

11. Health measures by Local Authority area

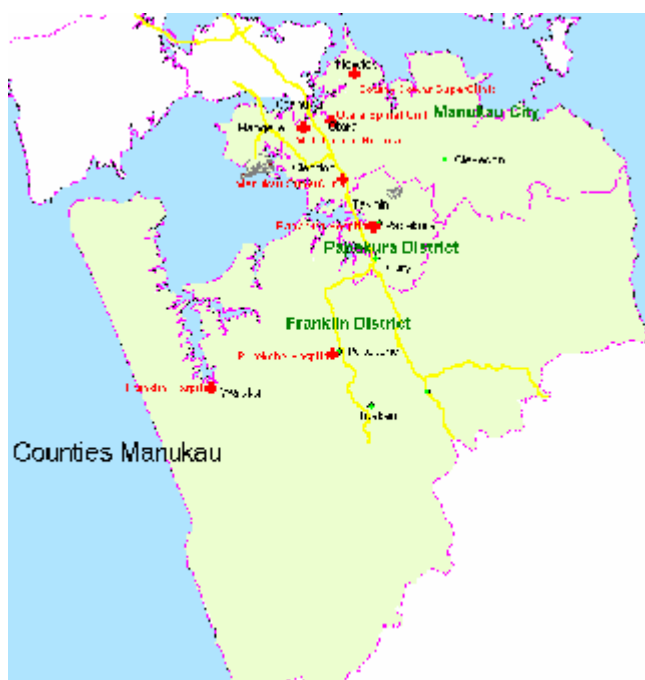
Counties Manukau DHB includes the territorial authorities (TAs) of Manukau City, Franklin District, and Papakura District. Each area has its own distinct social geography, and health experience. This section summarises the main health indicators for the three TAs within CMDHB, comparing across the three and with CMDHB as a whole. It should be read in conjunction with the previous sections.

11.1. Geography

The tangata whenua of the Counties Manukau area trace their ancestry back to the Tainui canoe that came to rest at Kawhia.

Manukau City

In the late 1800s and early 1900s Manukau was largely a farming community feeding the growing Auckland city. Following World War Two extensive development of commercial and industrial sectors occurred with the post-war industrialisation of Auckland and its expansion southwards.



The construction of the Southern Motorway in the 1950s, a major state housing programme in Manukau, the Auckland International Airport, and also increasing levels of car ownership were major contributors to growth. The growing manufacturing sector created a labour shortage, met by an increasing urbanisation of Maori and a large influx of people from the Pacific Islands. In the 1980s and 1990s Manukau had one of the highest growth rates of any city in New Zealand. Manukau City covers an area of 55,200 ha and is divided into seven wards: Pakuranga, Howick, Clevedon, Mangere, Otara, Manurewa and Papatoetoe. Manukau City was the third largest city in the country at the 2001 Census, behind Auckland City and Christchurch City. It is one of the

most ethnically diverse cities in New Zealand, with 165 different ethnic groups noted by Manukau City Council.

Papakura District

Papakura District is 126 sq km (or 12,600ha) lying between Manukau City and Franklin District. First settled in 1847, Papakura was a military outpost in the 1860s before becoming a thriving rural township. Papakura has been met by the growth of Manukau City southward, now forming the southernmost extent of the Auckland urban area. Its physical environment includes forest covered Hunua foothills and agricultural and horticultural land linking with Franklin District. Several wineries are based in Papakura. The urban area abuts the Manukau Harbour, and has rail and motorway links north-south. Papakura includes within it Ardmore Airport and the Karaka Horse Sales centre.

Franklin District

At the time the Treaty of Waitangi was signed in 1840 four tribes dominated - Ngāti Te Ata, Ngāti Tamaoho, Ngāti Tipa and Ngāti Paoa. European settlers began to arrive in the 1850's, with the fertile farming land become part of the Land wars of the 1860s. Franklin District

provided a route via the Manukau Harbour to the Waikato River and was an important transport hub. Its 219,000 hectares provide for horticulture, and dairying; the main economic drivers along with the Glenbrook Steel Mill. The Auckland Regional Growth Strategy has tried to prevent further urbanisation southward. Population growth however continues, fuelled by so-called lifestyle blocks for urban people seeking a country setting, and people escaping from Auckland's high house prices in Waiuku and Pukekohe townships.

11.2. Demography

For the year 2005 the Counties Manukau population is projected to reach 435,000, 10.6% of the New Zealand population (Table 11.2.1). Of CMDHB's 2% annual growth in population 6,800 of the estimated 8,300 increase is within Manukau City. Section 2, p7 on has detail on overall CMDHB demography.

Table 11.2.1: Projected population CMDHB by TA 2005

	Manukau City	Papakura District	Franklin District	CMDHB Total
Projected Pop 30 June 2005	333,400	44,000	57,600	435,000
Annual change 2004 to 2005	6,800	500	900	8,300

Statistics NZ, Jan 2005, based on Census 2001 and medium projections

11.2.4. Population composition

Notable characteristics of the Counties Manukau population are the high numbers of Māori and Pacific people, and their relative youthfulness. Over a quarter (112,500 or 26% estimated in 2005) of the population are aged 14 or under; 12.7% of the children of New Zealand live in the CMDHB area. All the TAs have a relatively young population, with Manukau City leading the way (Table 11.2.2). Franklin has a slightly older age structure than the other two, 9.6% compared with 9.4% for Papakura and 8.1% for Manukau, but all are well below the New Zealand average 65+ proportion of 12.1%.

