

Chapter 6: Use of Health Care Professionals and Hospitals

Introduction

New Zealanders have access to a variety of health care workers and services in the health and disability sector.

The primary health sector is usually the first point of contact an individual has with the health system. GPs and practice nurses are the health professionals most often encountered in the primary health care sector. Oral health care workers, other health care workers (such as pharmacists, community nurses, physiotherapists, chiropractors, opticians and psychologists) and complementary and alternative health care workers are also seen in the primary health care sector.

The secondary health care sector provides more specialised services, generally by staff working in clinics and hospitals. Medical specialists are one of the groups of health care workers that work in the secondary health care sector. They specialise in a particular field of medicine (other than primary care) and usually see individuals after they have been seen in the primary sector. In New Zealand, public hospitals are generally free, whereas a fee is paid at private hospitals, which may be funded by an individual's medical insurance.

This chapter presents findings for the 2006/07 New Zealand Health Survey about the use of certain health care workers in the last 12 months, the usual number of visits, the reason for the last visit, reasons for selecting a particular type of provider, and how many people needed to see a health practitioner for some reason but then did not, and the reasons for this.

This chapter also includes the use of public and private hospitals in the previous 12 months, with a particular focus on emergency department use, and ends by looking at medical insurance coverage.

Appendices 5 and 6 describe how to access data presented in this chapter, as well as additional results available online.

General practitioners

Introduction

The local doctor or general practitioner (GP) is the first point of contact with the health care system for nearly all New Zealanders. GPs operate private businesses and set their own fees for consultations and other services. As part of the Primary Health Care Strategy, new funding has been provided by the government in order to lower the cost of GP visits for people enrolled in primary health organisations (PHOs) and to encourage free GP consultations for children under six years of age. Most GPs belong to a PHO.

The New Zealand Health Survey provides information about the cost of GP visits and, by comparing survey results over time, how successful the Primary Health Care Strategy has been in reducing these costs. The survey focuses on the actual cost of the last visit to a GP. Another source of information on the cost of GP visits is the advertised (*scheduled*) fees for standard consultations, but these may be different from the *actual* fee charged for the last visit as collected in this survey. Differences can arise if visits are shorter or longer than standard consultations, if nurses or other staff are involved in the visit, or if GPs choose to discount the fees they actually charge on the day.

What were the survey questions?

In the 2006/07 New Zealand Health Survey, all adult participants and parents of child participants were asked how many times they/their child had seen a GP in the previous 12 months. If they had seen a GP in the previous 12 months, they were asked further questions about their last visit: how long ago it was (adult participants only), the health issue concerned, and the cost. If adult participants saw a GP apart from their usual health care provider in the previous 12 months, they were asked how often this had occurred and the reason why.

Adult participants and the parents of child participants were also asked if there had been any time in the previous 12 months when they/their child needed to see a GP but could not, and if so how many times this occurred, the reason they were unable to see the GP, the health issue concerned (child participants only) and what they did instead.

Chapter 5 of this report focused on whether people had a primary health care provider to go to first and on the accessibility and comprehensiveness of services provided. This chapter focuses on visits to health professionals more generally. This includes visits to health professionals apart from those at primary health care providers, and includes visits for people who do not have a primary health care provider.

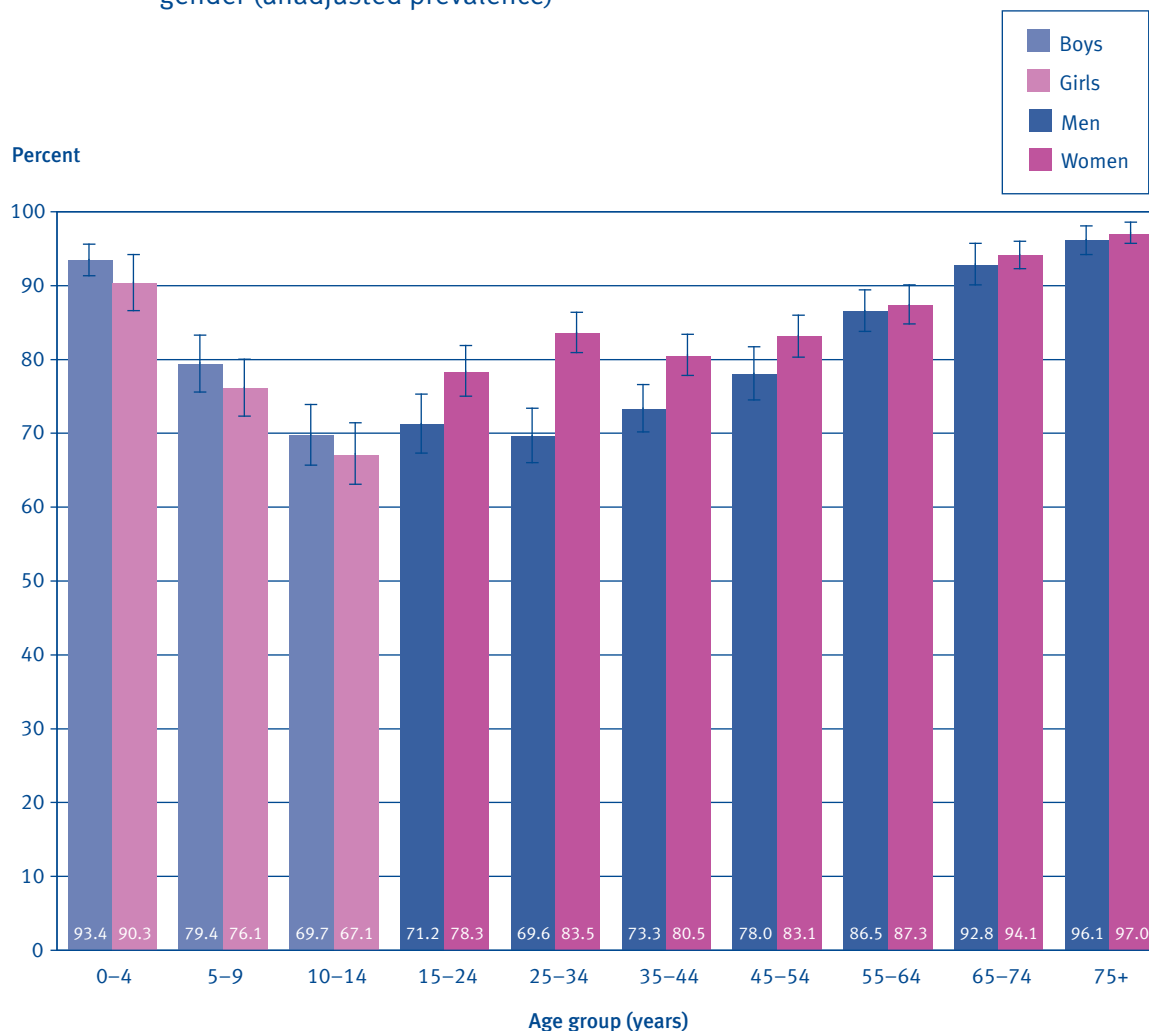
Saw a GP in the previous 12 months

Overall, four out of five children (79.2%, 77.7–80.7) and four out of five adults (81.3%, 80.3–82.3) had seen a GP in the previous 12 months. Adjusted for age, boys and girls were equally likely to have seen a GP in the previous 12 months, while women (83.4%, 82.1–84.7) were significantly more likely than men to have seen a GP in the previous 12 months (76.6%, 75.1–78.1).

Saw a GP in the previous 12 months, by age group

The proportion of the population who had seen a GP in the last 12 months was highest for children aged less than five years and adults aged over 65 years. The lowest proportion was for children aged 10–14 years (Figure 6.1).

Figure 6.1: Children and adults who saw a GP in the previous 12 months, by age group and gender (unadjusted prevalence)



Source: 2006/07 New Zealand Health Survey

Saw a GP in the previous 12 months, by ethnic group

Pacific boys (SRR 1.05, 1.01–1.10) were significantly more likely than boys in the total population to have seen a GP in the previous 12 months. European/Other adults (SRR 1.02, 1.01–1.02) were significantly more likely than the total adult population to have seen a GP in the previous 12 months, while Asian adults (SRR 0.91, 0.88–0.95) were less likely to have done so.

Saw a GP in the previous 12 months, by neighbourhood deprivation

There were no significant differences in the use of GP services by neighbourhood deprivation for either children or adults.

Saw a GP in the previous 12 months, by DHB area

The proportion of children who saw a GP in the previous 12 months was significantly higher in the Auckland DHB area than the national rate, while this proportion was significantly lower in the South Island DHBs, excluding Canterbury (Table 6.1).

There were no significant differences in proportion of adults in each DHB area who saw a GP in the previous 12 months.

Table 6.1: Children and adults who saw a GP in the previous 12 months, by DHB area (unadjusted)

DHB area	Prevalence in children (95% CI)	Number of children	Prevalence in adults (95% CI)	Number of adults
Northland / Tairāwhiti / Hawke's Bay / Lakes / Whanganui	81.7 (78.4–85.0)	94400	82.6 (80.4–84.8)	310200
Waitemata	80.0 (75.4–84.6)	83200	81.4 (78.3–84.5)	308400
Auckland	83.8 (79.4–88.1) +	62600	79.3 (76.0–82.7)	256000
Counties Manukau	80.1 (76.0–84.2)	89100	83.3 (80.5–86.0)	268500
Waikato	75.3 (71.0–79.6)	57400	80.8 (78.5–83.1)	209500
Bay of Plenty / Taranaki / MidCentral	78.3 (73.8–82.8)	77100	79.8 (77.1–82.5)	280400
Wairarapa / Hutt Valley / Capital and Coast	80.9 (76.1–85.6)	72300	82.2 (79.6–84.7)	284800
Canterbury	79.0 (73.4–84.6)	71800	83.0 (80.3–85.8)	308200
Nelson Marlborough / West Coast / South Canterbury / Otago / Southland	73.3 (67.2–79.4) –	68900	79.3 (76.1–82.4)	311400
New Zealand total	79.2 (77.7–80.7)	676800	81.3 (80.3–82.3)	2537400

Source: 2006/07 New Zealand Health Survey

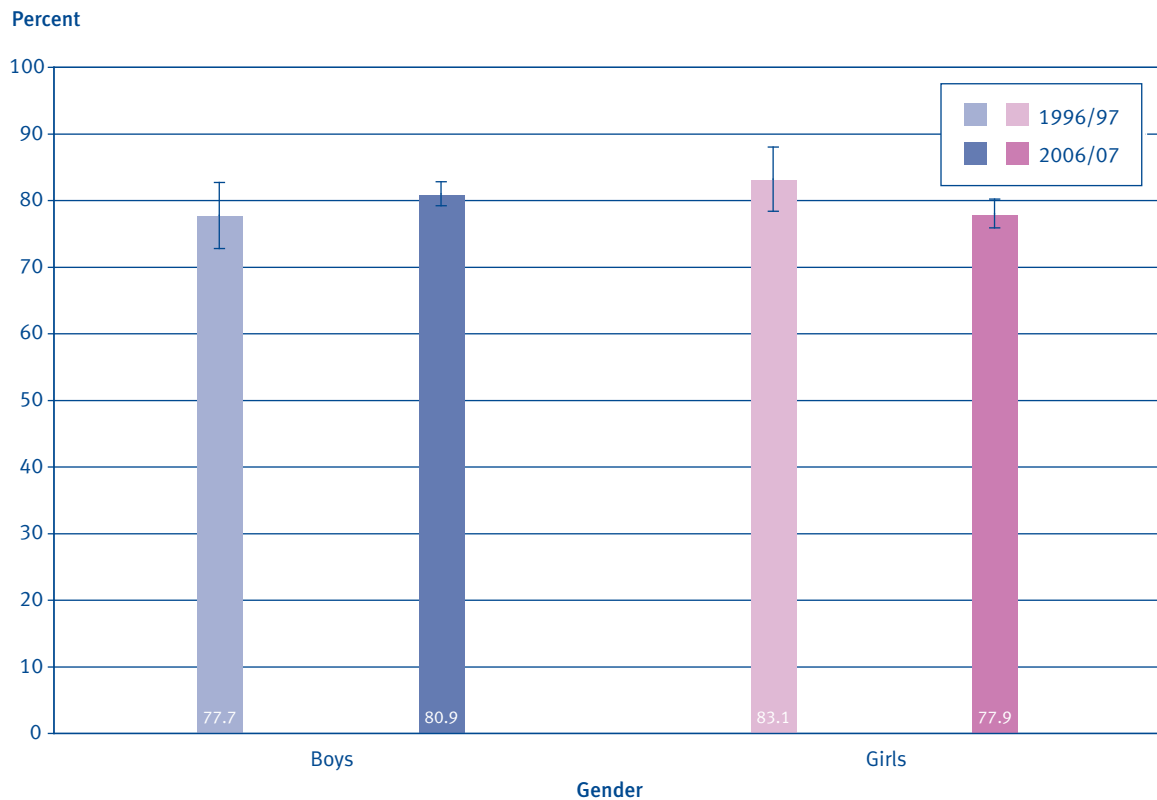
Notes: Estimates indicated with a + are significantly higher than the national rate, and estimates indicated with a – are significantly lower than the national rate. Data are based on direct survey estimates and could be confounded by different population characteristics in each DHB. Due to small sample size, some DHB areas have been combined. Survey population is the estimated resident population living in permanent private dwellings at 31 June 2007.

Time trends in the use of GPs in the previous 12 months

Between 1996/97 and 2006/07, there has been no change in the proportion of boys who saw a GP in the previous 12 months, adjusted for age (Figure 6.2). For girls, adjusted for age, there has been a small, but not significant decline in the proportion who saw a GP in the previous 12 months from 83.1% to 77.9% (p-value = 0.05).

There was no change in the proportion of Māori children who saw a GP in the previous 12 months between 1996/97 and 2006/07, adjusted for age.

Figure 6.2: Children who saw a GP in the previous 12 months, by gender, 1996/97 and 2006/07 (age standardised prevalence)



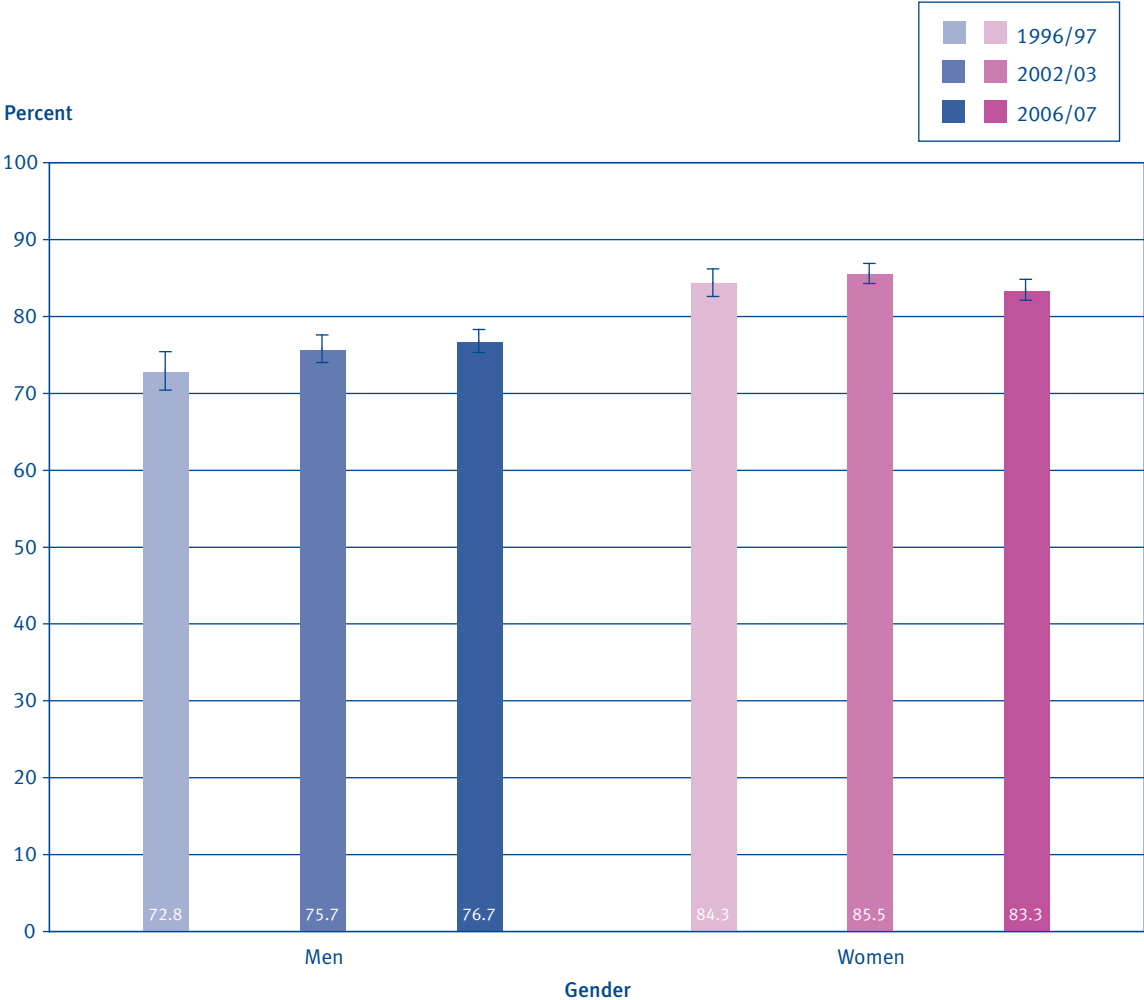
Source: 1996/97 and 2006/07 New Zealand Health Surveys

Note: Data from previous years have been reanalysed to allow for comparability. Data not available for 2002/03.

For men, between the 1996/97 and 2006/07 New Zealand Health Surveys, there was an increase in the proportion who saw a GP in the previous 12 months (p-value < 0.05), adjusted for age (Figure 6.3). For women, there was a significant decline between 2002/03 and 2006/07 in the proportion that saw a GP in last 12 months (p-value < 0.05).

For Māori, there was a significant increase in the proportion of men who saw a GP in the previous 12 months between the 2002/03 and 2006/07 health surveys, adjusted for age (Figure 6.4).

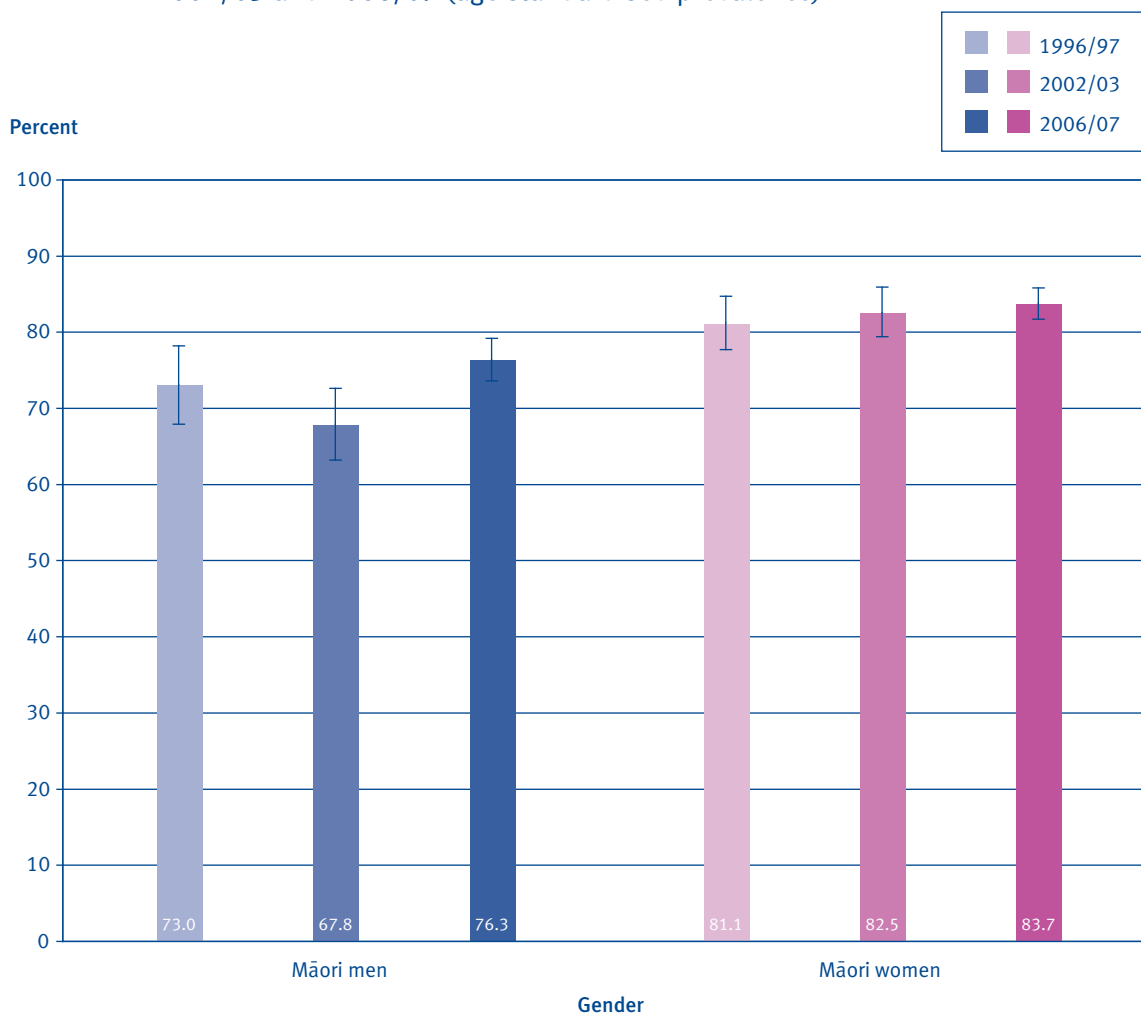
Figure 6.3: Adults who saw a GP in the previous 12 months, by gender, 1996/97, 2002/03 and 2006/07 (age standardised prevalence)



Source: 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys

Note: Data from previous years have been reanalysed to allow for comparability.

Figure 6.4: Māori adults who saw a GP in the previous 12 months, by gender, 1996/97, 2002/03 and 2006/07 (age standardised prevalence)



Source: 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys

Note: Data from previous years have been reanalysed to allow for comparability.

Number of visits to a GP in previous 12 months

The median number¹⁶ of visits to a GP in the previous 12 months for both children and adults was two. Children aged less than five years had a higher median number of visits (three), as did adults aged 55–64 years (three) and those aged 65 years and over (four). There were no significant differences in the number of visits by ethnic group or neighbourhood deprivation for either children or adults.

Time trends in the number of visits to a GP in the previous 12 months

There are no time trends available for children on the number of visits to a GP in the previous 12 months.

From 2002/03 to 2006/07, there was no change in the median number of two visits to a GP in the previous 12 months, for both men and women, adjusted for age.

¹⁶ Other reports may use the mean (average) number of visits, which is slightly higher than the median number of visits in the previous 12 months, due to a small number of people in this sample with a very high number of visits.

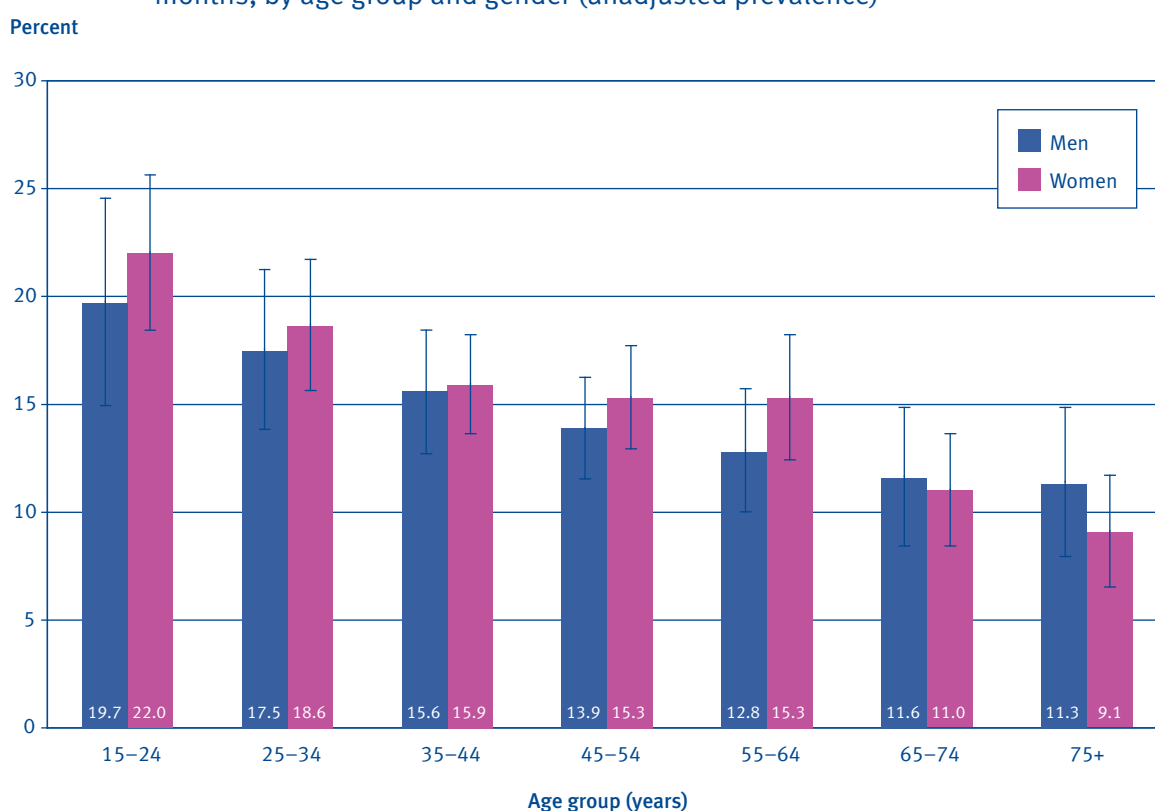
Among Māori men, the median number of visits increased from one in 2002/03 to two in 2006/07, adjusted for age. There was no difference in the median number of visits among Māori women (remaining steady at three visits).

Saw a GP at another primary health care provider

One in six (15.7%, 14.8–16.6) adults with a primary health care provider saw a GP in the previous 12 months who was not based at their usual primary health care provider¹⁷.

The proportion of adults who saw a GP at a different primary health care provider decreased with age (Figure 6.5). Adults aged 65 years and over were significantly less likely than those aged less than 65 years to have seen a GP at a different primary health care provider.

Figure 6.5: Adults who saw a GP outside their primary health care provider in the previous 12 months, by age group and gender (unadjusted prevalence)



Source: 2006/07 New Zealand Health Survey

The most common reasons given for seeing a GP at a different primary health care provider were:

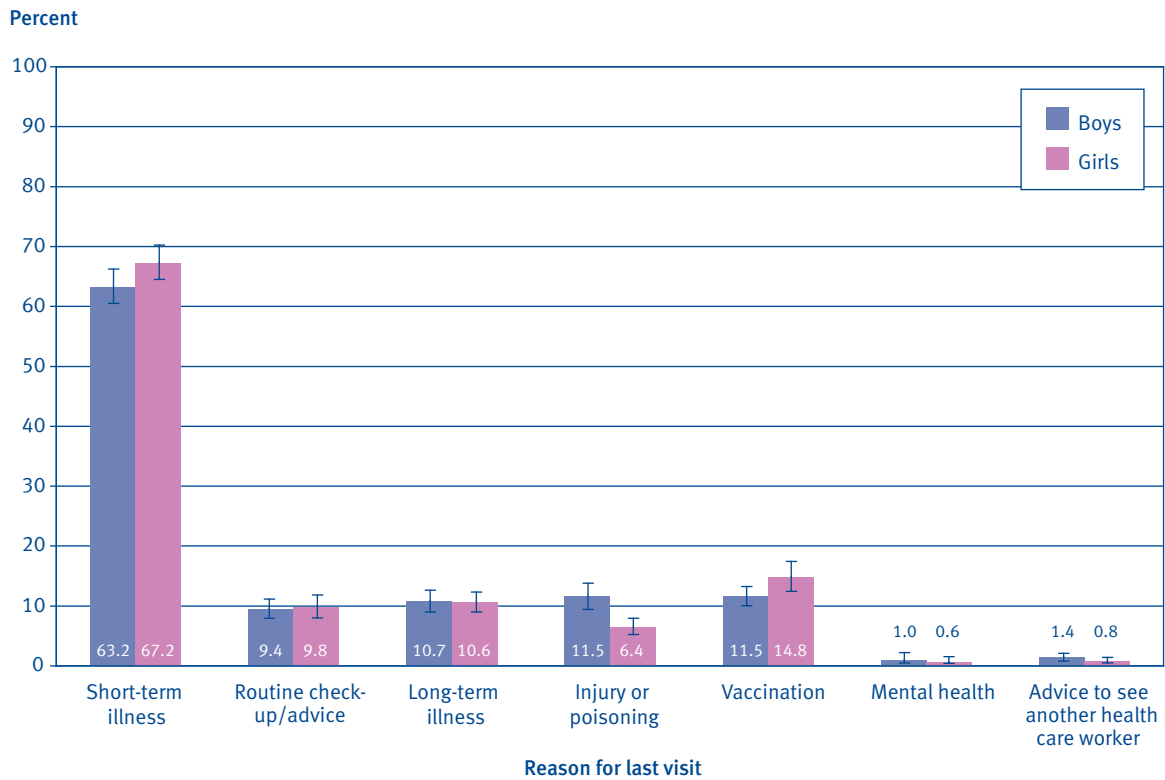
- it was after hours (38.3%, 35.3–41.3)
- I see different GPs for different conditions (18.0%, 15.5–20.5)
- I could not get an appointment with my usual health care provider (16.7%, 14.7–18.6)
- I was on holiday or at work away from my usual health care provider (13.3%, 11.4–15.2)
- another GP was closer/more convenient (5.5%, 4.1–6.9).

