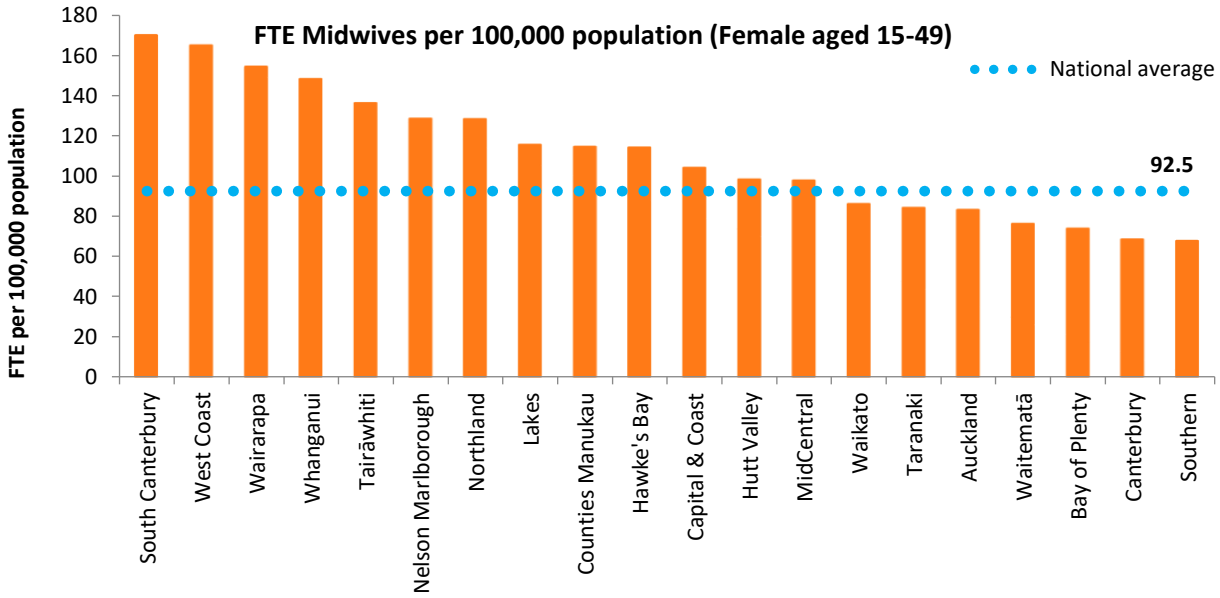
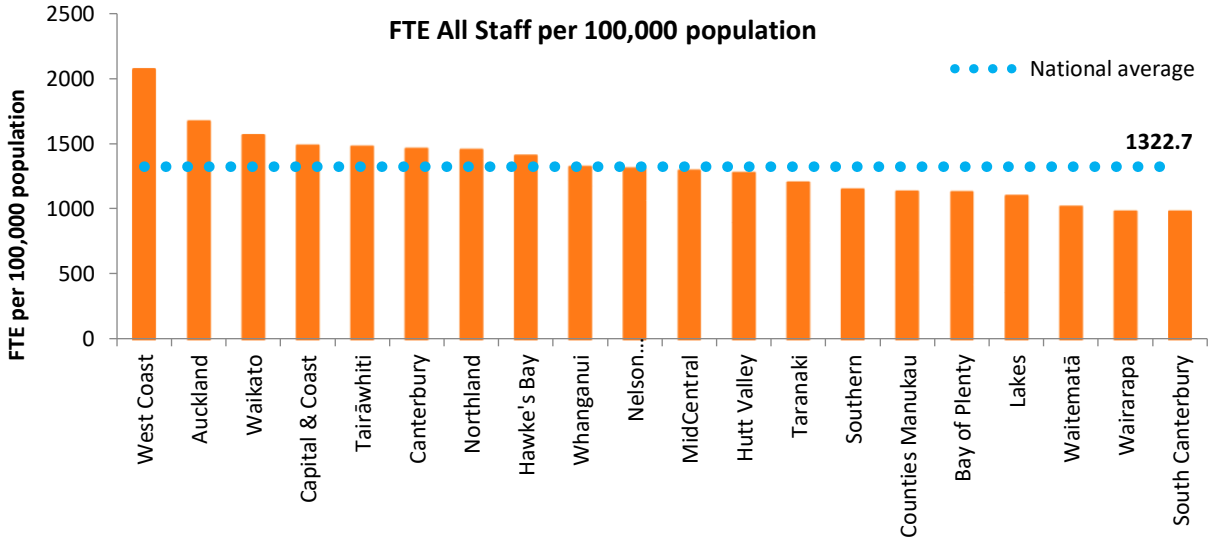



Figure 25: Population density of all DHB staff by DHB