Table 11.2.2: Proportion of population in each age group, CMDHB by TA 2001

TA	As percent of each TA					As percent of CMDHB				
	0-14	15-44	45-64	65+	Total	0-14	15-44	45-64	65+	Total
Manukau	27	45	20	8	100	21	34	15	6	76
Papakura	25	44	21	9	100	3	5	2	1	11
Franklin	26	42	23	10	100	3	6	3	1	13
CMDHB	27	44	21	8	100	27	44	21	8	100

Based on Census 2001

For ethnicity the multicultural nature of Manukau City stands out (Table 11.2.3). With a quarter of Pacific background, and a further 17% Maori and 15% Asian, Manukau is the most ethnically diverse city in New Zealand. A quarter of the Papakura population is of Maori ethnicity, but Papakura has much smaller Pacific or Asian proportions. Franklin has about the NZ average proportion of Maori residents, but is otherwise largely European.

Table 11.2.3: Proportion of population in each ethnic group, CMDHB by TA 2001

TA	As percent of each TA					As percent of CMDHB				
	Maori	Pacific	Asian	Other	Total	Maori	Pacific	Asian	Other	Total
Manukau	17	25	15	44	100	13	19	11	33	76
Papakura	25	6	5	63	100	3	1	1	7	11
Franklin	16	2	4	78	100	2	0	1	10	13
CMDHB	18	20	12	50	100	18	20	12	50	100

Based on Census 2001, prioritised ethnicity

11.2.5. Population growth

The Counties Manukau population is growing around 2% per year, and this is projected to continue for the foreseeable future. This rapid growth mirrors that being experienced across the Auckland region, and places a significant load on health service provision. Looking out from 2006 to 2026 the populations of Manukau and Franklin are expected to grow by around a third, based on Statistics New Zealand medium projections (Table 11.2.4). These projections try to take into account the “greenfield” growth such as at Flatbush for Manukau or Takanini and Hingaia for Papakura. Nearly 150,000 new residents are expected in the CMDHB area by 2026. By far the largest growth occurs in Manukau City, with over 120,000 new residents expected over the next 20 years.

Table 11.2.4: Projected population CMDHB by TA 2001 to 2026

TA	Projected population						Change 2006-2026	
	2001	2006	2011	2016	2021	2026	Number	%
Manukau	298,200	337,200	367,000	397,500	427,900	459,000	121,800	36
Papakura	42,300	44,500	46,600	48,400	50,200	51,900	7,400	17
Franklin	53,300	58,300	63,000	67,600	72,100	76,600	18,300	31
CMDHB	393,700	439,900	476,600	513,500	550,200	587,500	147,500	34

Statistics NZ, Feb 2005, based on Census01 with medium fertility, mortality and migration assumptions

Table 11.2.5: Projected population CMDHB 2001 to 2026 by age group and TA

TA	Year	Population ('000) by age group (years) at 30 June				Components of population change ('000), five years ended 30 June				Median age at 30 June
		0-14	15-64	65+	All Ages	Births	Deaths	Natural Increase	Net Migration	
Manukau City	2001	80.2	193.5	24.6	298.2					30.7
	2006	87.3	220.2	29.7	337.2	29.8	7.8	22.0	17.0	31.2
	2011	91.7	238.6	36.7	367.0	30.4	8.5	21.9	8.0	32.6
	2016	94.1	257.2	46.2	397.5	30.0	9.5	20.5	10.0	33.7
	2021	95.5	276.4	56.0	427.9	31.1	10.7	20.4	10.0	34.7
	2026	98.6	292.7	67.6	459.0	33.4	12.4	21.0	10.0	35.7
Papakura District	2001	10.7	27.5	4.1	42.3					32.0
	2006	10.9	29.0	4.6	44.5	3.7	1.5	2.3	0.0	33.4
	2011	10.7	30.5	5.5	46.6	3.6	1.5	2.1	0.0	34.6
	2016	10.6	31.3	6.7	48.4	3.4	1.6	1.8	0.0	35.7
	2021	10.3	32.0	7.8	50.2	3.5	1.7	1.8	0.0	36.6
	2026	10.4	32.3	9.2	51.9	3.6	1.9	1.7	0.0	37.6
Franklin District	2001	13.6	34.5	5.2	53.3					34.9
	2006	14.1	37.9	6.3	58.3	4.0	1.5	2.5	2.5	36.8
	2011	14.1	41.2	7.7	63.0	4.0	1.7	2.3	2.5	38.4
	2016	14.2	43.5	9.8	67.6	4.0	1.9	2.1	2.5	39.7
	2021	14.4	45.5	12.2	72.1	4.2	2.2	2.0	2.5	40.5
	2026	14.9	46.7	15.0	76.6	4.5	2.5	2.0	2.5	41.2
CMDHB	2001	104.5	255.5	33.9	393.8	0.0	0.0	0.0	0.0	31.4
	2006	112.3	287.1	40.6	440.0	37.5	10.8	26.8	19.5	32.2
	2011	116.5	310.3	49.9	476.6	38.0	11.7	26.3	10.5	33.6
	2016	118.9	332.0	62.7	513.5	37.4	13.0	24.4	12.5	34.7
	2021	120.2	353.9	76.0	550.2	38.8	14.6	24.2	12.5	35.6
	2026	123.9	371.7	91.8	587.5	41.5	16.8	24.7	12.5	36.6

Statistics NZ, Feb 2005, based on estimated resident population at 30 June 2001 incorporating medium fertility, medium mortality and medium migration assumptions for each area. Median age - half of the population is younger, and half older, than this age.

