

# DHB EMPLOYED WORKFORCE QUARTERLY REPORT

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1 JULY TO 30 SEPTEMBER 2010

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**REPORT PREPARED BY**

**THE HEALTH WORKFORCE INFORMATION PROGRAMME**

**DHBNZ**

## HEALTH WORKFORCE INFORMATION PROGRAMME

The Health Workforce Information Programme (HWIP) supports the District Health Boards (DHBs) through providing base information on DHB employee demographics and competencies, describing the current composition of the DHB workforce. Regular reports are produced based on a quarterly collection of data from the DHBs. District Health Board 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 2010 to 30 September 2010 and is a snapshot in time as at 30 September 2010. 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 / charts on the demographics of the DHB workforce aligned to the six occupational groupings. These groupings are:

- Senior and 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 2010 to September 2010 inclusive and is a snapshot taken by the DHBs on 30 September 2010
- Otago DHB and Southland DHB are now reported as Southern DHB
- The protocol used for grouping the occupations is similar to that used in previous reports with the following exceptions:

DHBNZ are presently consulting on a review to the grouping protocol which is anticipated to reflect groups more accurately. This report has adopted some of those measures including amalgamating Allied Health with Technical and Scientific to create Allied and scientific and splitting medical into Junior and Senior medical.

- While every effort has been made to ensure the report is conceptually and factually correct this extract relies upon the quality of the data supplied to HWIP. Consideration must be made to the fact that the data is extracted from multiple systems across the DHBs.
- It is expected that the data quality will continue to improve as the HWIP team work closely with the DHBs to help manage and improve the data submitted.

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Data source: HWIP, held by DHBNZ

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# OVERVIEW

## DHB WORKFORCE AT A GLANCE

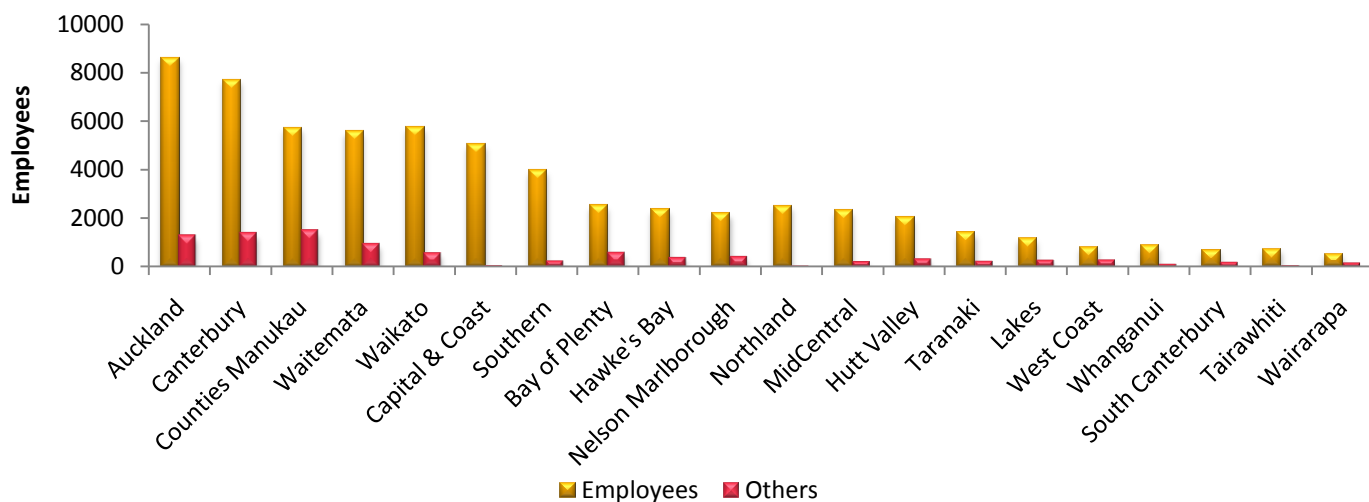
For data to 30 September 2010, only those employed with contracted hours greater than zero are included in the analysis except for the tables and charts that explicitly report on 'Other' employees on page 5.