¹⁷ Chapter 5 contains more information about primary health care providers.

Reason for last visit to GP

For children who saw a GP in the previous 12 months, the usual reason for their last GP visit was a short-term condition, followed by vaccination for girls and injury/poisoning or vaccination for boys (Figure 6.6).

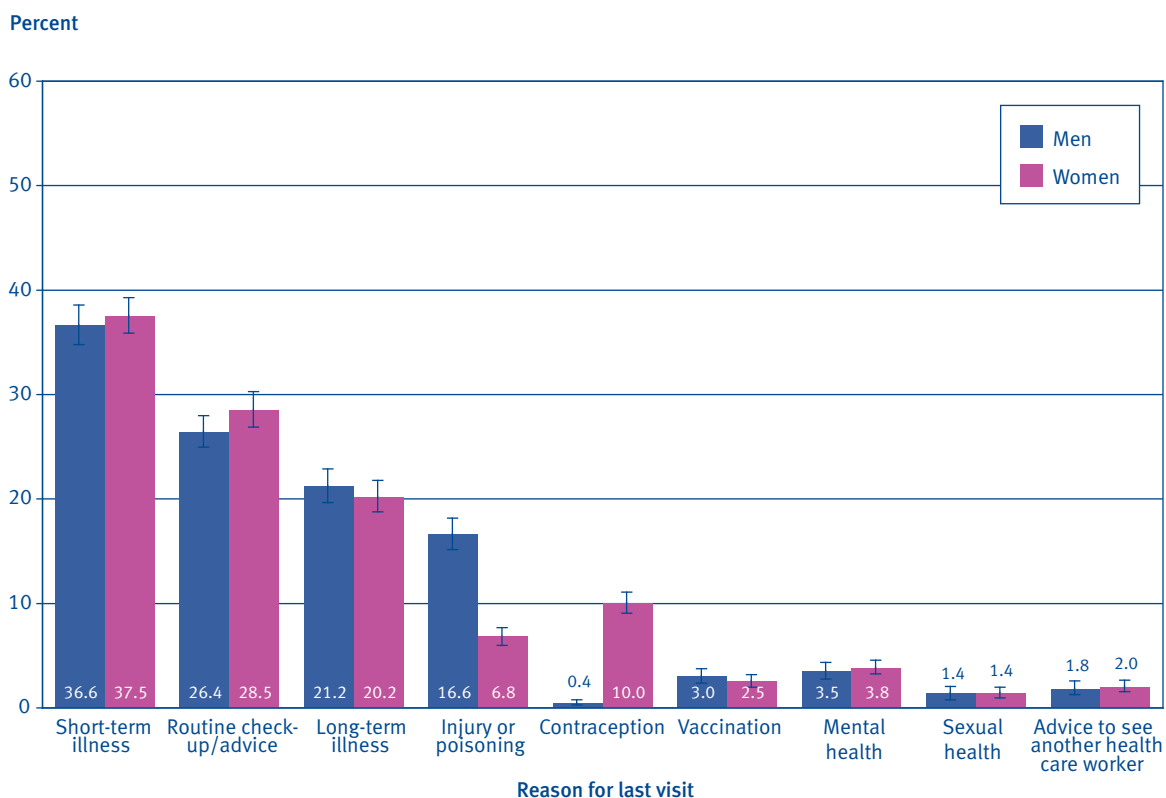
Figure 6.6: Reason for last visit to GP for children, by gender (age standardised prevalence)



Source: 2006/07 New Zealand Health Survey

For adults who saw a GP in the previous 12 months, the most common reason for the last GP visit was for a short-term illness, followed by a routine check-up or advice. Adjusted for age, men were much more likely than women to have seen a GP for an injury or poisoning, and women were much more likely than men to have seen a GP for contraception (Figure 6.7).

Figure 6.7: Reason for last visit to GP for adults, by gender (age standardised prevalence)

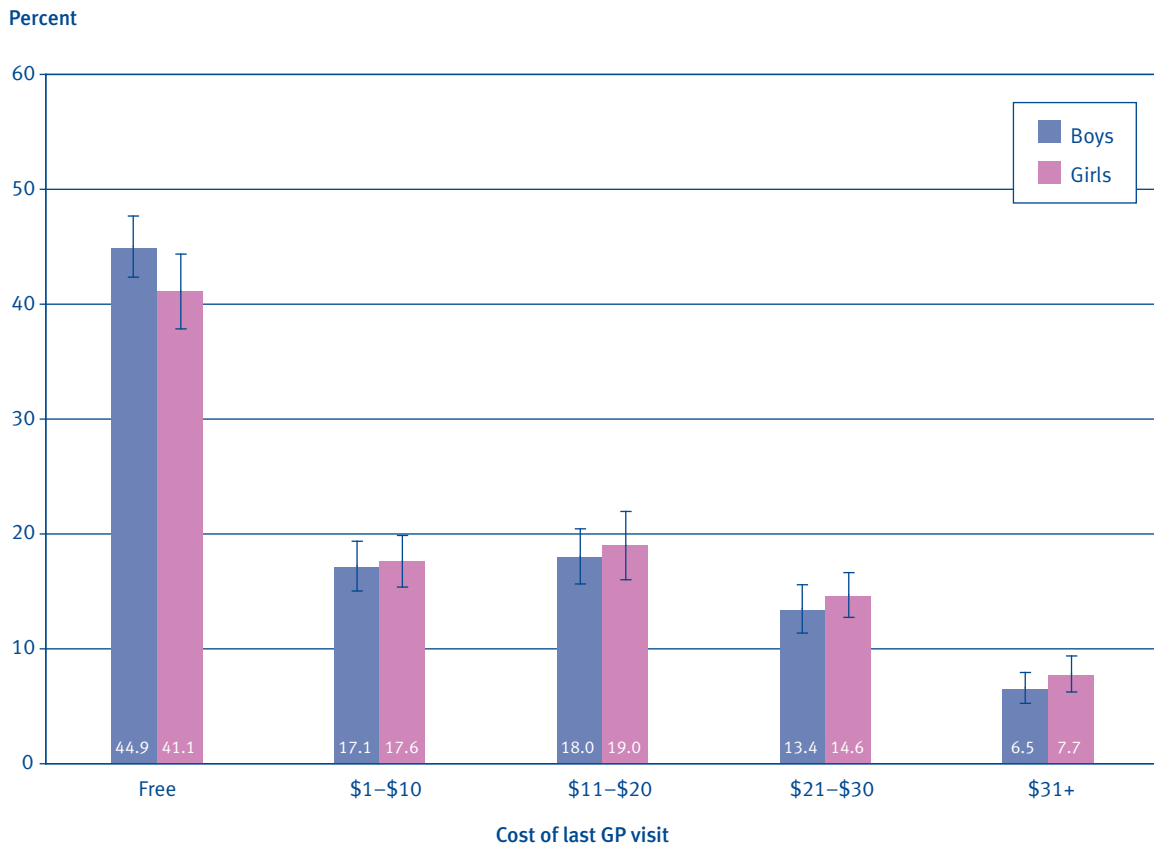


Source: 2006/07 New Zealand Health Survey

Cost of last visit to GP

The last visit to a GP was free for two out of five children (42.5%, 40.3–44.7) aged from birth to 14 years, while the cost for a further 17.3% (15.6–19.0) was \$10 or less. Adjusted for age, there were no significant differences between boys and girls in the cost of last visit to a GP (Figure 6.8)

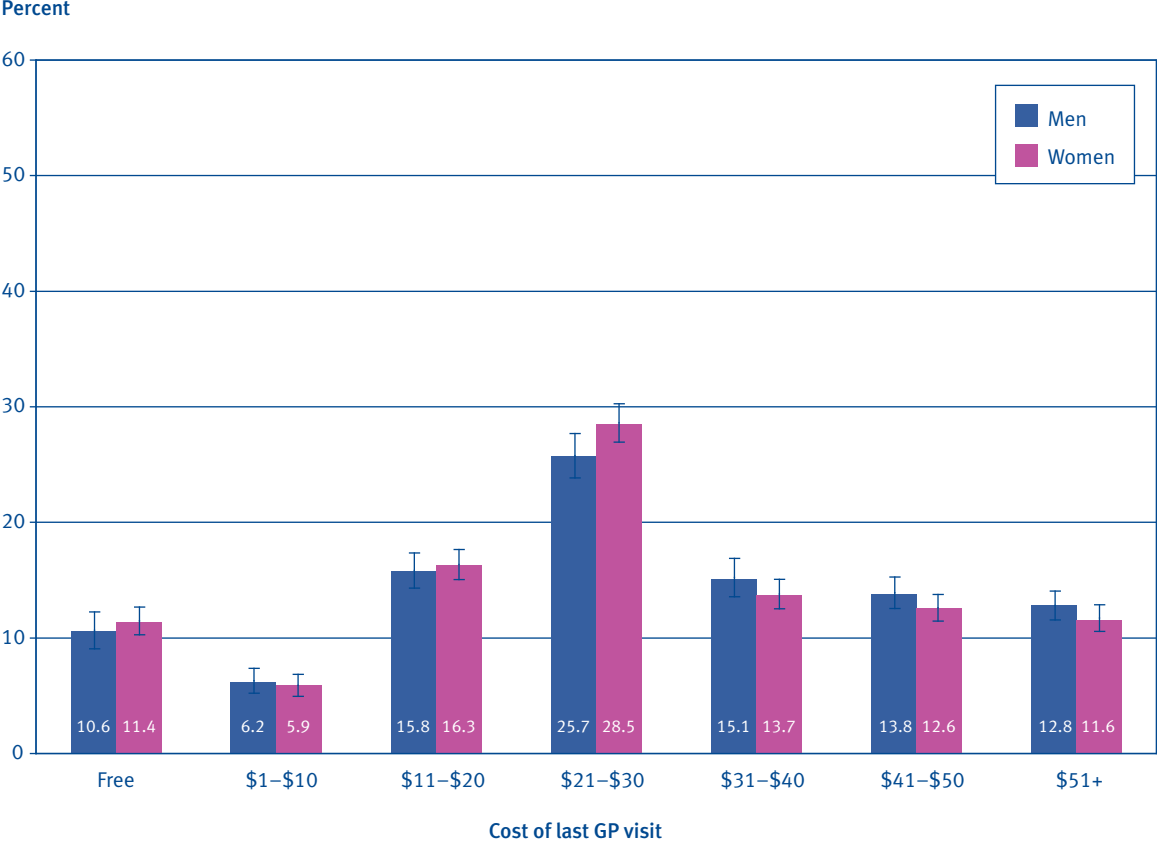
Figure 6.8: Cost of last GP visit for children, by gender (age standardised prevalence)



Source: 2006/07 New Zealand Health Survey

For men and women, the most common cost of their last GP visit was \$21 to \$30, followed by \$11–20 (Figure 6.9). One in ten adults were not charged for their last visit to a GP. Adjusted for age, there was little difference between men and women in the cost for their last GP visit, however women were slightly more likely than men to be charged \$21–30 (Figure 6.9).

Figure 6.9: Cost of last GP visit for adults, by gender (age standardised prevalence)



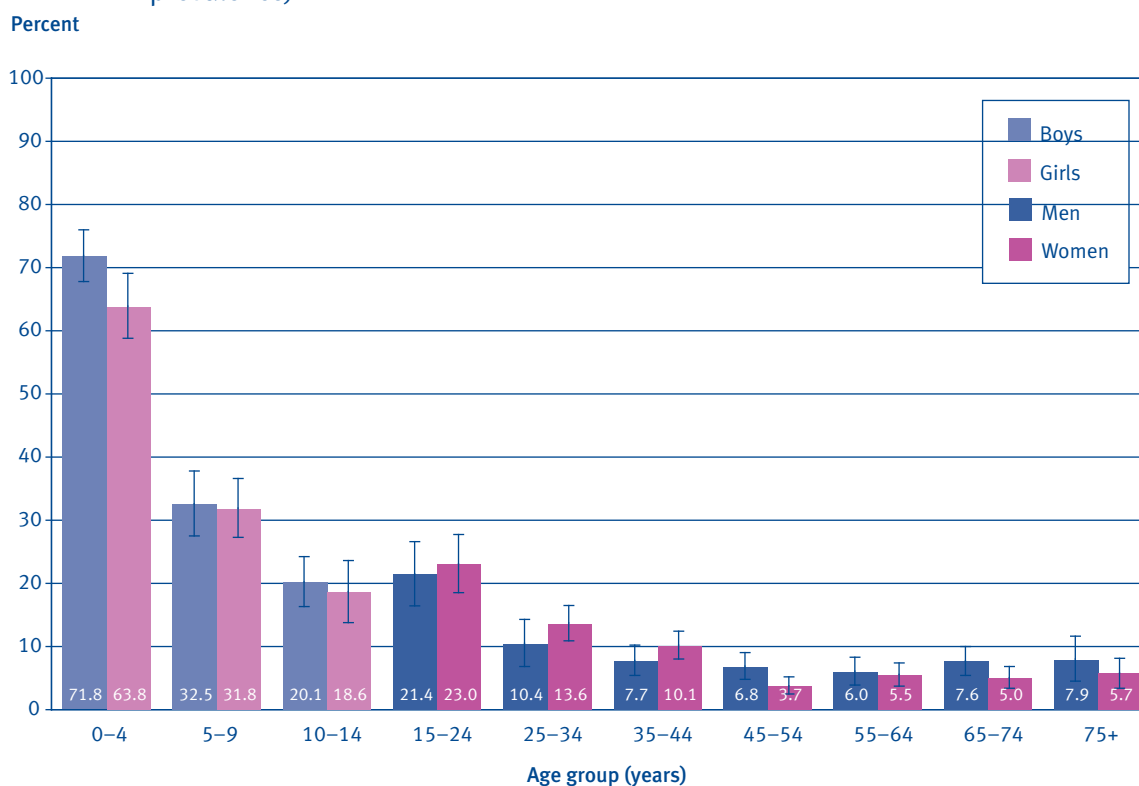
Source: 2006/07 New Zealand Health Survey

Last GP visit free, by age group

The proportion of children whose last GP visit was free decreased with increasing age. Children aged 0–4 years (68.0%, 64.9–71.1) were significantly more likely than those aged 5–9 years (32.2%, 28.5–35.9) and 10–14 years (19.4%, 16.2–22.6) to have had a free last GP visit (Figure 6.10). The last GP visit was free for two-thirds (67.0%, 64.2–69.9) of children aged less than six years.

Adults aged 15–24 years were significantly more likely than all other adult age groups to have had a free last GP visit with one in five (22.3%, 19.0–25.6) adults aged 15–24 years not charged for their last GP visit (Figure 6.10). For adults aged 65 years and over, 6.4%, (5.1–7.8) had a free last GP visit.

Figure 6.10: Population whose last GP visit was free, by age group and gender (unadjusted prevalence)

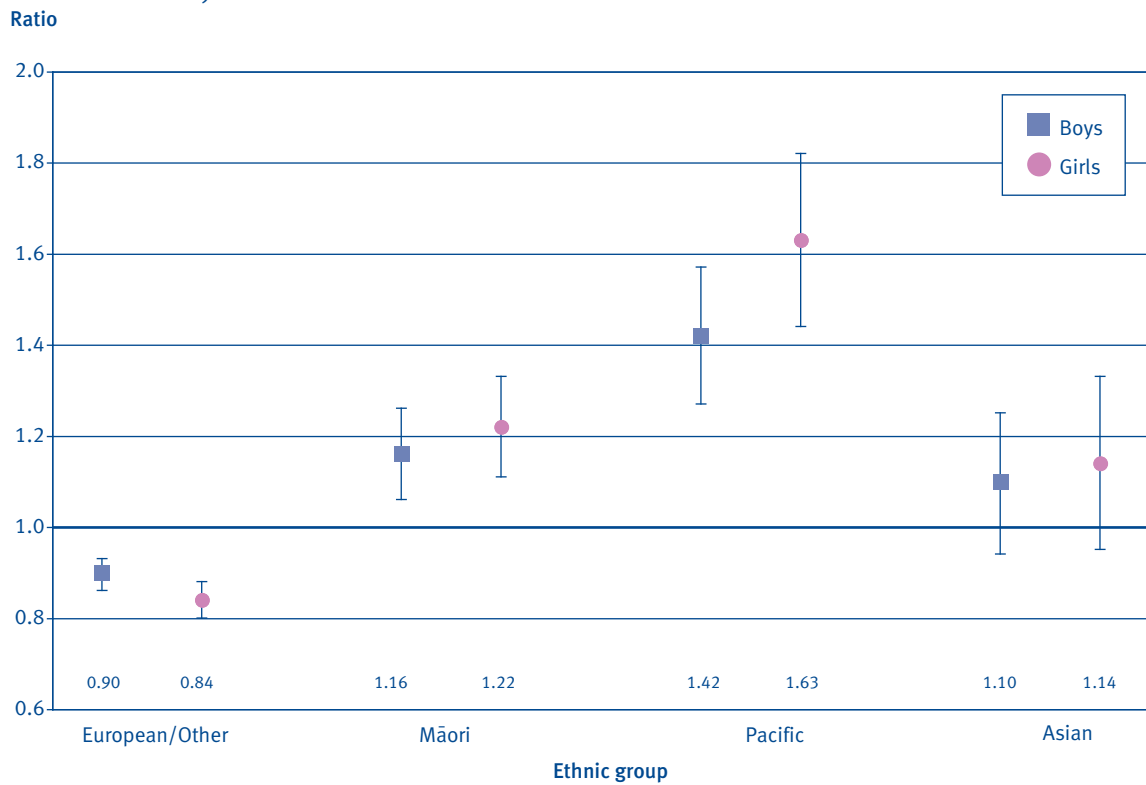


Source: 2006/07 New Zealand Health Survey

Last GP visit free, by ethnic group

After adjusting for age, Māori and Pacific boys and girls were significantly more likely than boys and girls in the total population to have had a free last GP visit (Figure 6.11). Māori (SRR 1.16, 1.10–1.22) and Pacific (SRR 1.25, 1.15–1.35) children under six years of age were also significantly more likely than all children under six years of age to have had a free last GP visit (graph not shown).

Figure 6.11: Last GP visit free for children, by ethnic group and gender (age standardised rate ratio)

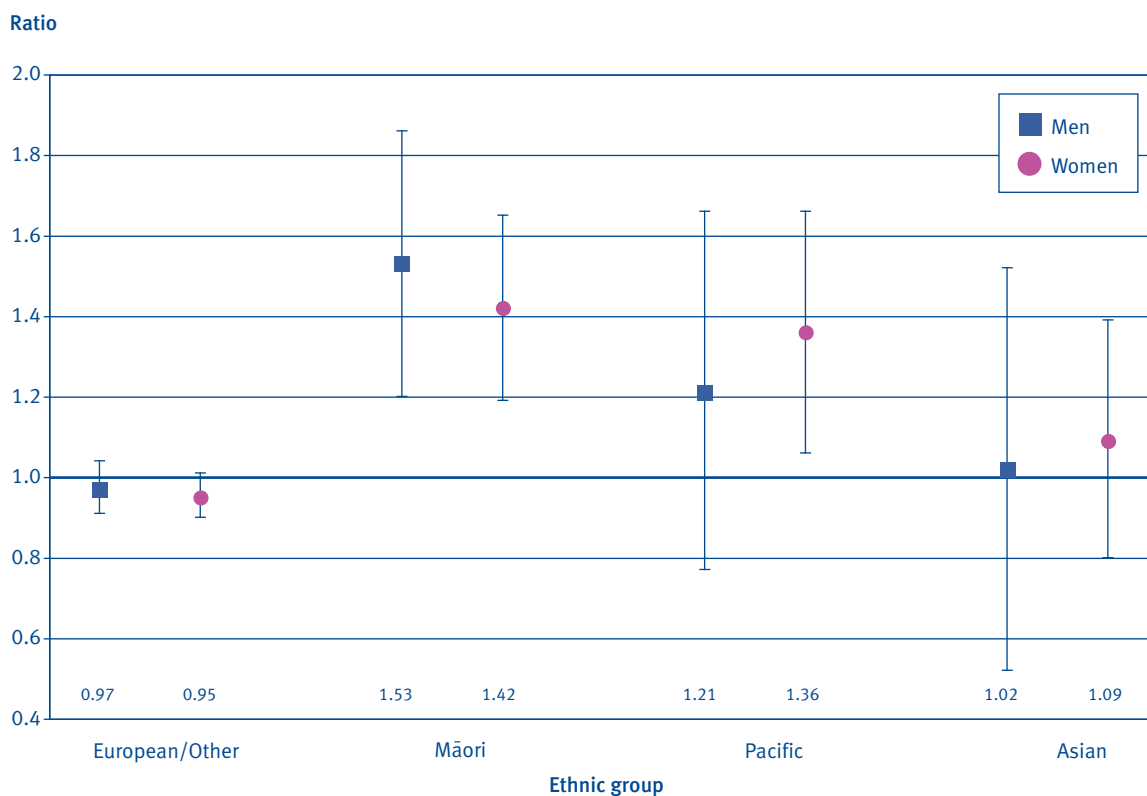


Source: 2006/07 New Zealand Health Survey

Notes: Age standardised to the WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged from birth to 14 years. Total response standard output for ethnic groups has been used.

Māori men and women and Pacific women were significantly more likely than men and women in the total adult population to report that their last GP visit was free (Figure 6.12).

Figure 6.12: Last GP visit free for adults, by ethnic group and gender (age standardised rate ratio)



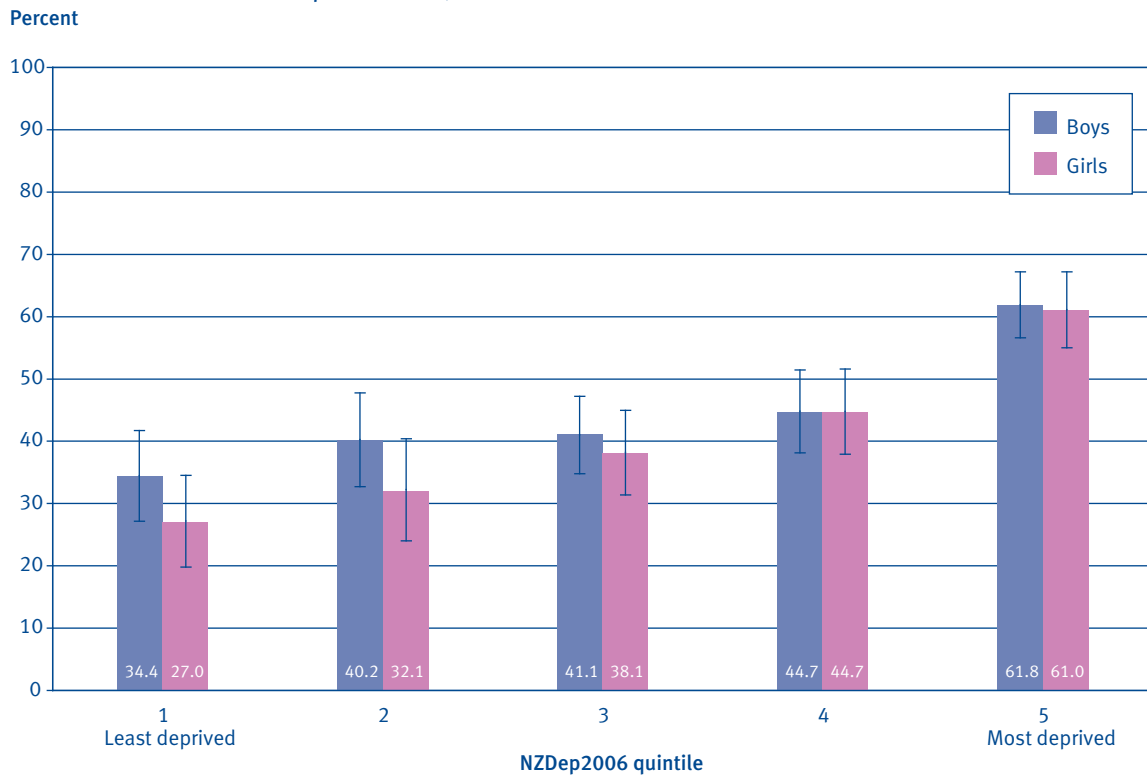
Source: 2006/07 New Zealand Health Survey

Notes: Age standardised to the WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 15 years and over. Total response standard output for ethnic groups has been used.

Last GP visit free, by neighbourhood deprivation

Children in NZDep2006 quintile 5 (most deprived) neighbourhoods were significantly more likely to have had a free last GP visit than those in any other NZDep2006 quintile (Figure 6.13). The same trend was seen for children aged under six years.

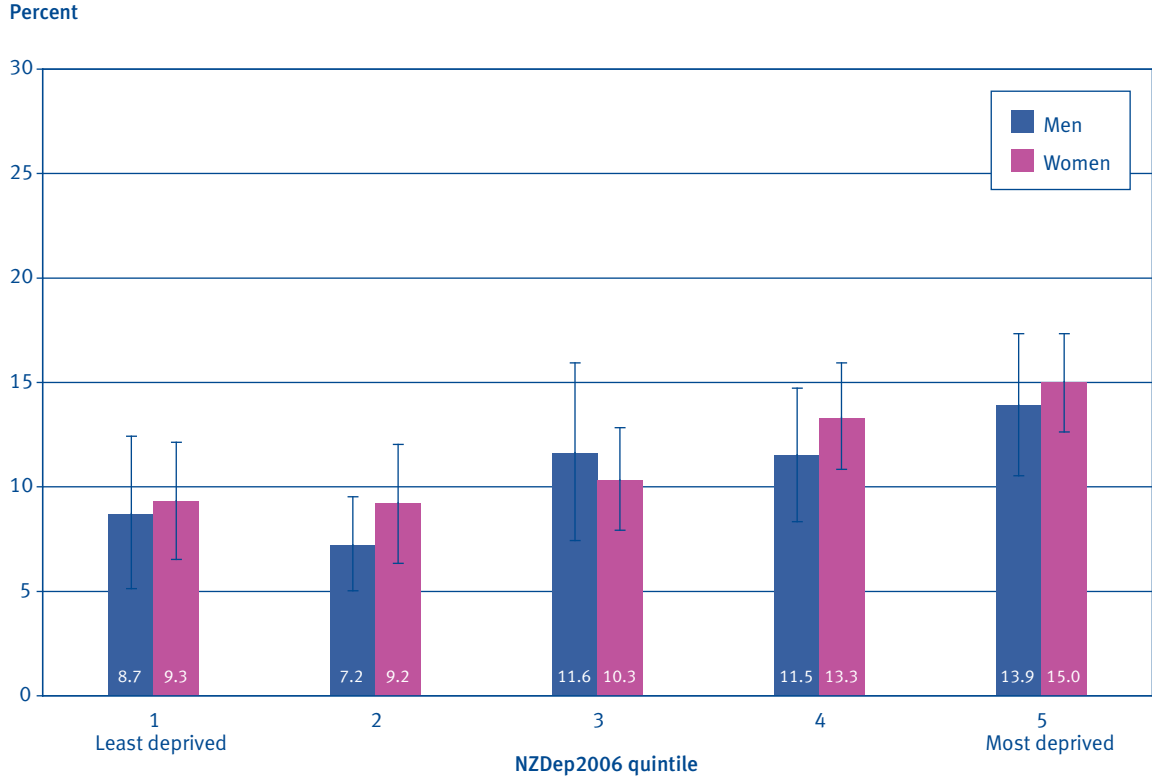
Figure 6.13: Children whose last GP was free, by NZDep2006 quintile and gender (age standardised prevalence)



Source: 2006/07 New Zealand Health Survey

Women in NZDep2006 quintile 5 (most deprived) neighbourhoods were significantly more likely to have had a free GP visit than women in NZDep2006 quintiles 1 (least deprived) and 2 (Figure 6.14).

Figure 6.14: Adults whose last GP was free, by NZDep2006 quintile and gender (age standardised prevalence)



Source: 2006/07 New Zealand Health Survey

Last GP visit free, by DHB area

There was a lot of variation by DHB area in the proportion of the population whose last visit to a GP was free.

The proportion of children whose last GP visit was free was significantly higher in the Northland / Tairāwhiti / Hawke's Bay / Lakes / Whanganui and Counties Manukau DHB areas than nationally, while this proportion was significantly lower in Wairarapa / Hutt Valley / Capital and Coast and Canterbury DHB areas than nationally (Table 6.2).

The proportion of adults whose last GP visit was free was significantly higher in the Northland / Tairāwhiti / Hawke's Bay / Lakes / Whanganui DHB area than nationally, while this proportion was significantly lower in the Waitemata and Bay of Plenty / Taranaki / MidCentral DHB areas (Table 6.2).