Whilst young people continue to make up the largest proportion of the CMDHB population, the over-65 population is projected to more than double from 33,800 in 2001 (39,500 currently) to 76,000 by 2021, and to 92,000 by 2026 (Table 11.2.5 and Table 11.2.6). It is this group who will place the highest demands on health services. All three TAs see large rises,; Manukau City with 38,000 additional over 65 year olds has the largest increase, and Franklin at 138% the highest proportionate rise. The median age rises rapidly in all districts – adding 4 years for Manukau and Papakura and 5 years for Franklin from 2006 to 2026. The Franklin median age looks similar to the New Zealand median age currently and throughout the projection series – in contrast the Manukau and Papakura median ages show much younger populations. So even with the remarkable growth in the elderly population projected, Manukau City by 2021 will have a similar proportion of over-65s as NZ has now, but will still be markedly younger than the NZ of 2021 (13% of the population versus 18% projected). Papakura occupies an intermediate position.

Table 11.2.6: Size of change in projected population growth from 2006 to 2026, for each main age group, CMDHB by TA

TA	0-14 yrs		15-64 yrs		65+ yrs		Total	
	No	%	No	%	No	%	No	%
Manukau City	11,300	13	72,500	33	37,900	128	121,800	36
Papakura District	-500	-5	3,300	11	4,600	100	7,400	17
Franklin District	800	6	8,800	23	8,700	138	18,300	31
CMDHB	11,600	10	84,600	29	51,200	126	147,500	34

See Table 11.2.5 above

Also notable in Table 11.2.5 above is the high proportion of growth in Manukau City forecast for migration. This is a mixture of people from overseas as well as internal migration, and provides the most volatile portion of the population projections. Changes in migration policy or in New Zealand's position in the world economies could have dramatic effects on these figures. During the nineties SNZ consistently underestimated the proportion of growth in Counties Manukau, and the Auckland Region generally; with the opening up of the large Flatbush subdivision there is some concern that the medium migration assumptions may be too low.

11.2.6. Socioeconomic characteristics

Within Counties Manukau DHB 35% of the population live in NZDep01 areas rated 9 or 10 – the most relatively deprived deciles (Table 11.2.7 and Figure 2.3.1, p10). Manukau City has the highest proportion of its population relatively deprived (40%), followed by Papakura (33%) (Table 11.2.7 and Figure 2.3.2 p11). By the NZDep01 measure Franklin (12%) is relatively well off in comparison with the other TAs, or New Zealand generally (20%). Families with children tend to concentrate in deprived areas – of all children living in Manukau City nearly half (49%) live in decile 9 or 10 areas. Figures for Papakura District are not far behind (41%). Elderly people (age 65+) do not show the same pattern, although 27% of Manukau residents are living in decile 9 and 10 areas compared with a NZ average of 17%. In Franklin only 12% of the over 65 population live in decile 9 or 10 areas. Maori and Pacific people are highly concentrated in decile 9 and 10 areas, particularly in Manukau City.

Both Manukau and Papakura show U or J-shaped pattern in deprivation, dominated by the deprived “tail”, but also with reasonable proportions of their population in the least deprived decile 1 and 2 areas. Franklin shows a more stable pattern with a peak at the decile 2-4 level (Figure 2.3.2, p11).

Table 11.2.7: NZDep01 - percentage of population living in areas of decile 9 or 10, CMDHB by TA 2001

TA	Total	Age 0-14	Age 65+	Maori	Pacific	Asian	Other
Manukau	40%	49%	27%	62%	80%	22%	29%
Papakura	33%	41%	20%	58%	66%	29%	42%
Franklin	12%	15%	12%	34%	36%	10%	12%
Total CMDHB	35%	44%	24%	58%	78%	22%	29%
Total NZ	20%	24%	17%	43%	57%	18%	25%

Based on 2001 Census. See section 1, p10 for more detail on the NZ Deprivation Index 2001. Deciles 9 and 10 are the most deprived deciles.

Table 11.2.8: Highest qualification achieved, CMDHB by TA 2001

TA	No qualification	School	Post-school
Manukau City	29%	44%	27%
Papakura District	34%	40%	26%
Franklin District	31%	40%	29%
New Zealand	28%	40%	32%

Census 2001

The CMDHB TAs have a higher proportion of their adult population with no educational qualification compared with New Zealand (Table 11.2.8), with Papakura at 34% notably high. As well all TAs had less higher educational achievements than for New Zealand as a whole.

Table 11.2.9: Income and related measures, CMDHB by TA 2001

TA	Adult population			Average household size	Households				
	% unem-ployed	median income	% income <20000		Access to tele-phone	Access to internet	Access to car	avg weekly rent	% dwell-ings owned
Manukau	10.1%	19,000	52%	3.3	94.7%	39.4%	90.7%	204	65%
Papakura	8.9%	20,700	50%	2.9	95.0%	36.2%	89.7%	193	66%
Franklin	5.4%	21,300	48%	2.9	96.3%	36.5%	94.3%	179	74%
CMDHB	9.3%	19,492	51%	3.2	94.9%	38.7%	91.1%	199	67%
NZ	7.5%	18,500	53%	2.7	96.3%	37.4%	89.9%	174	68%

All figures as at Census 2001

weekly rent is average of all households who pay rent for permanent private dwellings

% dwellings owned = dwellings owned either with or without mortgage

A large number of different social measures are collected in the Census – some are presented in Table 11.2.9. Manukau and Papakura have higher unemployment than Franklin, or the New Zealand average. The other statistics are relatively comparable, the averaging of the large Manukau City population hiding to some extent the areas of deprivation within it. The average weekly rent figure is a pointer to the higher cost of living in the urban areas – having a similar-to-average median income may not be sufficient once the extra housing costs in the Auckland area are included. The average household size in Manukau City of 3.3 compares with the NZ average of 2.7, and is an indicator of the overcrowding issues in some suburbs of Manukau (Mangere, Otara, Clendon).