<b>Total employees 62,418</b> <b>49,335 female</b> <b>13,083 male</b>	<b>51,808 FTE</b> <b>11,966 FTE males</b> <b>39,842 FTE females</b>	<b>Largest occupation group:</b> <b>Nurses – 23,709</b> <b>Smallest occupation group:</b> <b>Midwives – 1,295</b>
<b>DHB employee average age 45.0 years</b> <b>45.0 years for females</b> <b>44.7 years for males</b>	<b>Oldest male occupation group:</b> <b>Senior medical (mean age 48.7 years)</b> <b>Youngest male occupation group:</b> <b>Junior Medical (mean age 31.4 years)</b>	<b>Oldest female occupation group:</b> <b>Care and Support (mean age 48.8 years)</b> <b>Youngest female occupation group:</b> <b>Junior Medical (mean age 32.2 years)</b>
<b>Mean FTE rate 0.83</b> <b>Mean FTE rate for females 0.81</b> <b>Mean FTE rate for males 0.91</b>	<b>Longest Length of Service occupation group</b> <b>Senior medical (mean 9.1 years)</b> <b>Shortest Length of Service occupation group</b> <b>Junior Medical (mean 1.3 years)</b>	<b>Top three employee ethnicities:</b>  <b>NZ European – 77%</b> <b>Asian – 11%</b> <b>Māori – 8%</b>

## DISTRIBUTION OF EMPLOYEES

This chart shows the proportion of employees within each DHB who are classed as either Employees (contracted hours greater than zero) or 'Other' (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 employee size. The table below the chart gives the actual count of employees.

**Figure 1: Contracted employees and 'Other' employees**



**Table 1: Distribution of employment types**

DHB	Employees	Others*	Total
Auckland	8624	1262	9886
Canterbury	7709	1349	9058
Counties Manukau	5723	1457	7180
Waitemata	5574	930	6504
Waikato	5758	575	6333
Capital & Coast	5017	65	5082
Southern	3958	249	4207
Bay of Plenty	2526	578	3104
Hawke's Bay	2343	382	2725
Nelson Marlborough	2185	427	2612
Northland	2500	55	2555
MidCentral	2313	231	2544
Hutt Valley	2020	333	2353
Taranaki	1404	238	1642
Lakes	1142	273	1415
West Coast	801	297	1098
Whanganui	878	123	1001
South Canterbury	691	205	896
Tairāwhiti	719	69	788
Wairarapa	533	167	700
<b>Grand Total</b>	<b>62418</b>	<b>9265</b>	<b>71683</b>

\* Other = maternity leave, parental leave and those whose data does not match the reporting variable standard format

## 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 all derived from data using the following caveats:

### Inclusions:

- Only employees who have a positive number of contracted hours have been included (regardless of their employment status), except those on maternity / parental leave, and those whom do not have an employment status code
- 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)
- Any employee who has an employment end date entered (regardless of the date it refers to) has also been excluded since they left employment before the end of this quarter
- Employees who do not have contracted hours greater than zero have been excluded
- Charts containing 'length of service', exclude employees who have a length of service less than or equal to zero
- Charts containing 'occupation grouping', exclude employees who do not have a valid CCoA or ANZSCO code
- Charts containing 'ethnicity', exclude employees who do not have a valid ethnicity code

## 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 (FTE, assuming a 2086 hour annual contract) and mean FTE (the average FTE calculation for all employees). Employees who do not have a valid CCoA or ANZSCO code have been excluded.