Table 6.2: Last visit to GP was free, children and adults, by DHB area (unadjusted)

DHB area	Prevalence in children (95% CI)	Number of children	Prevalence in adults (95%CI)	Number of adults
Northland / Tairāwhiti / Hawke's Bay / Lakes / Whanganui	41.5 (36.9–46.1) +	47900	12.5 (10.2–14.7) +	38700
Waitemata	28.0 (21.4–34.5)	29100	6.8 (4.7–8.8) –	20900
Auckland	39.6 (32.7–46.4)	29600	7.6 (5.0–10.3)	19500
Counties Manukau	47.1 (41.3–53.0) +	52400	10.1 (8.0–12.3)	27200
Waikato	32.1 (26.6–37.5)	24500	10.0 (7.1–12.9)	21000
Bay of Plenty / Taranaki / MidCentral	32.8 (27.6–37.9)	32300	6.8 (5.2–8.4) –	19100
Wairarapa / Hutt Valley / Capital and Coast	22.4 (17.1–27.6) –	20000	11.9 (9.1–14.6)	33800
Canterbury	22.1 (16.4–27.7) –	20100	11.7 (8.9–14.6)	36200
Nelson Marlborough / West Coast / South Canterbury / Otago / Southland	30.3 (23.6–36.9)	28500	11.6 (8.9–14.4)	36300
New Zealand total	33.3 (31.5–35.1)	284800	10.0 (9.2–10.8)	252600

Source: 2006/07 New Zealand Health Survey

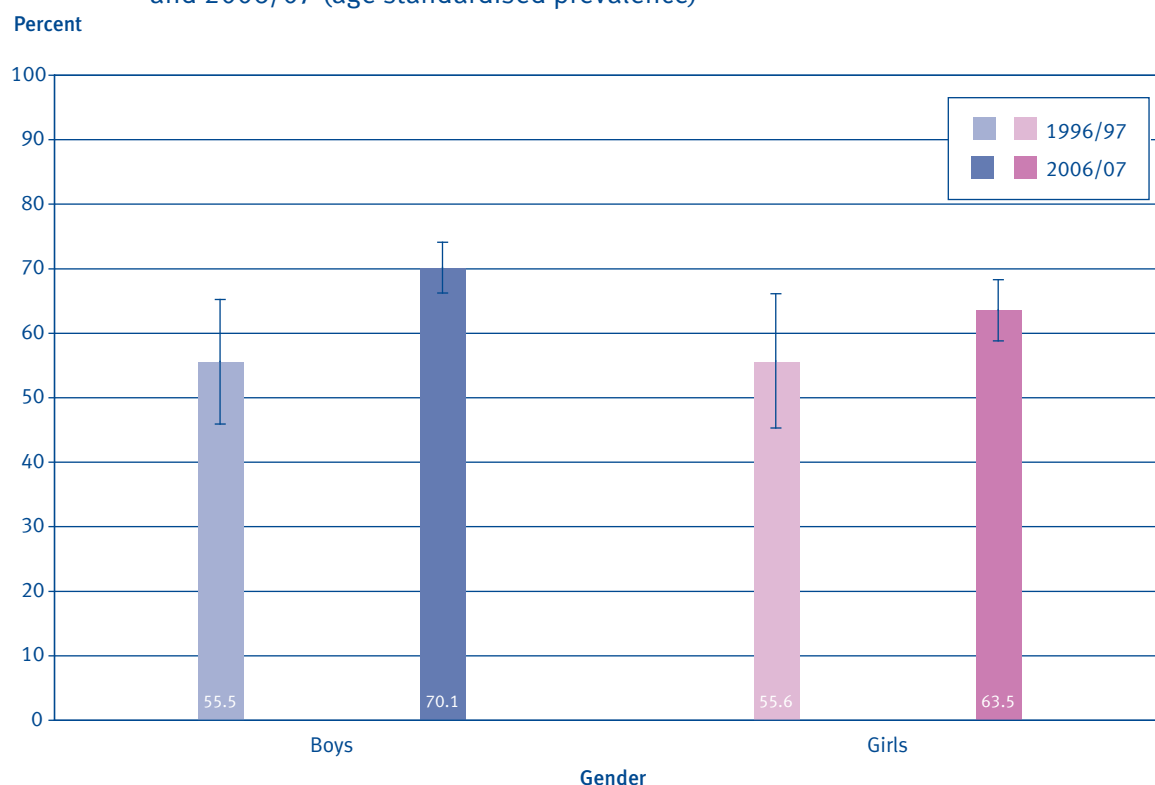
Notes: Estimates indicated with a + are significantly higher than the national rate, and estimates indicated with a – are significantly lower than the national rate. Data are based on direct survey estimates and could be confounded by different population characteristics in each DHB. Due to small sample size, some DHB areas have been combined. Survey population is the estimated resident population living in permanent private dwellings at 31 June 2007.

Time trends in last GP visit free

Overall for children in the total population, between 1996/97 and 2006/07, there was no change in the proportion whose last visit to a GP was free. For children under six years of age, there was a significant increase in the proportion of children whose last visit to a GP was free, adjusting for age, from 55.5% (48.5–62.6) in 1996/97 to 67.0% (64.1–69.8) in 2006/07. When looking at boys and girls separately, this increase is significant only in boys (Figure 6.15).

There was also a significant increase in the proportion of Māori boys under 6 years of age whose last visit to a GP was free from 61.8% (44.5–79.2) in 1996/97 to 80.7% (75.0–86.5) in 2006/07 (p-value < 0.05), with no change for Māori girls.

Figure 6.15: Children aged under 6 years whose last visit to GP was free, by gender, 1996/97 and 2006/07 (age standardised prevalence)



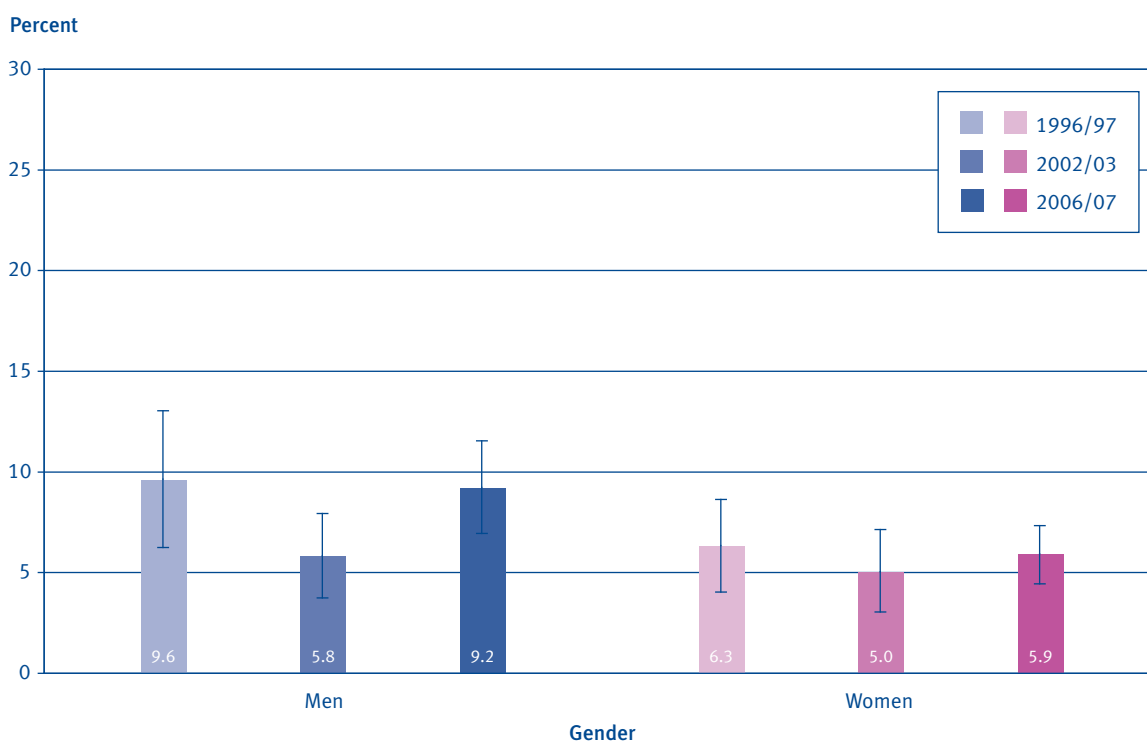
Source: 1996/97 and 2006/07 New Zealand Health Surveys

Note: Data from previous years have been reanalysed to allow for comparability. Data not available for 2002/03.

Among adults, between 1996/97 and 2002/03, there was no change in the proportion whose last visit to a GP was free. Among adults aged 65 years and over, there was an increase in the proportion of men whose last visit to a GP was free (p-value < 0.05) (Figure 6.16).

There was also a significant increase in the proportion of Māori men over 65 years of age whose last visit to a GP was free from 7.3 % (2.6–11.9) in 2002/03 to 26.4% (15.7–39.6) in 2006/07, with no change for Māori women.

Figure 6.16: Adults aged 65 years and over whose last visit to GP was free, by gender, 1996/97, 2002/03, 2006/07 (age standardised prevalence)



Source: 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys

Note: Data from previous years have been reanalysed to allow for comparability.

Unmet need for GP services in previous 12 months

Four percent (3.3–4.8) of children and 6.3% (5.8–6.9) of adults needed to see a GP in the previous 12 months but were unable to for any reason, that is, they had an unmet need for a GP. This equates to 34,600 children and 197,400 adults.

For children who had unmet need for a GP visit in the previous 12 months:

- 55.5% were unable to see a GP once
- 29.4% were unable to see a GP twice
- 15.1% were unable to see a GP three times or more.

Parents, whose child was unable to see a GP when needed, reported that the last time this happened they:

- did nothing (23.5%, 15.2–31.7)
- saw their child's GP at a later date (16.9%, 10.6–23.1)
- went to an after-hours medical centre (13.0%, 7.9–19.7)
- went to a hospital emergency department (9.5%, 4.9–16.1), or
- went to a pharmacy instead (7.0%, 4.0–11.4).

For adults who had unmet need for a GP visit in the previous 12 months:

- 40.4% were unable to see a GP once
- 31.1% were unable to see a GP twice
- 28.5% were unable to see a GP three times or more.

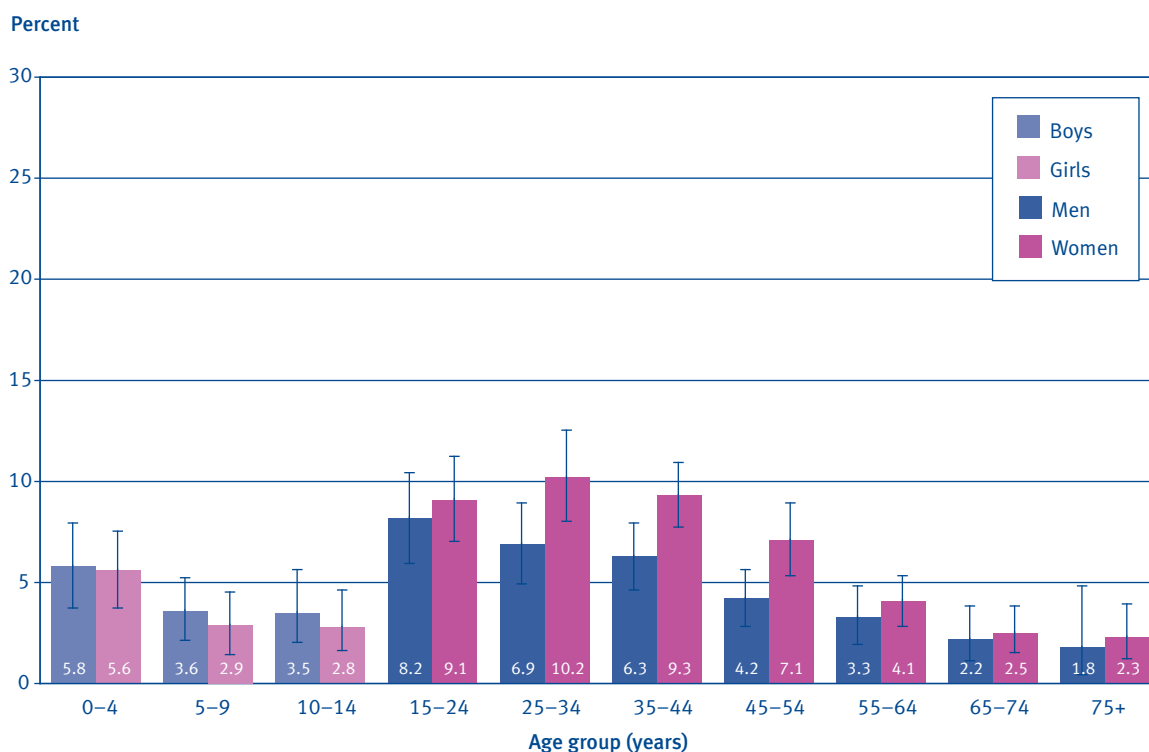
Adults who were unable to see a GP when needed, reported the last time this happened they:

- did nothing (45.8%, 41.7–50.0)
- went to a pharmacy (13.7%, 10.4–17.0)
- saw their GP at a later date (13.1%, 10.1–16.1)
- went to a hospital emergency department (3.9%, 2.3–5.5), or
- went to an after-hours medical centre instead (2.9%, 1.7–4.5).

Unmet need for GP services, by age group

The proportion of children reporting an unmet need for GP services decreased with age (Figure 6.17). For adults the same pattern can be seen, with the younger age groups having greater unmet need compared to the older age groups. Adjusted for age, boys and girls were equally likely to have an unmet need for a GP, while women (7.8%, 6.9–8.6) were significantly more likely than men (5.7%, 4.9–6.5) to report unmet need.

Figure 6.17: Unmet need for GP services for children and adults, by age group and gender (unadjusted prevalence)



Source: 2006/07 New Zealand Health Survey

Unmet need for GP services, by ethnic group

Table 6.3 gives an indication of the proportions and numbers of children in New Zealand's main ethnic groups that were unable to see a GP when they needed to in the previous 12 months.

Table 6.3: Unmet need for a GP in the previous 12 months for any reason for children, by ethnic group (unadjusted)

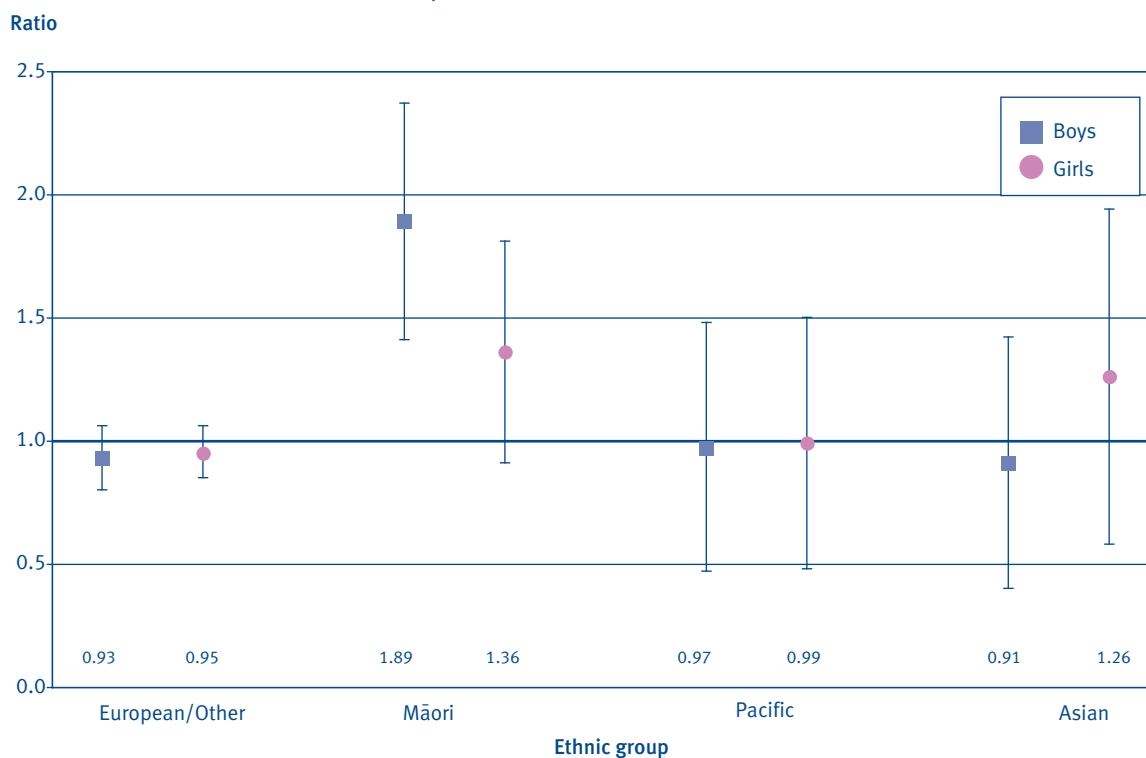
Ethnic group	Prevalence (95% CI)	Number of children
European/ Other	3.8 (3.0–4.6)	24500
Māori	6.7 (5.2–8.3)	13200
Pacific	4.0 (2.5–5.6)	4000
Asian	4.3 (2.4–6.1)	3300

Source: 2006/07 New Zealand Health Survey

Note: Total response standard output for ethnic groups has been used.

After adjusting for age, Māori boys (SRR 1.89, 1.41–2.37) were significantly more likely than boys in the total population to have had an unmet need for GP services in the previous 12 months (Figure 6.18).

Figure 6.18: Unmet need for GP services for children, by ethnic group and gender (age standardised rate ratio)



Source: 2006/07 New Zealand Health Survey

Notes: Age standardised to the WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged from birth to 14 years. Total response standard output for ethnic groups has been used.

Table 6.4 gives an indication of the proportions and numbers of adults in New Zealand’s main ethnic population groups that were unable to see a GP when they needed to in the previous 12 months.

Table 6.4: Unmet need for a GP in the previous 12 months for any reason for adults, by ethnic group (unadjusted)

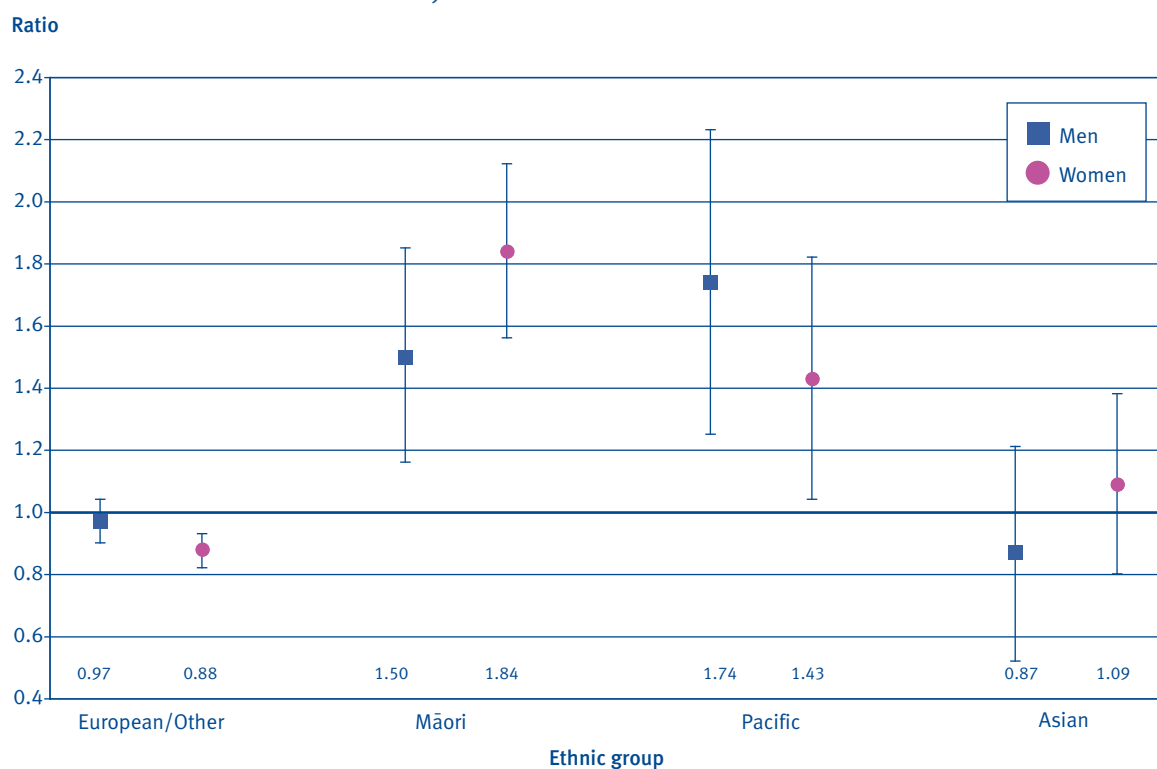
Ethnic group	Prevalence (95% CI)	Number of adults
European/ Other	5.6 (5.0–6.1)	141800
Māori	12.1 (10.6–13.6)	43100
Pacific	11.2 (8.5–13.9)	18500
Asian	7.4 (5.7–9.2)	20800

Source: 2006/07 New Zealand Health Survey

Note: Total response standard output for ethnic groups has been used.

After adjusting for age, Māori and Pacific men and women were significantly more likely to report an unmet need for GP services in the previous 12 months compared to men and women in the total adult population (Figure 6.19).

Figure 6.19: Unmet need for GP services for adults, by ethnic group and gender (age standardised rate ratio)



Source: 2006/07 New Zealand Health Survey

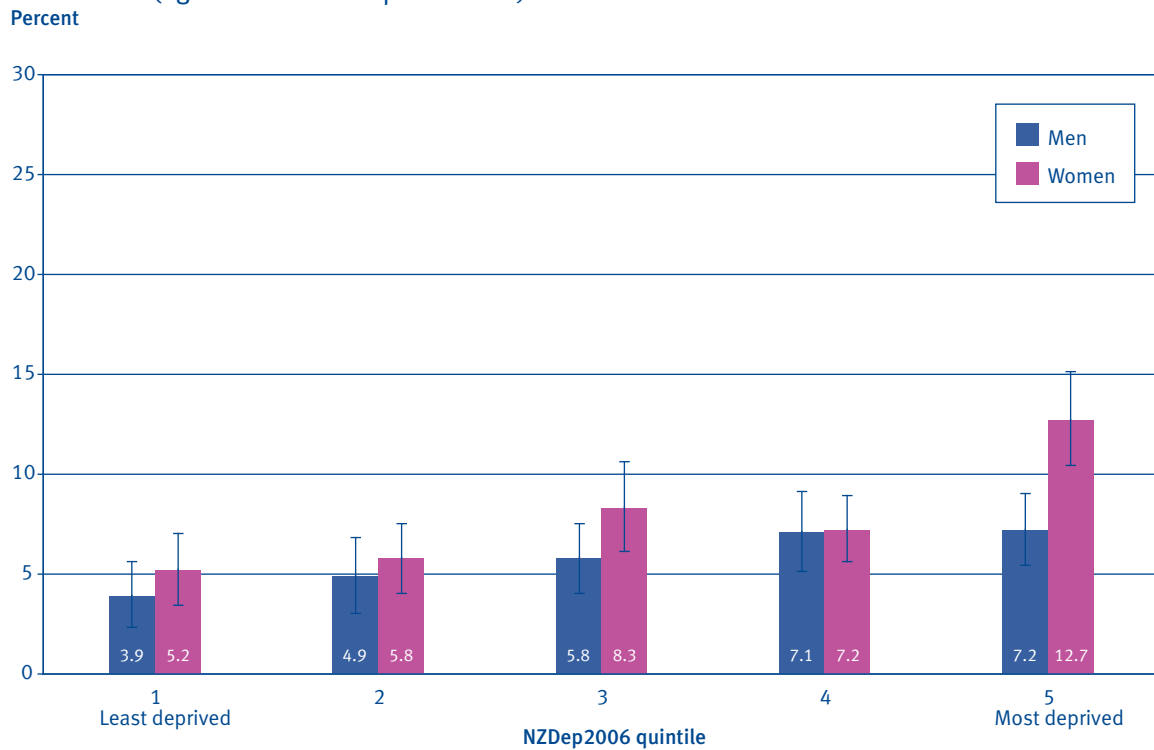
Notes: Age standardised to the WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 15 years and over. Total response standard output for ethnic groups has been used.

Unmet need for GP services, by neighbourhood deprivation

There were no significant differences in reporting an unmet need for GP services between NZDep2006 quintile 1 (least deprived) and quintile 5 (most deprived) for boys and girls.

Men and women in NZDep2006 quintile 5 (most deprived) neighbourhoods were significantly more likely to report an unmet need for GP services than those in quintile 1 (least deprived) (Figure 6.20).

Figure 6.20: Adults with an unmet need for GP services, by NZDep2006 quintile and gender (age standardised prevalence)



Source: 2006/07 New Zealand Health Survey

Unmet need for GP services, by DHB area

The proportion of children and adults having an unmet need for a GP visit was significantly lower in the Counties Manukau and Nelson Marlborough / West Coast / South Canterbury / Otago / Southland DHB areas than nationally (Table 6.5).

The proportion of adults having an unmet need for a GP visit was significantly lower in the Counties Manukau and the South Island DHBs, including Canterbury, than the national rate, while this proportion was significantly higher in Waikato and Wairarapa / Hutt Valley / Capital and Coast DHB areas than nationally.

Table 6.5: Unmet need for GP services for children and adults, by DHB area (unadjusted)

DHB area	Prevalence in children (95% CI)	Number of children	Prevalence in adults (95% CI)	Number of adults
Northland / Tairāwhiti / Hawke's Bay / Lakes / Whanganui	4.5 (2.4–6.5)	5100	7.5 (6.1–8.8)	28200
Waitemata	4.4 (2.3–7.6)	4600	7.5 (5.6–9.3)	28400
Auckland	3.9 (1.9–7.1)	2900	7.0 (5.0–9.0)	22500
Counties Manukau	2.3 (1.3–3.8) –	2600	4.5 (2.9–6.1) –	14500
Waikato	5.9 (3.6–8.2)	4500	9.5 (7.1–12.0) +	24700
Bay of Plenty / Taranaki / MidCentral	3.9 (2.3–6.0)	3800	6.0 (4.6–7.4)	21100
Wairarapa / Hutt Valley / Capital and Coast	5.0 (2.5–8.9)	4500	8.8 (6.8–10.7) +	30400
Canterbury	4.9 (2.4–8.8)	4500	3.5 (2.3–4.7) –	12900
Nelson Marlborough / West Coast / South Canterbury / Otago / Southland	2.2 (0.9–4.6) –	2000	3.7 (2.4–5.1) –	14700
New Zealand total	4.0 (3.3–4.8)	34500	6.3 (5.8–6.9)	197400

Source: 2006/07 New Zealand Health Survey

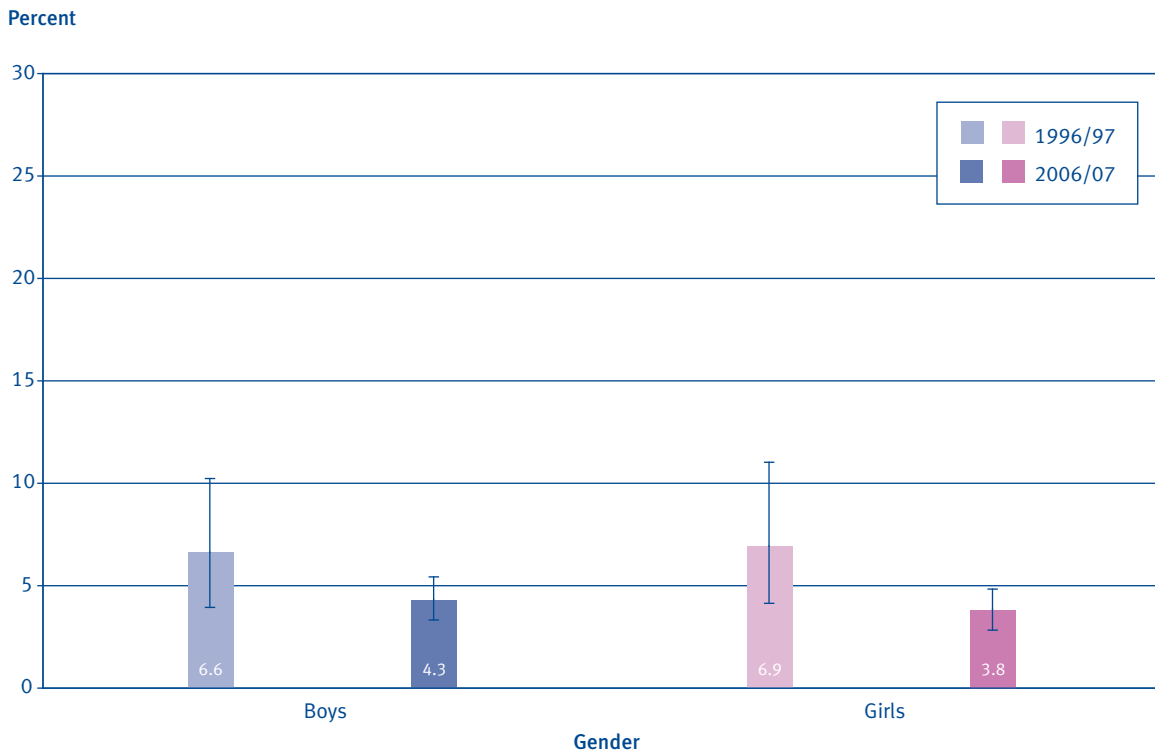
Notes: Estimates indicated with a + are significantly higher than the national rate, and estimates indicated with a – are significantly lower than the national rate. Data are based on direct survey estimates and could be confounded by different population characteristics in each DHB. Due to small sample size, some DHB areas have been combined. Survey population is the estimated resident population living in permanent private dwellings at 31 June 2007.