11.3. Life expectancy

Life expectancy (LE) for CMDHB was examined in Section 4, p29. Here we look at the areas within CMDHB – note that values are only approximate due to the relatively small numbers of deaths in some age groups. Life expectancy at birth looks at the estimated life span of an infant should they experience the current age-specific mortality rates for the rest of their life.

CMDHB as a whole, Manukau City and Franklin have life expectancies very close to the New Zealand average. Papakura has a LE at birth 1.3 years less than the NZ average. This will be mainly driven by the high Maori population in Papakura (Table 11.2.3 and Section 4 for overall Maori rates). Life expectancy at age 65 looks at the length of time someone of 'retirement age' might expect to live given current age-specific mortality rates. Papakura again has a lower rate – 0.7 years less than the national rate.

Within Manukau City there are wide differences in LE. Otara and Manurewa/Wiri/Clendon have LE at birth 5.1 and 3.4 years respectively less than the NZ average. Manurewa has the lowest age 65 LE. In contrast the less deprived suburbs of Howick, Pakuranga, and Clevedon have LEs well above the national average.

Table 11.3.1: Life expectancy in years, CMDHB suburbs and TAs 2000-2002

TA/suburb	Life Expectancy		Difference from NZ	
	At birth	At age 65	At birth	At age 65
Howick Pakuranga	82.5	20.4	3.6	1.7
Clevedon	80.8	19.7	1.8	0.9
Otara	73.9	17.1	-5.1	-1.6
Mangere	77.4	18.3	-1.6	-0.5
Papatoetoe	79.1	19.4	0.1	0.7
Manurewa	75.6	16.4	-3.4	-2.4
Manukau City	79.0	18.9	0.0	0.1
Papakura	77.7	18.0	-1.3	-0.7
Franklin	79.3	18.9	0.3	0.1
CMDHB	78.9	18.8	-0.1	0.0
NZ	79.0	18.8	0.0	0.0

CMDHB - derived from mortality data, years 2000 to 2002 combined

11.4. Mortality

There are around 2,100 deaths a year in CMDHB, of which around three-quarters occur in Manukau City – roughly in proportion to the population size. Around 80 of the 2100 deaths each year are in children, again most (64) in Manukau City. Overall mortality is examined in detail in Section 5.

Of the 2,100 or so deaths about two-thirds would be considered potentially avoidable (Table 11.4.2 and Figure 11.4.1). Avoidable as used here includes those that would have been prevented by appropriate preventive action (like not smoking) through to best medical practice in cancer treatment. Not every such death identified would be able to be prevented in reality, but it gives a useful indication of access to preventive and acute care.

Table 11.4.1: Average number of deaths per year, CMDHB 2000-2001

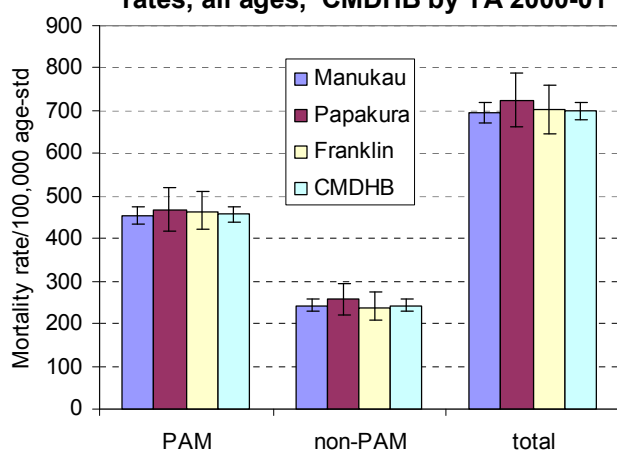
TA	Age			% CMDHB
	0-14	15+	Total	
Manukau	64	1459	1523	73%
Papakura	9	249	257	12%
Franklin	8	305	313	15%
CMDHB	80	2,012	2,092	100%

Table 11.4.2: Potentially avoidable deaths per year, CMDHB, average 2000-01

TA	Potentially avoidable mortality (PAM)				Potentially avoidable as % of all deaths		
	0-14	15+	Total	%	0-14	15+	Total
Manukau	44	955	999	73%	69%	65%	66%
Papakura	6	161	167	12%	71%	65%	65%
Franklin	7	202	208	15%	81%	66%	67%

CMDHB	57	1,317	1,374	100%	71%	65%	66%
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Figure 11.4.1: Age-standardised mortality rates, all ages, CMDHB by TA 2000-01



Comparing age-standardised rates, Papakura has slightly higher rates than Manukau or Franklin for both PAM (potentially avoidable mortality) and non-PAM conditions, but neither is significantly different from the others or the total CMDHB rate.

The five major causes of death, responsible for about 80% of all deaths, are listed in Table 11.4.3. Heart disease in all its forms (ie all cardiovascular disease except stroke) makes up 29% of all deaths in CMDHB and is the

largest cause of death. It is very closely followed by cancer. Papakura and Franklin had higher rates of heart disease than Manukau, but this was not statistically significant. Papakura has a slight excess of respiratory deaths, and Franklin has a higher injury death rate, mostly due to motor vehicle crashes.

