

5. Health care utilisation

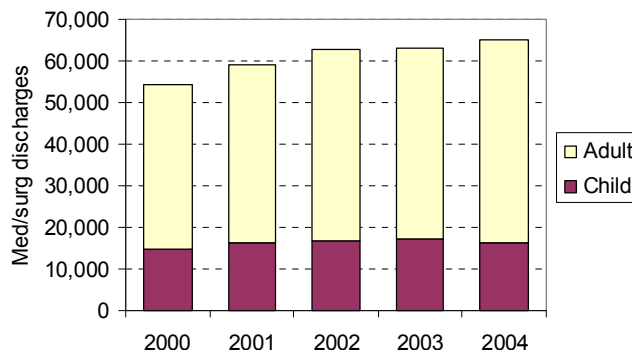
This section presents the following health care utilisation data:

- The top causes of hospitalisation in CMDHB
- The top ten causes of potentially avoidable hospitalisation for CMDHB and NZ.
- Potentially avoidable hospitalisation rates of selected diseases for children and adults by DHB and ethnic group.
- Adult surgical intervention rates for selected surgical procedures by DHB and ethnic group.
- CMDHB discharge rates for selected disorders for children and adults over time, and compared with other DHBs and New Zealand.
- Frequency of visits to various health provider services, and level of satisfaction with these health services, as documented by the NZHS 2002/03.

5.1. Hospitalisations

In 2004 there were 65,366 medical-surgical hospitalisations at public hospitals for CMDHB residents. “Medical/surgical” covers acute and elective hospitalisations for paediatrics, adult

Figure 5.1.1: Medical-surgical hospitalisations, CMDHB 2000-2004



medicine, and surgery, but excludes mental health, maternity and Care of the Elderly services. Day patient stays are included. This is an increase of around 5% per year since 2000 when 54,598 discharges occurred (Figure 5.1.1).

In 2000 children made up 27% of medical-surgical discharges. This had fallen to 25% by 2004, despite the proportion of children in the population staying roughly the same.

The most common cause of medical-surgical hospitalisation is injury. Injury makes up 14% of all medical-surgical inpatient events in children (Table 5.1.1) and 15% in adults (Table 5.1.2).

Table 5.1.1: Main causes of hospitalisation in children, CMDHB 2004

Rank	Condition	Number	% total
1	Injury	2,258	14%
2	Pneumonia + other respiratory infections	1,076	7%
3	Ear infections	952	6%
4	Bronchiolitis	943	6%
5	Prematurity and low birthweight	777	5%
6	Asthma	755	5%
7	Dental conditions	729	4%
8	Gastroenteritis	695	4%
9	Other viral diseases	619	4%
10	Cellulitis	537	3%
Total top 10		9,341	57%
Total		16,498	100%

Age 0-14, medical-surgical only.

Most of the other most common causes of hospitalisation in children relate to infectious diseases – pneumonia and other respiratory infections, ear infections, gastroenteritis and

cellulitis. The equivalent of around 15% of the 0-14 population was admitted to hospital in 2004 in CMDHB.

For adults, heart disease, particularly ischaemia-related (angina, heart attacks), was the next most common cause following injury-related causes (Table 5.1.2). Cancer in all its forms was the next most common cause. Around half the bed days spent in hospital for medical-surgical causes were in people aged 65 and over. The equivalent of around 15% of the 15+ population was admitted to hospital in 2004 in CMDHB.

Table 5.1.2: Main causes of hospitalisation in adults, CMDHB 2004

Rank	Condition	Number	% total
1	Injury	7,142	15%
2	Heart disease	6,737	14%
3	Cancer	3,635	7%
4	Abdominal pain & other digestive symptoms	1,480	3%
5	General signs and symptoms	1,239	3%
6	Female genital tract disorders	1,212	2%
7	Cellulitis	1,182	2%
8	Chronic obstructive respiratory disease	1,112	2%
9	Respiratory infections	1,089	2%
10	Gallbladder disorders	902	2%
Total top 10		25,730	53%
Total		48,868	100%

medical/surgical only

There has been a 7% increase in all public hospitalisations for CMDHB residents over the past 3 years (Table 5.1.3), with the largest increase noted in the elective surgery area (11%). This is the result of increases in hip and knee joint surgery through additional government funding (see Table 5.3.1 below) and prioritisation of funding by CMDHB. Almost all the increase came in the 2004/05 year. Adult medical growth has continued at around 3% a year – about what is predicted by the known demographic changes. This represents a significant reduction in the 8-9% growth experienced in the late '90s (see eg Figure 5.4.1 later in this section). This reduction has been attributed to the integrated care initiatives instituted over that time, and the strengthening of primary care through the developments of the Primary Care Strategy. In other areas there has been a promising reduction in acute paediatric hospitalisations in the past year, and the increase in work in the maternity and neonates area in 2002-2004 has abated somewhat in 2004/05.

Table 5.1.3: CMDHB resident hospitalisations 2001/2002 to 2004/2005

	Discharges				% change 01/02 - 04/05	proportion discharges in 2004/05
	2001/02	2002/03	2003/04	2004/05		
Elective surgery	10,807	10,524	10,743	12,007	11%	16%
Acute surgery	15,780	16,364	16,852	17,148	9%	22%
Medicine (adult)	24,646	24,735	25,634	26,898	9%	35%
Paediatrics	8,413	8,845	8,978	8,449	0%	11%
Maternity	10,094	11,095	11,621	10,542	4%	14%
Neonates	2,298	2,347	2,337	1,992	-13%	3%
Total	72,038	73,910	76,165	77,036	7%	100%

NMDS as downloaded 28 May 05, 2004/05 figures pro-rated to full financial year results; includes public purchases in private facilities. Surgery here includes children, paediatrics is 0-14 non-surgical.

Using a weighting system inpatient discharges can be represented proportionately as a measure of workload. The 7% increase in hospitalisations noted above also represents a

7% increase in workload (Table 5.1.4), but notably a 17% increase in elective surgery work. Overall nearly half the publicly funding inpatient workload for CMDHB is surgical. The maternity and neonate “spike” in 2002/03 and 2003/04 appears to have abated somewhat for 2004/05, bringing the rates back to a more expected level This is explored further in Section 7.

Table 5.1.4: CMDHB resident hospitalisation workload 2001/2002 to 2004/2005

Service	Case-weighted discharges				% change	proportion workload
	2001/02	2002/03	2003/04	2004/05	01/02 - 04/05	in 2004/05
Elective surgery	10,273	10,054	10,650	11,995	17%	18%
Acute surgery	17,578	18,051	18,850	18,797	7%	28%
Medicine (adult)	20,993	21,239	22,357	22,459	7%	34%
Paediatrics	5,606	5,801	5,995	5,583	0%	8%
Maternity	4,185	4,498	4,614	4,134	-1%	6%
Neonates	3,172	3,752	3,417	3,072	-3%	5%
Total	61,806	63,393	65,883	66,040	7%	100%

NMDS as downloaded 28 May2005. 2004/05 figures pro-rated to full financial year results; includes public purchases in private facilities. Case weights are a measure of inpatient workload - maternity figures presented as if maternity used case weights

5.2. Potentially avoidable hospitalisations

Potentially avoidable hospitalisations (PAH) are admissions to hospital that might be considered to be avoidable and consist of:

- Preventable hospitalisations – hospitalisations resulting from diseases that may be prevented through population-based health promotion strategies (e.g. tobacco tax and smoke free laws, exercise, good diet).
- Ambulatory sensitive hospitalisations – hospitalisations resulting from diseases able to be looked after in a primary health care setting (e.g. vaccine-preventable diseases, diabetes control, asthma prevention).

It is important to note that not all hospitalisations identified by this method will in fact be preventable – one would never envisage the indicator to reach zero. For example there will always be people with asthma attacks severe enough to need hospital care. Note also that one can also consider hospitalisations avoidable through injury prevention – particularly in view of the high rates of hospitalisation for such causes, but these are not generally included in the PAH rubric.

PAH rate data was obtained from 2004 Middlemore hospital discharge data for specific chronic conditions (see Section 12, p179). This section examines PAH rate by DHB, and by ethnic group for CM, for all PAH and selected causes of PAH.

Top ten potentially avoidable hospitalisations in CM and NZ

Children living in CMDHB had the same top 10 causes of PAH as for children in New Zealand as a whole, although there were some differences in ranking (Table 5.2.1). The leading cause of PAH for both CM and NZ was ENT (ear, nose, and throat) infections. Counties Manukau had significantly higher PAH rates than NZ for acute bronchiolitis, pneumonia, asthma, cellulitis, gastroenteritis, and urinary tract infections – in fact in almost every infectious disease. There was no significant difference in rates for ENT infections, dental conditions, epilepsy, or other respiratory conditions.

Table 5.2.1: Top ten causes of PAH in children, age-standardised rates, CMDHB and New Zealand, 2004

Cause of PAH	Counties Manukau		New Zealand	
	Rank	PAH rate	Rank	PAH rate
ENT infections	1	838	1	832
Acute bronchiolitis	2	802	4	499
Asthma	3	656	3	526
Dental conditions	4	643	2	579
Gastroenteritis	5	600	5	450
Pneumonia	6	551	8	317
Cellulitis	7	473	7	321
Other respiratory infections	8	373	6	397
Epilepsy	9	248	9	245
Kidney/urinary infection	10	187	10	139

Rate per 100,000 population aged 0-14

For adults (Table 5.2.2), CMDHB and NZ share the same top ten causes for PAH and similar ranking for each condition with the leading two causes related to ischaemic heart disease. CMDHB had a significantly higher rate than NZ for each of the top ten causes of PAH, except for stroke, and a significantly higher overall rate.

Table 5.2.2: Top ten causes of PAH in adults, age-standardised rates, CMDHB and New Zealand, 2004

Cause of PAH	Counties Manukau		New Zealand	
	Rank	PAH rate	Rank	PAH rate
Angina and chest pain	1	980	1	787
Myocardial infarction	2	420	2	372
CORD	3	414	3	331
Cellulitis	4	386	4	287
Skin cancers	5	365	5	282
Pneumonia	6	313	6	248
Diabetes mellitus	7	296	7	219
Congestive heart failure	8	259	8	208
Stroke	9	215	9	195
Kidney/urinary infection	10	209	10	165

Rate age standardised per 100,000 population aged 15+

[Potentially avoidable hospitalisation rate by DHB](#)

Table 5.2.3 and Figure 5.2.1 show the age-standardised PAH rates per 100,000 population for children and adults by DHB, for all PAH and selected causes of PAH.