Time trends in unmet need for GP services (any reason)

Overall, between 1996/97 and 2006/07 there was a 40% decrease in the proportion of children whose parents reported an unmet need for GP services, adjusted for age, from 6.8% in 1996/97 to 4.1% in 2006/07. When looking at boys and girls separately, there were also decreases but these changes were not significant (Figure 6.21).

The number of Māori children in the 1996/97 Health Survey was too small to make any meaningful comparisons with the findings from the 2006/07 Health Survey results.

Figure 6.21: Unmet need for a GP visit for children (any reason), by gender, 1996/97 and 2006/07 (age standardised prevalence)



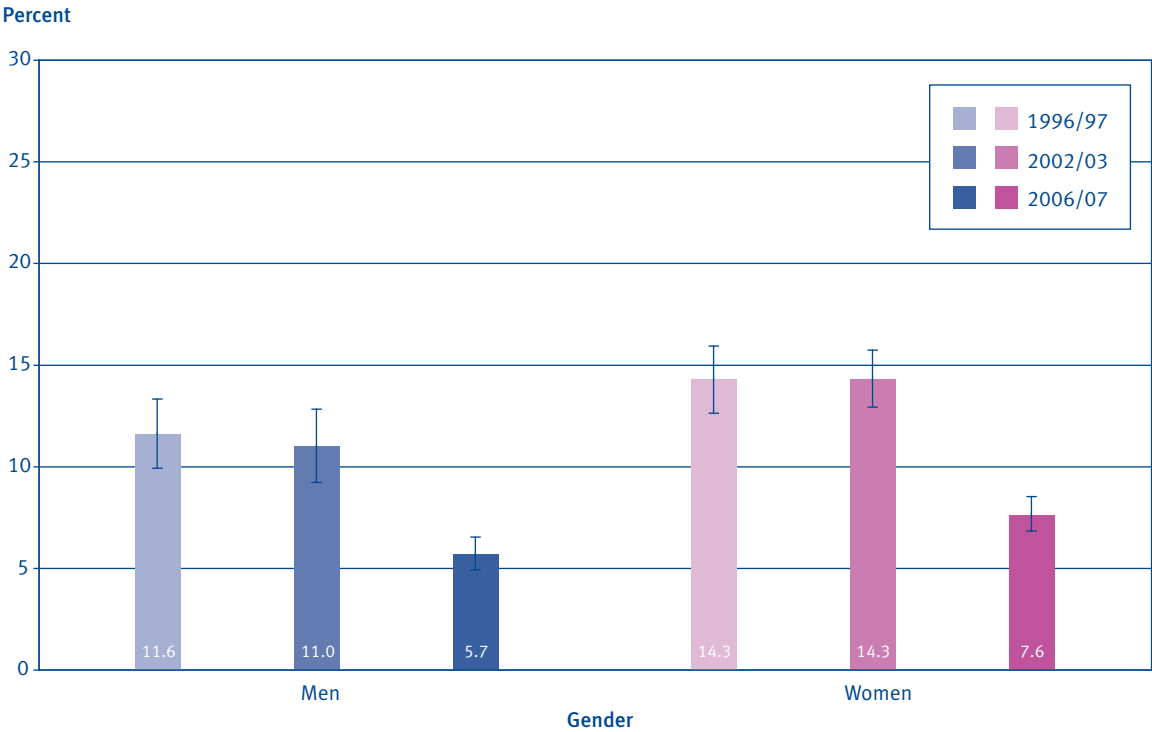
Source: 1996/97 and 2006/07 New Zealand Health Surveys

Note: Data from previous years have been reanalysed to allow for comparability. Data not available for 2002/03.

From 2002/03 to 2006/07 there was a large decrease (almost 50%) in the proportion of men and women reporting an unmet need for GP services, adjusted for age (Figure 6.22).

A similar trend can be seen for Māori adults, with the proportion reporting an unmet need for GP services declining in men and women, adjusted for age (Figure 6.23). However, the decrease is not as large for Māori, compared to men and women in the total population (43% decrease for Māori men and 35% decrease for Māori women in unmet need for GP services since 2002/03).

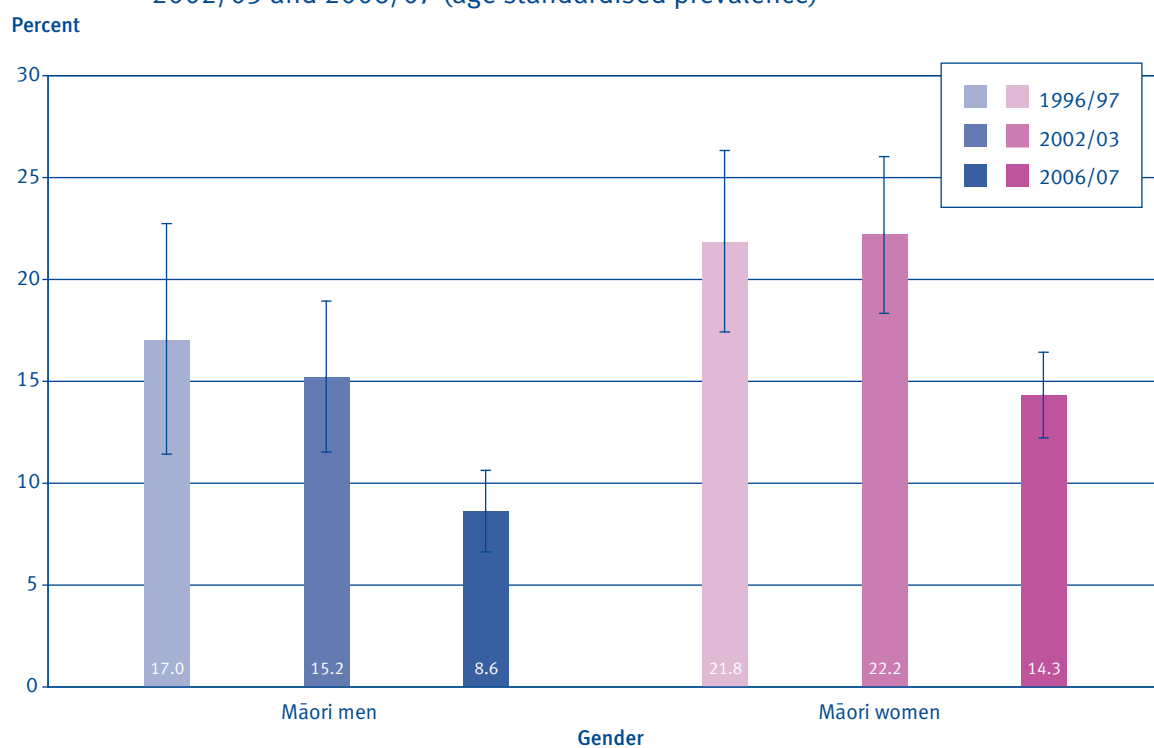
Figure 6.22: Unmet need for a GP visit for adults (any reason), by gender, 1996/97, 2002/03 and 2006/07 (age standardised prevalence)



Source: 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys

Note: Data from previous years have been reanalysed to allow for comparability.

Figure 6.23: Unmet need for a GP visit for Māori adults (any reason), by gender, 1996/97, 2002/03 and 2006/07 (age standardised prevalence)



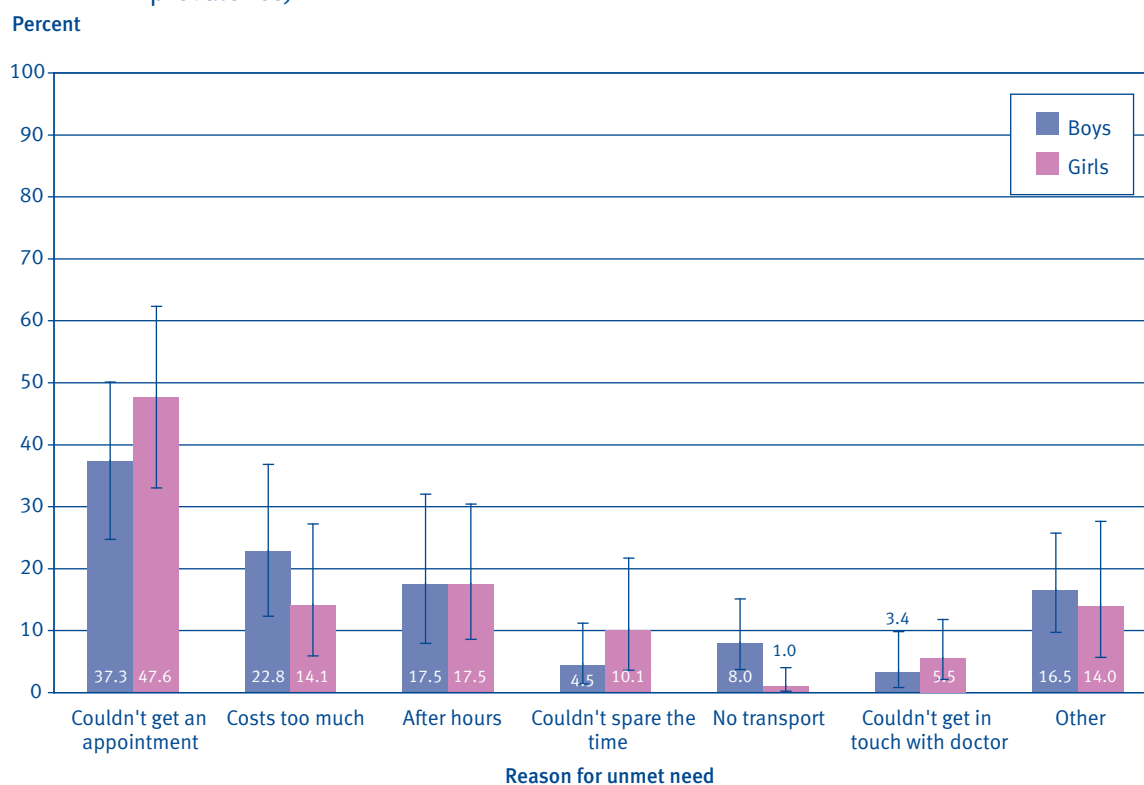
Source: 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys

Note: Data from previous years have been reanalysed to allow for comparability.

Reason for unmet need for GP services

The most common reasons given by parents for the last time their child could not see a GP when they needed to were: couldn't get an appointment soon enough or at a suitable time; it costs too much; and it was after hours (Figure 6.24).

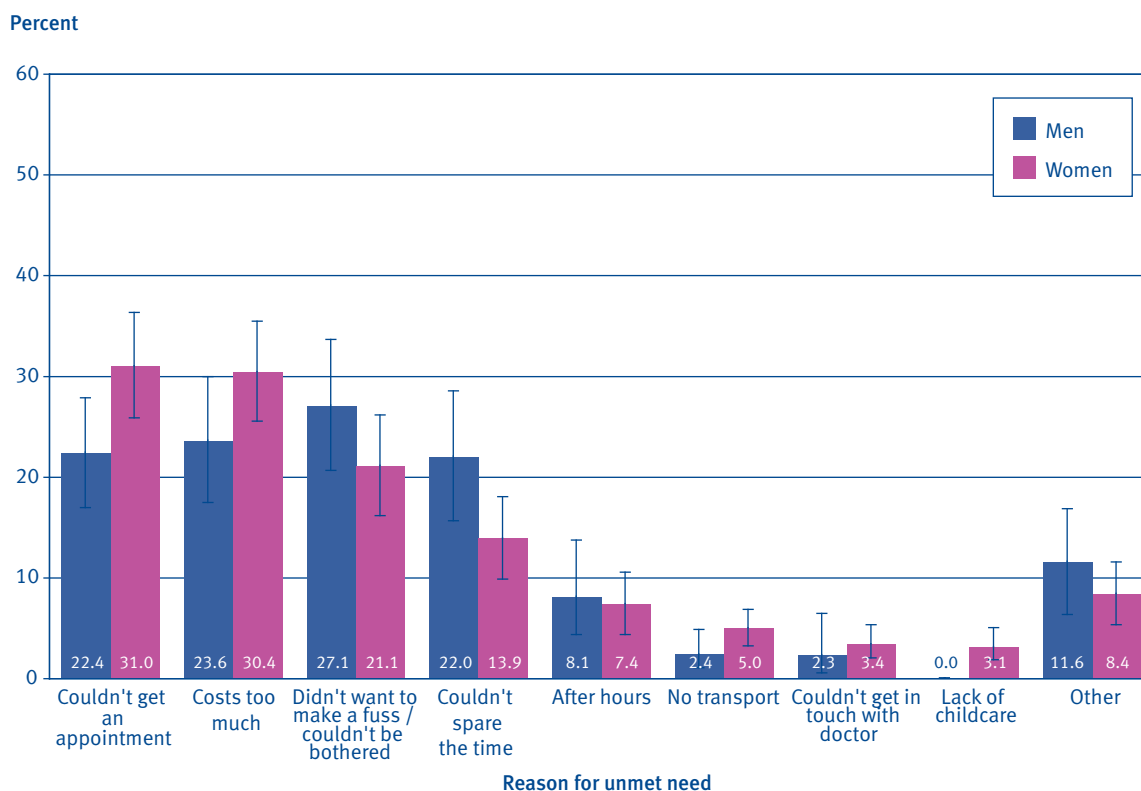
Figure 6.24: Reason for unmet need for GP services for children, by gender (age standardised prevalence)



Source: 2006/07 New Zealand Health Survey

The most common reasons for women being unable to see a GP when they last needed to were being unable to get an appointment soon enough or at a suitable time and cost, while for men the most common reasons given were that they didn't want to make a fuss / couldn't be bothered, followed by cost, being unable to get an appointment soon enough or at a suitable time, and couldn't spare the time (Figure 6.25).

Figure 6.25: Reason for unmet need for GP services for adults, by gender (age standardised)



Source: 2006/07 New Zealand Health Survey

Unmet need for GP services due to cost

One in 125 children (0.8%, 0.4–1.1) and 1 in 59 adults (1.7%, 1.4–1.9) were unable to see a GP due to cost (that is, cost was the barrier for the last time they couldn't see a GP when they wanted to in the previous 12 months), which equates to 6600 children and 52,500 adults.

When adjusting for age, boys and girls were equally likely, while women (2.4%, 1.9–2.8) were significantly more likely than men (1.4%, 0.9–1.8), to be unable to see a GP due to cost.

Māori children (SRR 2.33, 1.30–3.36) and Māori adults (SRR 2.19, 1.67–2.70) were significantly more likely than children and adults in the total population respectively to be unable to see a GP due to cost. Asian boys (SRR 0.12, 0.00–0.37) and Asian men (SRR 0.27, 0.00–0.55) were significantly less likely than boys and men in the total population respectively to be unable to see a GP due to cost.

Adults in the most deprived neighbourhoods (NZDep2006 quintile 5) (3.0%, 2.2–3.8) were significantly more likely than those in the least deprived neighbourhoods (quintile 1) (1.2%, 0.7–2.0) to be unable to see a GP due to cost. There were no significant differences in neighbourhood deprivation for children.

Time trends in reason for unmet need for GP services

Among children, after adjusting for age, there was a significant decrease in unmet need due to cost, from 4.0% (2.5–6.1) in 1996/97 to 0.8% (0.4–1.1) in 2006/07 (an 80% decline). For Māori children, there has also been a decrease in unmet need due to cost, from 10.8% (5.8–17.9) in 1996/97 to 1.8% (0.9–3.2) in 2006/07 (an 83% decline).

For adults, between 2002/03 and 2006/07 there was also a significant decrease in the proportion of adults who reported an unmet need for GP services due to cost from 6.3% (5.4–7.1) to 1.8% (1.5–2.1) (a 71% decline). Among Māori, there was also a decrease in unmet need for GP services due to cost from 10.8% (8.3 - 13.3) in 2002/03 to 4.1% (3.2–5.1) in 2006/07 (a 62% decline).

In 2002/03, after adjusted for age, the main reason for unmet need for GP services for men was ‘cost’, but in 2006/07 the main reason for unmet need had become ‘didn’t want to make a fuss / couldn’t be bothered’ and ‘unable to get an appointment soon enough or at a suitable time’. Between 2002/03 and 2006/07, the proportion of women who reported being ‘unable get an appointment soon enough or at a suitable time’ as a reason for unmet need also increased, replacing ‘cost’ as the main reason in 2006/07.

For Māori adults, although the proportion reporting ‘cost’ as the reason for unmet need declined from 2002/03 to 2006/07, it remained the main reason for unmet need in 2006/07 for this ethnic group.

Uncollected prescriptions due to cost

GPs are the most common prescribers of medicine in New Zealand – in the 2006/07 survey, 94.4% (93.9–95.0) of adults who had a prescription in the previous 12 months received their prescription from a GP.

Overall 1.1% (0.8–1.5) of parents of all children and 1.4% (1.2–1.7) of all adults did not collect their prescription due to cost the last time they had an uncollected prescription, which equates to 9700 children and 44,200 adults. When adjusting for age, there were no significant differences in uncollected prescriptions by gender for children or adults.

Uncollected prescriptions due to cost, by ethnic group

Asian children were much less likely (SRR 0.29, 0.00–0.59) than children in the total population to have an uncollected prescription due to cost. European/Other (SRR 0.79, 0.68–0.90) adults were significantly less likely than adults in the total population to have an uncollected prescription due to cost, while Māori (SRR 2.31, 1.74–2.88) and Pacific (SRR 2.88, 2.03–3.73) adults were significantly more likely.

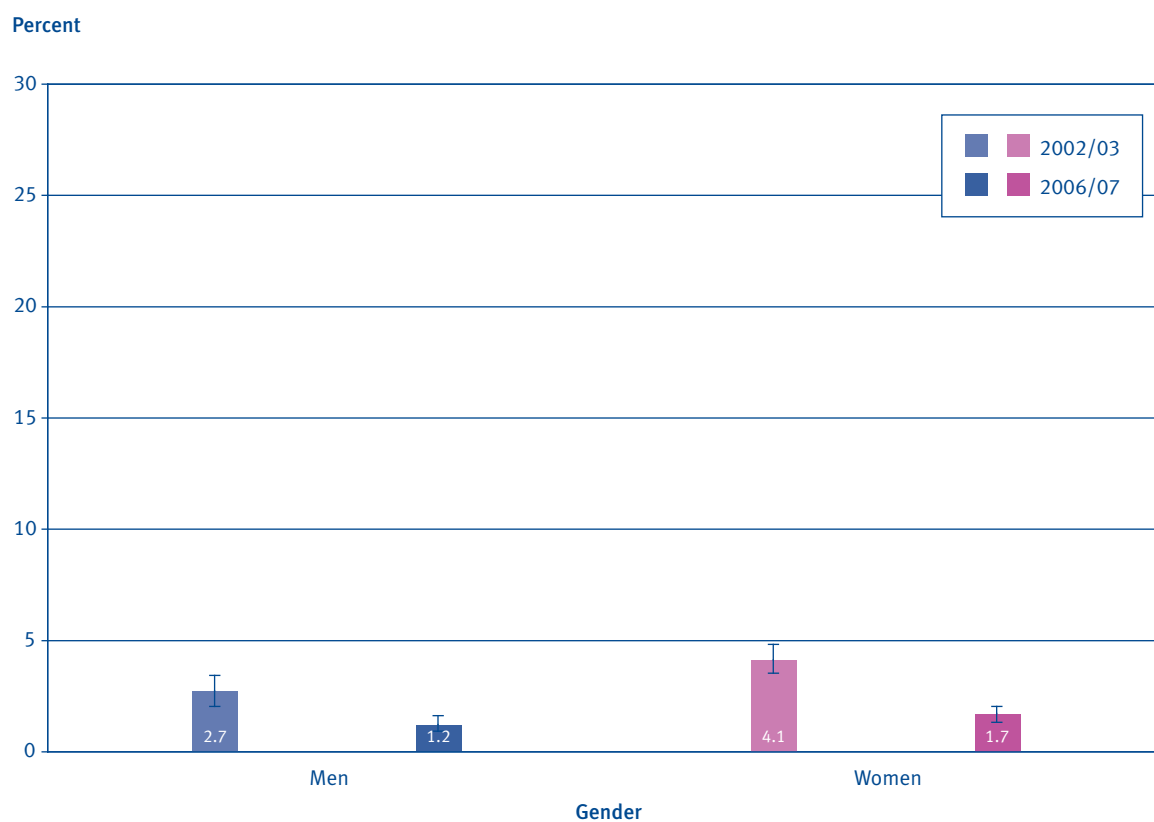
Uncollected prescriptions due to cost, by neighbourhood deprivation

Children (2.2%, 1.3–3.6) and adults (3.3%, 2.4–4.2) in the most deprived neighbourhoods (NZDep2006 quintile 5) were significantly more likely than children (0.4%, 0.1–1.0) and adults (0.6%, 0.3–1.1) in the least deprived neighbourhoods (quintile 1) to have an uncollected prescription due to cost.

Time trends in uncollected prescriptions due to cost

From 1996/97 to 2006/07 there was no change in the proportion of children with uncollected prescriptions in the previous 12 months due to cost, adjusted for age (graph not shown). For adults, from 2002/03 to 2006/07 there was a significant decline in the proportion of men and women with uncollected prescriptions in the previous 12 months due to cost, adjusted for age (Figure 6.26).

Figure 6.26: Adults with uncollected prescription due to cost in the previous 12 months, by gender, 2002/03 and 2006/07 (age standardised prevalence)



Source: 2002/03 and 2006/07 New Zealand Health Surveys

Note: Data from previous years have been reanalysed to allow for comparability.

Primary health care nurses

Introduction

Primary health care nurses (sometimes called practice nurses) play an important role in the delivery of primary health care services in New Zealand. In 2001 the Primary Health Care Strategy identified primary health care nurses as crucial to its successful implementation, and called for greater development of the role of nurses in the New Zealand health sector.

Nurses have skills and abilities that can be used effectively to improve the health and wellbeing of individuals, families and communities. Increased nurse involvement in primary health care is acknowledged to be an effective way not only to reduce inequalities in health, but also to improve population health in a way that is cost effective (Primary Health Care Nurse Innovation Evaluation Team 2007).

What were the survey questions?

In the 2006/07 New Zealand Health Survey, all adult participants and parents of child participants were asked how many times they/their child had seen a primary health care nurse in the previous 12 months, (a) as part of a GP consultation and (b) alone without seeing a GP. If they had seen a primary health care nurse in the previous 12 months, they were asked about the health issue concerned, how long ago (adult participants only), and the cost of their last visit.

If adult participants saw a primary health care nurse who was not based at their usual health care provider in the previous 12 months, they were asked the reason why.

Saw a primary health care nurse in the previous 12 months

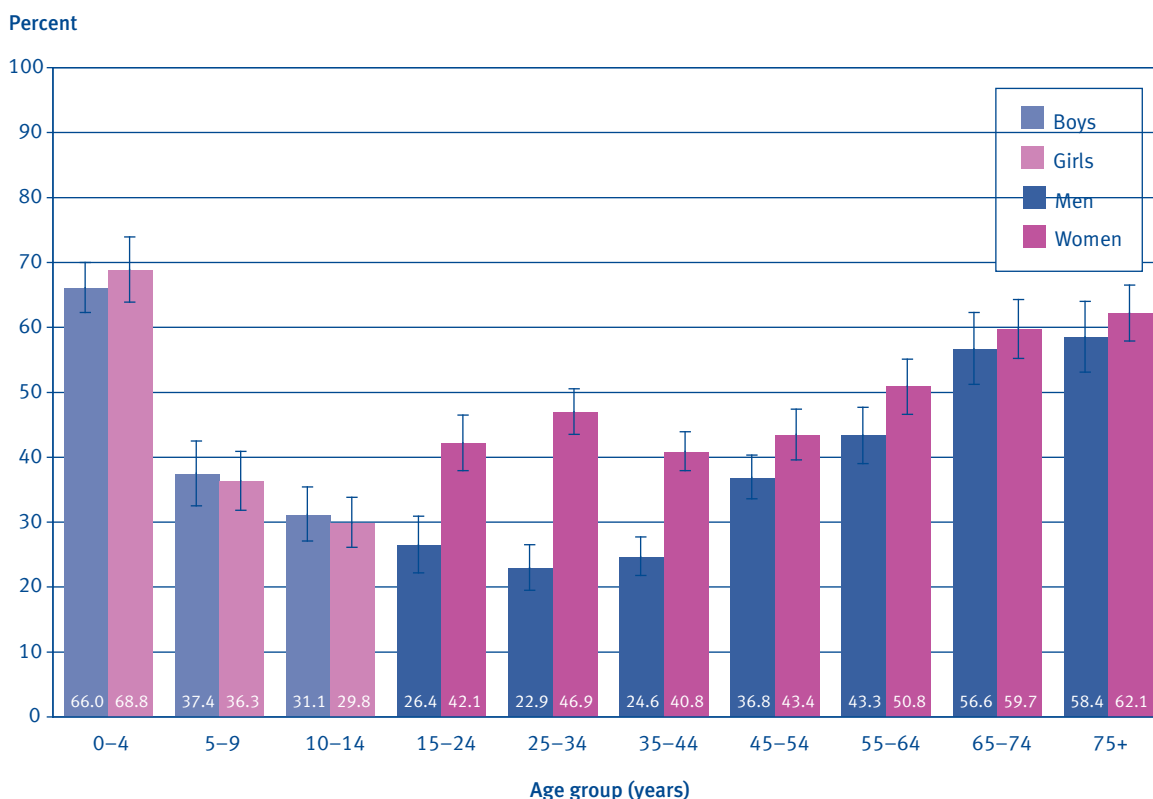
Overall, two out of five children (44.7%, 42.8–46.6) and adults (40.8%, 39.7–42.0) saw a primary health care nurse in the previous 12 months. Women (46.1%, 44.4–47.9) were significantly more likely than men (32.3%, 30.8–33.8) to have seen a primary health care nurse in the previous 12 months, while boys and girls were equally likely to have seen a primary health care nurse in the previous 12 months, adjusted for age.

One in three (33.5%, 31.8–35.2) children and one in four (25.5%, 24.5–26.5) adults saw a primary health care nurse as part of a GP consultation. One in five (22.7%, 21.2–24.3) children and one in four (28.7%, 27.7–29.7) adults saw a primary health care nurse alone without seeing a GP.

Saw a primary health care nurse, by age group

Children aged 0–4 years (67.4%, 63.9–70.8) were significantly more likely than all other age groups except those aged 65 years and over to have seen a primary health care nurse in the previous 12 months (Figure 6.27). Women aged 15–44 years were significantly more likely than men of the same age to have seen a primary health care nurse in the previous 12 months.

Figure 6.27: Saw a primary health care nurse in the previous 12 months, by age group and gender (unadjusted prevalence)



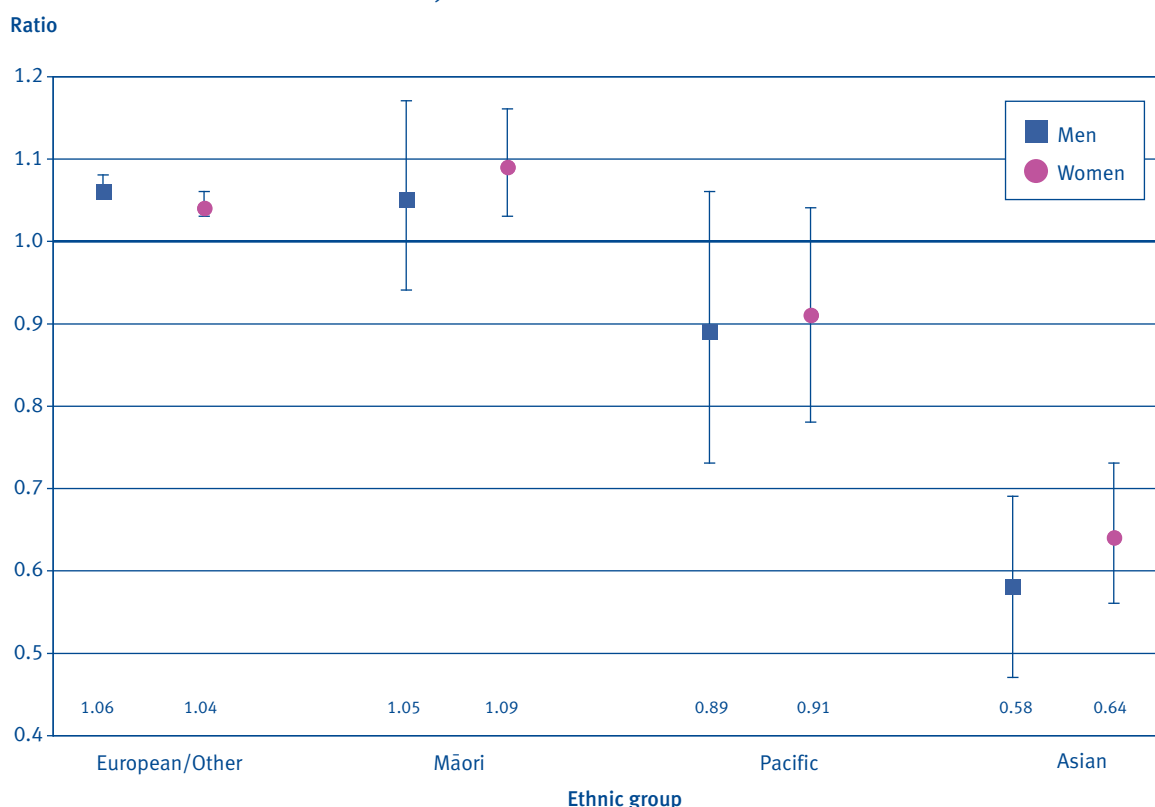
Source: 2006/07 New Zealand Health Survey

Saw a primary health care nurse, by ethnic group

Asian children (SRR 0.81, 0.72–0.90) were less likely and Māori children more likely (SRR: 1.06, 1.00–1.11) than children in the total population to have seen a primary health care nurse in the previous 12 months. There were no other significant differences by ethnic group in the proportion of children who saw a primary health care nurse in the previous 12 months.