Table 11.4.3: Major causes of death, CMDHB by TA 2000-01

Cause of death	Number of deaths per year (average 2000-01)				Age-standardised rate/100,000			
	Manukau	Papakura	Franklin	CMDHB	Manukau	Papakura	Franklin	CMDHB
1. Heart disease	436	80	99	614	210	229	226	215
2. Cancer	450	74	89	613	201	205	191	200
<i>Lung</i>	90	12	22	123	40	32	46	40
<i>Colo-rectal</i>	51	12	15	77	23	33	32	26
<i>Breast</i>	35	7	6	47	14	18	11	14
<i>Prostate</i>	32	7	6	44	16	20	12	15
3. Stroke	145	26	28	198	72	74	65	71
4. Respiratory	126	26	26	177	61	74	60	62
5. Injury	88	11	22	121	32	25	43	33
Total Top 5	1,244	216	263	1,722	576	608	586	581
As % total	82%	84%	84%	82%				

Turning to potentially avoidable mortality (PAM), the 10 main causes are shown in Table 11.4.4. The Papakura and Manukau patterns look similar to the overall CMDHB pattern. For Franklin heart disease rates are slightly higher than the other areas. While not statistically significant it does fit a pattern seen in other more rural areas in New Zealand, and one could look to compare for example response times to chest pain/angina incidents. For diabetes Franklin has less than half the mortality rate of Papakura and Manukau. With diabetes particularly predominant in Maori and Pacific people this is probably due to the differing ethnic make-up of Franklin. Motor vehicle injury is the main outlier for Franklin, with a statistically significant nearly triple the death rate of the other two TAs. These figures relate to 2000/2001, and there has been a major campaign since then to try to reduce the death rate in Franklin. However with the increasing volume of cars in Franklin, and high average speeds compared with more urban driving the higher mortality rate in Franklin is likely to continue.

Table 11.4.4: Potentially avoidable mortality, 10 main causes, CMDHB by TA, 2000-01

Cause of PAM	Number of deaths per year (average 2000-01)				Age-standardised rate/100,000			
	Manukau	Papakura	Franklin	Total	Manukau	Papakura	Franklin	Total
IHD	299	54	74	427	145	157	169	151
Stroke	104	20	21	144	52	57	49	52
CORD	90	17	21	128	44	49	50	45
Lung cancer	90	12	22	123	40	32	46	40
Colorectal cancer	51	12	15	77	23	33	32	26
Diabetes	62	9	5	75	28	23	11	25
Breast cancer	35	7	6	47	14	18	11	14
Suicide	36	5	8	49	12	11	15	12
Road traffic injury	20	2	9	31	7	5	17	8
Skin cancers	18	5	2	24	8	13	5	8
PAM Total	999	167	208	1,374	454	467	464	457
Non-PAM	524	91	105	719	242	256	238	243
Total	1,523	257	313	2,092	696	722	702	700

IHD = Ischaemic heart disease (eg heart attacks)

CORD = Chronic obstructive respiratory disease (eg bronchitis, emphysema)

11.5. Hospitalisations

Around 65,000 CMDHB residents were admitted to a public hospital in 2004 for medical or surgical conditions (ie not including maternity, mental health or care of the elderly). Section 5 of this report covers hospitalisations in some detail. Of the 65,000 around 16,500 or 25% were aged 14 or less (Table 11.5.1). Although showing an increase of 2.7% per annum over the past 5 years, if just the last 3 years are considered child admissions seem to have reached a plateau, or even reduced. This is a marked contrast to the preceding years, and it is hoped is start of a trend.

Table 11.5.1: Medical-surgical hospitalisations, CMDHB 2000 to 2004

Child TA	Number of medical-surgical hospitalisations					% change pa
	2000	2001	2002	2003	2004	
Manukau	11,838	13,140	13,746	13,853	13,202	2.7%
Papakura	1,676	1,722	1,677	1,659	1,698	-0.1%
Franklin	1,279	1,387	1,531	1,596	1,598	6.3%
Total	14,793	16,249	16,954	17,108	16,498	2.7%

Adult TA	Number of medical-surgical hospitalisations					% change pa
	2000	2001	2002	2003	2004	
Manukau	30,022	32,794	34,608	35,007	36,874	5.1%
Papakura	5,201	5,548	5,944	5,872	6,263	4.5%
Franklin	4,582	4,681	5,157	5,285	5,731	6.3%
Total	39,805	43,023	45,709	46,164	48,868	5.1%

Total TA	Number of medical-surgical hospitalisations					% change pa
	2000	2001	2002	2003	2004	
Manukau	41,860	45,934	48,354	48,860	50,076	4.4%
Papakura	6,877	7,270	7,621	7,531	7,961	3.4%
Franklin	5,861	6,068	6,688	6,881	7,329	6.3%
Total	54,598	59,272	62,663	63,272	65,366	4.5%
% child	27.1%	27.4%	27.1%	27.0%	25.2%	

Adult discharges are showing a different pattern to children, increasing at around 5% a year. Based on demographic growth, including aging, one might expect 3.5 to 4% growth in adult hospitalisations – which is being exceeded in each of the TAs. Hospitalisations from Franklin residents in particular would seem to be growing at a faster rate than would be expected from population growth. The continuing growth in adult care and reductions in child care is has reduced the overall proportion of child inpatients from 27% to 25%.