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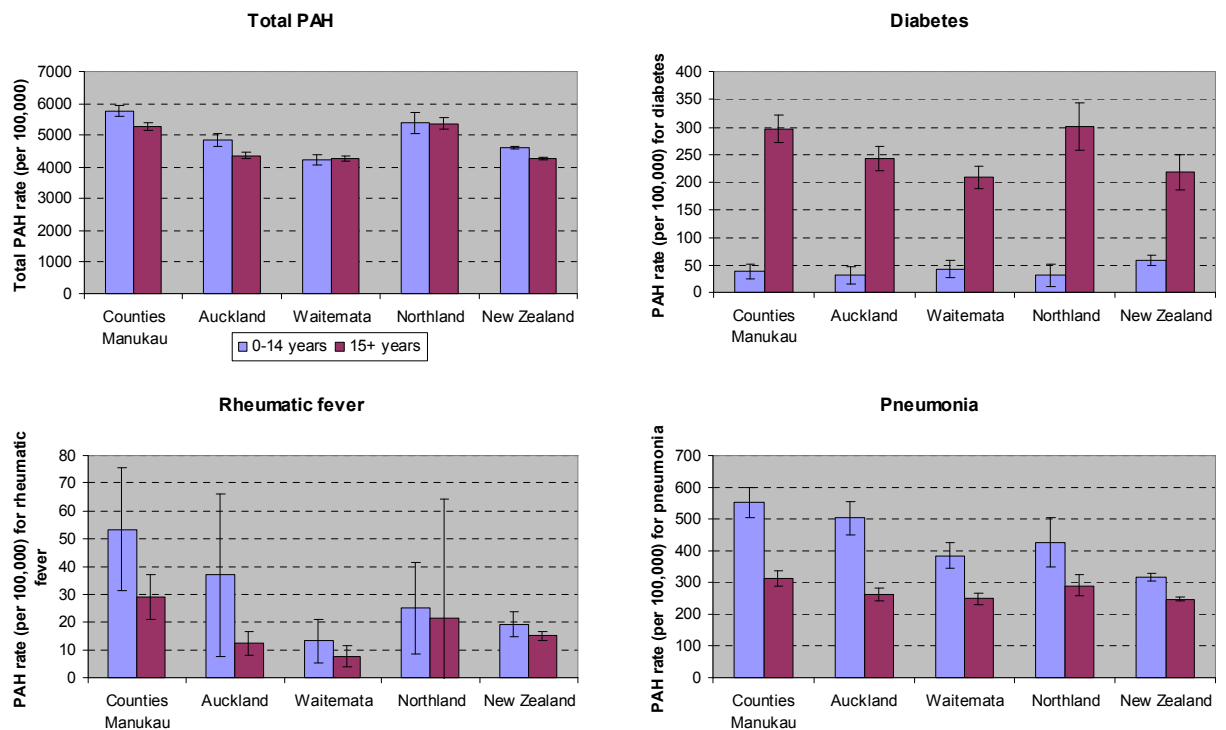
Table 5.2.3: Potentially avoidable hospitalisation rate for all PAH and select causes for children and adults, by DHB, 2004

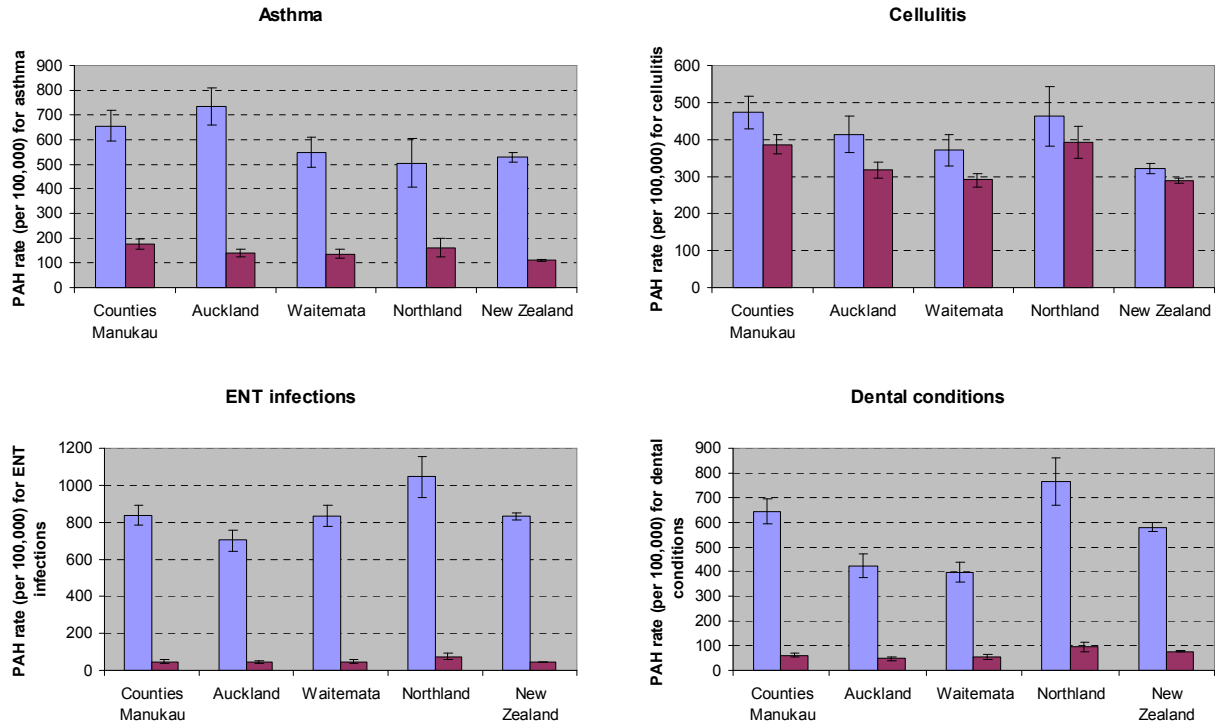
DHB	All PAH		Diabetes		Rheumatic fever		Pneumonia		Asthma		Cellulitis	
	0-14	15+	0-14	15+	0-14	15+	0-14	15+	0-14	15+	0-14	15+
Counties Manukau	5,762	5,298	38	296	53	29	551	313	656	174	473	386
Auckland	4,864	4,347	32	243	37	12	504	263	734	140	413	318
Waitemata	4,218	4,269	43	209	13	8	384	249	548	138	371	290
Northland	5,389	5,362	31	301	25	21	425	291	505	163	462	393
New Zealand	4,615	4,259	58	219	19	15	317	248	526	112	321	287

Rates per 100,000 population

DHB	Dental conditions		ENT infections	
	0-14	15+	0-14	15+
Counties Manukau	643	62	838	49
Auckland	423	49	701	47
Waitemata	395	56	832	50
Northland	765	94	1,043	76
New Zealand	579	77	832	48

Figure 5.2.1: Potentially avoidable hospitalisation rate (per 100,000 population) for all PAH and select causes for children and adults, by DHB





Amongst children aged 0-14 years CMDHB had a significantly higher PAH rate than the rest of the Auckland region for total PAHs and dental conditions. In addition, CMDHB had a significantly higher rate of PAHs for rheumatic fever, pneumonia, and cellulitis compared to Waitemata and all NZ, and a higher rate of PAHs for ENT infections than Auckland and all NZ. There were no significant differences between CMDHB and the rest of the Auckland region for diabetes and asthma, and no significant differences between CMDHB and NZ for diabetes, ENT infections, and dental conditions.

Amongst adults aged 15+ years CMDHB had a significantly higher PAH rate than the rest of the Auckland region and all New Zealand, for total PAHs, diabetes, rheumatic fever, pneumonia, and cellulitis. In addition, CM had a significantly higher rate of PAH for asthma, and a significantly lower rate for dental conditions, than nationally. There were no significant differences between CMDHB and the rest of Auckland or New Zealand for ENT infections.

[Potentially avoidable hospitalisation rate in CM by ethnic group](#)

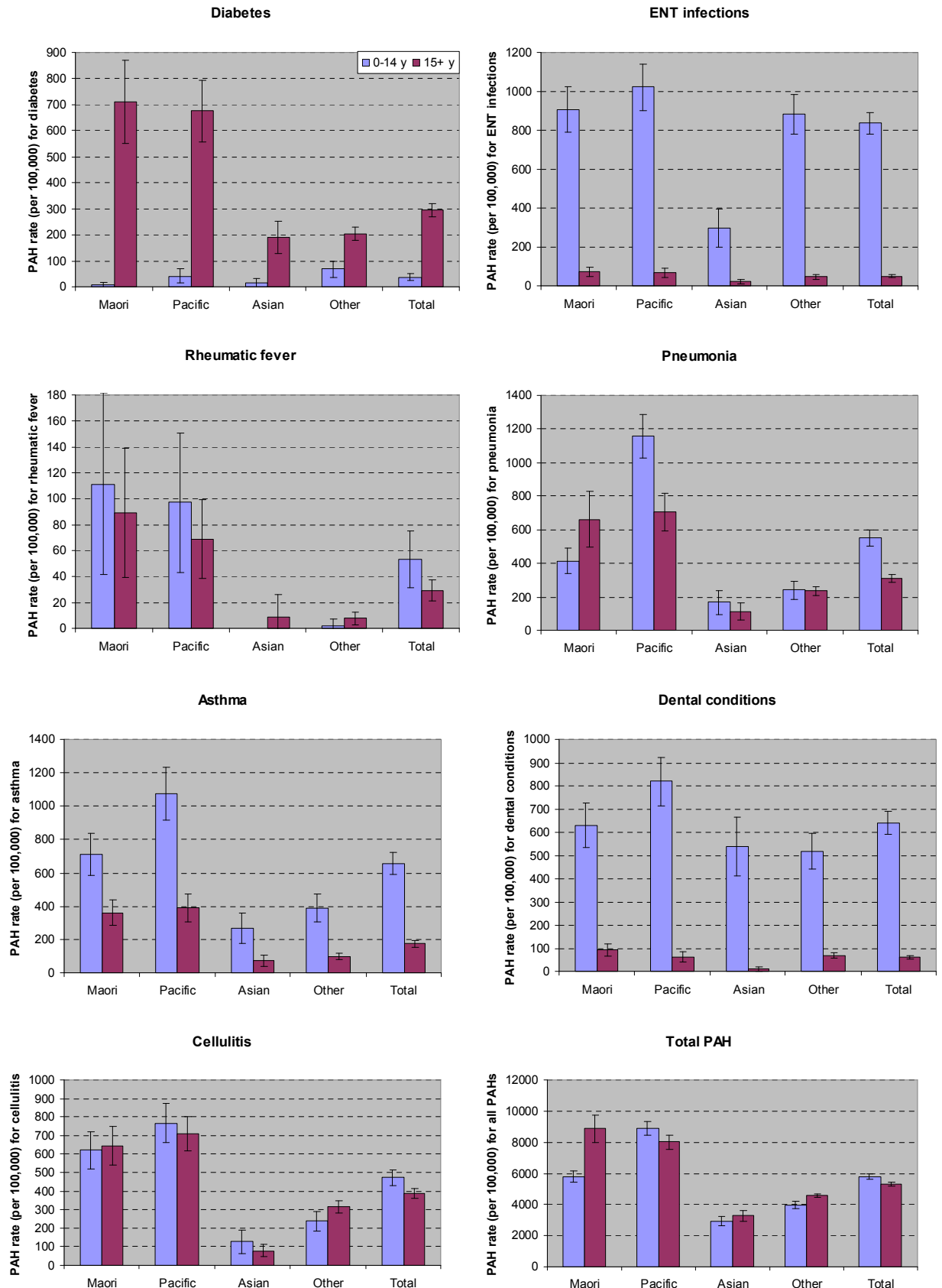
Table 5.2.4 and Figure 5.2.2 show the age-standardised PAH rates per 100,000 population for all PAH and selected causes of PAH, for children and adults in CM by ethnic group.