Table 2: Headcount and FTE by DHB and occupation group

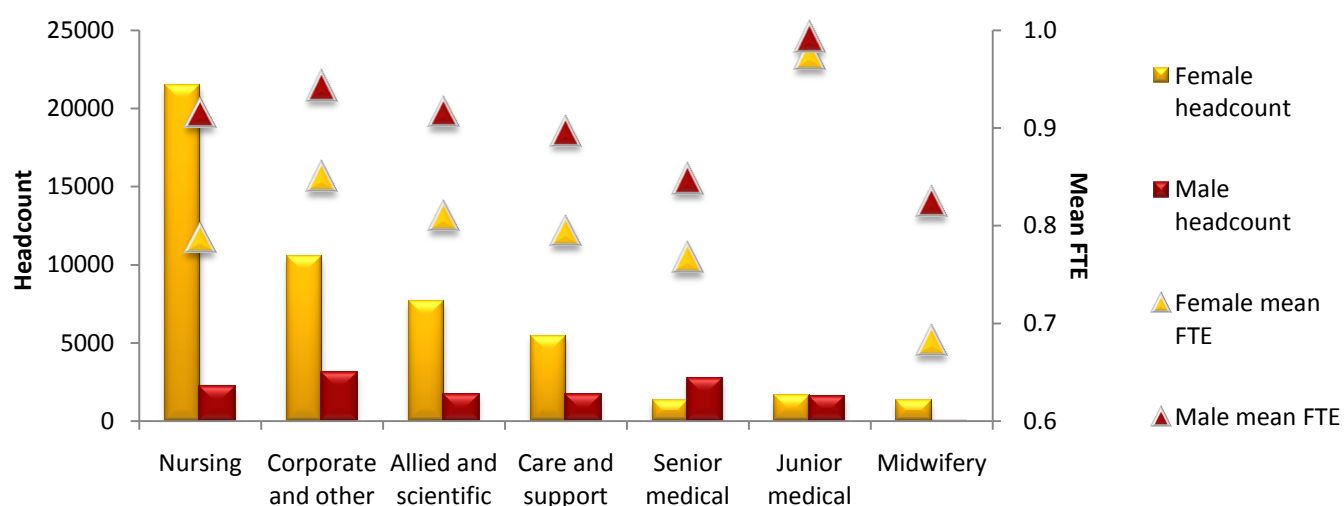
DHB	Nursing			Corporate and other			Allied & scientific			Care and support			Senior medical			Junior medical			Midwifery		
	Headcount	FTE	Mean FTE	Headcount	FTE	Mean FTE	Headcount	FTE	Mean FTE	Headcount	FTE	Mean FTE	Headcount	FTE	Mean FTE	Headcount	FTE	Mean FTE	Headcount	FTE	Mean FTE
Auckland	3140	2613	0.83	1728	1558	0.90	1681	1414	0.84	607	550	0.91	790	629	0.80	516	493	0.95	162	121	0.74
Bay of Plenty	1038	829	0.80	545	486	0.89	300	254	0.85	292	247	0.85	163	136	0.83	140	138	0.99	48	33	0.70
Canterbury	2969	2362	0.80	1564	1333	0.85	1237	1008	0.81	936	730	0.78	449	371	0.83	415	407	0.98	139	93	0.67
Capital & Coast	1896	1481	0.78	1033	934	0.90	655	541	0.83	629	503	0.80	306	230	0.75	340	306	0.90	158	101	0.64
Counties Manukau	2210	1870	0.85	1279	1082	0.85	776	672	0.87	613	546	0.89	389	324	0.83	331	323	0.98	123	85	0.69
Hawke's Bay	882	637	0.72	530	452	0.85	326	263	0.81	314	248	0.79	113	93	0.82	121	170	1.41	57	38	0.67
Hutt Valley	693	566	0.82	536	466	0.87	352	284	0.81	170	141	0.83	129	97	0.75	113	113	1.00	27	19	0.72
Lakes	432	354	0.82	290	256	0.88	139	120	0.86	116	98	0.84	72	63	0.88	63	63	1.00	30	23	0.75
MidCentral	902	729	0.81	607	551	0.91	290	247	0.85	205	162	0.79	137	120	0.87	121	120	0.99	51	33	0.65
Nelson Marlborough	723	491	0.68	472	376	0.80	248	173	0.70	486	345	0.71	110	90	0.82	71	66	0.93	48	29	0.61
Northland	957	711	0.74	568	457	0.80	353	283	0.80	334	234	0.70	140	129	0.92	74	74	0.99	74	46	0.62
South Canterbury	297	239	0.80	128	108	0.85	85	65	0.77	62	49	0.78	35	28	0.80	24	23	0.95	20	16	0.81
Southern	1624	1266	0.78	945	827	0.88	546	461	0.84	348	272	0.78	236	185	0.79	201	199	0.99	57	39	0.68
Tairāwhiti	297	224	0.75	169	151	0.89	97	83	0.85	71	62	0.87	63	56	0.89	12	12	1.00	10	7	0.70
Taranaki	541	392	0.72	315	274	0.87	184	149	0.81	193	165	0.85	79	63	0.80	61	61	1.00	31	23	0.74
Waikato	2219	1813	0.82	1370	1233	0.90	763	649	0.85	665	579	0.87	314	275	0.88	330	321	0.97	97	64	0.66
Wairarapa	224	147	0.65	142	111	0.78	58	44	0.76	39	30	0.77	29	24	0.83	7	7	1.00	15	10	0.67
Waitemata	2026	1702	0.84	1005	874	0.87	1068	890	0.83	733	666	0.91	390	323	0.83	243	235	0.97	109	71	0.65
West Coast	289	233	0.81	209	171	0.82	74	64	0.86	181	88	0.48	35	32	0.90	6	6	1.00	7	7	1.00
Whanganui	350	285	0.81	193	170	0.88	105	78	0.74	121	104	0.86	49	42	0.86	28	28	1.00	32	25	0.79
Grand Total	23709	18942	0.80	13628	11870	0.87	9337	7741	0.83	7115	5821	0.82	4028	3310	0.82	3217	3165	0.98	1295	884	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**