European/Other men and women and Māori women were significantly more likely than men and women in the total population to have seen a primary health care nurse in the previous 12 months (Figure 6.28). Asian men and women were significantly less likely to have seen a primary health care nurse in the previous 12 months.

Figure 6.28: Adults who saw a primary health care nurse, by ethnic group and gender (age standardised rate ratio)



Source: 2006/07 New Zealand Health Survey

Notes: Age standardised to the WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 15 years and over. Total response standard output for ethnic groups has been used.

Saw a primary health care nurse, by neighbourhood deprivation

There were no significant differences by neighbourhood deprivation in the proportion of children and adults who had seen a primary health care nurse in the previous 12 months.

Number of visits to a primary health care nurse in previous 12 months

For those who saw a primary health care nurse as part of a GP consultation in the previous 12 months, the median number of visits for both children and adults was two. For those who saw a primary health care nurse alone in the previous 12 months without seeing a GP, the median number of visits for both children and adults was one.

Reason for last visit to primary health care nurse

For children who saw a primary health care nurse as part of a GP consultation, the main reasons given for the last visit were immunisation (39.1%, 35.7–42.4), short-term illness (34.0%, 30.7–37.3) and injury (10.5%, 8.4–12.5). For children who saw a primary health care nurse alone, the vast majority of last visits were for immunisation (70.4%, 67.2–73.6), followed by short-term illness (12.8%, 10.4–15.1) and routine check-up or health advice (5.2%, 3.8–6.6).

For adults who saw a primary health care nurse as part of a GP consultation, the main reasons given for the last visit were a blood or urine test (25.2%, 23.1–27.2), short-term illness (20.5%, 18.9–22.2) and routine check-up or health advice (17.6%, 16.2–18.9). For adults who saw a primary health care nurse alone, the main reasons for the last visit were immunisation (18.7%, 17.1–20.3), a blood or urine test (18.4%, 16.7–20.1) and a routine check-up or health advice (15.4%, 14.1–16.8).

Cost of last visit to primary health care nurse alone

The majority of children's last visits to a primary health care nurse were free, with 85.7% (82.7–88.7) of parents of child participants stating that the last time their child saw a nurse alone without seeing a GP they were not charged for the visit. A further 6.4% were charged less than \$10.

Pacific boys (SRR 1.11, 1.05–1.18) and Māori girls (SRR 1.07, 1.01–1.14) were significantly more likely to have not been charged for their last primary health care nurse visit than boys and girls in the total population.

After adjusting for age, children in NZDep2006 quintile 5 (most deprived) (92.7%, 89.1–96.4) were significantly more likely to have a free last primary health care nurse visit than those in quintile 1 (least deprived) (79.9%, 70.9–89.0).

One in two adults (55.7%, 53.4–57.9) reported they were not charged for their last visit to a primary health care nurse alone. A further 15.9% (14.2–17.6) of adults were charged \$1 to \$10, and 14.2% (12.7–15.8) were charged between \$10 and \$20.

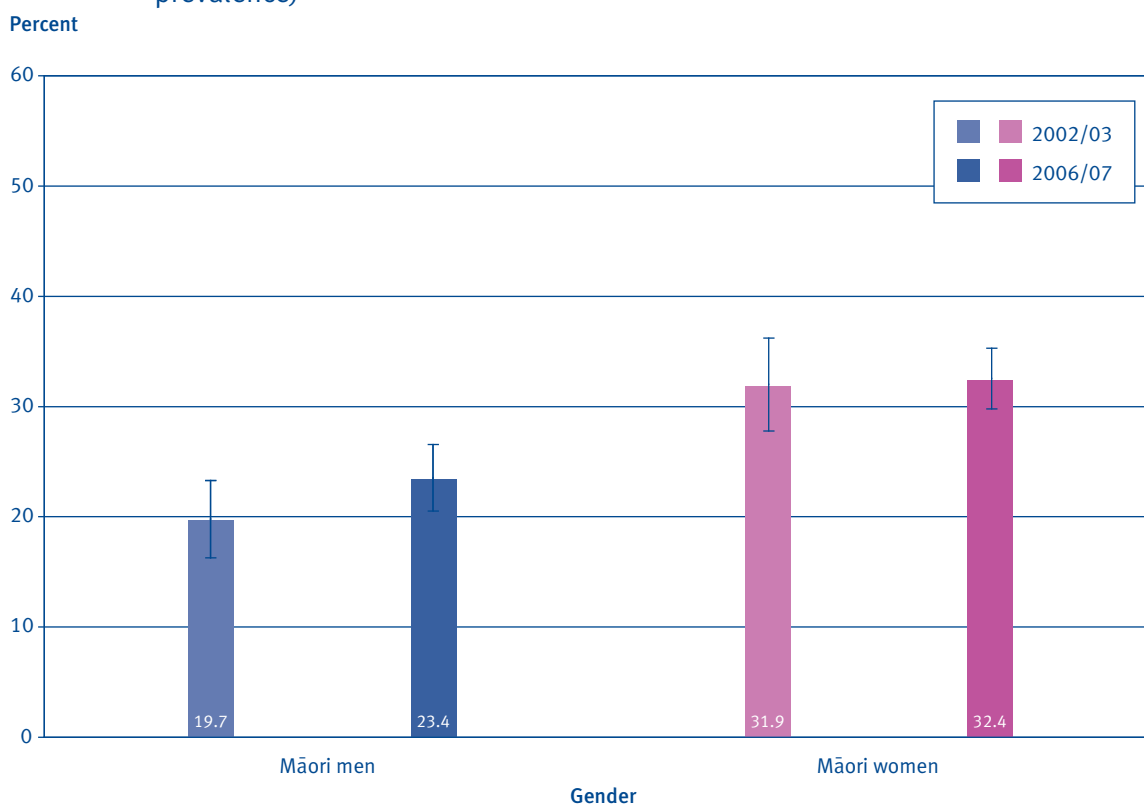
Asian women (SRR 1.23, 1.06–1.41) were significantly more likely than women in the total population to have not been charged for their last primary health care nurse visit.

Adults aged 65–74 years (66.5%, 62.0–71.0) and 75 years and over (66.0%, 60.9–71.0) were more likely than younger adults to have not been charged for their last visit to a primary health care nurse. There were no other significant differences in those who had not been charged for their last primary health care nurse visit by age and no differences by neighbourhood deprivation quintile.

Time trends in use of primary health care nurses

Between 2002/03 and 2006/07 there were no changes in the proportion of all adults who saw a primary health care nurse as part of a GP consultation in the previous 12 months, adjusted for age (graph not shown). However, there was a significant increase in the proportion of Māori men who saw a primary health care nurse as part of a GP consultation (p-value < 0.05), adjusted for age (Figure 6.29).

Figure 6.29: Māori adults who saw a primary health care nurse as part of a GP consultation in previous 12 months, by gender, 2002/03 and 2006/07 (age standardised prevalence)

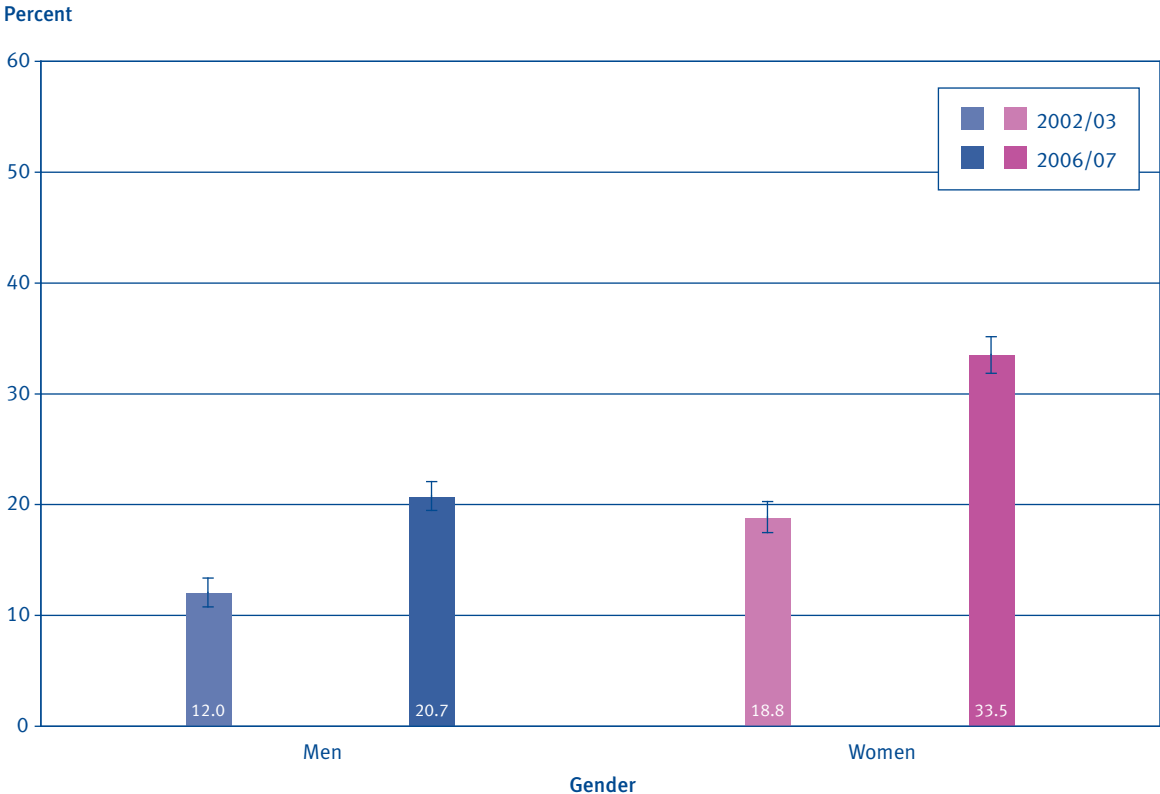


Source: 2002/03 and 2006/07 New Zealand Health Surveys

Note: Data from previous years have been reanalysed to allow for comparability.

Between 2002/03 and 2006/07 there was a large increase in the proportion of men and women who saw a primary health care nurse alone (without seeing a GP at the same time) in the previous 12 months, adjusted for age (Figure 6.30). This increasing trend was also seen for Māori adults (graph not shown).

Figure 6.30: Adults who saw a primary health care nurse alone in previous 12 months, by gender, 2002/03 and 2006/07 (age standardised prevalence)



Source: 2002/03 and 2006/07 New Zealand Health Surveys

Note: Data from previous years have been reanalysed to allow for comparability.

Oral health care workers

Introduction

The Ministry of Health has a vision for high-quality oral health services that promote, improve, maintain and restore good oral health, and that are proactive in addressing the needs of those at greatest risk of poor oral health (Ministry of Health 2006).

Promoting good oral health in young people has benefits over a lifetime. High levels of dental cavities in childhood lead to greater oral health disease levels in adulthood. Children and young people in New Zealand are entitled to free basic dental care from birth to their 18th birthday (Ministry of Health 2006).

What were the survey questions?

In the 2006/07 New Zealand Health Survey, adult participants and the parents of child participants were asked how long ago they/their child last saw an oral health care worker, whether there had been a time when they needed to see an oral health care worker and couldn't, and the reason they were unable to see them. Adult participants were also asked how often they usually see an oral health care worker.

The definition of oral health care worker included dentists, dental nurses, dental therapists, and specialists such as orthodontists.

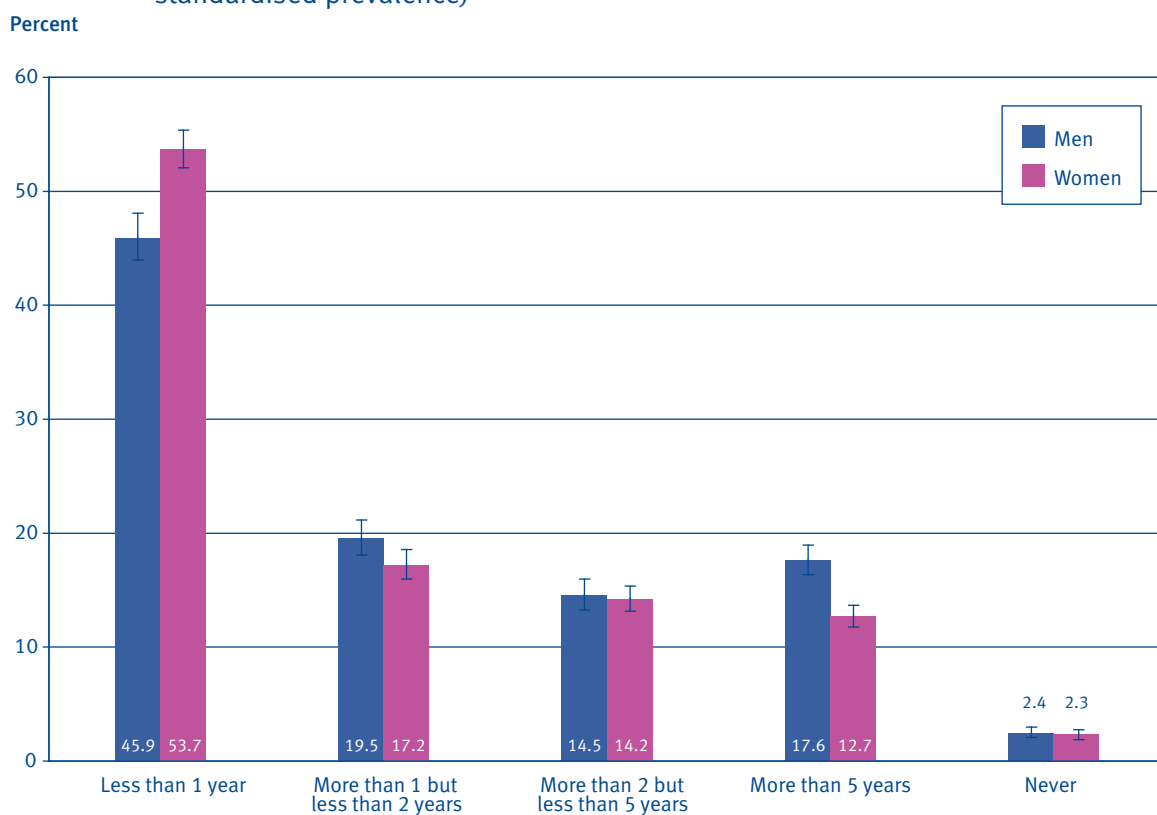
The key results for the oral health status of children and adults are included in Chapter 3 of this report.

Use of oral health care services for children and adults

Four out of five (80.4%, 78.9–81.9) children aged 2–14 years had visited an oral health care worker in the previous 12 months, and a further 9.4%, (8.1–10.8) had visited an oral health care worker more than one year but less than two years before. One in eleven children (8.9%, 7.9–9.8) aged 2–14 years had never seen an oral health care worker.

One in two adults (51.0%, 49.7–52.4) had visited an oral health care worker in the previous 12 months, and a further 17.8% (16.8–18.8) had visited an oral health care worker more than one year but less than two years before. One in forty (2.3%, 2.0–2.6) adults had never seen an oral health worker (Figure 6.31). Women (53.7%, 52.0–55.3) were significantly more likely than men (45.9%, 43.9–48.0) to have seen an oral health care worker in the previous 12 months.

Figure 6.31: Time since last visit to an oral health care worker for adults, by gender (age standardised prevalence)

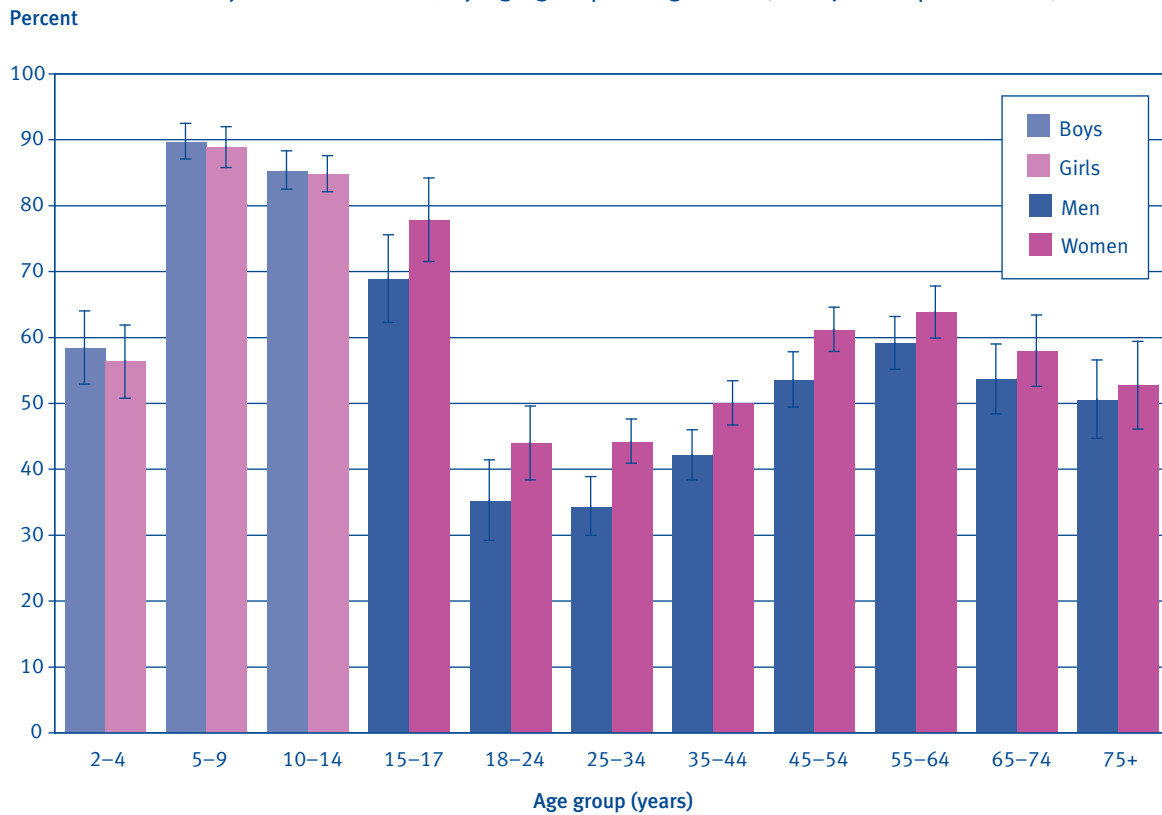


Source: 2006/07 New Zealand Health Survey

Use of oral health care services, by age group

School-aged children and young adults, particularly young women, were significantly more likely than all other age groups to have seen an oral health care worker in the previous 12 months. Women aged 25–54 years were significantly more likely than men of the same age to have visited an oral health care worker in the previous 12 months (Figure 6.32).

Figure 6.32: Visited an oral health care worker in the previous 12 months for children aged 2–14 years and adults, by age group and gender (unadjusted prevalence)

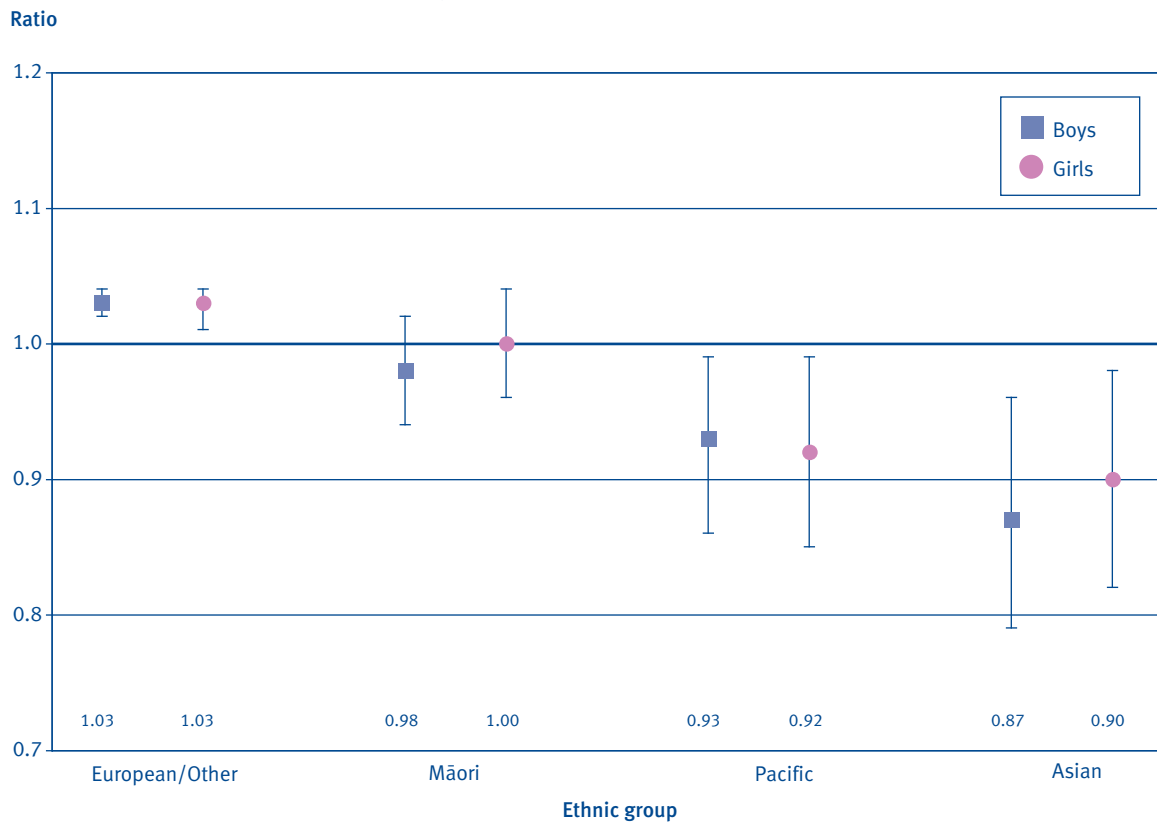


Source: 2006/07 New Zealand Health Survey

Use of oral health care services, by ethnic group

European/Other boys and girls aged 2–14 years were significantly more likely than boys and girls aged 2–14 years in the total population to have seen an oral health care worker in the previous 12 months. Pacific and Asian boys and girls were significantly less likely (Figure 6.33).

Figure 6.33: Children aged 2–14 years who saw an oral health care worker in the previous 12 months, by ethnic group and gender (age standardised rate ratio)

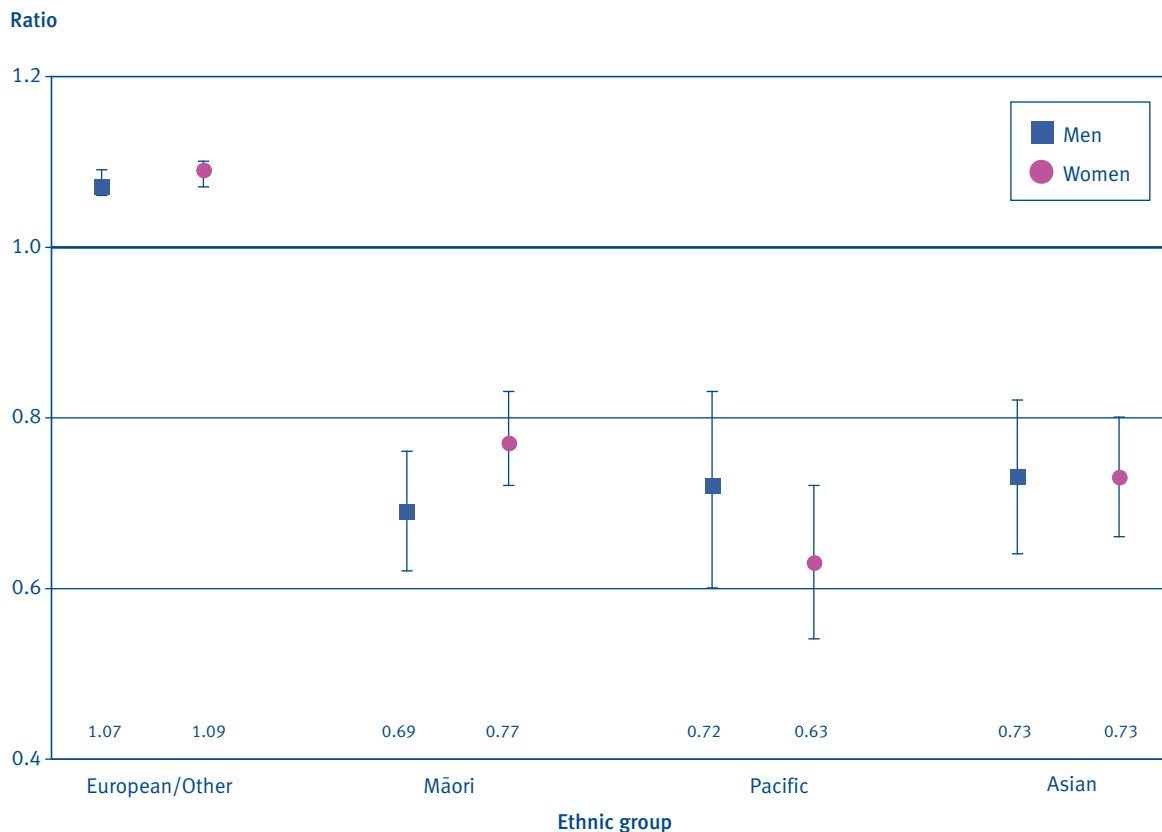


Source: 2006/07 New Zealand Health Survey

Notes: Age standardised to the WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged from 2-14 years. Total response standard output for ethnic groups has been used.

European/Other men and women were significantly more likely than men and women in the total adult population to have visited an oral health care worker in the previous 12 months. Māori, Pacific and Asian men and women were significantly less likely (Figure 6.34).

Figure 6.34: Adults who saw an oral health care worker in the previous 12 months, by ethnic group and gender (age standardised rate ratio)



Source: 2006/07 New Zealand Health Survey

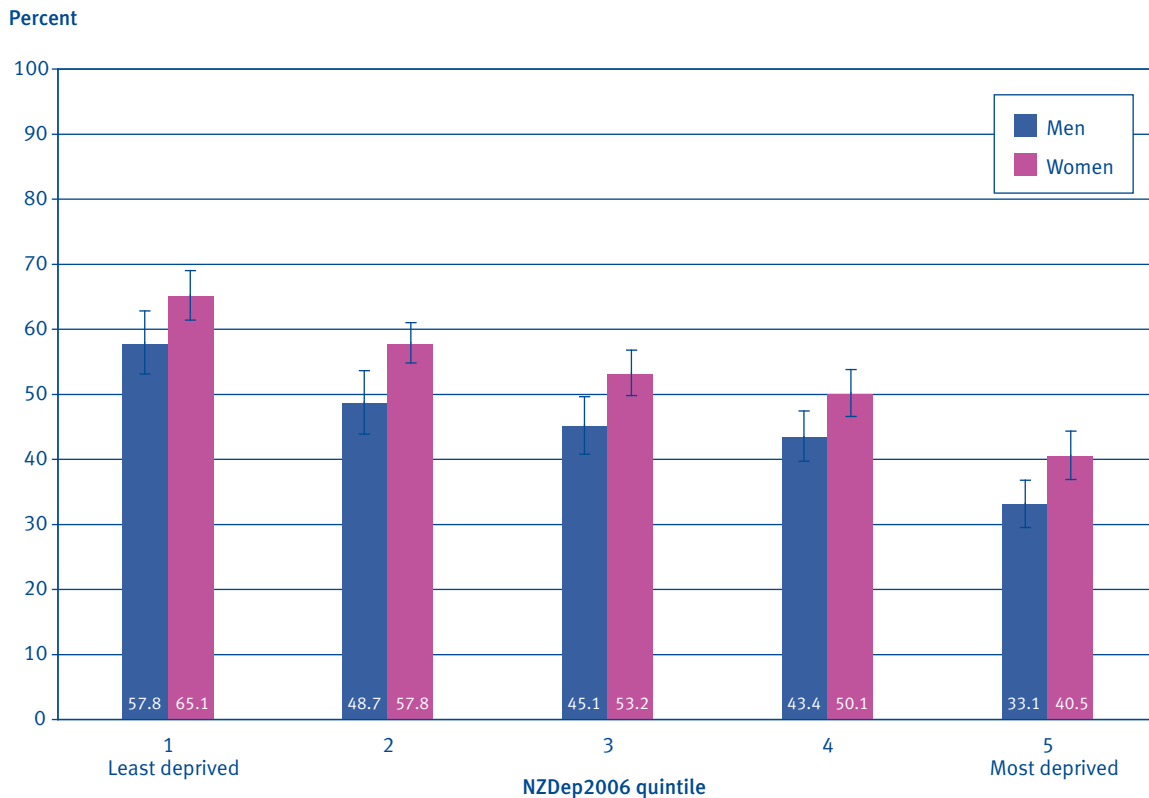
Notes: Age standardised to the WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 15 years and over. Total response standard output for ethnic groups has been used.