Table 5.2.4: Potentially avoidable hospitalisation rate (age-standardised per 100,000) for all and selected causes in CMDHB children and adults, by ethnic group, 2004

Cause of PAH	Maori		Pacific		Asian		Other		Total	
	0-14 y	15+ y	0-14 y	15+ y	0-14 y	15+ y	0-14 y	15+ y	0-14 y	15+ y
Diabetes	8	711	41	677	14	189	68	203	38	296
ENT infections	908	72	1,022	67	300	23	883	48	838	49
Rheumatic fever	111	89	97	69	0	9	3	8	53	29
Pneumonia	413	662	1,159	707	167	114	242	236	551	313
Asthma	710	360	1,074	390	265	71	387	99	656	174
Dental conditions	630	93	819	62	537	11	519	69	643	62
Cellulitis	620	645	766	708	125	79	238	314	473	386
All PAHs	5,803	8,884	8,909	8,022	2,948	3,262	3,964	4,572	5,762	5,298

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Figure 5.2.2: Potentially avoidable hospitalisation rate (per 100,000 population) for all and selected causes of PAH in CMDHB children and adults, by ethnic group, 2004

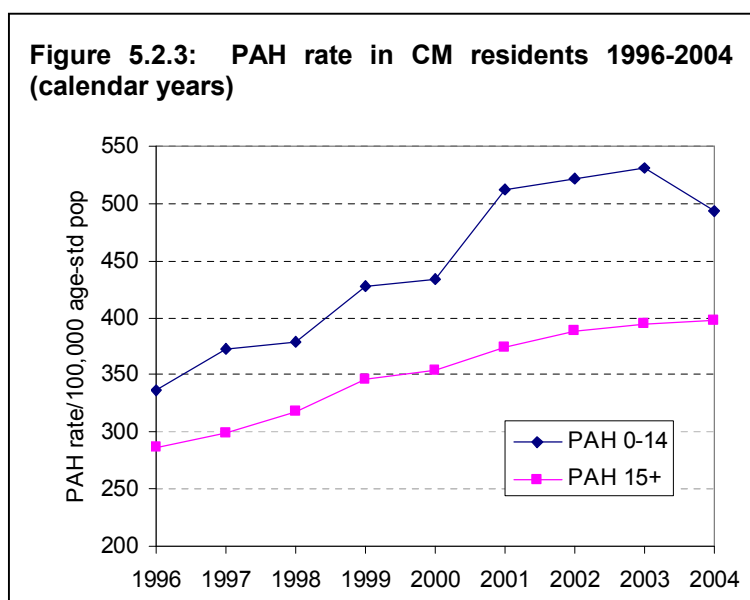


Pacific children in CMDHB had a significantly higher rate for all causes of PAH combined, pneumonia, and asthma. Pacific children also had higher PAH rates for dental conditions, and cellulitis, although differences were not significantly greater than for Maori children. Maori children had the highest PAH rate for rheumatic fever, although it was not significantly greater than for Pacific children. Other children had the highest PAH rate for diabetes, which was not significantly higher than for Pacific. Asian children had the lowest PAH rate for all causes of PAH combined, diabetes, ENT infections, rheumatic fever, pneumonia, asthma, and cellulitis, although rates were only significantly lower than for Other children for all PAH and ENT infections.

Maori adults had the highest rate for all causes of PAH combined, diabetes, rheumatic fever, and dental conditions, although rates were not significantly greater than for Pacific adults. Pacific adults had the highest PAH rates for ENT infections, pneumonia, asthma, and cellulitis, although rates were not significantly greater than for Maori adults. Asian adults had the lowest rates for all causes of PAH and for all selected causes except rheumatic fever which was lowest in Other adults. Adult Asian rates were significantly lower than for Other adults for all conditions except asthma.

Potentially avoidable hospitalisation rate in CM time trend

The rate of hospitalisation for CM residents increased markedly in the late 1990s, but has tended to slow in the 2000s (Figure 5.2.3). For children aged 0-14 for the first time in the last decade a year has been



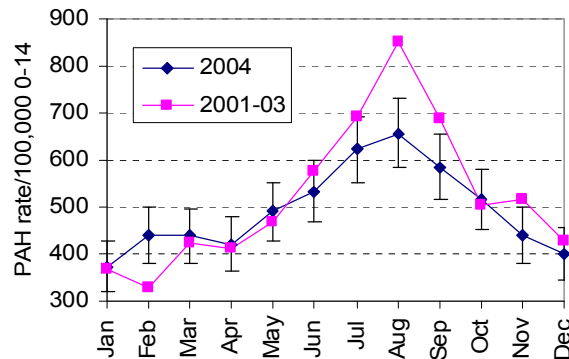
lower than its predecessor (493/100,000 0-14 year olds in 2004 compared with 531 in 2003). For adults the rate of increase continued to slow with 2004 very similar to 2003 (398/100,000 compared with 395). As a proportion of all medical-surgical hospitalisations PAH made up 41% of all child hospitalisations in 2003-04, but was only 38% in 1996-97. This compares to adults where the proportion has fallen from 32.9% in 1996-97 to 31.5% in 2003-04.

The seasonal pattern of PAH has remained similar over the 1996-2004 period (not shown). Looking in more detail at the 2004 year, and comparing with the average for the prior 3 years the fall in PAH is most pronounced in the winter months and the latter months of the year (Figure 5.2.4). This reduction has continued through to June 2005 (preliminary figures, not shown), raising hopes of a sustained decrease in avoidable child hospitalisation. The final figures after the winter months of 2005 will be eagerly awaited.

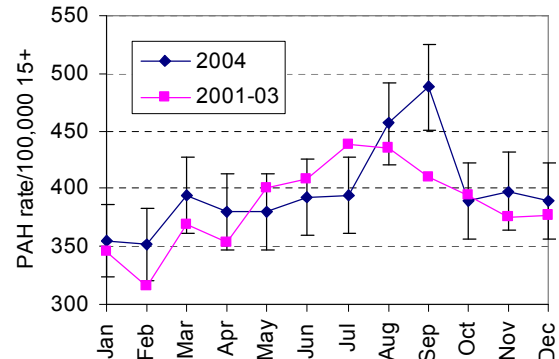
For adults the 2004 year looked similar to the average for the prior 3 years, with a later winter peak (Figure 5.2.4). The lack of an increase in 2004 compared to 2003 is evident however, and it is hoped that increasing Chronic Care Management enrolments will help fuel this trend.

Further detail on specific conditions, and comparisons with other DHBs over time are given in Section 5.4, p89.

Figure 5.2.4: PAH rates in CM by month for 2004 compared with average for 2001-2003
Age 0-14



Age 15+



5.3. Surgical indicators

In this section, a range of high-cost, high-volume surgical procedures have been selected as indicators for surgery performance. Both acute and elective procedures have been included and are presented as age-standardised rates per 100,000 population. Adults only are covered, as child surgery rates for CMDHB are similar or better than NZ averages and access to public hospital surgery for priority-scored surgery has not been identified as a specific issue. Results are presented by DHB and by ethnic group for CMDHB.

Surgical indicators by DHB

In 2004, CMDHB had the highest intervention rates in the Auckland region for all of the surgical indicators shown below (Table 5.3.1 and Figure 5.3.1). In addition, CM had higher surgical intervention rates than national rates for the following: angiography, angioplasty, coronary artery bypass grafts, total knee joint replacement, cataract extraction, and cholecystectomy. Northland had higher rates than the Auckland region and nationally for angiography, coronary artery bypass grafts, prostatectomy, and cataract extraction.

In CMDHB angioplasty rates have generally been increasing, while coronary artery bypass grafting has been decreasing, since 2002 (Figure 5.3.1). Angiography rates have been higher in CMDHB than in the rest of the Auckland region, Northland and all NZ, and have been increasing since 2000. Given that all these procedures for the Northern region DHBs are provided by the same unit (at Auckland City Hospital) one must assume the increased figures for CMDHB are related to increased need for surgery.

Table 5.3.1: Adult cardiovascular and other surgical procedure rates by DHB, 2004

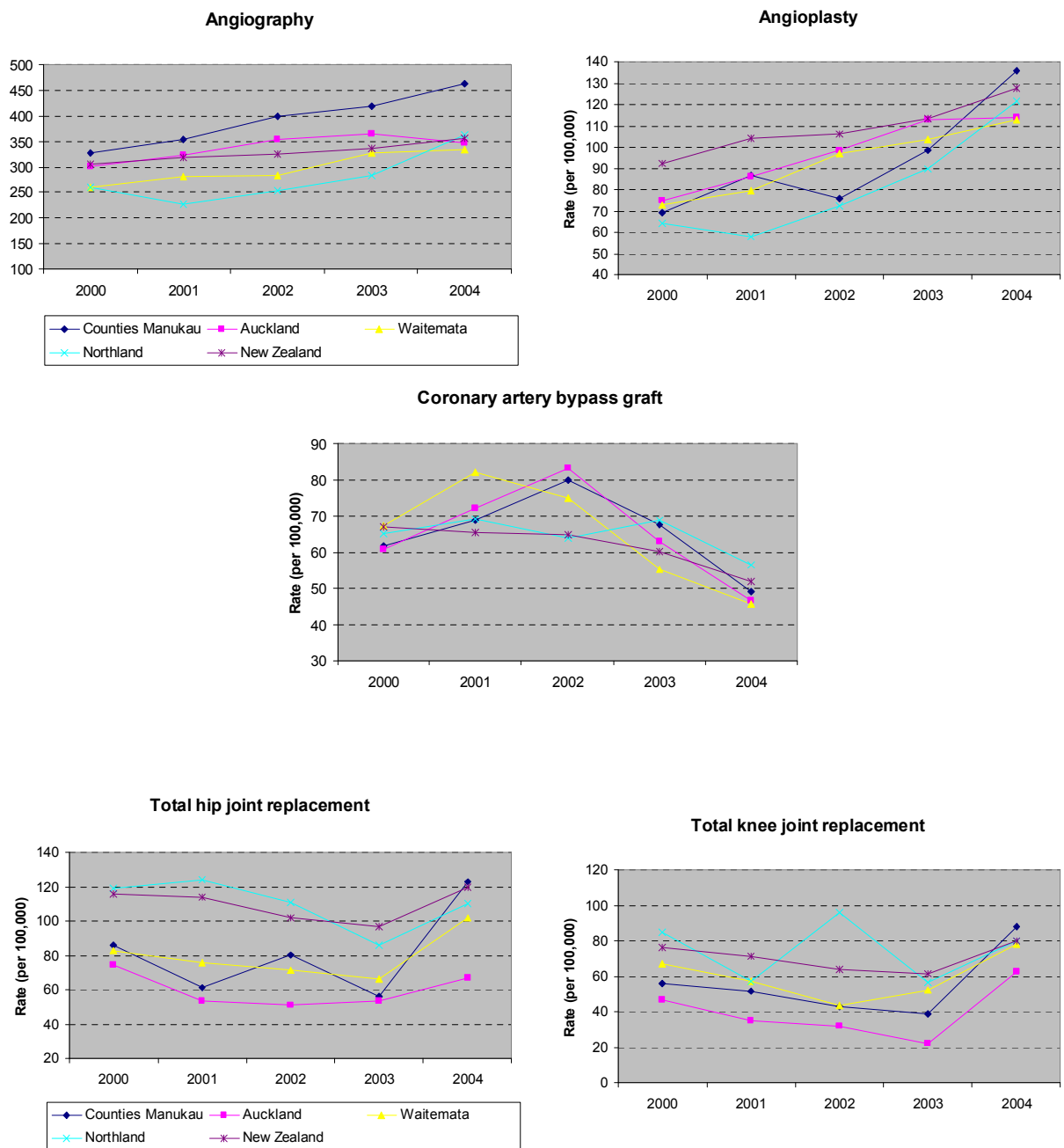
DHB	Cardiovascular surgery			Other surgery				
	Angio-graphy	Angio-plasty	Coronary artery bypass grafts	Total hip joint replacement	Total knee joint replacement	Prosta-tectomy	Cataract extraction	Chole-cystectomy
Counties Manukau	462	136	49	121	88	53	260	136
Auckland	346	114	47	65	60	42	256	77
Waitemata	333	113	46	102	78	48	235	116
Northland	363	121	57	110	80	64	306	130
New Zealand	356	128	52	120	80	60	252	123