Note: 89 entries had no recorded ANZSCO or CCoA code (81 reported in June 2010)

**Table 3: Occupation group headcount and mean FTE by sex**

Occupation group	Female		Male	
	Headcount	Mean FTE	Headcount	Mean FTE
Nursing	21,477	0.79	2,232	0.92
Corporate and other	10,513	0.85	3,115	0.94
Allied and scientific	7,627	0.81	1,710	0.92
Care and support	5,443	0.79	1,672	0.90
Senior medical	1,284	0.77	2,744	0.85
Junior medical	1,631	0.98	1,586	0.99
Midwifery	1,291	0.68	4	0.82
Grand Total	49,266	0.81	13,063	0.91

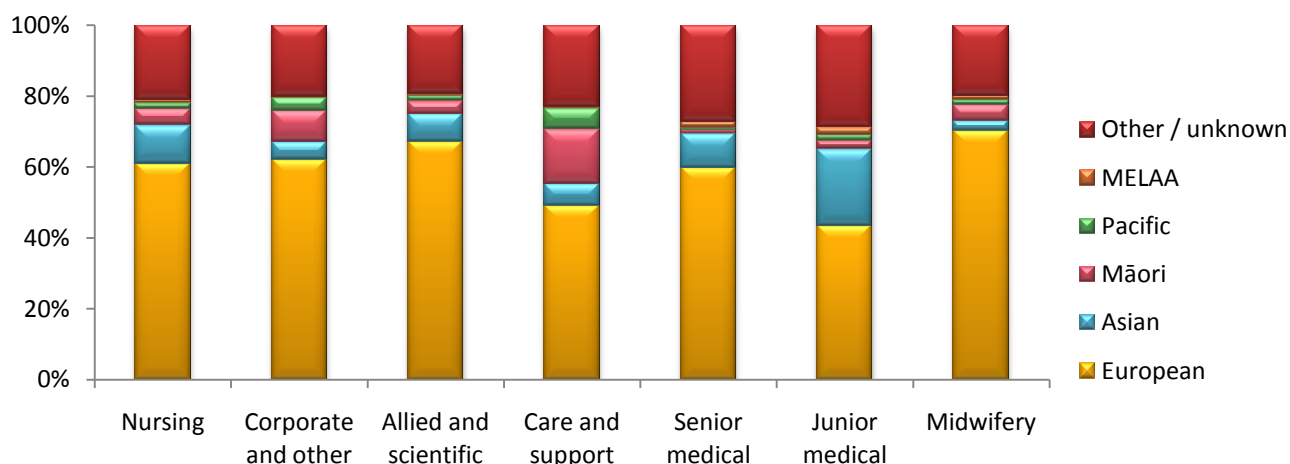


## HEADCOUNT BY OCCUPATION GROUP AND ETHNICITY

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 that follows 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	European		Asian		Māori		Pacific		MELAA		Other	
Nursing	12545	61%	2218	11%	929	5%	352	2%	143	1%	4323	21%
Corporate and other	7380	62%	591	5%	1032	9%	459	4%	42	0%	2369	20%
Allied and scientific	5144	67%	591	8%	280	4%	114	1%	51	1%	1463	19%
Care and support	3200	49%	402	6%	993	15%	387	6%	29	0%	1492	23%
Senior medical	1933	60%	313	10%	33	1%	20	1%	58	2%	873	27%
Junior medical	1168	43%	590	22%	63	2%	45	2%	60	2%	769	29%
Midwifery	790	70%	33	3%	50	4%	16	1%	14	1%	222	20%
Grand Total	32160	60%	4738	9%	3380	6%	1393	3%	397	1%	11511	21%

Notes:

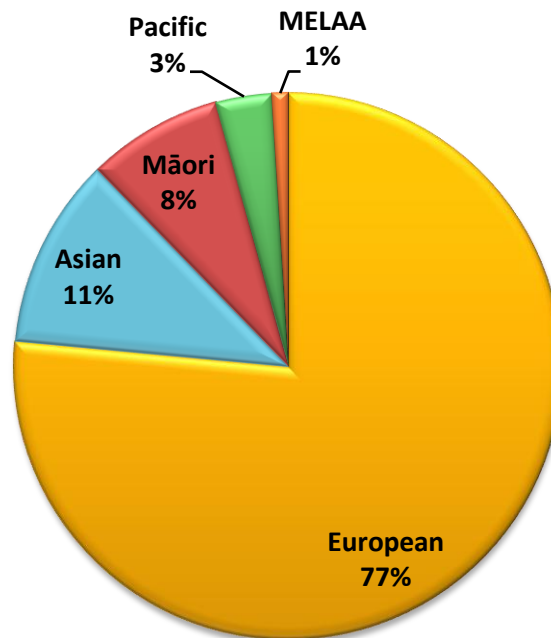
MELAA is a group amalgamation of Middle Eastern, Latin American and African ethnicities