Use of oral health care services, by neighbourhood deprivation

Children living in neighbourhoods of high deprivation (NZDep 2006 quintile 5) were less likely to have seen an oral health care worker in the previous 12 months (77.0%, 73.4–80.5) compared to children living in the least deprived neighbourhoods (quintile 1) (84.8%, 81.3–88.3).

Men and women in NZDep2006 quintile 5 (most deprived) were significantly less likely than men and women in any other quintile to have seen an oral health care worker in the previous 12 months (Figure 6.35). One in three adults (36.9%, 34.0–39.8) in quintile 5 had visited an oral health care worker, compared with 61.7% (58.4–65.0) in quintile 1, adjusted for age.

Figure 6.35: Adults who saw an oral health care worker in the previous 12 months, by NZDep2006 quintile and gender (age standardised prevalence)



Source: 2006/07 New Zealand Health Survey

Use of oral health care services, by DHB area

The proportion of children aged 2–14 years who had visited an oral health care worker in the previous 12 months was significantly higher in the South Island DHBs, including Canterbury, compared to the national rate, while this proportion was significantly lower in Auckland and Wairarapa / Hutt Valley / Capital and Coast DHB areas (Table 6.6).

The proportion of adults who had visited an oral health care worker in the previous 12 months was also significantly higher in the South Island DHBs, including Canterbury, compared to the national rate, but significantly lower in Counties Manukau and Waikato DHB areas (Table 6.6).

Table 6.6: Visited an oral health care worker in the previous 12 months for children aged 2–14 years and adults, by DHB area (unadjusted)

DHB area	Prevalence in 2–14 year olds (95% CI)	Number of children	Prevalence in adults (95% CI)	Number of adults
Northland / Tairāwhiti / Hawke's Bay / Lakes / Whanganui	80.8 (76.9–84.7)	80500	50.1 (47.4–52.8)	170700
Waitemata	76.4 (71.1–81.7)	68500	50.3 (46.7–53.9)	183300
Auckland	72.3 (66.5–78.1) –	47200	49.7 (45.2–54.1)	155800
Counties Manukau	79.0 (74.8–83.2)	74700	43.4 (39.3–47.5) –	133500
Waikato	78.9 (74.4–83.4)	52200	46.1 (42.8–49.5) –	111100
Bay of Plenty / Taranaki / MidCentral	83.6 (79.5–87.8)	72200	50.9 (47.5–54.3)	163600
Wairarapa / Hutt Valley / Capital and Coast	70.9 (65.4–76.4) –	53600	53.6 (49.8–57.4)	178000
Canterbury	89.4 (84.8–93.9) +	71800	54.6 (50.8–58.5) +	187100
Nelson Marlborough / West Coast / South Canterbury / Otago / Southland	89.9 (85.5–94.3) +	76300	58.1 (54.0–62.2) +	200900
New Zealand total	80.4 (78.9–81.9)	596900	51.0 (49.7–52.4)	1484200

Source: 2006/07 New Zealand Health Survey

Notes: Estimates indicated with a + are significantly higher than the national rate, and estimates indicated with a – are significantly lower than the national rate. Data are based on direct survey estimates and could be confounded by different population characteristics in each DHB. Due to small sample size, some DHB areas have been combined. Survey population is the estimated resident population living in permanent private dwellings at 31 June 2007.

The proportion of children aged 2–14 years who had never visited an oral health care worker in the previous 12 months was significantly lower in the South Island DHB areas than the national rate, while this proportion was significantly higher in Auckland and Wairarapa / Hutt Valley / Capital and Coast DHB areas than nationally (Table 6.7).

The proportion of adults who had never visited an oral health care worker in the previous 12 months was significantly lower in the Wairarapa / Hutt Valley / Capital and Coast and the South Island DHB areas, including Canterbury, than the national rate, while this proportion was significantly higher in Auckland DHB area than nationally (Table 6.7).

Table 6.7: Never visited an oral health care worker for children aged 2-14 years and adults, by DHB area (unadjusted)

DHB area	Prevalence in 2–14 year olds (95% CI)	Number of children	Prevalence in adults (95% CI)	Number of adults
Northland / Tairāwhiti / Hawke's Bay / Lakes / Whanganui	9.5 (6.8–12.1)	9400	2.5 (1.5–3.5)	8600
Waitemata	7.7 (4.7–10.7)	7000	2.2 (1.3–3.1)	8000
Auckland	13.2 (9.1–17.3) +	8600	5.9 (4.4–7.4) +	18500
Counties Manukau	9.9 (6.8–12.9)	9300	3.4 (2.2–4.5)	10400
Waikato	11.1 (7.5–14.8)	7400	2.1 (1.0–3.3)	5100
Bay of Plenty / Taranaki / MidCentral	7.0 (4.6–9.4)	6000	2.1 (1.4–2.8)	6800
Wairarapa / Hutt Valley / Capital and Coast	14.5 (10.2–18.7) +	11000	1.0 (0.5–1.8) –	3300
Canterbury	4.8 (2.2–8.7) –	3800	1.0 (0.5–2.0) –	3500
Nelson Marlborough / West Coast / South Canterbury / Otago / Southland	4.0 (1.8–7.6) –	3500	1.1 (0.5–2.1) –	3800
New Zealand total	8.9 (7.9–9.8)	65900	2.3 (2.0–2.6)	68000

Source: 2006/07 New Zealand Health Survey

Notes: Estimates indicated with a + are significantly higher than the national rate, and estimates indicated with a – are significantly lower than the national rate. Data are based on direct survey estimates and could be confounded by different population characteristics in each DHB. Due to small sample size, some DHB areas have been combined. Survey population is the estimated resident population living in permanent private dwellings at 31 June 2007.

Regularity of oral health care for adults

Two out of five adults (41.0%, 39.7–42.3) reported that they visit an oral health care worker at least every two years for a check-up, while a further 9.2%, (8.6–9.9) said they have regular check-ups but with intervals of more than two years. Two out of five adults (40.3%, 39.0–41.5) reported that they only visit an oral health care worker when they have a toothache, and one in ten (9.5%, 8.8–10.2) said they never visited an oral health care worker.

European/Other adults (SRR 1.13, 1.11–1.14) were significantly more likely to visit an oral health care worker at least every two years for a regular check-up than the total adult population. Māori (SRR 1.32, 1.25–1.38), Pacific (SRR 1.44, 1.34–1.54) and Asian (SRR 1.19, 1.12–1.26) adults were significantly more likely to visit an oral health care worker only when they have a toothache.

Unmet need for oral health care services in previous 12 months

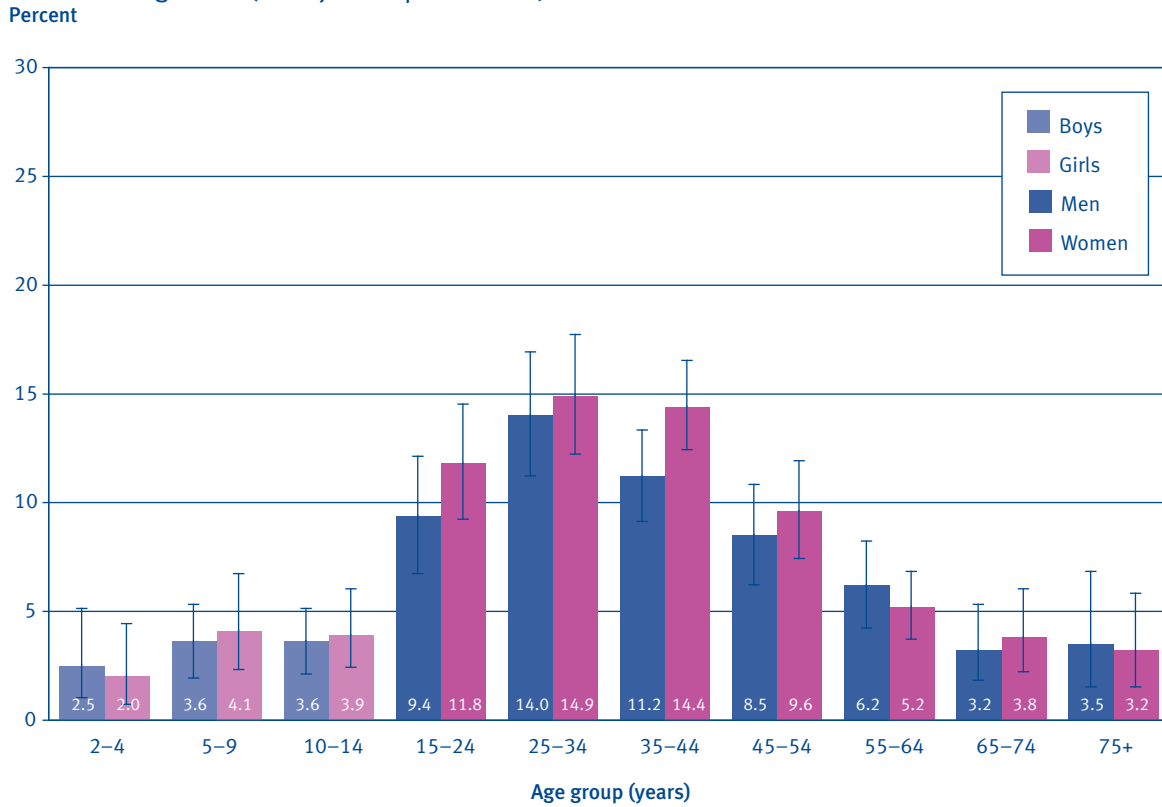
One in twenty-nine children (3.4%, 2.8–4.1) aged 2–14 years and one in ten adults (10.0%, 9.3–10.7) were unable to see an oral health care worker when they needed to in the previous 12 months. This equates to 25,600 children and 291,300 adults.

There were no significant differences in unmet need for an oral health care worker in the previous 12 months by gender for children or adults, adjusted for age.

Unmet need for oral health care services, by age group

Boys and girls aged 2–14 years and men and women aged 65 years and over were significantly less likely to have an unmet need for oral health care services than men and women aged 15–64 years (Figure 6.36).

Figure 6.36: Unmet need for oral health care services for children and adults, by age group and gender (unadjusted prevalence)



Source: 2006/07 New Zealand Health Survey

Unmet need for oral health care services, by ethnic group

Table 6.8 gives an indication of the proportion and number of children in New Zealand's main ethnic groups that were unable to see an oral health care worker in the previous 12 months when they needed to.

Table 6.8: Unmet need for an oral health care worker in the previous 12 months for children aged 2–14 years, by ethnic group (unadjusted)

Ethnic group	Prevalence in children 2-14 years (95% CI)	Number of children 2–14 years
European/ Other	3.7 (2.9–4.5)	20800
Māori	4.6 (3.4–5.8)	7800
Pacific	2.2 (1.3–3.7)	1900
Asian	2.9 (1.6–4.8)	1900

Source: 2006/07 New Zealand Health Survey

Note: Total response standard output for ethnic groups has been used.

After adjusting for age, Māori boys (SRR 1.64, 1.04–2.25) were significantly more likely to have been unable to see an oral health care worker in the previous 12 months than all boys aged 2–14 years. Pacific girls (SRR 0.52, 0.06–0.98) were significantly less likely to have been unable to see an oral health care worker in the previous 12 months than all girls aged 2–14 years.

Table 6.9 gives an indication of the proportions and numbers of adults in New Zealand’s main ethnic population groups who were unable to see an oral health care worker when they needed to in the previous 12 months.

Table 6.9: Unmet need for an oral health worker in the previous 12 months for adults, by ethnic group (unadjusted)

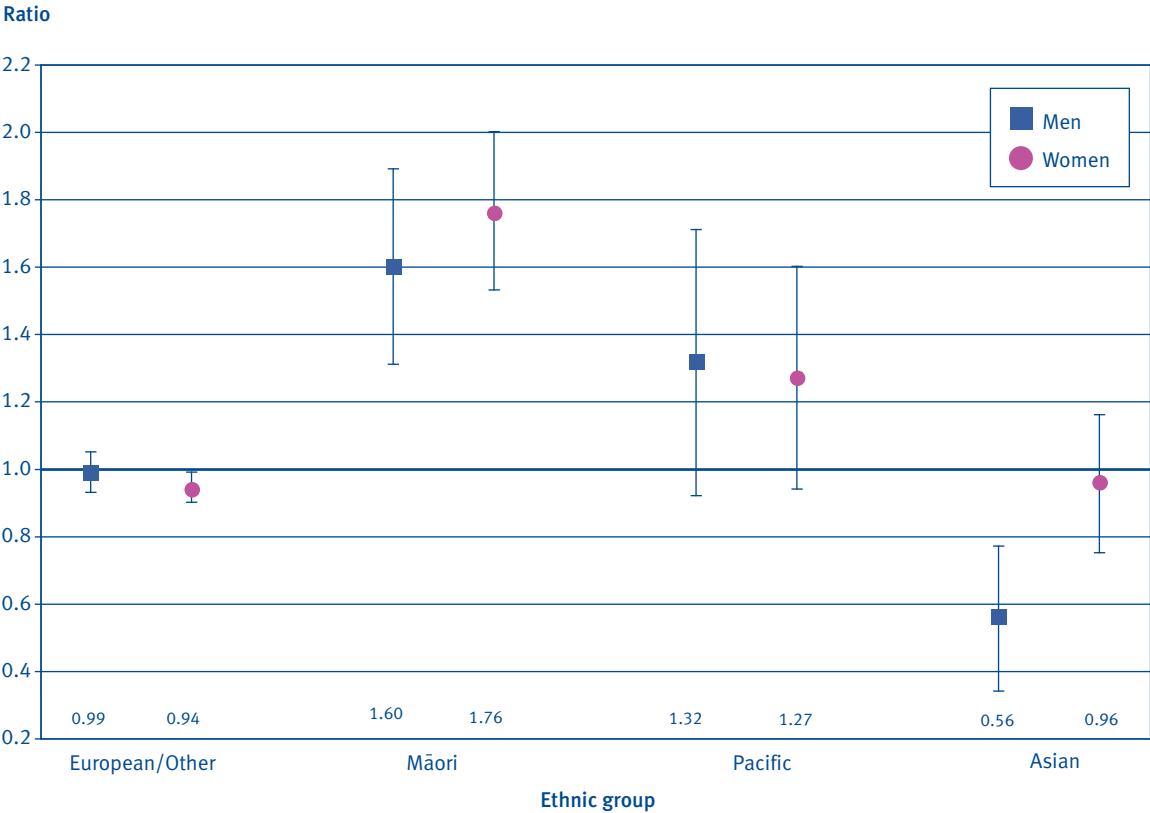
Ethnic group	Prevalence (95% CI)	Number of adults
European/ Other	9.4 (8.6–10.2)	222000
Māori	18.1 (16.4–19.8)	59900
Pacific	14.1 (11.4–16.7)	22700
Asian	8.7 (6.9–10.4)	23900

Source: 2006/07 New Zealand Health Survey

Note: Total response standard output for ethnic groups has been used.

When adjusting for age, Māori men and women were significantly more likely to have been unable to see an oral health care worker in the previous 12 months than men and women in the total adult population, while Asian men were significantly less likely than men in the total population (Figure 6.37).

Figure 6.37: Adults with an unmet need for oral health care services, by ethnic group and gender (age standardised rate ratio)



Source: 2006/07 New Zealand Health Survey

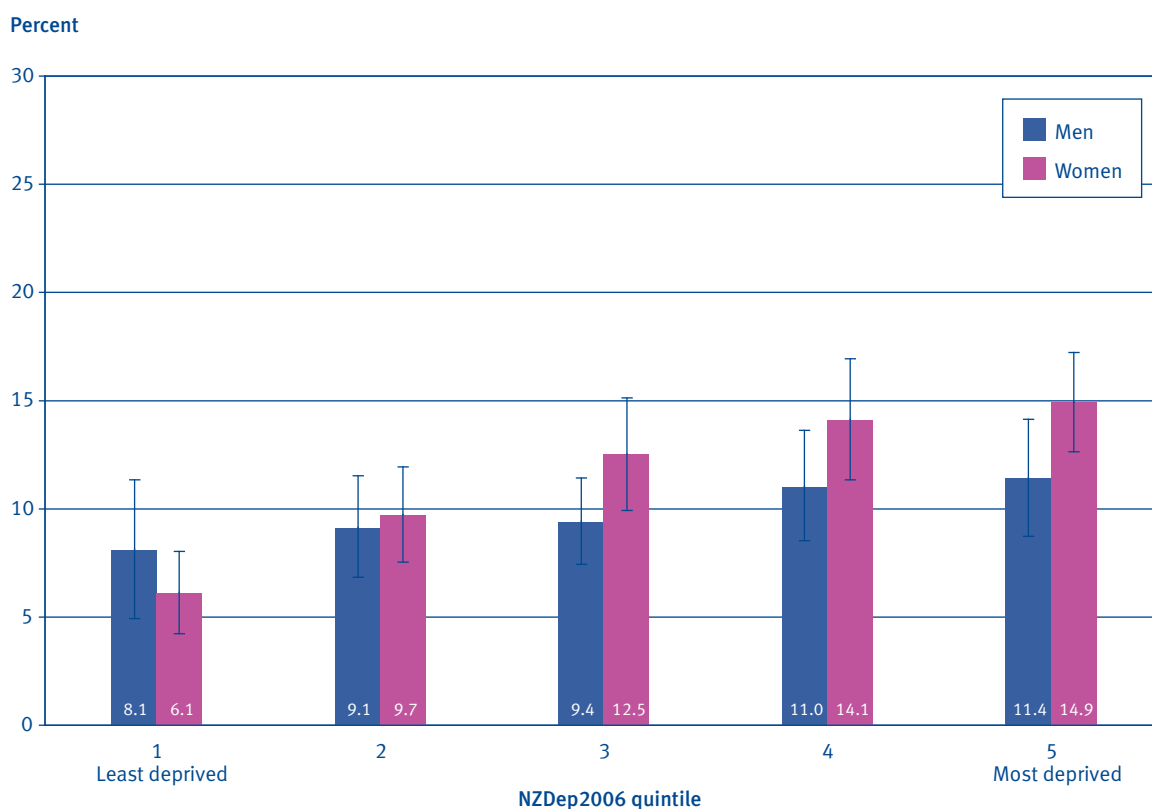
Notes: Age standardised to the WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 15 years and over. Total response standard output for ethnic groups has been used.

Unmet need for oral health care services, by neighbourhood deprivation

There were no significant differences in unmet need for oral health care services between NZDep2006 quintile 1 (least deprived) and quintile 5 (most deprived) for children aged 2–14 years.

Women in NZDep2006 quintile 5 (most deprived) were significantly more likely to have been unable to see an oral health care worker in the previous 12 months compared to those in quintiles 1 (least deprived) or 2. There were no statistically significant differences in unmet need for oral health care services by neighbourhood deprivation for men (Figure 6.38).

Figure 6.38: Unmet need for an oral health care worker in the previous 12 months, by NZDep2006 quintile and gender (age standardised prevalence)



Source: 2006/07 New Zealand Health Survey

Unmet need for oral health care services, by DHB area

The proportion of children aged 2–14 years with an unmet need for oral health care services was significantly lower in the Counties Manukau and Canterbury DHB areas than nationally (Table 6.10).

The proportion of adults with an unmet need for oral health care services was significantly lower in the Canterbury DHB area than the national rate, while this proportion was significantly higher in Northland / Tairāwhiti / Hawke’s Bay / Lakes / Whanganui and Waikato DHB areas than nationally (Table 6.10).

Table 6.10: Unmet need for oral health care services for children aged 2–14 years and adults, by DHB area (unadjusted)

DHB area	Prevalence in children (95% CI)	Number of children	Prevalence in adults (95% CI)	Number of adults
Northland / Tairāwhiti / Hawke’s Bay / Lakes / Whanganui	4.0 (2.4–5.6)	4000	13.0 (11.0–14.9) +	44100
Waitemata	2.7 (1.1–5.5)	2500	11.3 (9.0–13.7)	41300
Auckland	4.3 (1.8–8.4)	2900	8.4 (6.4–10.5)	26500
Counties Manukau	0.9 (0.4–1.8) –	800	8.0 (5.7–10.4)	24700
Waikato	2.8 (1.4–5.1)	1800	12.6 (10.1–15.2) +	30500
Bay of Plenty / Taranaki / MidCentral	4.2 (2.5–6.5)	3600	10.7 (8.9–12.4)	34300
Wairarapa / Hutt Valley / Capital and Coast	6.1 (3.3–10.3)	4600	10.1 (7.7–12.5)	33500
Canterbury	0.9 (0.2–2.6) –	700	8.0 (6.0–10.0) –	27300
Nelson Marlborough / West Coast / South Canterbury / Otago / Southland	5.4 (2.6–9.9)	4600	8.4 (6.2–10.7)	29200
New Zealand total	3.4 (2.8–4.1)	25600	10.0 (9.3–10.7)	291300

Source: 2006/07 New Zealand Health Survey

Notes: Estimates indicated with a + are significantly higher than the national rate, and estimates indicated with a – are significantly lower than the national rate. Data are based on direct survey estimates and could be confounded by different population characteristics in each DHB. Due to small sample size, some DHB areas have been combined. Survey population is the estimated resident population living in permanent private dwellings at 31 June 2007.

Reason for unmet need for oral health care services

For children aged 2–14 years the main barrier to seeing an oral health care worker was inability to get an appointment soon enough or at a suitable time, followed by needing to see an oral health care worker after hours and cost (Table 6.11). A large proportion of parents of child participants gave other reasons for their child being unable to see an oral health care worker when they needed to, including the child was unwell, didn't know where to go or who to contact, away from usual oral health care worker and school dental clinic closed.

For adults, the main reason for being unable to see an oral health care worker was cost, followed by inability to get an appointment soon enough or at a suitable time and couldn't spare the time (Table 6.11).

Table 6.11: Unmet need for oral health care services in the previous 12 months for children aged 2–14 years and adults, by reason (unadjusted)

Reason for unmet need	Prevalence in children (95% CI)	Prevalence in adults (95% CI)
Cost	8.0 (3.7–14.7)	52.9 (50.0–55.8)
Couldn't get appointment	48.2 (37.4–59.0)	18.7 (16.0–21.3)
Couldn't spare time	2.9 (0.8–7.3)	14.1 (11.3–16.9)
Fear / anxiety	2.2 (0.6–5.9)	10.5 (8.3–12.7)
Didn't want to make a fuss	2.6 (0.7–6.6)	8.3 (6.2–10.5)
Transport	1.8 (0.6–4.3)	1.7 (1.0–2.7)
Child care	–	0.8 (0.3–1.6)
After hours	10.1 (4.2–19.5)	1.7 (1.0–2.7)
Couldn't get in touch	–	2.2 (1.0–4.0)
Other	31.7 (22.1–41.3)	2.1 (1.1–3.5)

Source: 2006/07 New Zealand Health Survey

Note: – indicates that numbers were very small.

Complementary and alternative health care professionals

Introduction

Complementary and alternative health care is a term used to describe a broad range of healing techniques that encompass all health systems, practices and their accompanying theories and beliefs, other than those in the mainstream health system of New Zealand. Complementary and alternative health care services generally take a holistic approach to health care, including the interactions between physical, spiritual, social and psychological aspects (Ministerial Advisory Committee On Complementary and Alternative Health 2004).

What were the survey questions?

In the 2006/07 New Zealand Health Survey, adult participants were asked how many times they had seen a complementary or alternative health care worker in the previous 12 months, the reason (health condition) for the visit, and whether they had seen a GP about the same condition. A show card which listed the following types of complementary and alternative health care workers was used:

- massage therapist
- homoeopath or naturopath
- acupuncturist
- traditional Chinese medicine practitioner
- herbalist
- aromatherapist
- spiritual healer
- Māori traditional rongoā healer
- Pacific traditional healer
- other, please specify.

Use of complementary and alternative health care in the previous 12 months

Overall, one in five (18.2%, 17.3–19.1) adults reported that they had seen a complementary or alternative health care worker in the previous 12 months. Women (22.3%, 21.1–23.5) were significantly more likely than men (14.1%, 12.7–15.6) to have seen a complementary or alternative health care worker in the previous 12 months, adjusted for age.

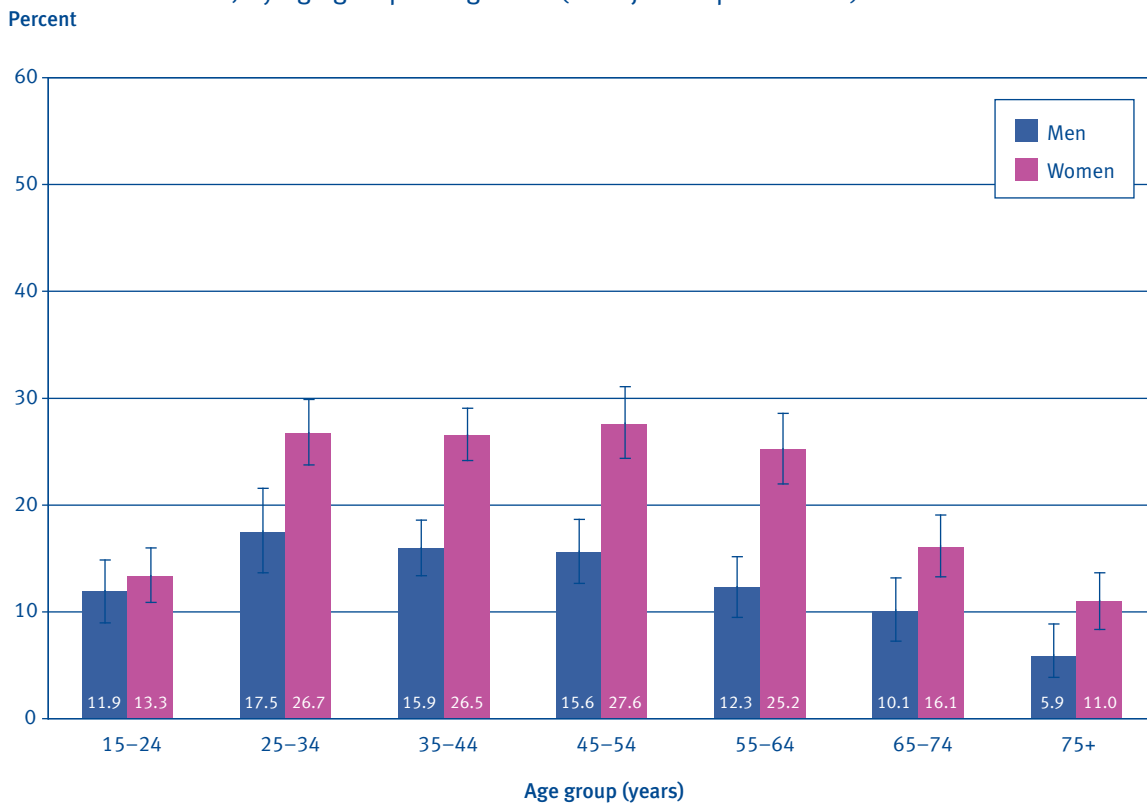
Less than 0.5% of adults said they go to a complementary or alternative health care worker first when they are feeling unwell or injured (that is, they had a complementary or alternative health care worker as their primary health care provider).

One in three (29.0%, 26.7–31.3) adults who visited a complementary or alternative health care worker in the previous 12 months said that the last time they saw a complementary or alternative health care worker they also saw a GP about the same condition.

Use of complementary and alternative health care, by age group

Women aged 25–64 years were significantly more likely to have seen a complementary or alternative health care worker in the previous 12 months than women aged 15–24 or over 65 years. Women aged over 25 years were also significantly more likely to have seen a complementary or alternative health care worker than men of the same age (Figure 6.39).