Rate age-standardised per 100,000

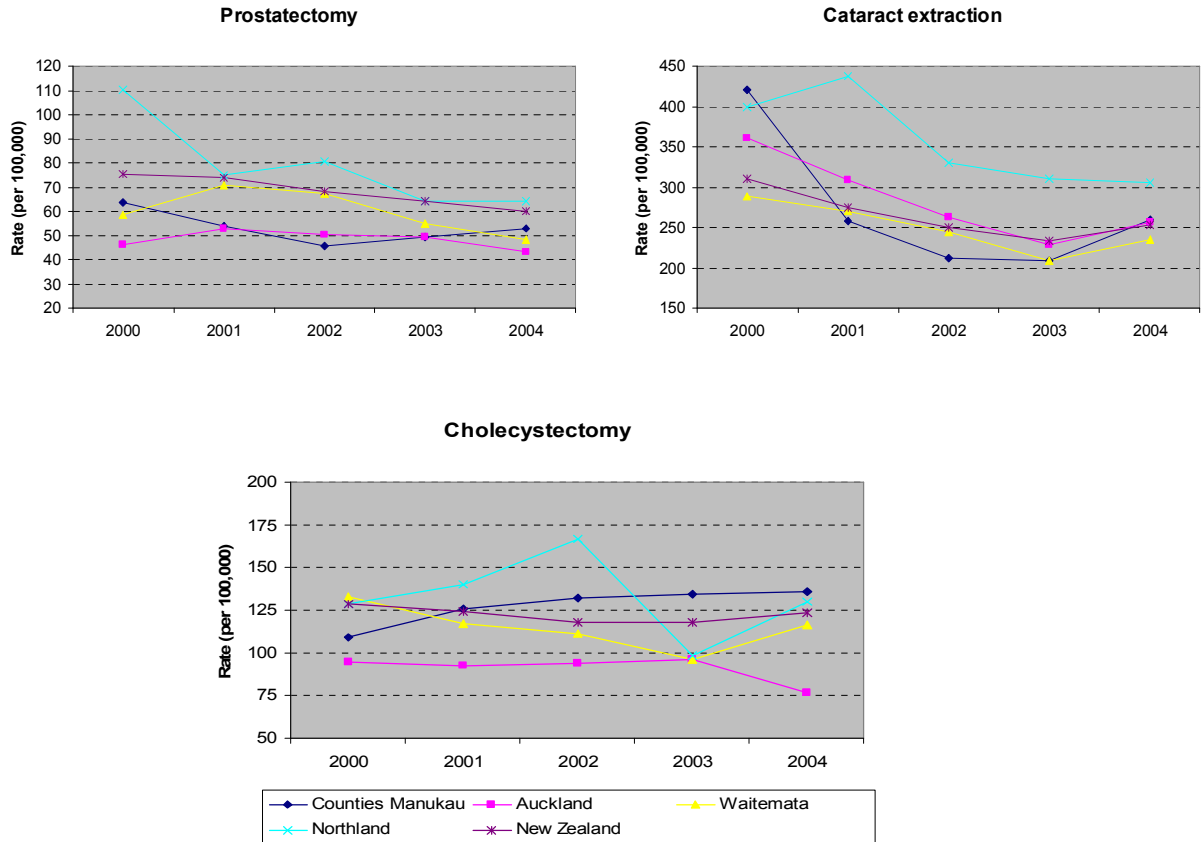
There has been a greater than twofold increase in hip and knee joint replacements in CM for 2004, which dovetails an increase in funding for these procedures. This has resulted in CM exceeding the national rate for these procedures for the first time throughout the 2000-2004 time period.

Procedure rates have fallen in CMDHB from 2000 to 2002 for prostatectomy, and from 2000 to 2003 for cataract extraction, but both have increased slightly since then. Between 2001 and 2003, rates were generally lower in CMDHB than the rest of the Auckland region, but were slightly higher in 2004. Cholecystectomy rates have been increasing in CMDHB since 2000, and have been higher than in the rest of the Auckland region or nationally since 2001.

Figure 5.3.1: Adult cardiovascular and other surgical procedures, rate per 100,000 population by DHB, 2004



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[Surgical indicators by ethnic group in CM](#)

This section compares cardiovascular and other surgical intervention rates between the different ethnic groups in CM (Table 5.3.2, Figure 5.3.2). Within CM Maori had the highest rates of angiography and angioplasty and the lowest rates of coronary artery bypass graft surgery. Pacific and Others had similar rates of angiography to Maori but Pacific had the lowest rate of angioplasty and the highest rate of bypass grafting. People of Other ethnicities had fairly high rates of both angioplasty and bypass grafting. The differences between ethnic groups were not statistically significant although Asians did have a significantly lower rate of angiography than Others or Maori.

Table 5.3.2: Adult cardiovascular and other surgical procedures for CMDHB by ethnic group 2004

Ethnic group	Cardiovascular surgery			Other surgery				
	Angio-graphy	Angio-plasty	Coronary artery bypass grafts	Total hip joint replacement	Total knee joint replacement	Prosta-tectomy	Cataract extraction	Chole-cystectomy
Maori	544	158	16	218	55	45	349	207
Pacific	447	93	71	49	90	42	523	110
Asian	304	90	38	7	38	61	282	81
Other	459	145	49	139	94	55	201	140
Total	462	136	49	123	88	53	260	136

Rate age-standardised per 100,000

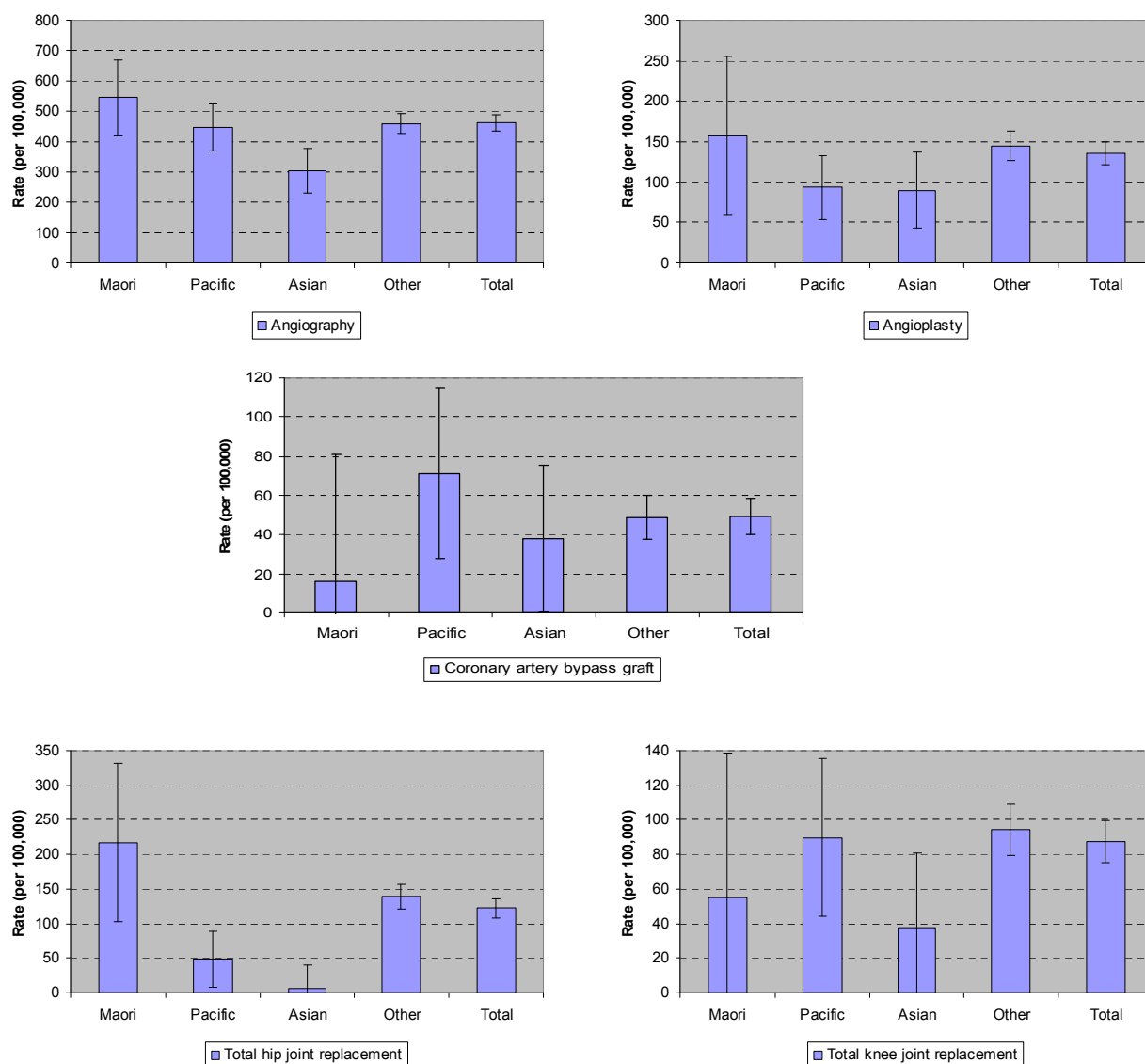
Maori had the highest rate for total hip joint replacement, and this was significantly higher than the Pacific and Asian rates. In addition, Maori had the highest rate for cholecystectomy although the differences between ethnic groups were not significant.

Pacific people had the highest rates for total knee joint replacement and cataract extraction, and the cataract extraction rate was significantly higher than for Asians and Others.

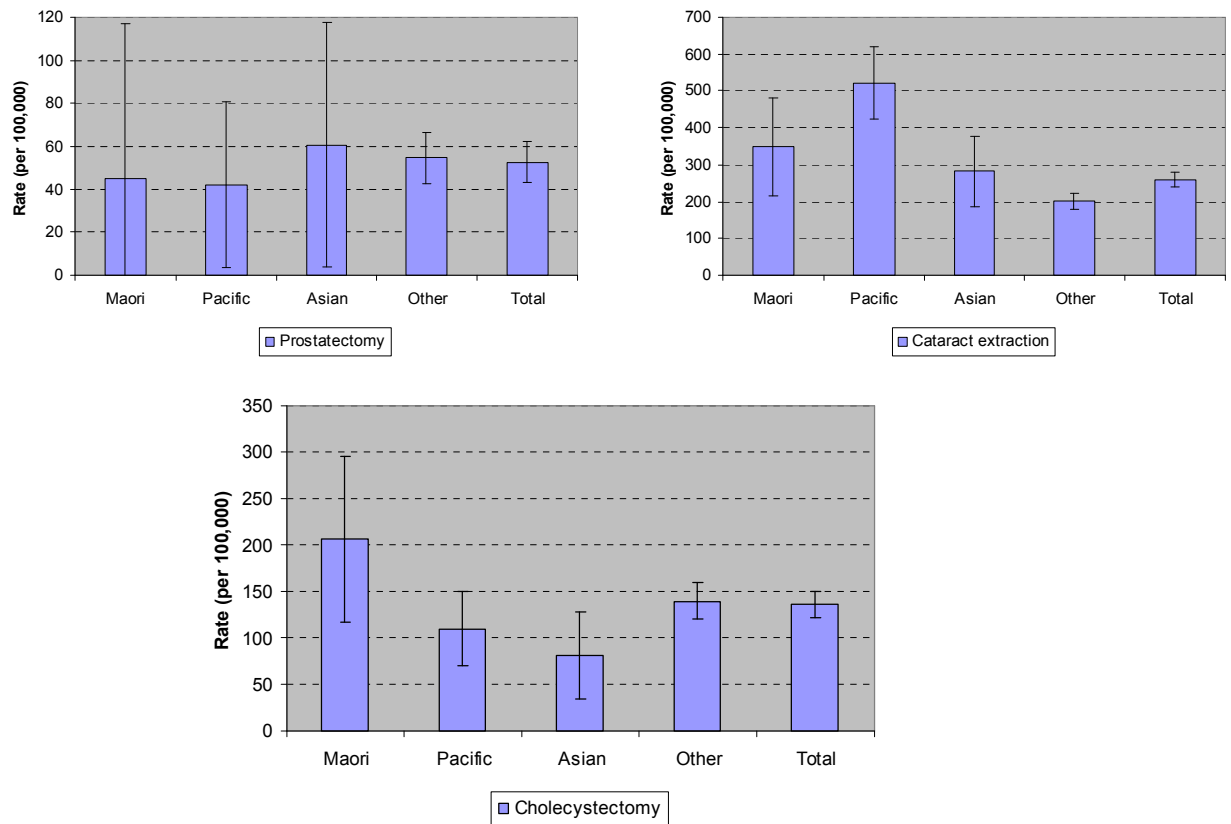
Asians had the highest rate for prostatectomy although it was not significantly higher than the rates for other ethnic groups. Asians also had the lowest rates for total hip and knee joint replacements, and cholecystectomy. However, differences were not significant except for total hip joint replacement where the Asian rate was significantly less than for Maori and Other groups.