89 entries had no recorded ANZSCO or CCoA code. June 2010 data had 81 uncoded occupations

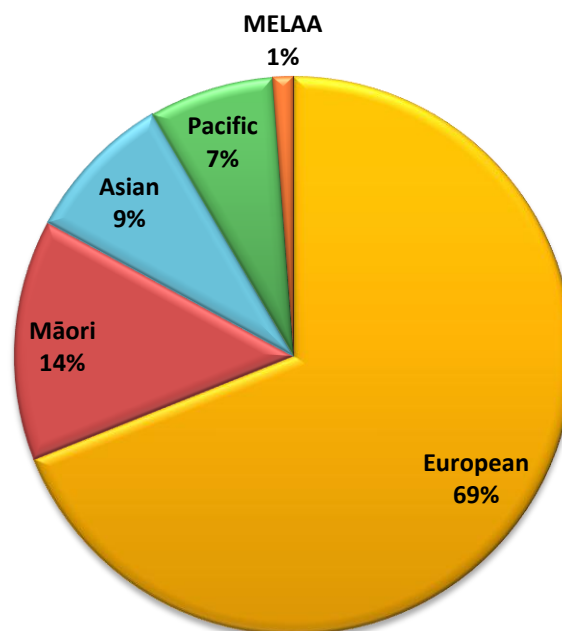
8753 entries have been excluded as they had no recorded ethnicity code or did not match the reporting variable standard format - a 5.0% improvement on June 2010 data

This pie chart is based on the 42,142 permanent employees who had a specific ethnicity reported. Below it is a similar pie chart of ethnicity proportions in the New Zealand population based on 2010 PHO enrolment data (extracted 16/08/2010 by MoH).