Figure 6.39: Use of complementary and alternative health care in the previous 12 months for adults, by age group and gender (unadjusted prevalence)

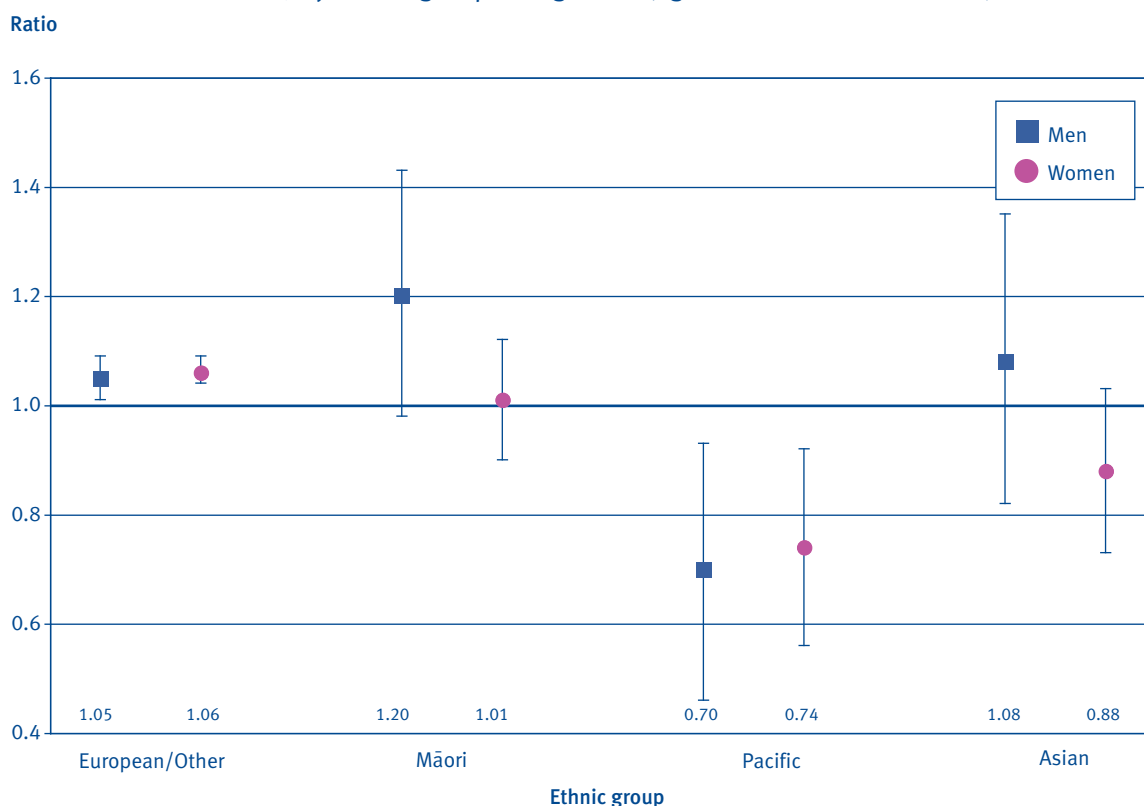


Source: 2006/07 New Zealand Health Survey

Use of complementary and alternative health care, by ethnic group

European/Other men and women were significantly more likely than men and women in the total population to have seen a complementary or alternative health care worker in the previous 12 months, while Pacific men and women were significantly less likely to have seen a complementary or alternative health care worker in the previous 12 months (Figure 6.40).

Figure 6.40: Adults who saw a complementary or alternative health care worker in the previous 12 months, by ethnic group and gender (age standardised rate ratio)



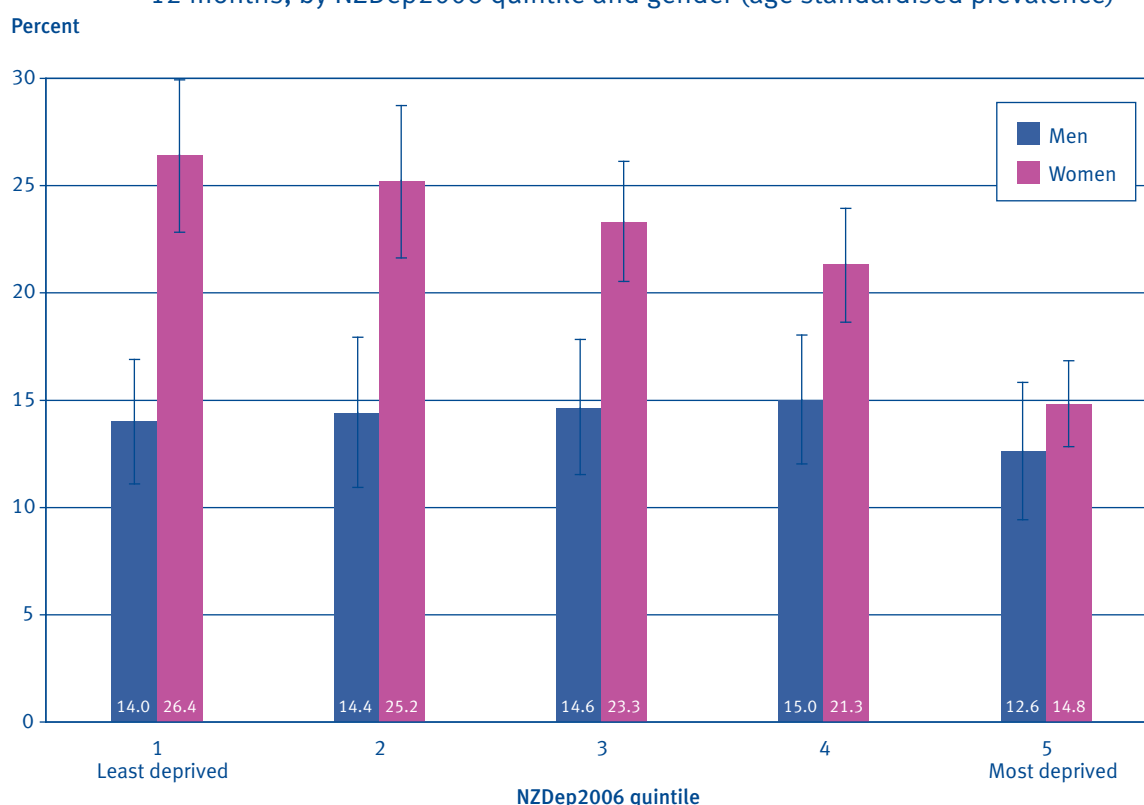
Source: 2006/07 New Zealand Health Survey

Notes: Age standardised to the WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 15 years and over. Total response standard output for ethnic groups has been used.

Use of complementary and alternative health care, by neighbourhood deprivation

The proportion of women who saw a complementary or alternative health care worker in the previous 12 months decreased with increasing deprivation, with women in NZDep2006 quintile 5 (most deprived) being significantly less likely than women in any other NZDep2006 quintile to have seen a complementary or alternative health care worker in the previous 12 months (Figure 6.41). There were no significant differences for men who saw a complementary or alternative health care worker in the previous 12 months by neighbourhood deprivation.

Figure 6.41: Adults who saw a complementary or alternative health care worker in the previous 12 months, by NZDep2006 quintile and gender (age standardised prevalence)



Source: 2006/07 New Zealand Health Survey

Type of complementary and alternative health care workers seen

Of those adults who saw a complementary or alternative health care worker in the previous 12 months, over half (55.8%, 53.3–58.3) saw a massage therapist, one in four (25.8%, 23.5–28.2) saw a homoeopath or naturopath, and one in five (18.5%, 16.6–20.4) saw an acupuncturist. Other types of complementary health care workers seen were:

- spiritual healer (9.1%, 7.6–10.7)
- traditional Chinese medicine practitioner (6.7%, 5.2–8.2)
- herbalist (6.5%, 5.2–7.8)
- Māori traditional rongoā healer (3.2%, 2.5–3.8)
- aromatherapist (2.3%, 1.4–3.3)
- Pacific traditional healer (1.4%, 0.8–1.9).

Reason for using complementary and alternative health care

The most common reason given for visiting a complementary or alternative health care worker was physical wellbeing, with 41.9% (39.3–44.5) of those who had seen a complementary health care worker citing this as a reason. One in four reported short-term illness (25.2%, 22.9–27.5) and one in four reported chronic illness (25.1%, 23.1–27.2) as the reason for their visit, while 15.8% (13.8–17.9) cited injury or poisoning and 8.6% (7.4–9.9) mental health.

Other health care workers

Introduction

Other health care workers are those who also work in the primary health sector and have not already been covered in earlier sections of this report. This includes any health care worker other than GPs, primary health care nurses, oral health workers and complementary and alternative health care workers.

What were the survey questions?

In the 2006/07 New Zealand Health Survey, adult participants and parents of child participants were asked how many times they had seen another health care worker about their own (or their child's) health. A show card which listed the following types of health care workers was used:

- Well Child nurse
- other nurse
- pharmacist
- physiotherapist
- chiropractor
- osteopath
- dietitian
- optician or optometrist
- occupational therapist
- speech-language therapist
- midwife
- mental health worker (eg, social worker, psychologist or counsellor).

Use of a Well Child nurse for children aged under five years

Well Child nurses include Plunket nurses as well as other community workers who provide support services for the development, health and wellbeing of children under five years of age.

Over half (54.6%, 51.4–57.9) of children aged under five were reported by their parent to have seen a Well Child nurse in the previous 12 months. European/Other (SRR 1.05, 1.02–1.09) children aged under five years were significantly more likely than all children aged under five years to have seen a Well Child nurse in the previous 12 months. There were no significant differences for those who saw a Well Child nurse by gender or neighbourhood deprivation.

For those who saw a Well Child nurse in the previous 12 months, the median number of visits was two.

Use of other health care workers in the previous 12 months

Other types of health care workers most commonly seen by children in the previous 12 months, other than a Well Child nurse, were pharmacists, followed by opticians then midwives. Other types of health care workers most commonly seen by adults in the previous 12 months were pharmacists, followed by physiotherapists and opticians (Table 6.12).

Table 6.12: Use of other health care workers in the previous 12 months for children and adults (unadjusted)

Type of health care worker	Prevalence in children (95% CI)	Prevalence in adults (95% CI)
Pharmacist	8.8 (7.8–9.9)	18.4 (17.4–19.3)
Physiotherapist	2.7 (2.1–3.4)	13.0 (12.2–13.7)
Chiropractor	3.0 (2.4–3.6)	5.4 (4.9–5.9)
Osteopath		4.4 (3.9–4.9)
Dietitian	0.9 (0.5–1.3)	1.9 (1.6–2.2)
Optician or optometrist	6.1 (5.0–7.2)	12.9 (12.1–13.7)
Occupational therapist	0.7 (0.4–1.2)	0.8 (0.6–1.0)
Speech-language therapist	2.3 (1.7–2.9)	–
Midwife	5.3 (4.6–6.1)	2.9 (2.5–3.2)
Psychologist, counsellor or social worker	3.3 (2.5–4.0)	3.5 (3.1–3.9)

Source: 2006/07 New Zealand Health Survey

Note: – indicates that numbers were very small. Chiropractor and Osteopath were not asked about separately in the child questionnaire.

Medical specialists

Introduction

A medical specialist, as defined in this report, is a doctor who specialises in a branch of medicine other than general practice. Medical specialists include general physicians, general surgeons, paediatricians, cardiologists, dermatologists, geriatricians, obstetric and gynaecology specialists, neurologists, urologists, ear nose and throat surgeons, rheumatologists, ophthalmologists, orthopaedic surgeons, and many more types of doctors. Medical specialists can see patients in public hospitals or in private clinics.

What were the survey questions?

In the 2006/07 New Zealand Health Survey, adult participants and the parents of child participants were asked how many times they/their child had seen a medical specialist (most common types were listed on a show card) in the previous 12 months. If they had seen a specialist they were asked where the last visit took place.

Participants were asked to exclude medical specialists they had seen as an inpatient at a hospital.

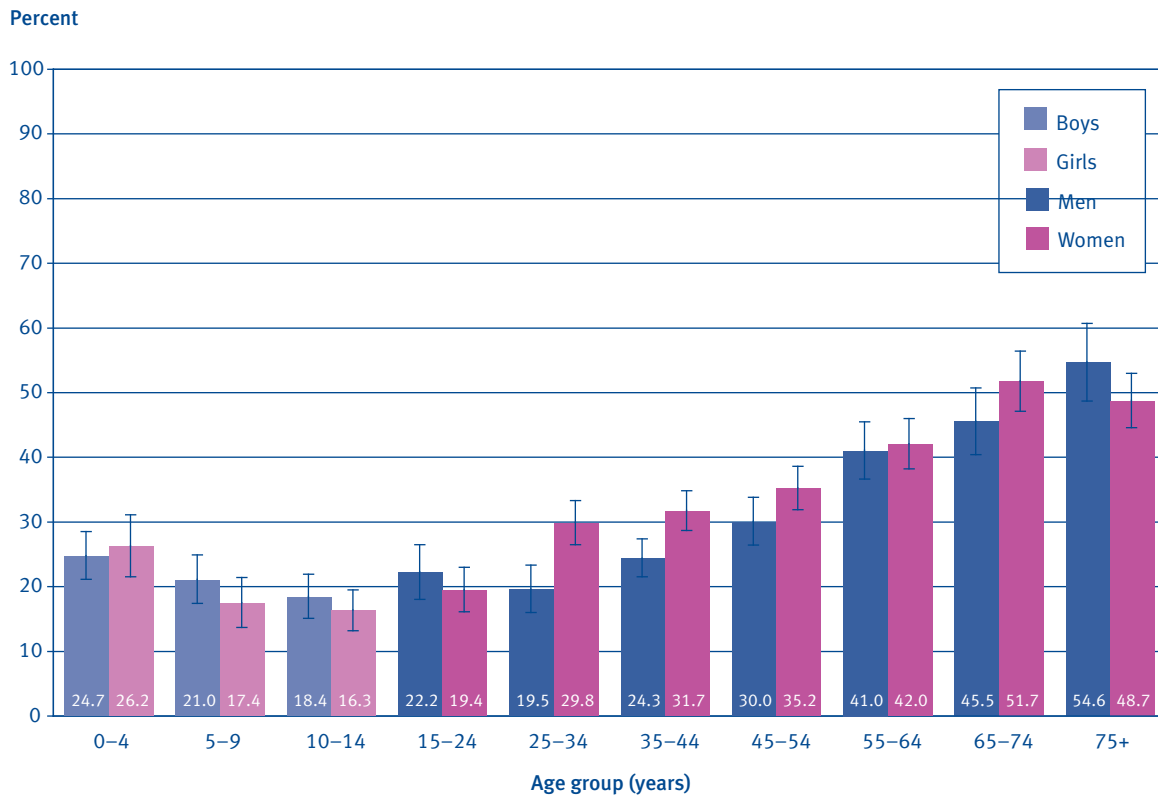
Seen a medical specialist in the previous 12 months

Overall, one in five children (20.6%, 19.2–22.0) and one in three adults (32.2%, 31.2–33.3) had seen a medical specialist in the previous 12 months. Women (32.3%, 31.0–33.6) were significantly more likely than men (28.3%, 26.7–30.0) to have seen a medical specialist in the previous 12 months, while boys and girls were equally likely, adjusted for age. For those who saw a medical specialist in the previous 12 months, the median number of visits for children was one and for adults it was two.

Seen a medical specialist, by age group

For children the proportion who had seen a medical specialist in the previous 12 months decreased with age, while for adults the proportion who had seen a specialist increased with age (Figure 6.42). Women aged 25–44 years were significantly more likely to have seen a medical specialist in the previous 12 months than men of the same age.

Figure 6.42: Children and adults who saw a medical specialist in the previous 12 months, by age group and gender (unadjusted prevalence)

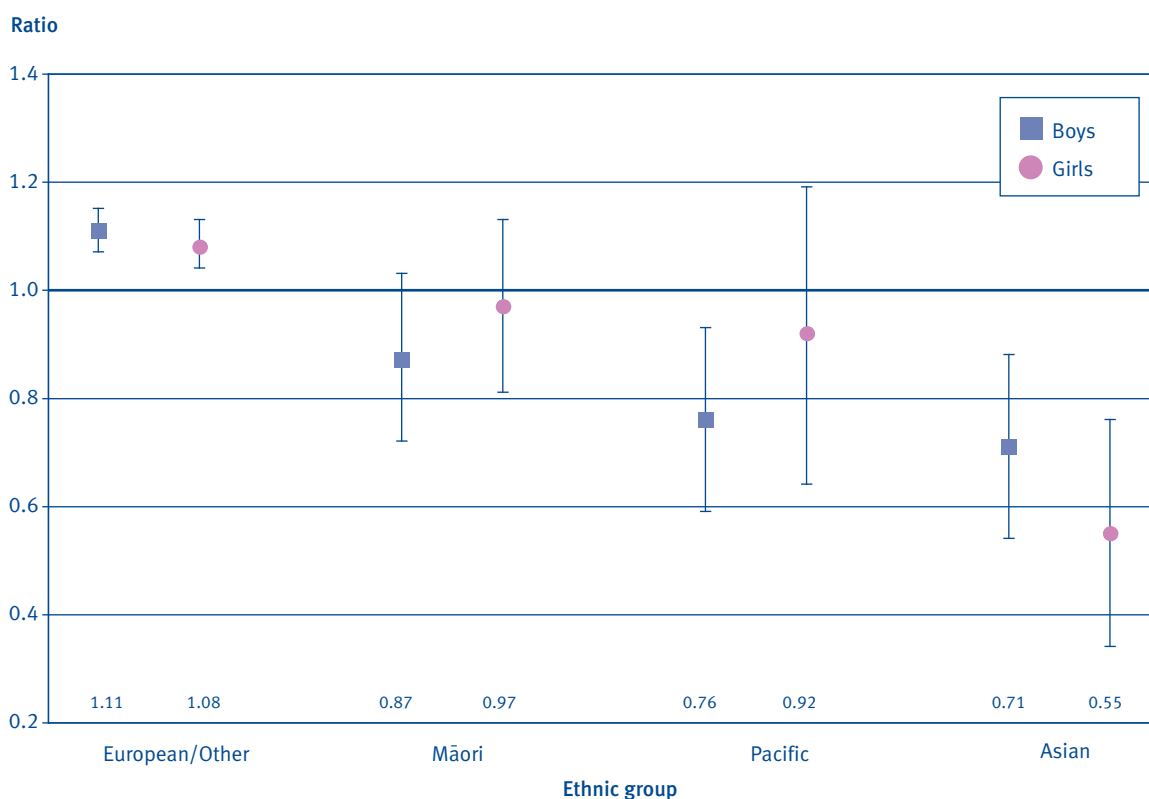


Source: 2006/07 New Zealand Health Survey

Seen a medical specialist, by ethnic group

European/Other boys and girls were significantly more likely than boys and girls in the total population to have seen a medical specialist in the previous 12 months. Pacific boys and Asian boys and girls were significantly less likely (Figure 6.43).

Figure 6.43: Children who saw a medical specialist in the previous 12 months, by ethnic group and gender (age standardised rate ratio)

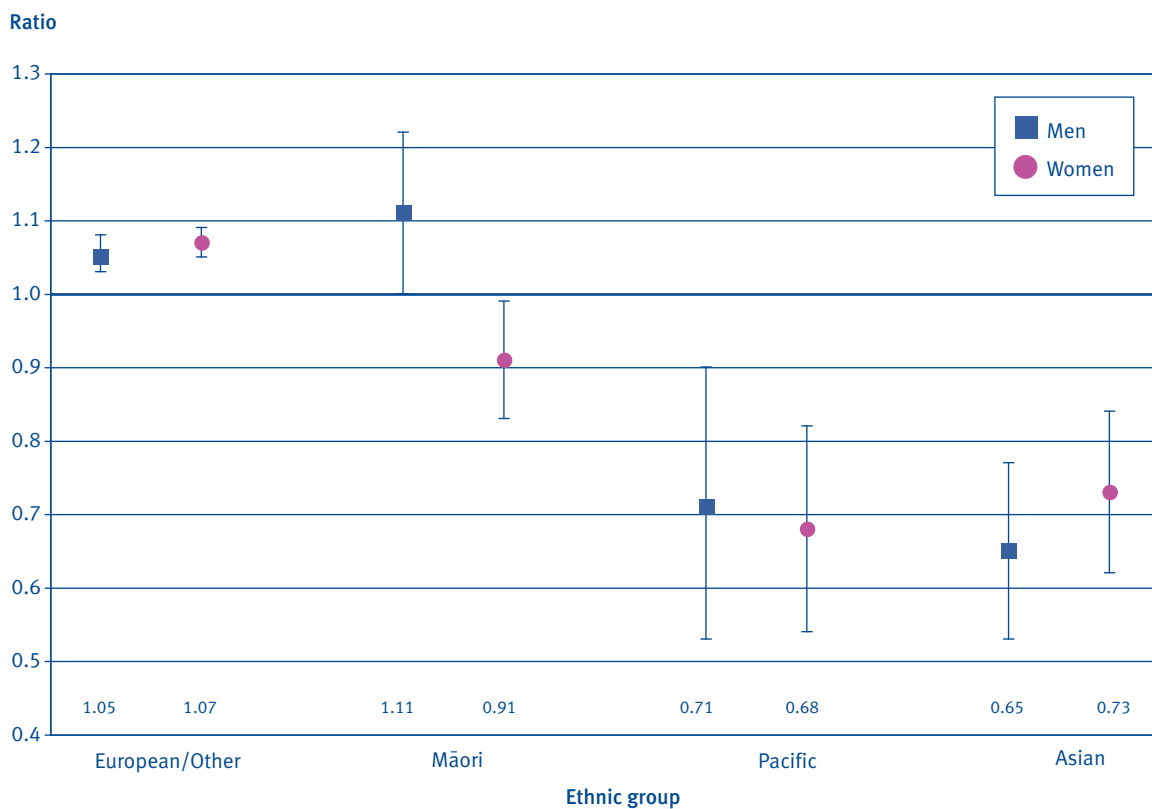


Source: 2006/07 New Zealand Health Survey

Notes: Age standardised to the WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged birth to 14 years. Total response standard output for ethnic groups has been used.

European/Other men and women were significantly more likely than men and women in the total adult population to have seen a medical specialist in the previous 12 months. Pacific and Asian men and women were significantly less likely. Māori women were significantly less likely than women in the total population to have seen a medical specialist in the previous 12 months (Figure 6.44).

Figure 6.44: Adults who saw a medical specialist in the previous 12 months, by ethnic group and gender (age standardised rate ratio)



Source: 2006/07 New Zealand Health Survey

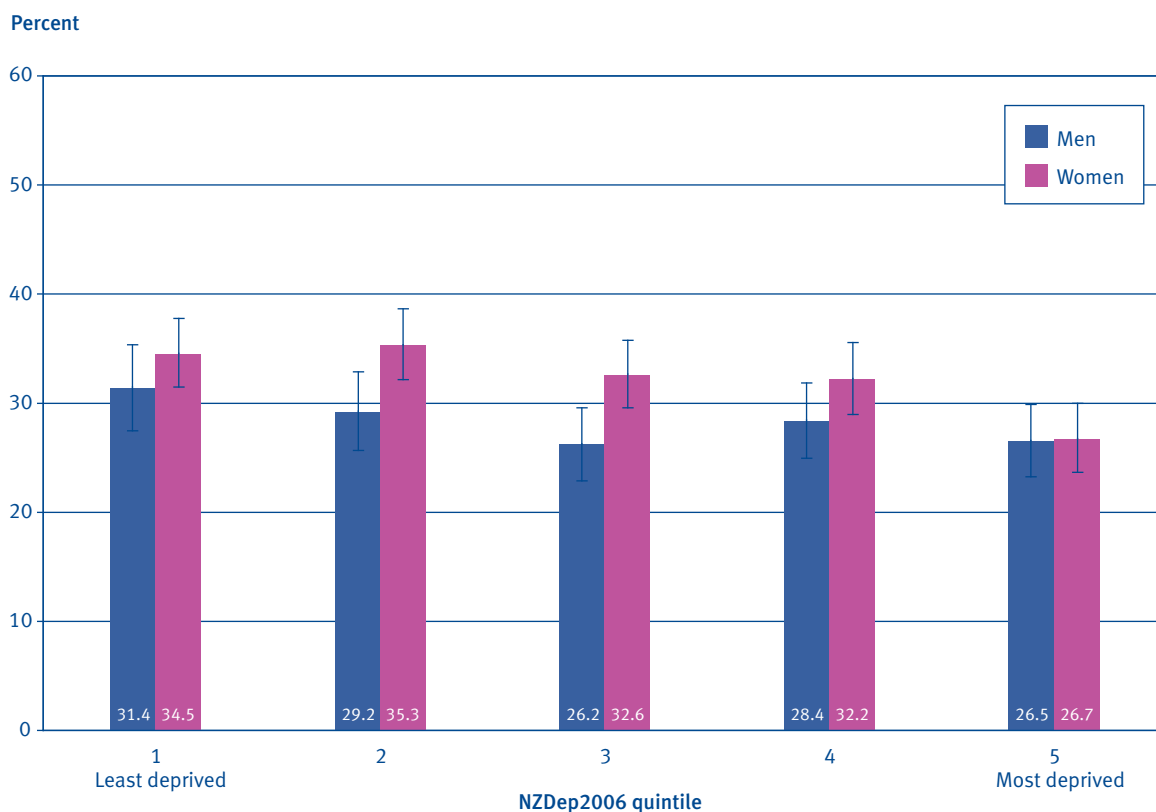
Notes: Age standardised to the WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 15 years and over. Total response standard output for ethnic groups has been used.

Seen a medical specialist, by neighbourhood deprivation

There were no significant differences for children who saw a medical specialist in the previous 12 months by neighbourhood deprivation.

Women in NZDep2006 quintile 5 (most deprived) were less likely than those in quintiles 1 (least deprived) or 2 to have seen a medical specialist in the previous 12 months (Figure 6.45). There were no significant differences for men who saw a medical specialist in the previous 12 months by neighbourhood deprivation.

Figure 6.45: Adults who saw a medical specialist in the previous 12 months, by NZDep2006 quintile and gender (age standardised prevalence)



Source: 2006/07 New Zealand Health Survey

Location of visit to medical specialist

Questions on medical specialists in the New Zealand Health Survey specifically excluded visits as an inpatient at a public hospital.

Almost three out of five (60.6%, 56.6–64.5) children who saw a medical specialist in the previous 12 months had their last visit as an outpatient at a public hospital, with one-third (35.7%, 32.0–39.3) visiting the medical specialist at private consulting rooms.

For adults, equal proportions had their last visit to a medical specialist as a public hospital outpatient (44.6%, 42.5–46.7) as at the specialist's private rooms (46.6%, 44.5–48.7). A further 8.1% (6.9–9.3) of adults saw a medical specialist at a private hospital.

Public hospital use

Introduction

Public hospitals are run and owned by District Health Boards, which are responsible for ensuring the delivery of health and disability services in their district. Public hospitals provide a variety of services such as medical, surgical, maternity, diagnostic and emergency services. The range of services offered by an individual hospital is affected both by the size of the local population and the services offered by other hospitals in the region.

Hospital services are provided on an emergency department, inpatient, day case and outpatient basis, depending on the type of care a patient needs:

- emergency department patients attend for assessment and treatment and may be discharged or become inpatients
- inpatients are admitted to hospital and stay a minimum of one night in hospital
- day case patients are admitted to hospital and discharged later the same day
- outpatients attend clinics, where they receive specialist services without being admitted to hospital.

It is important to note that hospital discharge data from the New Zealand Health Information Service (NZHIS) are a better source of information on public hospital use than the New Zealand Health Survey because they are not dependent on respondents' recall of events. However, there is variation among DHBs in the level of reporting emergency department events to the NZHIS. Therefore, the New Zealand Health Survey, in spite of depending on recall of events, is likely to provide more accurate information on the use of emergency departments in New Zealand. As a result, there is a focus in this section on the use of emergency departments.

What were the survey questions?

In the 2006/07 New Zealand Health Survey, adults participants and the parents of child participants were asked whether they/their child had used a service at, or been admitted to, a public hospital in the previous 12 months. If they had used a public hospital service, they were asked the type of service(s): emergency department, outpatient, day treatment or inpatient.

Maternity admissions (that is, 'born in the hospital in previous 12 months') were specifically excluded from these analyses for children. Adults were not asked about maternity admissions; therefore these are included in the data.

Emergency department use in the previous 12 months

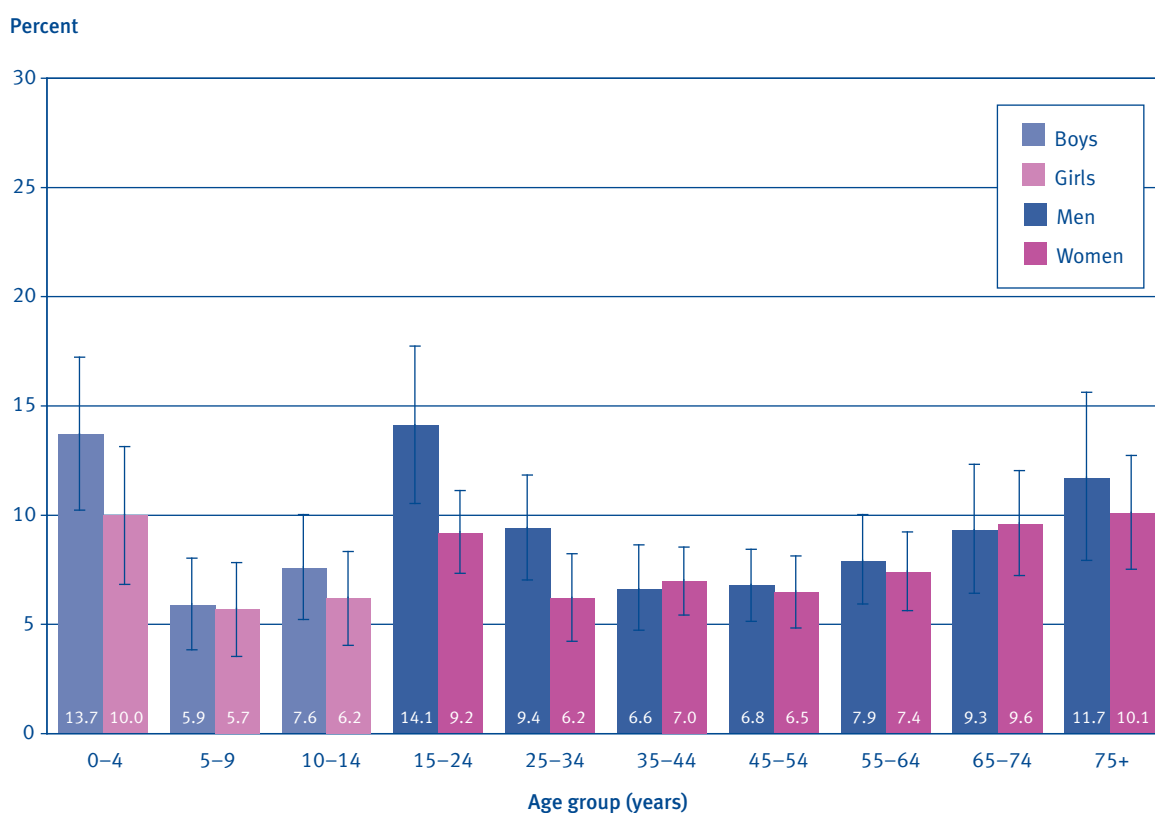
Emergency departments seek to provide care and treatment for those with serious injuries or illness and are usually open 24 hours a day, seven days a week. They are publicly funded, although some hospitals may charge for GP-level care at an emergency department.