Potentially Avoidable Hospitalisations

Section 5.2, p79 covers PAH for all CMDHB. Of all child medical-surgical hospitalisations from Manukau around 41% would be considered potentially avoidable (Table 11.5.2). Papakura had a similar proportion (39%), while Franklin's proportion (35%) was well below the others. The equivalent of just over 6% of all Manukau and Papakura children were admitted to hospital in 2004 (ie a rate of 6,000 per 100,000) for PAH conditions (the equivalent of 15% of all 0-14 year olds were admitted overall).

Table 11.5.2: Child potentially avoidable hospitalisations, CMDHB 2004

PAH condition	2004 Medical-surgical child (0-14) hospitalisations				Age-standardised rate/100,000			
	Manukau	Papakura	Franklin	CMDHB	Manukau	Papakura	Franklin	CMDHB
ENT infections	698	119	135	952	817	1,103	984	865
Acute bronchiolitis	804	89	50	943	918	827	377	844
Asthma	621	83	51	755	719	769	375	682
Dental conditions	586	71	72	729	686	657	525	663
Gastroenteritis	554	64	77	695	639	594	567	626
Pneumonia	553	54	34	641	635	501	252	576
Cellulitis	434	62	41	537	508	574	298	488
Other resp infections	381	35	19	435	438	325	141	391
Epilepsy	223	34	27	284	260	315	197	257
Kidney/urinary infection	182	22	11	215	211	204	81	194
Other PAH (21 conditions)	367	35	41	443	430	324	296	403
PAH Total	5,403	668	558	6,629	6,260	6,194	4,093	5,992
All other non-PAH	7,799	1,030	1,040	9,869	9,100	9,542	7,568	8,958
Total	13,202	1,698	1,598	16,498	15,361	15,736	11,661	14,950
Percentage PAH	41%	39%	35%	40%				

Source: NMDS

Franklin had a much lower child hospitalisation rate than Manukau or Papakura – 4% PAH, or 11.5% overall. Franklin had significantly lower rates of bronchiolitis, asthma, pneumonia, other respiratory infections, cellulitis – in fact all infectious disease conditions apart from gastroenteritis. This fits with the lack of overcrowding in Franklin compared with Papakura and Manukau (Table 11.2.9, p166), and the tendency for rural areas to have higher gastroenteritis rates than urban areas (non-mains water supplies, proximity to animals). Dental conditions feature higher in the listing for Franklin than the other two, although the rate

of hospitalisation in Franklin is lower. Note that meningococcal infection lay just outside the top 10 conditions for the three TAs in 2004, and is down in 2005 as at May 05 – it is hoped this fall will continue following the vaccination campaign.

Around 30% of all adult hospitalisations from each of the TAs are due to potentially avoidable conditions. However Franklin has a much lower overall hospitalisation rate overall, and for PAH. The equivalent of 5.3% of the Manukau 15+ population were hospitalised in 2004 for PAH, or 16% for any condition, while for Franklin it was 4% and 13.6%. The equivalent figures for Papakura are 5.8% and 19% - surprisingly high figures, particularly notable in the Maori population in Papakura (figures not shown). Papakura has a significantly higher rate of skin cancer hospitalisation than the other 2 TAs, it is unclear why. Franklin has significantly lower rates of admission for the chronic diseases CORD, congestive heart failure and diabetes, and for the infectious diseases cellulitis, pneumonia and kidney/urinary tract infections.

Table 11.5.3: Adult potentially avoidable hospitalisations, CMDHB 2004

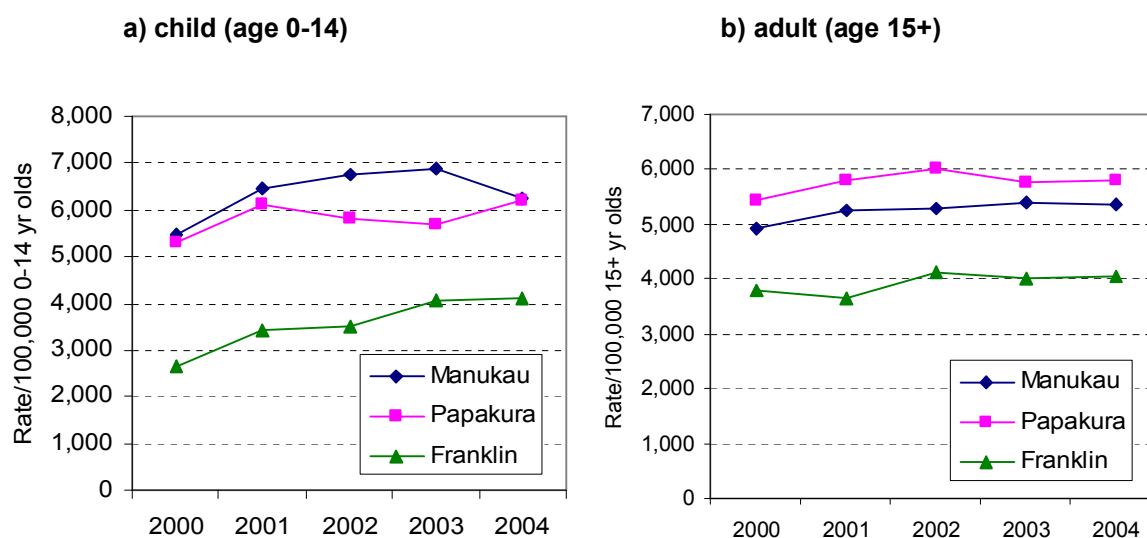
PAH condition	Hospitalisations				Age-standardised rate/100,000			
	Manukau	Papakura	Franklin	CMDHB	Manukau	Papakura	Franklin	CMDHB
Angina and chest pain	2,144	334	388	2,866	967	1,042	884	964
Myocardial infarction	855	144	156	1,155	414	459	372	413
CORD	862	140	110	1,112	428	450	266	406
Cellulitis	939	148	95	1,182	400	452	223	382
Skin cancers	606	177	149	932	320	580	373	358
Pneumonia	686	99	81	866	328	316	201	308
Diabetes	683	75	93	851	314	236	217	291
Congestive heart failure	510	99	66	675	260	324	168	254
Stroke	432	65	74	571	217	211	182	212
Kidney/urinary infection	502	64	52	618	222	198	126	206
Other PAH (29 cond)	3,428	505	443	4,376	1,475	1,535	1,046	1,423
PAH Total	11,647	1,850	1,707	15,204	5,345	5,803	4,059	5,218
Non PAH	25,227	4,413	4,024	33,664	11,049	13,572	9,560	11,120
Total	36,874	6,263	5,731	48,868	16,393	19,374	13,619	16,338
Percentage PAH	32%	30%	30%	31%				