**Figure 4: Proportion of identifiable ethnicities for all DHBs**

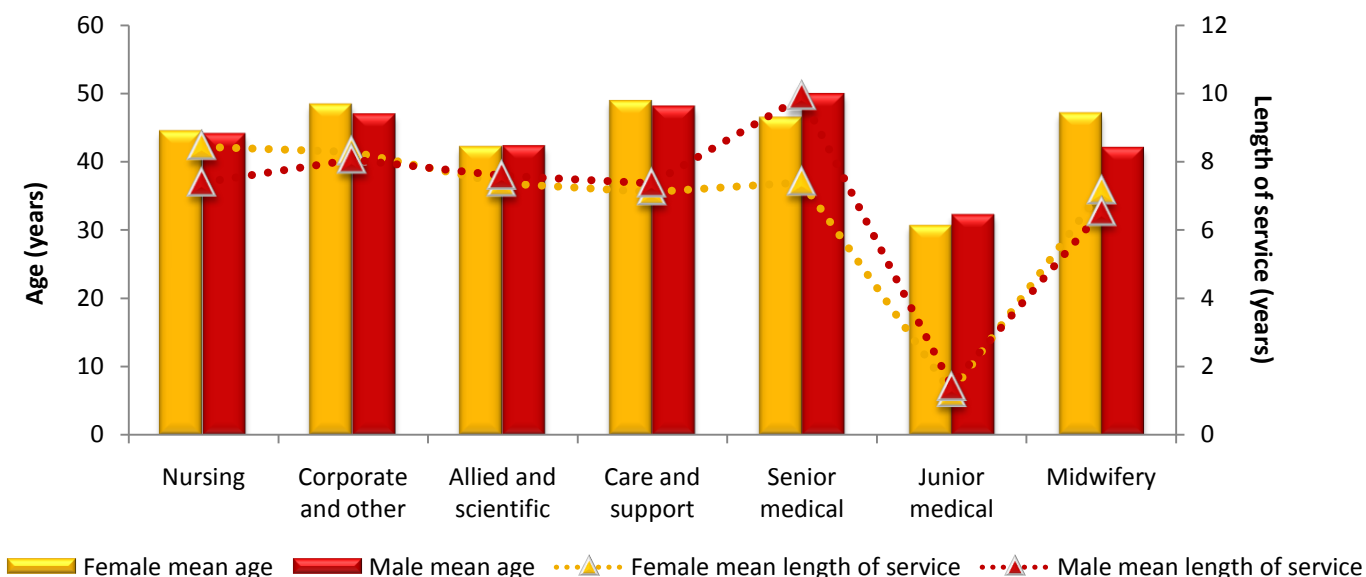


**Figure 5: Proportion of identifiable ethnicities for 2010 PHO enrolment data**



## 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**

Occupational group	Female		Male	
	Female mean length of service	Female mean age	Male mean length of service	Male mean age
Nursing	8.4	44.4	7.4	44.0
Corporate and other	8.3	48.3	8.1	46.9
Allied and scientific	7.4	42.1	7.6	42.2
Care and support	7.1	48.8	7.4	48.0
Senior medical	7.4	46.4	9.9	49.8
Junior medical	1.2	30.6	1.5	32.2
Midwifery	7.1	47.1	6.5	42.0
<b>Grand Total</b>	<b>7.8</b>	<b>45.0</b>	<b>7.4</b>	<b>44.7</b>

Notes:

902 entries contained false year of birth data (1.4% improvement on June 2010 data)

418 entries contained immeasurable lengths of service (39.2% improvement on June 2010 data)

89 entries had no recorded ANZSCO or CCoA code.

# TABLES AND CHARTS BY DHB

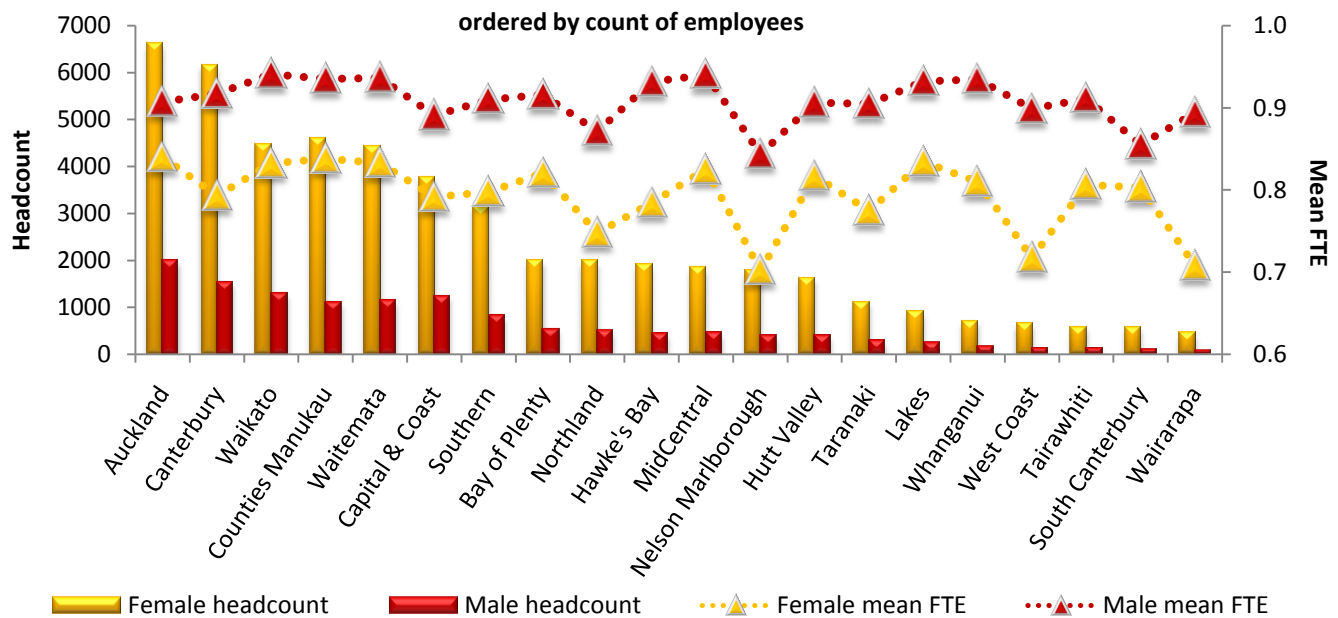
This section looks at the same statistics given in the first section but broken down by DHB rather than occupation group. Page 7 has a table of figures for FTE and headcount which looks at both DHB and occupation grouping.

## 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 table underneath shows the count of permanent employees and mean FTE by sex for each DHB.