Others had the highest rate for total knee joint replacement although it was not significantly different from the other ethnic groups. Others also had comparatively high rates for total hip joint replacement (significantly higher than for Pacific or Asian), prostatectomy, and cholecystectomy. In addition, Others had the lowest rate for cataract extraction (significantly lower than for Pacific).

Figure 5.3.2: Adult cardiovascular and other surgical procedures, age-standardised rates in CMDHB by ethnic group, 2004



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5.4. Hospitalisation rates over time

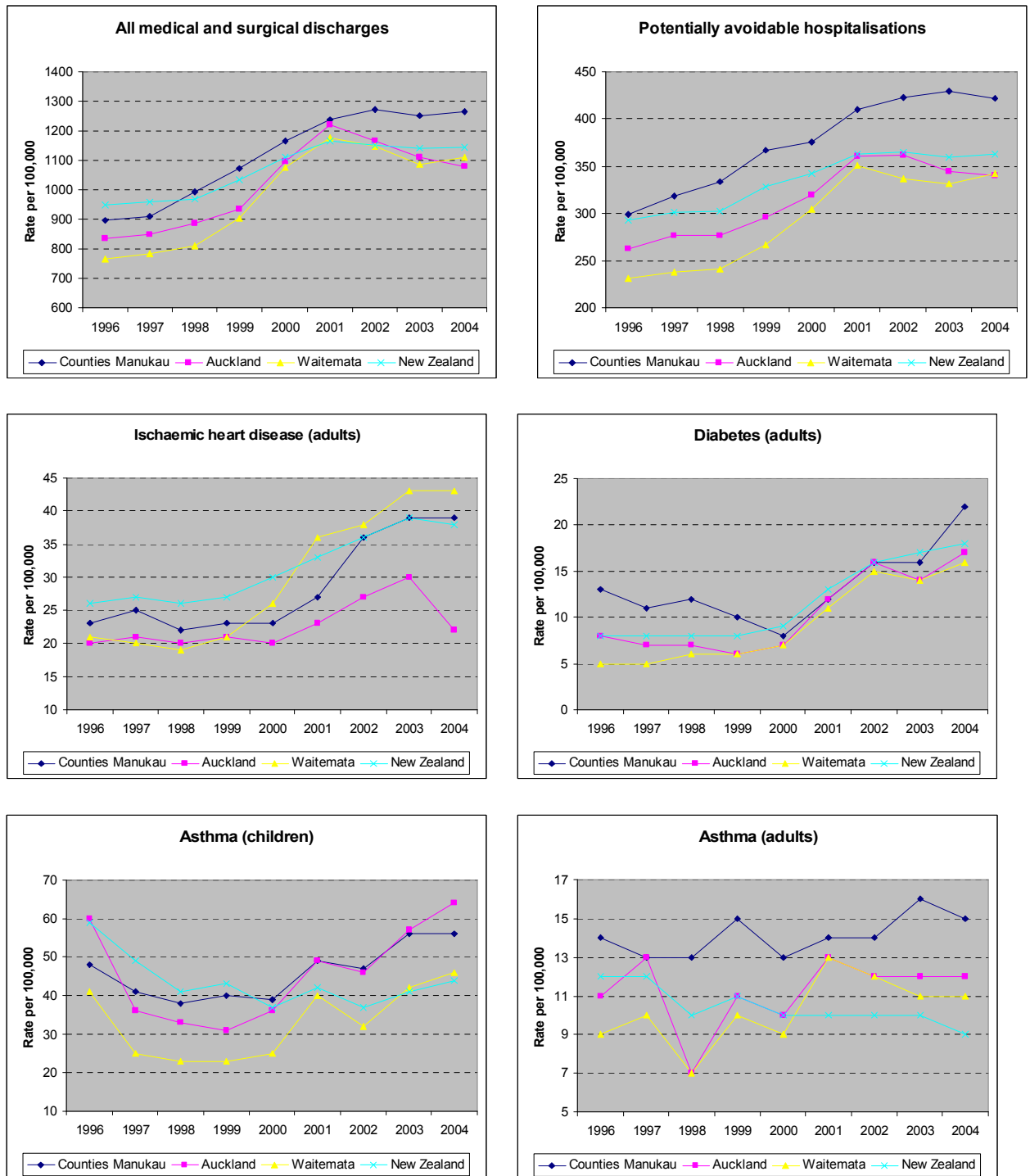
This section presents annual hospitalisation rates for all CMDHB residents compared with Auckland, Waitemata, and NZ. The previous Population Health Indicator report presented discharge rates for Middlemore Hospital only, while this report presents discharge rates for all CMDHB residents from any hospital, and therefore rates are somewhat higher than those shown in the previous report. In addition, annual rather than quarterly rates are shown.

Annual age-specific rates (per 100,000 population) are presented. The age-specific rate is defined as the number of cases per 100,000 persons per year for a specified age group. In this section the age groups are specified as adult (15+ years), child (0-14 years) or the total population. Annual age-specific rates are presented for the following:

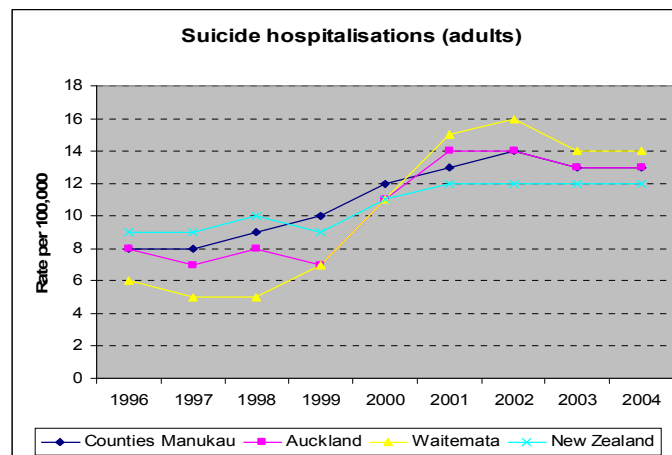
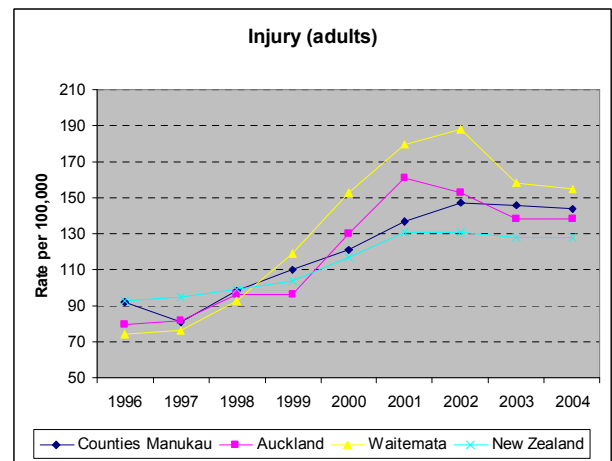
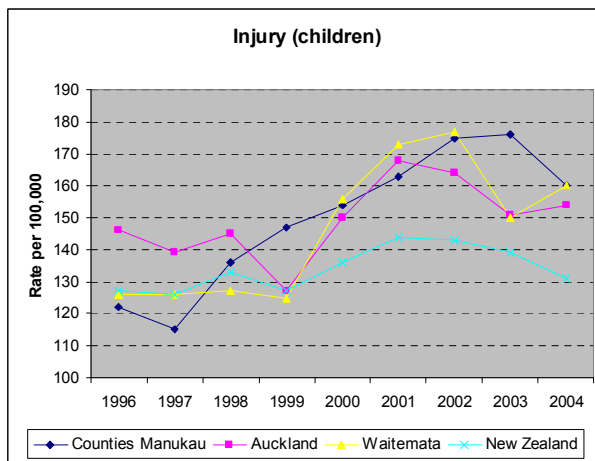
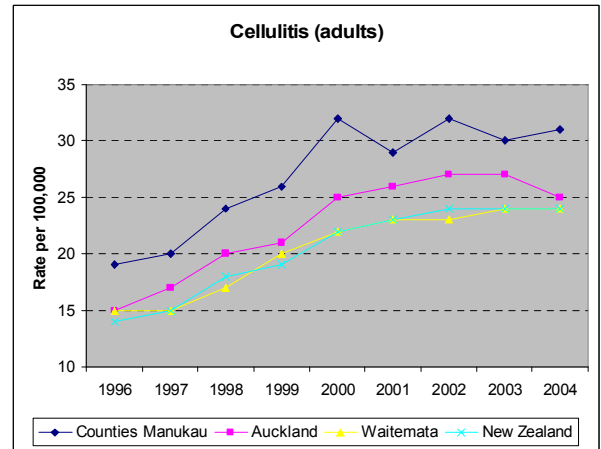
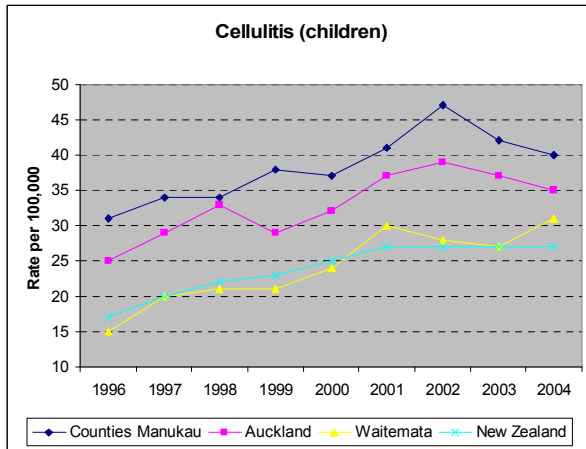
- All medical and surgical discharges (all ages)
- Potentially avoidable hospitalisations (all ages; see also Section 5.2 p84)
- Diabetes (adults only)
- Asthma (children and adults)
- Cellulitis (children and adults)
- Injury (children and adults)
- Suicide hospitalisations (adults).

CMDHB has consistently had the highest rate of hospital discharges and potentially avoidable hospitalisations compared to the rest of the Auckland region and nationally, since 1998 (Figure 5.4.1). In addition, CM had the highest rate of discharges for asthma (adults) and cellulitis (adults and children), and a higher rate of diabetes hospitalisation than the rest of the Auckland region since 1996, exceeding the national rate in 2004.

Figure 5.4.1: Hospitalisation rates (per 100,000 population) from 1996 to 2004 by DHB



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The large jump in ischaemic heart disease hospitalisations in the 2000-2002 period in most DHBs is not thought to reflect changing rates of disease. Rather it has been attributed to improved diagnosis through the use of better protocols and diagnostic tests (such as Troponin), such that patients who would otherwise have been discharged as unspecified chest pain are now discharged with an angina or myocardial infarction (MI) diagnosis. MI rates have had a similar percentage change nationwide (not shown).