CORD = Chronic obstructive respiratory disease

Combined adult and child PAH amount to nearly 23,000 hospitalisations. If say 20% of these were in fact prevented there would be around 4,600 less hospitalisations a year, or 12 a day fewer. CMDHB has various integrated care initiatives such as POAC – Primary Options for Acute Care – targeting this area.

Time trends for PAH have been discussed in Section 5.2 p82 and in Section 5.4 p89. Over the past five years PAH rates have been relatively stable for both children and adults by TA (Figure 11.5.1). The only important rise has been for children living in Franklin, whose rate has increased from 2,700 in 2000 to 4,100 in 2004. Even in 2004 their rate remains well below that for children in Papakura and Manukau.

Figure 11.5.1 Potentially avoidable hospitalisations 2000 – 2004, CMDHB by TA.



Surgery

Surgical procedures were discussed in Section 5.3, p85. The three TAs have similar population rates of surgery (Table 11.2.1). Papakura has an increased rate of total hip joint replacement (THJR), and has done for several years (Figure 11.5.2). The increase is not statistically significant, and it is not clear why there would be extra need for THJR surgery in Papakura.

Table 11.5.4: Selected surgical procedures, CMDHB by TA, 2004

Procedure	Number of procedures				Age standardised rate per 100,000 15+			
	Manukau	Papakura	Franklin	CMDHB	Manukau	Papakura	Franklin	CMDHB
Hip joint replacement	218	53	56	327	108	174	135	120
Knee joint replacement	165	32	38	235	82	104	89	86
Coronary artery bypass graft	102	13	24	139	48	41	54	48
Angioplasty	296	48	50	394	134	151	114	133
Cataract extraction	528	73	93	694	261	233	240	254
Cholecystectomy	307	63	52	422	129	191	118	134
Hysterectomy	208	39	38	285	87	119	85	91
Prostatectomy	96	10	33	139	48	33	80	52

Rates of surgery have varied over the past 8 years mainly in response to supply-side issues. For example the peaks in 1999-2000 in some procedures are due to waiting time initiatives carried out at that time. Time trends for the 3 TAs are similar for each of the procedures shown (and all surgery more generally – not shown). As was shown in Section 7 there has been a marked increase in the provision of hip and knee replacement surgery in 2004. This is due to the reorganisation of orthopaedic services across the Region, additional investment from CMDHB and significant additional funding coming directly from the Ministry of Health. It is expected that this rate of surgery will be sustainable into the future, setting a significantly higher rate again – the calendar 2004 figures shown here only include half the increase expected.

Figure 11.5.2: Selected surgical procedures 1996-2004, CMDHB by TA



11.6. Pregnancy and childbirth

Of the 7,400 or so public hospital deliveries to CMDHB residents in 2004, 5,830 or nearly 80% were to Manukau City women. Around 8% of all CMDHB deliveries were to women aged 19 or less, but this was 10% for Papakura.

Table 11.6.1: Public hospital deliveries, CMDHB by TA 2004

TA	Deliveries		Total	% teen	teen rate/1000 15-19
	19 & under	20+ yrs			
Manukau	452	5,378	5,830	7.8%	39
Papakura	81	717	798	10.2%	52
Franklin	52	731	783	6.6%	30
CMDHB	585	6,826	7,411	7.9%	39

Source: NMDS

aged 19 or less, but this was 10% for Papakura. The Papakura teen pregnancy rate of 52 per 1,000 15-19 year olds is well above that of the other two TAs. Put another way, in any one year 1 in 20 or 5.2% of Papakura women aged 15 to 19 will give birth. If all those births were to different women over that time it would mean

that a quarter of all Papakura females would have had a child by the age of twenty. See also Section 8.2, p130.

There was a sudden jump in deliveries to CMDHB women in 2002, almost of which was due to women resident in Manukau City (Figure 11.6.1 – note: the Manukau City births are on a different scale on the right-hand axis, nearly 10-fold higher). Then both Papakura and Franklin had the same proportionate increase in 2003, with all stabilizing at the new level in 2004, a jump of 400 deliveries a year in total from what was a relatively stable 7,000 or so deliveries in 2000 and before. Almost all this increase has taken place at CMDHB facilities, placing increased demand on local delivery suites.