**Figure 7: Headcount and mean FTE by sex and DHB**



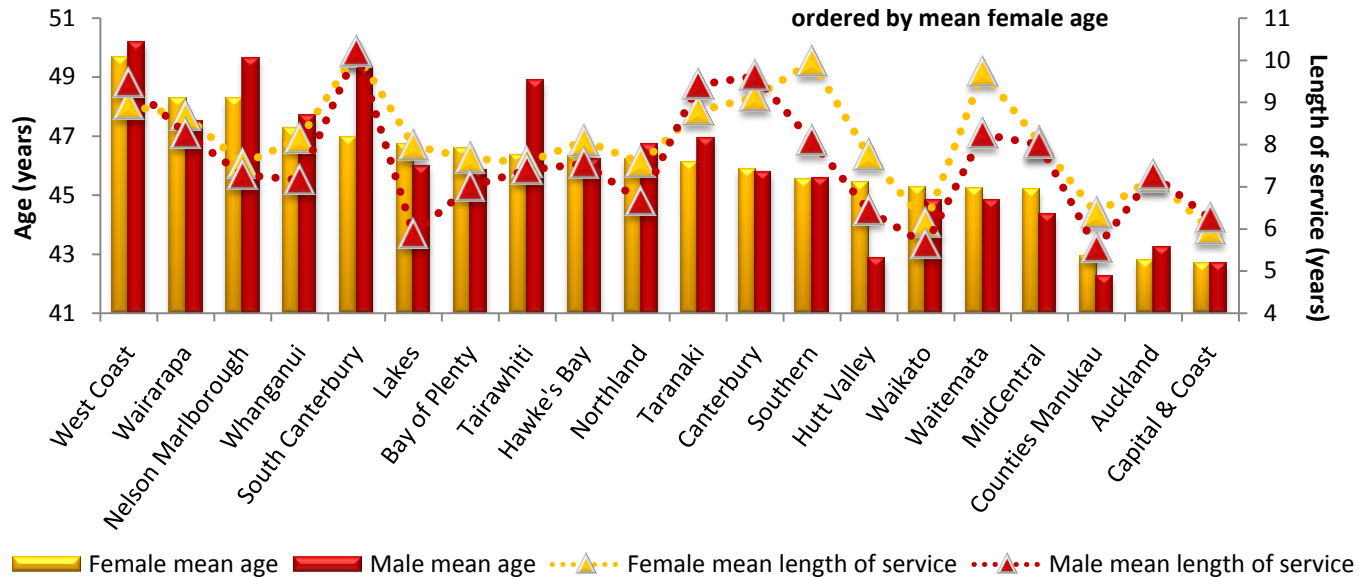
**Table 6: Headcount and mean FTE by sex and DHB**

		Auckland	Canterbury	Waikato	Counties Manukau	Waitemata	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	Count	6,624	6,170	4,461	4,611	4,420	3,776	3,136	1,990	1,987	1,906	1,851	1,786	1,624	1,108	900	708	663	582	581	451
	Mean FTE	0.84	0.79	0.83	0.84	0.83	0.79	0.80	0.82	0.75	0.78	0.83	0.70	0.82	0.77	0.83	0.81	0.72	0.81	0.80	0.71
Male	Count	2000	1539	1297	1112	1154	1241	822	536	513	437	462	399	396	296	242	170	138	137	110	82
	Mean FTE	0.91	0.92	0.94	0.94	0.94	0.89	0.91	0.92	0.87	0.93	0.94	0.84	0.91	0.90	0.93	0.93	0.90	0.91	0.86	0.89
Total	Count	8624	7709	5758	5723	5574	5017	3958	2526	2500	2343	2313	2185	2020	1404	1142	878	801	719	691	533
	Mean FTE	0.86	0.82	0.86	0.86	0.85	0.82	0.82	0.84	0.77	0.81	0.85	0.73	0.83	0.80	0.86	0.83	0.75	0.83	0.81	0.74