5.5. Use of health services

This section presents data on the frequency of visits to the following health providers, obtained from the New Zealand Health Survey (NZHS) 2002/03: GPs, Maori and Pacific health providers, medical specialists, nurses, and public/private hospitals.

General Practitioners

The percentage of people who had seen their GP was identified from the NZHS 2002/03 as those who stated they had seen a GP or their family doctor in the last 12 months. Maori and Pacific males living in CMDHB were less likely to have seen their GP in the last 12 months than those in the rest of Auckland, Northland, or nationally (Table 5.5.1).

Table 5.5.1: Percentage of people who visited a GP in the past 12 months

DHB	GP visit: age-standardised prevalence (%)														
	Males					Females					Total				
	M	P	A	O	Tot	M	P	A	O	Tot	M	P	A	O	Tot
CM	66.8	64.5	68.7	80.2	74.7	81.4	83.7	73.6	85.8	83.4	74.8	74.6	71.3	83.0	79.2
Auckland	68.9	70.8	58.4	78.3	73.7	83.9	81.2	68.4	87.7	83.4	77.0	76.5	63.8	83.1	78.8
Waitemata	68.7	66.9	53.8	76.3	73.2	82.4	80.8	68.2	88.1	85.3	75.9	74.5	61.6	82.4	79.5
Northland	67.7	66.1	61.2	82.3	78.7	81.8	88.8	64.5	85.4	84.2	75.4	74.7	63.2	83.9	81.6
NZ	67.8	75.1	63.8	77.7	75.7	82.5	83.7	73.8	87.0	85.5	75.7	79.6	69.2	82.4	80.8

NZHS 2002/03; in order: Maori, Pacific, Asian, Other, Total

The percentage of people who visited a GP in the previous 12 months was similar for CMDHB (79.2%) and the rest of the Auckland region, Northland (81.6%), and nationally (80.8%) (Figure 5.5.1). Females were significantly more likely to visit a GP (83.4%) than males (74.7%) in CMDHB, the other Auckland DHBs, and nationally.

Figure 5.5.1: Percentage of people who visited a GP in the previous 12 months by sex and DHB (NZHS 2002/03)

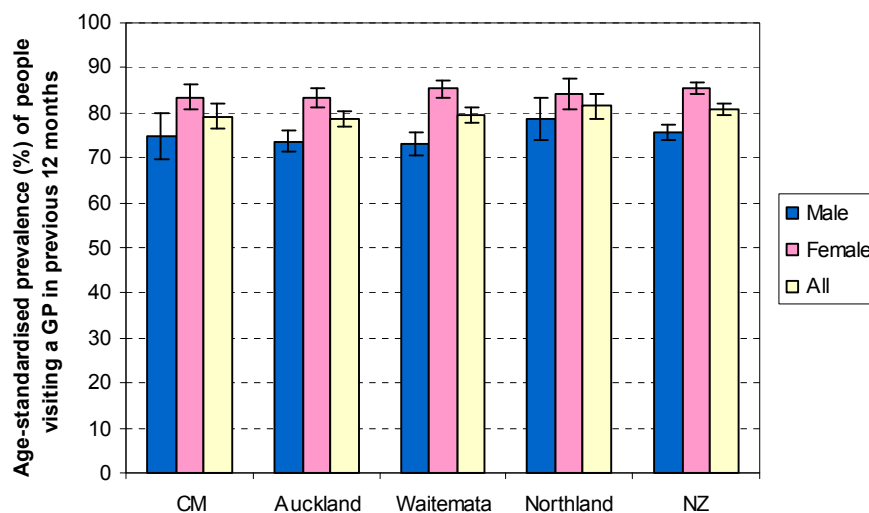
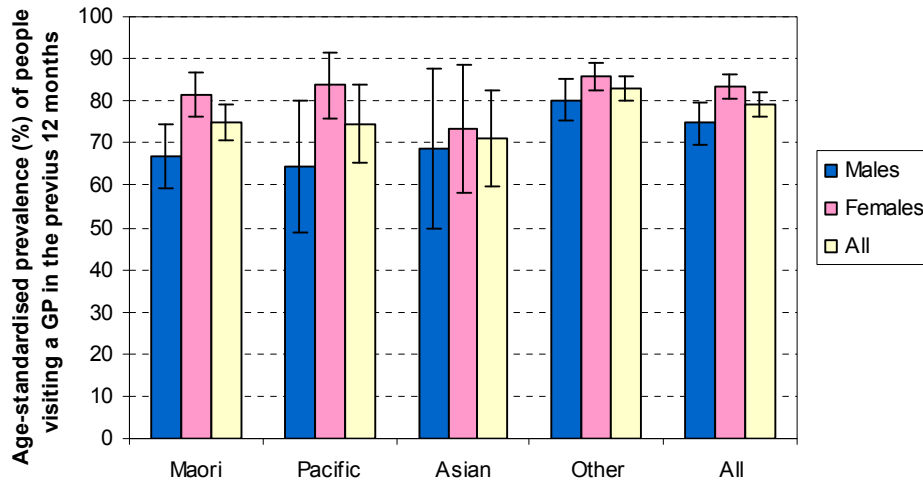


Figure 5.5.2 shows that within CMDHB fewer Maori (74.8%), Pacific (74.6%) and Asians (71.3%) visited a GP than Others (83.0%). The difference between Maori and Others was significant. While a higher prevalence of females than males had visited a GP for all ethnic groups, this difference was only significant for Maori (females 81.4%, males 66.8%).

Figure 5.5.2: Percentage of people who visited a GP in the previous 12 months in CMDHB by sex and ethnic group (NZHS 2002/03)



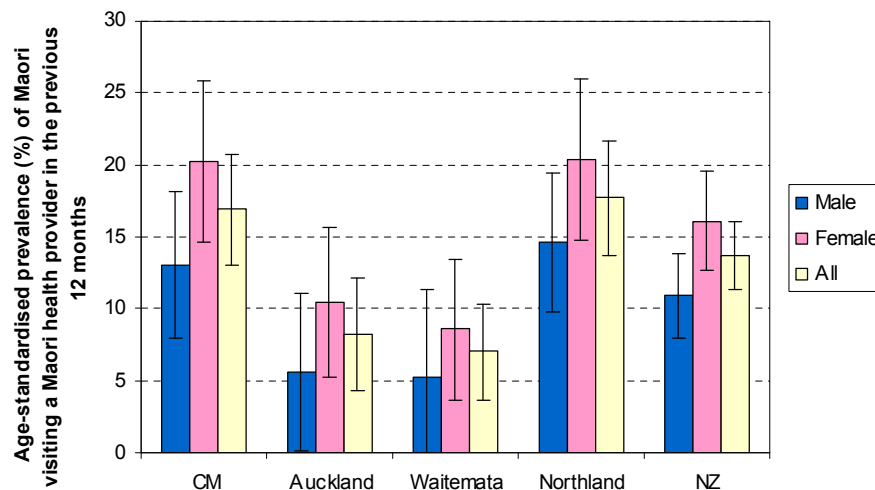
[Maori health providers](#)

The percentage of Maori people who had attended a Maori health provider was identified from the NZHS 2002/03 as those who had seen a health care worker at a Maori health provider in the last 12 months. Results were presented for the Maori ethnic group only due to the small number of non-Maori using these services (Table 5.5.2).

Table 5.5.2: Percentage of Maori people who saw a health care worker at a Maori health provider in the past 12 months (NZHS 2002/03)

DHB	Maori health provider visit: age-standardised prevalence (%)		
	Maori males	Maori females	Maori total
CM	13.0	20.2	16.9
Auckland	5.6	10.4	8.2
Waitemata	5.2	8.6	7.0
Northland	14.6	20.3	17.7
NZ	10.9	16.1	13.7

Figure 5.5.3: Age-standardised prevalence (%) of Maori who visited a Maori health provider in the previous 12 months by sex and DHB (NZHS 2002/03)



A significantly higher proportion of Maori from CMDHB visited a Maori health provider (16.9%) than Maori from Auckland (8.2%) or Waitemata (7.0%) (Table 5.5.2 and Figure 5.5.3). In CMDHB as for all DHBs shown and nationally, more Maori women (20.2%) than men (13.0%) visited a Maori health provider, although the difference was not statistically significant.

Pacific health providers

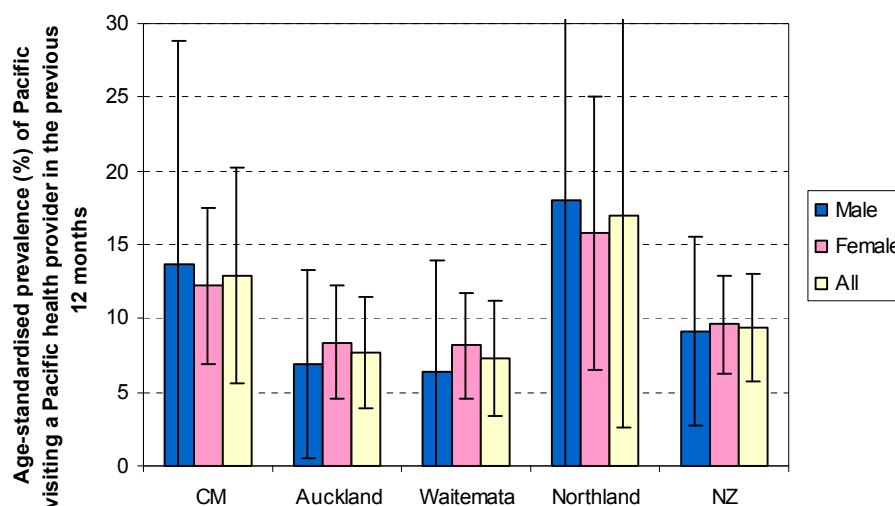
The percentage of Pacific people who had attended a Pacific health provider was identified from the NZHS 2002/03 as those who stated they had seen a health care worker at a Pacific health provider in the last 12 months. Results were presented for the Pacific ethnic group only due to the small number of non Pacific using these services.

Table 5.5.3: Percentage of Pacific people who saw a health care worker at a Maori health provider in the past 12 months (NZHS 2002/03)

DHB	Pacific health provider visit: age-standardised prevalence (%)		
	Pacific males	Pacific females	Pacific total
CM	13.7	12.2	12.9
Auckland	6.9	8.4	7.7
Waitemata	6.4	8.2	7.3
Northland	18.0	15.8	16.9
NZ	9.1	9.6	9.4

As shown in Table 5.5.3 and Figure 5.5.4 a greater proportion of Pacific in CMDHB visited a Pacific health provider than Pacific in Auckland, Waitemata, or nationally, although the highest proportion was in Northland. There were non-significant differences in the proportion of Pacific men and women who visited a Pacific health provider.

Figure 5.5.4: Age-standardised prevalence (%) of Pacific who visited a Pacific health provider in the previous 12 months by sex and DHB (NZHS 2002/03)



Medical specialists

The percentage of people who had seen a medical specialist was identified from the NZHS 2002/03 as those who stated they had seen a medical specialist in the last 12 months. As shown in Table 5.5.4, in CMDHB Maori, Pacific, and particularly Asian males, and Pacific females were more likely to have seen a specialist in the last 12 months than their counterparts in the rest of the Auckland region. People of Other ethnic groups were more likely to have visited a specialist than people of other ethnicities across all DHBs.