Figure 11.6.1: Deliveries to CMDHB residents 2000-2004 by TA

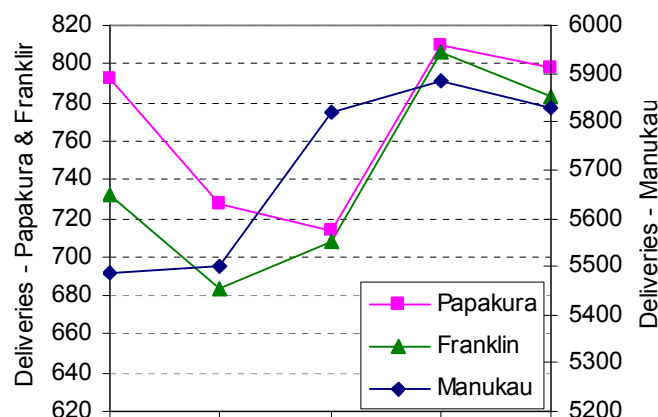
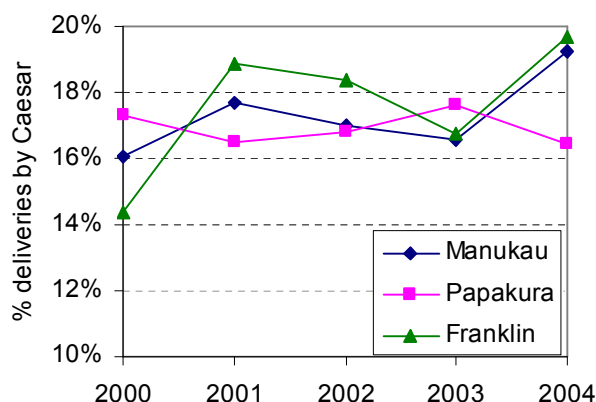


Figure 11.6.2: Proportion of deliveries by caesarean section, CMDHB residents 2000-2004 by TA



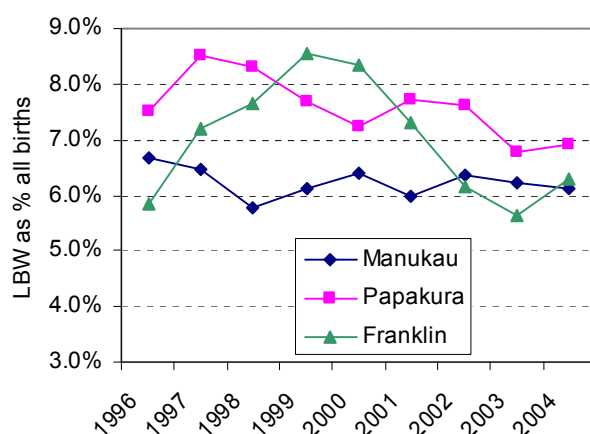
The proportion of deliveries that result in caesarean section has reached 19% for CMDHB residents in 2004, ranging from 16.4% in Papakura to 19.3% for residents of Manukau City, and 19.7% in Franklin. These proportions have been rising in recent years, following the NZ trend (Figure 11.6.2). It should be noted that the rate of caesarean section at CMDHB facilities is around 16% - the difference being that the CMDHB residents who choose to deliver at Auckland City Hospital tend to have a much higher caesarean section rate (see Section 7.3, p118). The proportion of deliveries performed by

caesarean section in CMDHB for women under the age of 30 is similar across the TAs – most of the difference lies in the rates for women aged 30 and over (data not shown).

Assisted deliveries (forceps and ventouse) are similar across the TAs and quite stable at 9-10% of all deliveries.

Low birthweight babies, that is those weighing less than 2500g, make up 5.6% of births from Franklin, 6.2% of births from Manukau and 6.8% from Papakura (average 2003-2004). Rates have been gradually dropping from around 1% higher than that in 1996 (Figure 11.6.3)

Figure 11.6.3: Low birthweight (<2500g) babies as % of all births, CMDHB TAs 1996-2004



[Summary – Section 11 health indicators by Territorial Authority](#)

When comparing the Territorial Authorities that comprise CMDHB Manukau City predominates – mainly due to its size relative to the other two. It is also a city of extremes – the youngest in the country, the most multicultural in the country, and so on. Franklin and Papakura present different pictures.

Franklin has an older population, with much less Pacific or Asian influence compared to Manukau. It has been a relatively stable area, growing more slowly with fertility and migration rates more like other parts of New Zealand than its close neighbours to the north. Particular challenges will come with the projected growth – how to retain the rural and desirable character of Franklin with an influx of new people. Health-wise Franklin residents appear to be doing well. They have a similar mortality rate to Manukau City and New Zealand, but a much lower hospitalisation rate, both overall and for PAH. Areas to concentrate on would be access to ischaemic heart disease services, and prevention of motor vehicle crashes.

Papakura lies between the two, both literally and in many of the indicators explored. Slower growing than Franklin or Manukau, nevertheless Papakura has seen a significant increase in the proportion of Maori – seemingly movement southward from the suburbs of Mangere and Otara. Papakura residents have a life expectancy 1.3 years lower than their counterparts in Manukau and Franklin, or indeed the rest of New Zealand. Papakura children were admitted to hospital at the same rate as Manukau City children – around 6% of the child population are admitted each year for what might be considered avoidable conditions. The equivalent figure for adults is 5.8% - even higher than Manukau City. Areas of concern were heart disease, respiratory diseases and skin cancer. Papakura also had the highest teenage pregnancy rate in CMDHB, with over 5% of all 15-19 year old females giving birth in 2004. Maori in Papakura represent a population particularly at risk.