## 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 female 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**



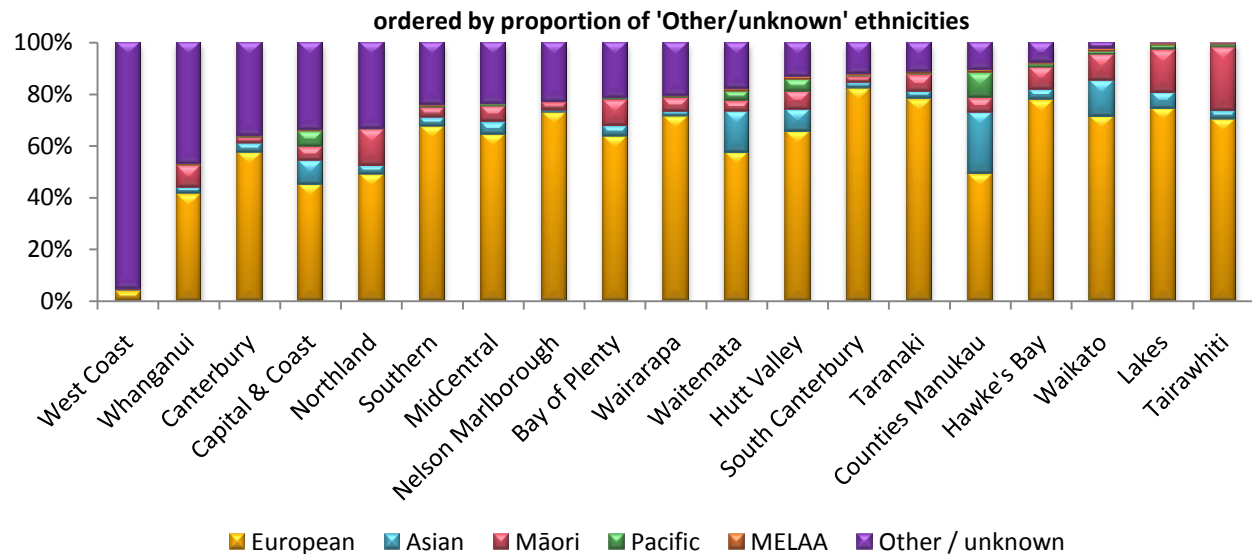
**Table 7: Mean ages and mean length of service by DHB and sex**

DHB	Female mean length of service	Female mean age	Male mean length of service	Male mean age
West Coast	8.9	49.7	9.5	50.2
Nelson Marlborough	8.7	48.3	8.2	47.5
Wairarapa	7.5	48.3	7.3	49.6
Whanganui	8.1	47.2	7.2	47.7
South Canterbury	10.2	47.0	10.2	49.3
Lakes	8.0	46.7	5.9	45.9
Bay of Plenty	7.7	46.6	7.0	45.8
Tairāwhiti	7.6	46.4	7.4	48.9
Hawke's Bay	8.1	46.3	7.5	46.2
Northland	7.6	46.2	6.7	46.7
Taranaki	8.8	46.1	9.4	46.9
Canterbury	9.1	45.9	9.6	45.8
Southern	10.0	45.5	8.1	45.6
Hutt Valley	7.7	45.4	6.4	42.9
Waitemata	6.1	45.3	5.6	44.8
MidCentral	9.7	45.2	8.2	44.8
Waikato	8.1	45.2	8.0	44.3
Counties Manukau	6.4	42.9	5.5	42.2
Auckland	7.2	42.8	7.3	43.2
Capital & Coast	6.0	42.7	6.2	42.7
Grand Total	7.8	45.0	7.4	44.7

## ETHNICITIES BY DHB

The following chart shows the proportion of ethnicities within each DHB employee population (in descending order of proportion of 'other/unknown'). 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: Proportion of reported ethnicities by DHB**

DHB	European	Asian	Māori	Pacific	MELAA	Other / unknown
West Coast	30	3	5	0	1	762
Whanganui	365	22	73	2	5	411
Canterbury	4421	286	160	44	37	2761
Capital & Coast	2260	475	261	294	34	1693
Northland	1224	89	342	11	1	833
Southern	2667	140	150	25	24	952
MidCentral	1490	114	137	19	1	552
Nelson Marlborough	1590	24	65	3	4	499
Bay of Plenty	1610	102	257	13	1	543
Wairarapa	346	9	25	4	3	98
Waitemata	3188	901	219	206	70	981
Hutt Valley	1321	175	139	97	22	266
South Canterbury	565	15	16	2	4	85
Taranaki	1097	43	87	5	17	155
Counties Manukau	2809	1356	316	551	84	597
Hawke's Bay	1775	93	196	31	15	176
Waikato	4117	794	573	60	62	152
Lakes	848	75	186	20	8	5
Tairāwhiti	506	23	177	6	4	2
<b>Grand Total</b>	<b>32229</b>	<b>4739</b>	<b>3384</b>	<b>1393</b>	<b>397</b>	<b>11523</b>

Note:

MELAA is a group amalgamation of Middle Eastern, Latin American and African ethnicities

Auckland is not included as the reporting did not match the reporting variable standard format

## 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 employees for the September 2010 quarter as reported in the Household Labour Force Survey (HLFS) by Statistics New Zealand. It shows that DHBs have a more concentrated distribution of employees in the 'high' age groups (45+) than the national average, and significantly less concentration in the younger age groups.

**Figure 10: Distribution of overall DHB occupation by age, with national employee data**