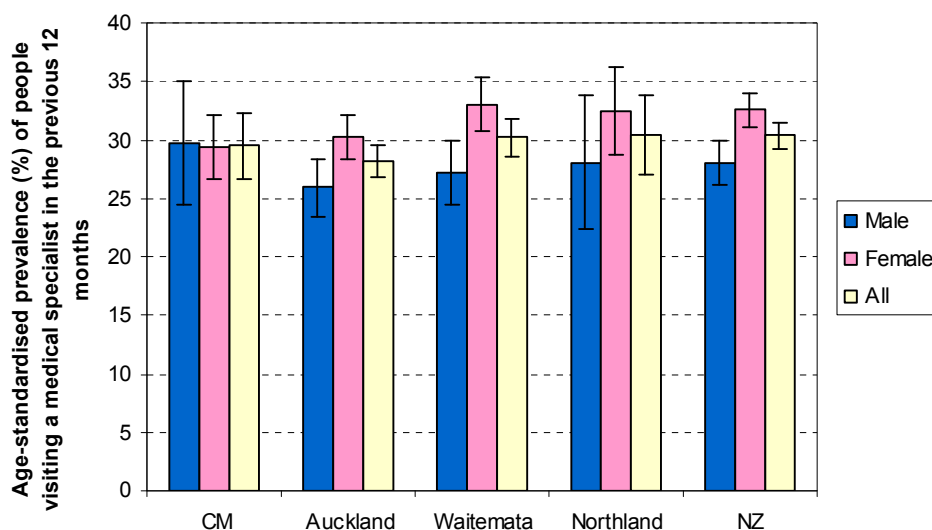
Table 5.5.4: Percentage of people who visited a medical specialist in past 12 months

DHB	Specialist visit: age-standardised prevalence (%)														
	Males					Females					Total				
	M	P	A	O	Tot	M	P	A	O	Tot	M	P	A	O	Tot
CM	25.5	24.8	31.4	31.5	29.7	28.1	19.8	17.9	34.8	29.4	27.0	22.2	24.3	33.2	29.5
Auckland	16.9	16.5	13.5	31.0	25.9	29.5	17.8	16.8	35.9	30.3	23.8	17.2	15.3	33.5	28.2
Waitemata	14.5	17.1	12.8	30.7	27.2	26.4	18.0	17.0	36.8	33.0	20.7	17.6	15.0	33.9	30.2
Northland	24.5	27.9	42.7	28.9	28.1	27.7	22.0	24.8	34.4	32.5	26.2	25.7	31.9	31.7	30.4
NZ	22.9	20.5	18.3	29.8	28.0	27.3	20.1	20.4	35.1	32.6	25.3	20.2	19.4	32.5	30.4

NZHS 2002/03; in order: Maori, Pacific, Asian, Other, Total

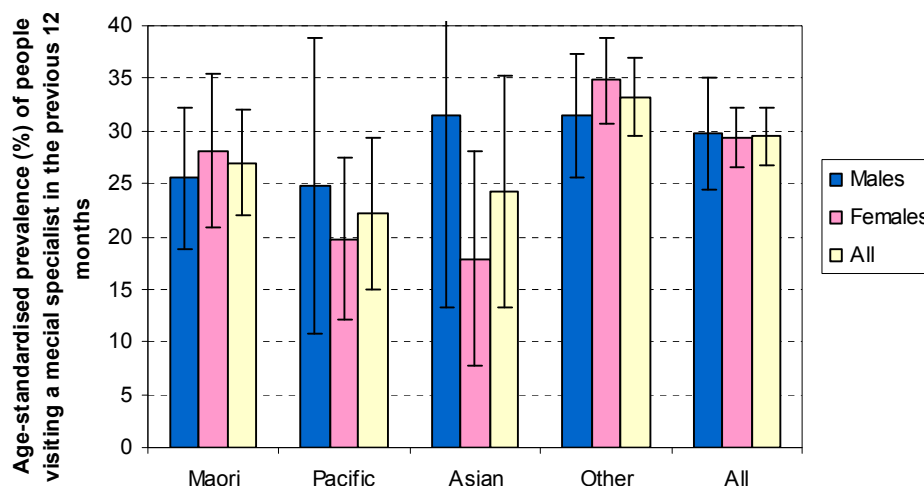
Figure 5.5.5 shows that the percentage of people who visited a medical specialist in the previous 12 months was similar for CMDHB (29.5%), the Auckland region, Northland (30.4%), and nationally (30.4%). Except in CMDHB a greater percentage of females than males had visited a medical specialist, with this difference being significant in Auckland, Waitemata, and nationally (females 32.6%, males 28.0%). This may be due to a lower use of specialists in pregnancy-related care in CM.

Figure 5.5.5: Age-standardised prevalence (%) of people who visited a medical specialist in the previous 12 months by sex and DHB (NZHS 2002/03)



In CMDHB Other ethnic groups were more likely to visit a medical specialist (33.2%) than Maori (27.0%), Pacific (22.2%), and Asian (24.3%) groups (Figure 5.5.6). However, the only significant difference was between Other and Pacific ethnic groups. Unlike the other DHBs in Auckland, there was no significant difference between males and females, although Pacific (24.8%) and especially Asian (31.4%) males had a higher prevalence than Pacific (19.8%) and Asian (17.9%) females.

Figure 5.5.6: Age-standardised prevalence (%) of people in CM who visited a medical specialist in the previous 12 months by sex and ethnic group (NZHS 2002/03)



[Nurses](#)

The percentage of people who had seen a nurse was identified from the NZHS 2002/03 as those who stated they had seen a nurse at a GP’s practice or at home in the last 12 months (excluding midwives and nurses seen in hospital). As shown in Table 5.5.5, in CMDHB Pacific people (27.2%), especially Pacific males (19.2%), were less likely to have seen a nurse than Pacific in Auckland (36.5%), Waitemata (36.1%), or nationally (31.9%).

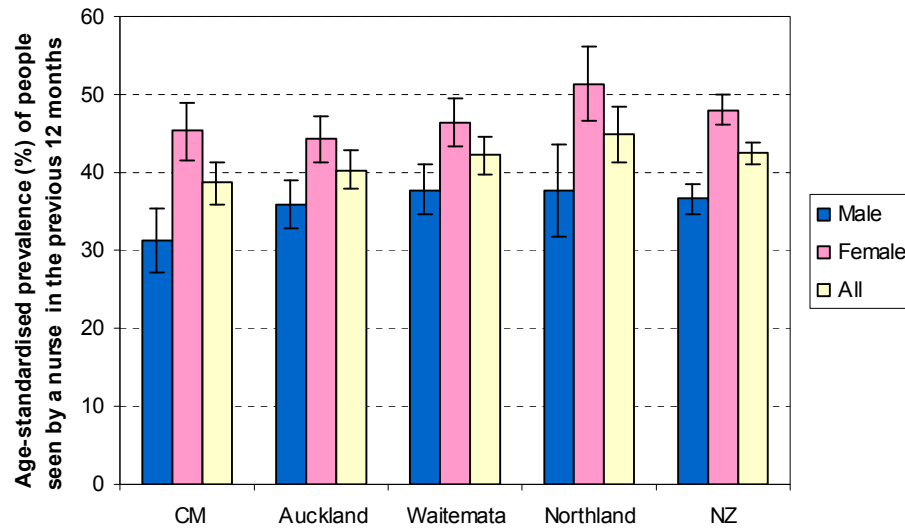
Table 5.5.5: Percentage of people who were seen by a nurse in the past 12 months

DHB	Nurse visit: age-standardised prevalence (%)														
	Males					Females					Total				
	M	P	A	O	Tot	M	P	A	O	Tot	M	P	A	O	Tot
CM	31.8	19.2	15.8	37.4	31.3	49.9	34.3	28.0	50.9	45.3	41.8	27.2	22.3	44.3	38.6
Auckland	30.9	33.7	20.0	40.5	35.9	47.9	38.7	26.2	49.6	44.3	40.1	36.5	23.3	45.2	40.3
Waitemata	30.1	37.1	15.6	41.1	37.8	49.7	35.3	27.0	49.4	46.4	40.4	36.1	21.7	45.4	42.2
Northland	33.1	22.3	10.5	39.9	37.8	50.6	34.3	26.6	52.4	51.4	42.7	26.8	20.3	46.2	44.8
NZ	33.9	27.0	22.2	38.5	36.6	49.2	36.2	29.8	49.9	48.0	42.1	31.9	26.3	44.4	42.5

NZHS 2002/03; in order: Maori, Pacific, Asian, Other, Total

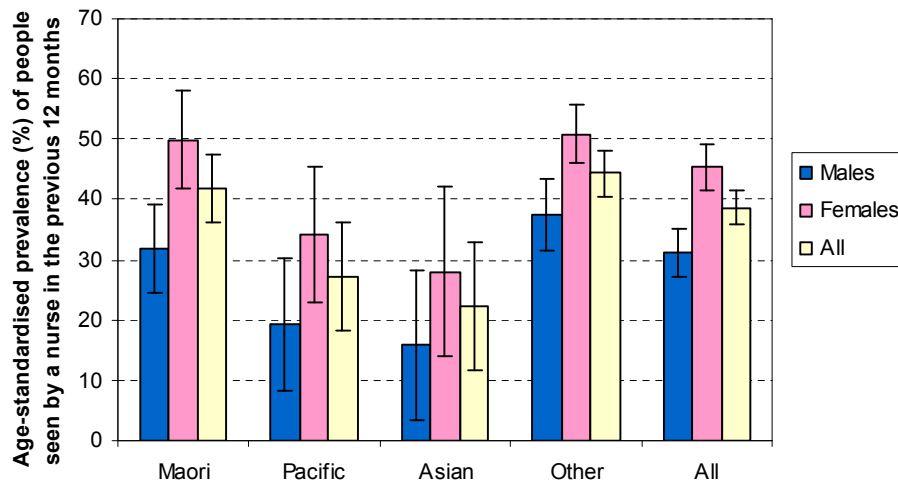
The percentage of people seen by a nurse was least in CMDHB (38.6%) and greatest in Northland (44.8%), although the difference was not statistically significant (Figure 5.5.7). Significantly more females (48.0%) than males (36.6%) were seen by a nurse, and males in CM were least likely to have been seen by a nurse (31.3%).

Figure 5.5.7: Age-standardised prevalence (%) of people who were seen by a nurse in the previous 12 months by sex and DHB (NZHS 2002/03)



In CMDHB Others (44.3%) and Maori (41.8%) were more likely to have seen a nurse in the previous 12 months than Pacific (27.2%) or Asian people (22.3%) (Figure 5.5.8). Female prevalence (45.3%) was higher than male prevalence (27.3%) in all ethnic groups and was significantly higher for Maori (49.9%) and Other (50.9%) females.

Figure 5.5.8: Age-standardised prevalence (%) of people in CM seen by a nurse in the previous 12 months by sex and ethnic group (NZHS 2002/03)



Public hospitals

The percentage of people who had utilised a public hospital was identified from the NZHS 2002/03 as those who stated they had used a service at, or been admitted to, a public hospital in the last 12 months. As shown in Table 5.5.6, in CMDHB Maori females and Asian males and females were more likely to have utilised a public hospital than Maori females and Asians in the rest of the Auckland region.

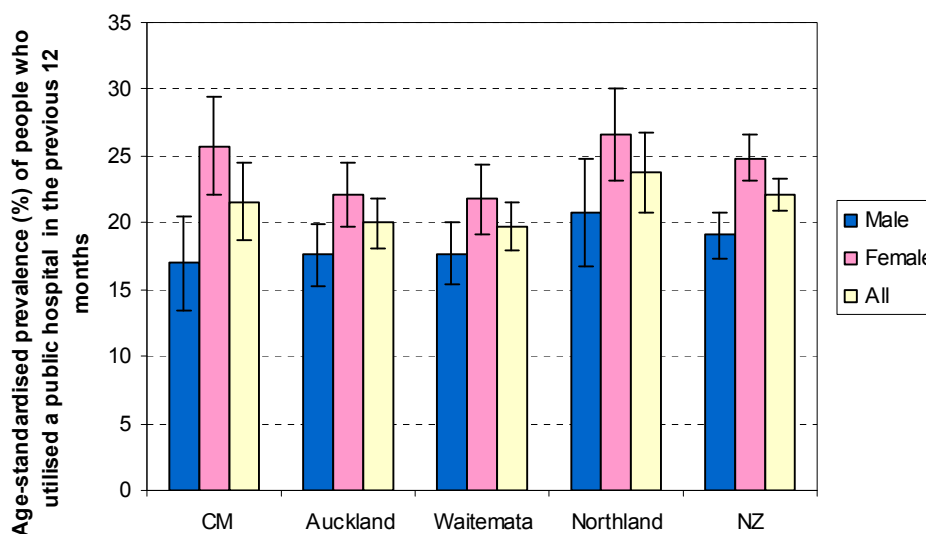
Table 5.5.6: Percentage of people who utilised a public hospital in the past 12 months

DHB	Public hospital utilisation: age-standardised prevalence (%)														
	Males					Females					Total				
	M	P	A	O	Tot	M	P	A	O	Tot	M	P	A	O	Tot
CM	20.2	13.3	10.5	18.6	17.0	28.3	26.0	26.7	24.9	25.8	24.6	20.0	19.1	21.9	21.6
Auckland	20.5	10.3	9.1	20.4	17.6	25.7	28.6	14.2	23.0	22.2	23.3	20.4	11.8	21.8	20.0
Waitemata	16.5	9.5	6.6	19.6	17.7	18.3	27.9	13.4	22.8	21.8	17.5	19.7	10.3	21.2	19.8
Northland	20.5	13.9	8.6	21.2	20.8	28.5	21.5	33.3	25.8	26.6	24.9	16.7	23.5	23.6	23.8
NZ	20.6	14.4	10.9	19.7	19.1	27.8	26.2	17.9	24.9	24.9	24.4	20.6	14.7	22.4	22.1

NZHS 2002/03; in order: Maori, Pacific, Asian, Other, Total

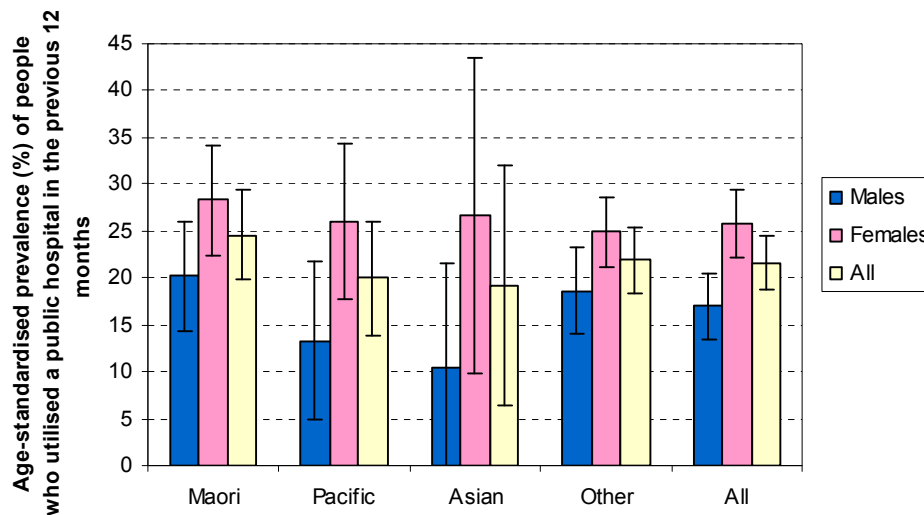
A greater proportion of people in CMDHB (21.6%) and nationally (22.1%) utilised a public hospital than in Auckland (20.0%) or Waitemata (19.8%), although results were not significantly different. This is consistent with the data directly from the hospitals discussed above. Females in all regions shown were more likely to utilise public hospitals (24.9%) than males (19.1%), and this difference was significant between males and females in CM (males 17.0%, females 25.8%) and nationally.

Figure 5.5.9: Age-standardised prevalence (%) of people who utilised a public hospital in the previous 12 months by sex and DHB (NZHS 2002/03)



In CMDHB Maori (24.6%) and Other (21.9%) were more likely to utilise a public hospital than Pacific (20.0%) and Asian (19.1%) although differences were not significant. Females were more likely than males to utilise public hospital services in all ethnic groups (males 17.0%, females 25.8%), although this difference was greatest for Asians (males 10.5%, females 26.7%) and Pacific (males 13.3%, females 26.0%).

Figure 5.5.10: Age-standardised prevalence (%) of people in CM who utilised a public hospital in the previous 12 months by sex and ethnic group (NZHS 2002/03)



Private hospitals

The percentage of people who had utilised private hospital services was identified from the NZHS 2002/03 as those who had used a service at, or been admitted to, a private hospital in the last 12 months. As shown in Table 5.5.7 for CMDHB Maori (3.9%), particularly Maori males (4.2%), were more likely to have utilised a private hospital than Maori in Auckland (1.6%), Waitemata (3.0%), and nationally (3.0%). Other males and females in CM (6.5%), particularly Other females (6.3%), were less likely than Others in Auckland (7.8%) and Waitemata (7.2%) to have utilised private hospital services.

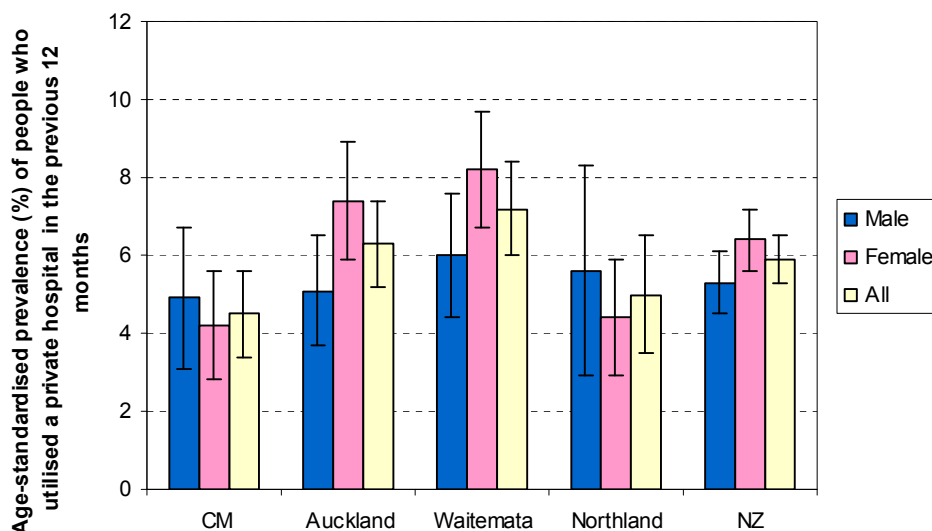
Table 5.5.7: Percentage of people who utilised a private hospital in the past 12 months

DHB	Private hospital utilisation: age-standardised prevalence (%)														
	Males					Females					Total				
	M	P	A	O	Tot	M	P	A	O	Tot	M	P	A	O	Tot
CM	4.2	No data	No data	6.7	4.9	3.7	No data	No data	6.3	4.2	3.9	No data	No data	6.5	4.5
Auckland	No data	No data	No data	6.7	5.1	2.9	No data	5.4	8.9	7.4	1.6	4.3	3.2	7.8	6.3
Waitemata	No data	No data	No data	7.2	6.0	5.4	No data	5.1	9.1	8.2	3.0	5.2	3.0	8.2	7.2
Northland	2.7	No data	No data	6.6	5.6	3.1	No data	No data	5.0	4.4	2.9	No data	No data	5.8	5.0
NZ	2.9	2.9	No data	6.0	5.3	3.1	1.9	4.2	7.3	6.4	3.0	2.4	2.6	6.7	5.9

NZHS 2002/03; in order: Maori, Pacific, Asian, Other, Total. No data = sample size too small to draw valid estimate

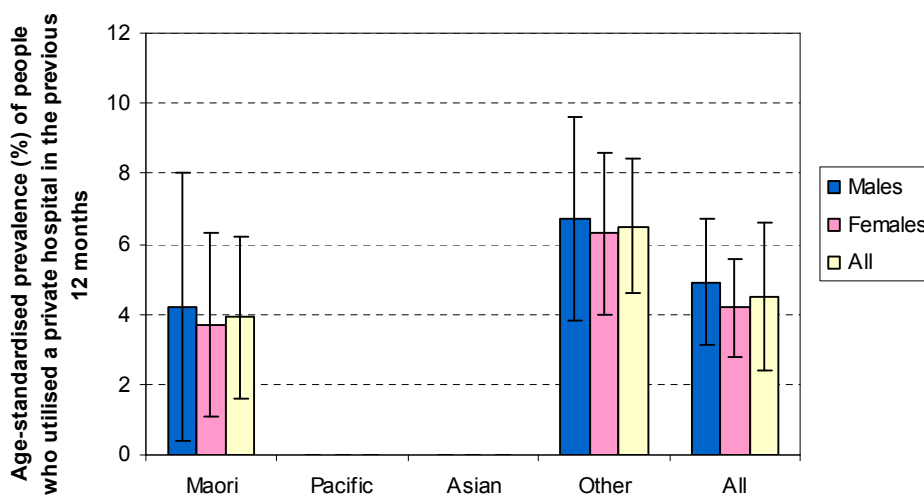
As shown in Figure 5.5.11, CMDHB had the smallest proportion of people who had utilised private hospital services (4.5%) compared with Northland (5.0%), Auckland (6.3%), Waitemata (7.2%), and nationally (5.9%), although the only significant difference was between CM and Waitemata. In Auckland, Waitemata, and nationally, females were more likely to utilise private hospital services than males, but in CM and Northland this trend was reversed. However, the differences between males and females were not significant.

Figure 5.5.11: Age-standardised prevalence (%) of people who utilised a private hospital in the previous 12 months by sex and DHB (NZHS 2002/03)



Within CMDHB data was available for Maori and Other ethnic groups only (Figure 5.4.12). As shown, Others (6.5%) were more likely than Maori (3.9%) to utilise private hospital services, with males in both ethnic groups being a little more likely to do so than females (males 4.9%, females 4.2%). However, differences were not significant.

Figure 5.5.12: Age-standardised prevalence (%) of people in CM who utilised a private hospital in the previous 12 months by sex and ethnic group (NZHS 2002/03)



[Summary Section 5 – health care utilisation](#)

CMDHB residents have a significantly higher acute hospitalisation rate than the rest of Auckland and New Zealand as a whole. Particular conditions identified with high rates include All, All PAH, diabetes, IHD – angina and heart attacks, CORD and almost all infections including cellulitis, pneumonia, and rheumatic fever. On the positive side the rate has levelled off over the past 3 years in most conditions – albeit at a higher level than the other DHBs. Acute child hospitalisations in particular have actually reduced. Diabetes hospitalisations show no sign of levelling off.

Elective surgery rates have been increasing – up 11% over the past 4 years. CM residents now match the rest of Auckland in surgical rates, and in some cases approach the national rates. Given the extra need in the CM population (as evident eg in the acute surgery rates) there is still some way to go, but the trend is in the correct direction. In addition CMDHB residents were less likely to state they had attended a private hospital in the prior 12 months than those living in the rest of Auckland or NZ overall – so are unlikely to be making up any shortfall in the private area.

Despite Maori men and Pacific men in CMDHB having some of the worst health outcome measures in New Zealand (see Section 4) they are the group least likely to attend a GP – and ending with high acute hospitalisation rates and mortality perhaps in part in consequence. Maori and Pacific in CMDHB were, however, more likely to state that they have attended a Maori-specific or Pacific-specific service in the previous 12 months than those from the rest of Auckland or nationally.