One in twelve children (8.2%, 7.0–9.3) and 1 in 12 adults (8.4%, 7.7–9.0) had used an emergency department at a public hospital in the previous 12 months. There were no significant differences in emergency department use by gender for children or adults, adjusted for age.

Emergency department use in the previous 12 months, by age group

Boys aged 0–4 years, were significantly more likely than older boys to have used an emergency department in the previous 12 months. Men aged 15–24 years were significantly more likely than men aged 35–64 years to have used an emergency department in the previous 12 months. There were no significant differences by age for women for emergency service use (Figure 6.46).

Figure 6.46: Emergency department use in the previous 12 months for adults and children and adults, by age group and gender (unadjusted prevalence)

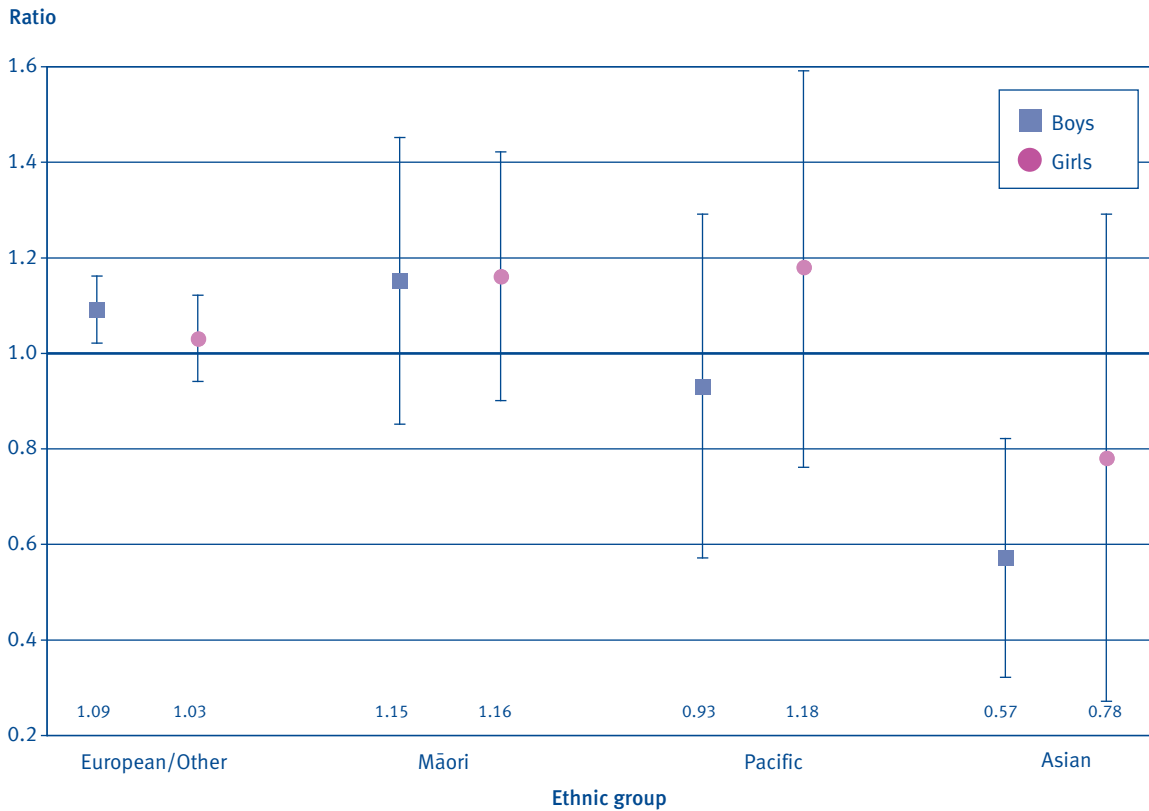


Source: 2006/07 New Zealand Health Survey

Emergency department use in the previous 12 months, by ethnic group

European/Other boys were significantly more likely than boys in the total population to have used an emergency department in the previous 12 months, while Asian boys were significantly less likely (Figure 6.47).

Figure 6.47: Children who used an emergency department in the previous 12 months, by ethnic group and gender (age standardised rate ratio)

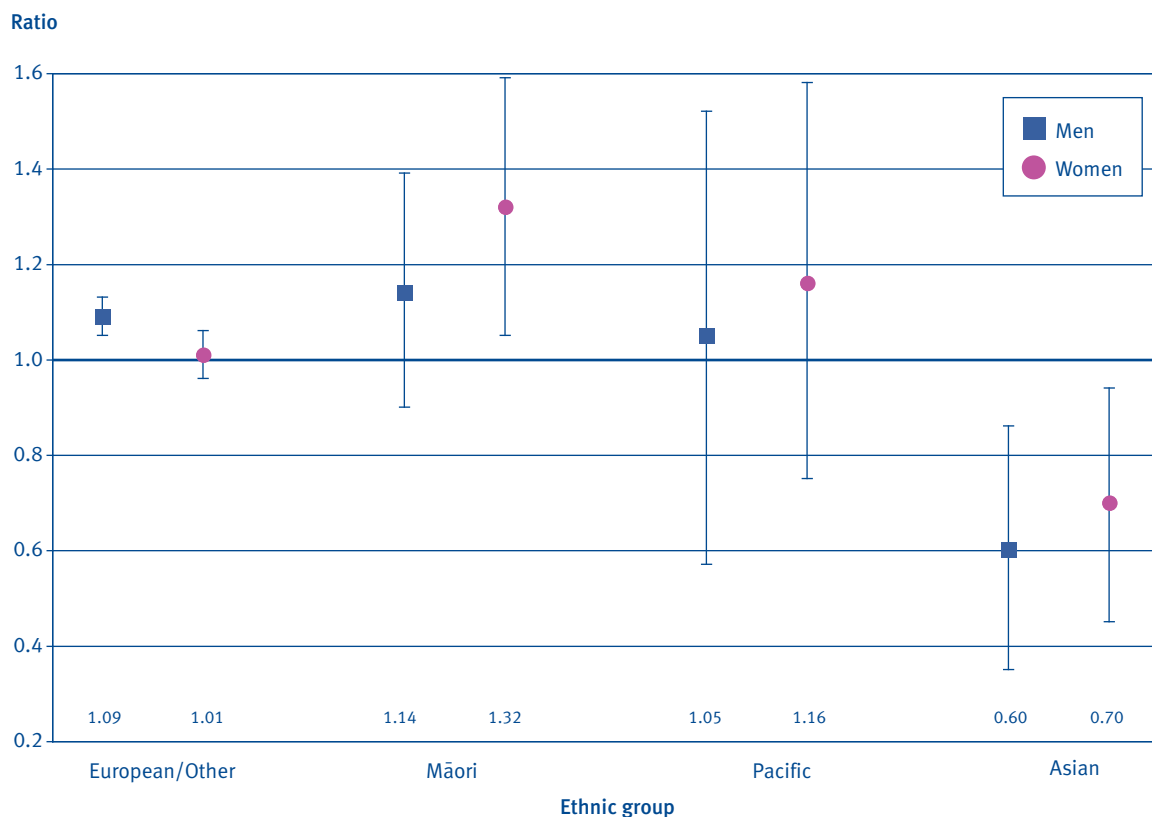


Source: 2006/07 New Zealand Health Survey

Notes: Age standardised to the WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged from birth to 14 years. Total response standard output for ethnic groups has been used.

European/Other men and Māori women were significantly more likely to have used an emergency department in the previous 12 months than men and women in the total population. Asian men and women were significantly less likely to have used an emergency department in the previous 12 months than men and women in the total adult population (Figure 6.48).

Figure 6.48: Adults who used an emergency department in the previous 12 months, by ethnic group and gender (age standardised rate ratio)



Source: 2006/07 New Zealand Health Survey

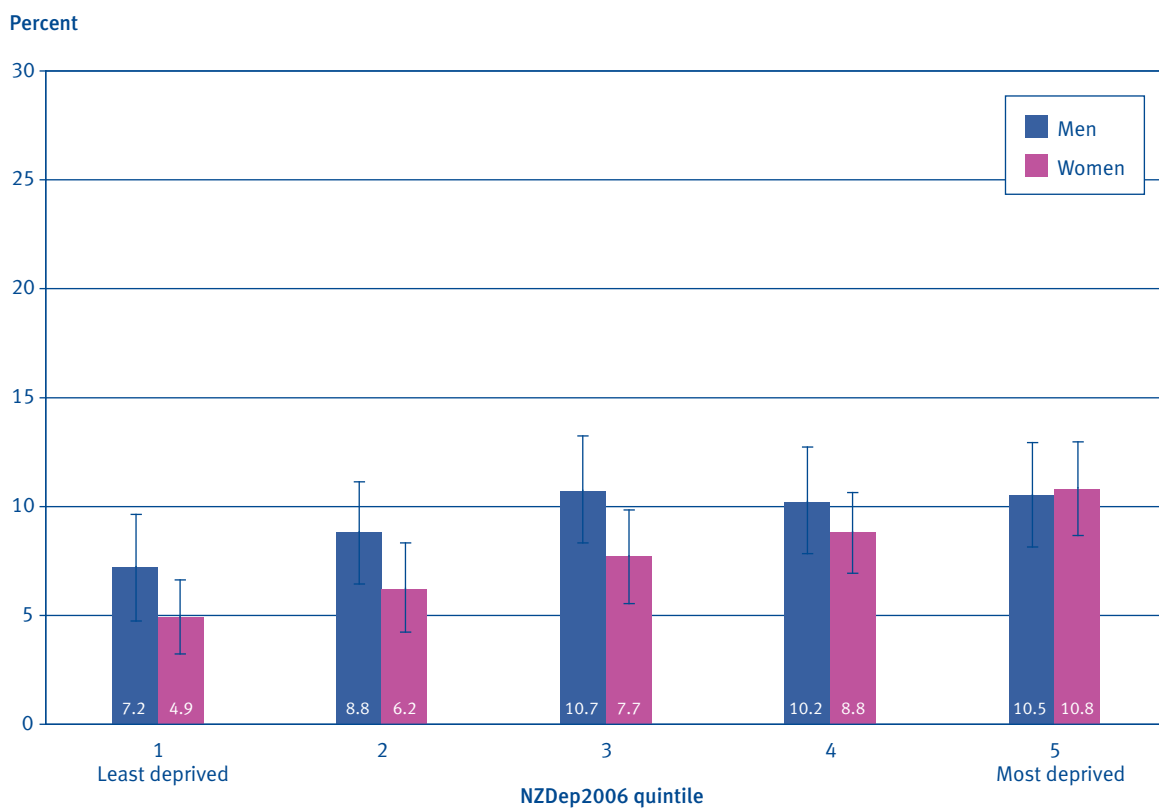
Notes: Age standardised to the WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 15 years and over. Total response standard output for ethnic groups has been used.

Emergency department use in the previous 12 months, by neighbourhood deprivation

There were no statistically significant differences for children who used an emergency department at a public hospital in the previous 12 months by neighbourhood deprivation.

Women in NZDep2006 quintile 5 (most deprived) were significantly more likely than those in quintile 1 (least deprived) to have used an emergency department in the previous 12 months (Figure 6.49).

Figure 6.49: Emergency department use in the previous 12 months by adults, by NZDep2006 quintile and gender (age standardised prevalence)



Source: 2006/07 New Zealand Health Survey

Emergency department use in the previous 12 months, by DHB area

The proportion of children using an emergency department in the previous 12 months was significantly lower in the Counties Manukau and Canterbury DHB areas than the national rate. The Nelson Marlborough / West Coast / South Canterbury / Otago / Southland DHB areas had significantly higher rates than nationally (Table 6.13).

The proportion of adults using an emergency department in the previous 12 months was significantly lower in the Auckland, Counties Manukau and Canterbury DHB areas than the national rate. The Wairarapa / Hutt Valley / Capital and Coast and Nelson Marlborough / West Coast / South Canterbury / Otago / Southland DHB areas had significantly higher rates than nationally (Table 6.13).

Table 6.13: Emergency department use in the previous 12 months, children and adults, by DHB area (unadjusted)

DHB area	Prevalence in children (95% CI)	Number of children	Prevalence in adults (95% CI)	Number of adults
Northland / Tairāwhiti / Hawke's Bay / Lakes / Whanganui	7.0 (4.8–9.2)	8100	9.5 (7.9–11.0)	35600
Waitemata	7.5 (5.0–10.0)	7800	6.9 (5.0–8.7)	26000
Auckland	7.6 (4.7–10.5)	5600	4.9 (3.2–6.6) –	15700
Counties Manukau	4.7 (2.5–6.9) –	5200	4.1 (3.0–5.3) –	13400
Waikato	7.0 (4.8–9.1)	5300	8.9 (6.8–11.0)	23100
Bay of Plenty / Taranaki / MidCentral	10.3 (8.0–12.6)	10100	9.9 (8.3–11.4)	34700
Wairarapa / Hutt Valley / Capital and Coast	10.8 (7.3–14.4)	9700	11.1 (8.6–13.7) +	38600
Canterbury	3.8 (1.7–7.3) –	3500	6.5 (4.6–8.4) –	24100
Nelson Marlborough / West Coast / South Canterbury / Otago / Southland	15.2 (9.3–21.1) +	14300	13.0 (10.5–15.4) +	50900
New Zealand total	8.2 (7.0–9.3)	69600	8.4 (7.7–9.0)	261800

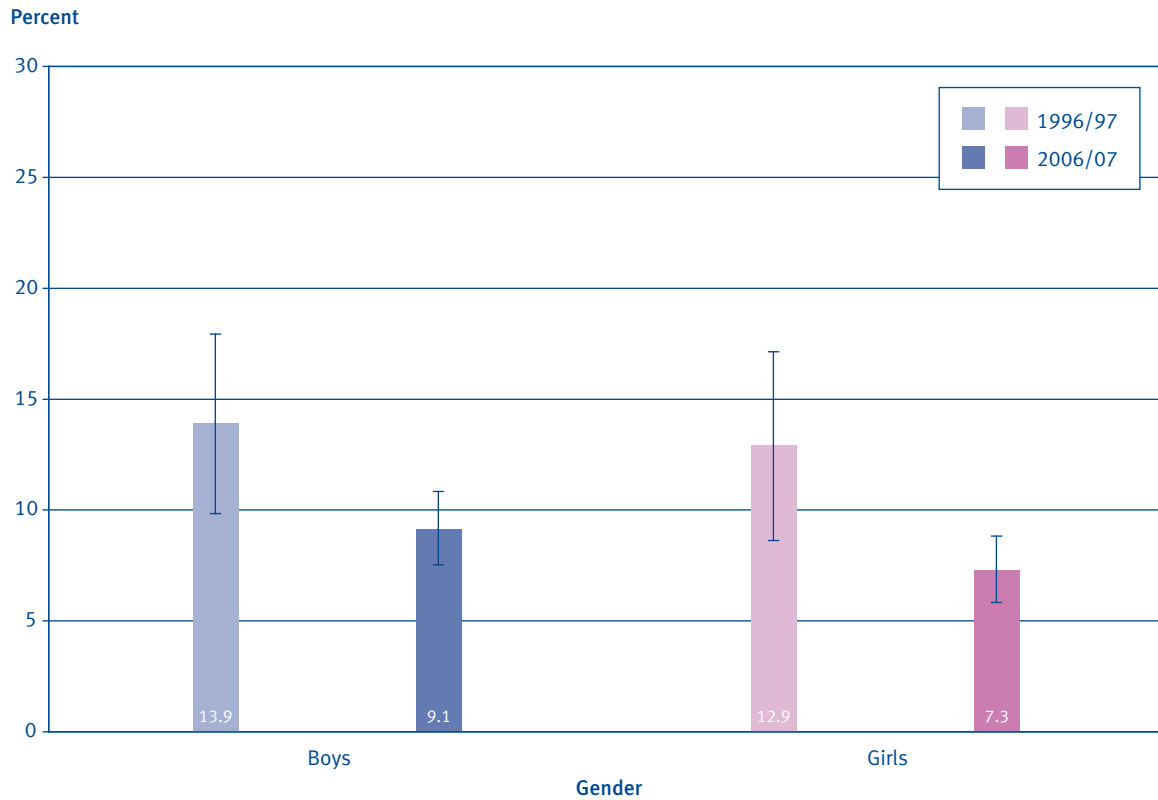
Source: 2006/07 New Zealand Health Survey

Notes: Estimates indicated with a + are significantly higher than the national rate, and estimates indicated with a – are significantly lower than the national rate. Data are based on direct survey estimates and could be confounded by different population characteristics in each DHB. Due to small sample size, some DHB areas have been combined. Survey population is the estimated resident population living in permanent private dwellings at 31 June 2007.

Time trends in use of emergency departments

For boys and girls there was a significant decline (p -values < 0.05) in the use of emergency departments between 1996/97 and 2006/07, adjusted for age (Figure 6.50).

Figure 6.50: Use of emergency departments in previous 12 months for children, by gender, 1996/97, 2006/07 (age standardised prevalence)

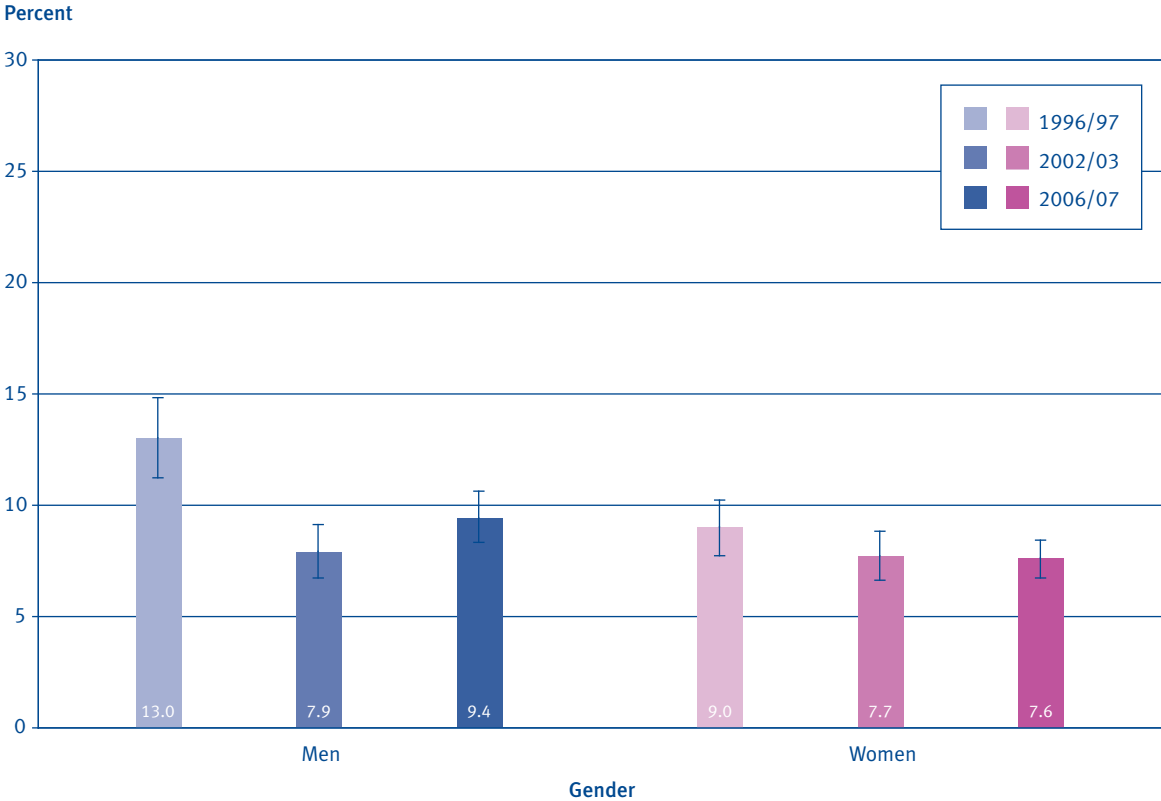


Source: 1996/97 and 2006/07 New Zealand Health Surveys

Note: Data from previous years have been reanalysed to allow for comparability. Data not available for 2003/03.

Adjusting for age, there was a decline in the use of emergency departments for men between 1996/97 and 2002/03, with the proportion remaining steady since 2002/03 (Figure 6.51). For women, there was no significant change in the use of emergency departments between 1996/97 and 2006/07. The same trend was also seen for Māori men and women (Figure 6.52).

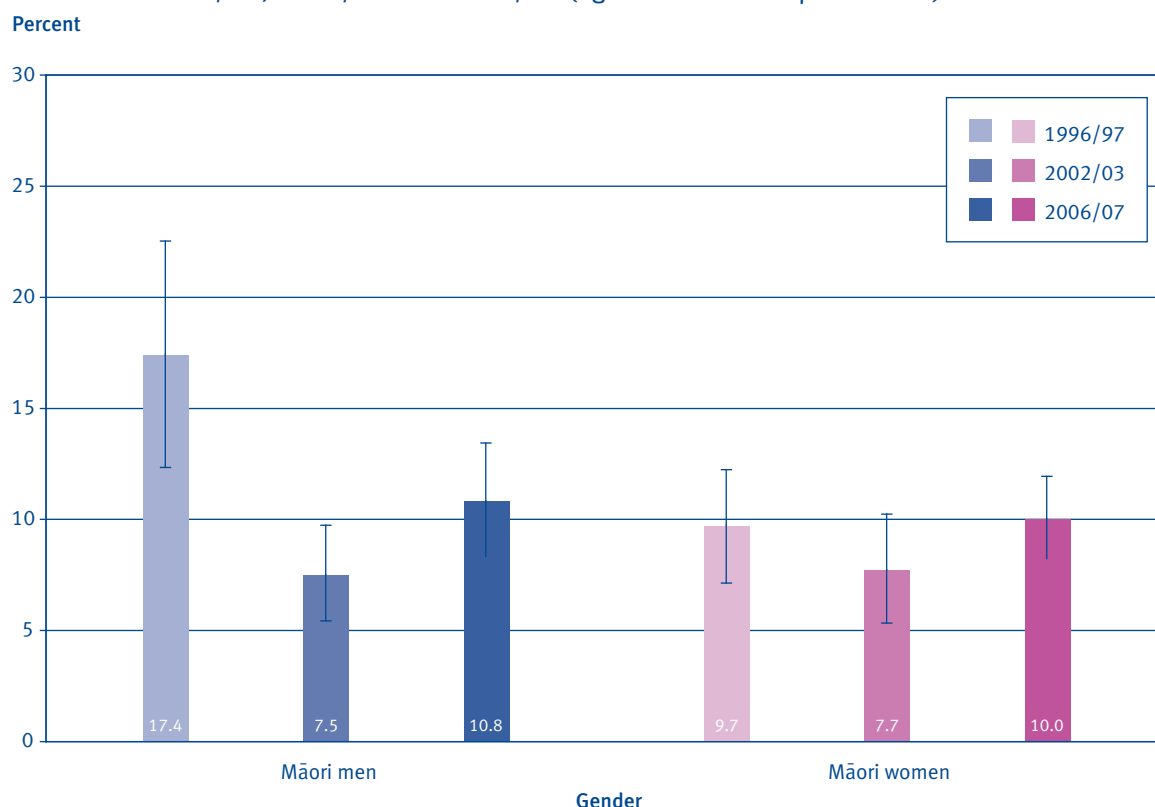
Figure 6.51: Use of emergency departments in the previous 12 months for adults, by gender, 1996/97, 2002/03 and 2006/07 (age standardised prevalence)



Source: 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys

Note: Data from previous years have been reanalysed to allow for comparability.

Figure 6.52: Use of emergency departments in previous 12 months for Māori adults, by gender, 1996/97, 2002/03 and 2006/07 (age standardised prevalence)



Source: 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys

Note: Data from previous years have been reanalysed to allow for comparability.

Public hospital use (excluding emergency departments) in previous 12 months

One in five children (18.2%, 16.8–19.7) and adults (18.3%, 17.4–19.2) used a service other than an emergency department at a public hospital in the previous 12 months. After adjusting for age, women (20.2%, 19.0–21.3) were significantly more likely than men (14.5%, 13.3–15.8) to have used a service other than an emergency department at a public hospital in the previous 12 months. There was no significant difference in public hospital use for boys and girls, adjusted for age.

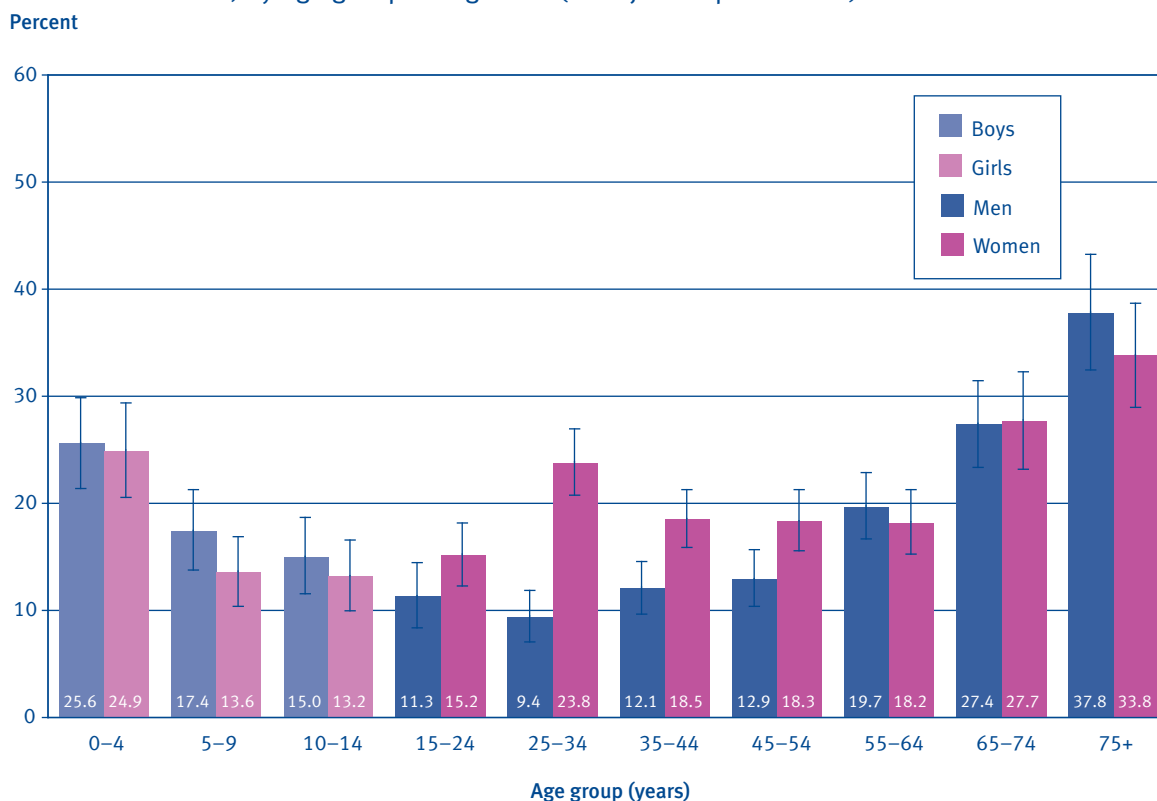
One in fourteen children (7.3%, 6.4–8.3) in the total population had been treated as an outpatient at a public hospital in the previous 12 months, 4.2% (3.5–4.9) were admitted as an inpatient and 2.9% (2.2–3.6) were admitted for day treatment. Māori boys (SRR 1.40, 1.02–1.77) were significantly more likely than boys in the total population to be admitted as an inpatient.

One in eleven adults (8.9%, 8.2–9.6) in the total population had been treated as an outpatient at a public hospital in the previous 12 months, 7.9% (7.3–8.4) were admitted as an inpatient and 3.6% (3.2–3.9) were admitted for day treatment. Māori adults (SRR 1.54, 1.35–1.73) were significantly more likely to be admitted as an inpatient than the total adult population. Adults in NZDep2006 quintile 5 (most deprived) (10.1%, 8.8–11.4) were significantly more likely than those in quintiles 1 (least deprived) (5.4%, 4.2–6.6), 2 or 3 to be admitted as an inpatient.

Public hospital use (excluding emergency departments) in the previous 12 months, by age group

Children aged 0–4 years and adults aged 65 years and over were significantly more likely than other age groups to use public hospital services other than an emergency department. Women aged 25–34 years and 35–44 years were significantly more likely than men of the same age to have used public hospital services other than an emergency department in the previous 12 months (Figure 6.53), which is likely to be due to use of maternity services.

Figure 6.53: Public hospital use (excluding ED) in the previous 12 months for children and adults, by age group and gender (unadjusted prevalence)

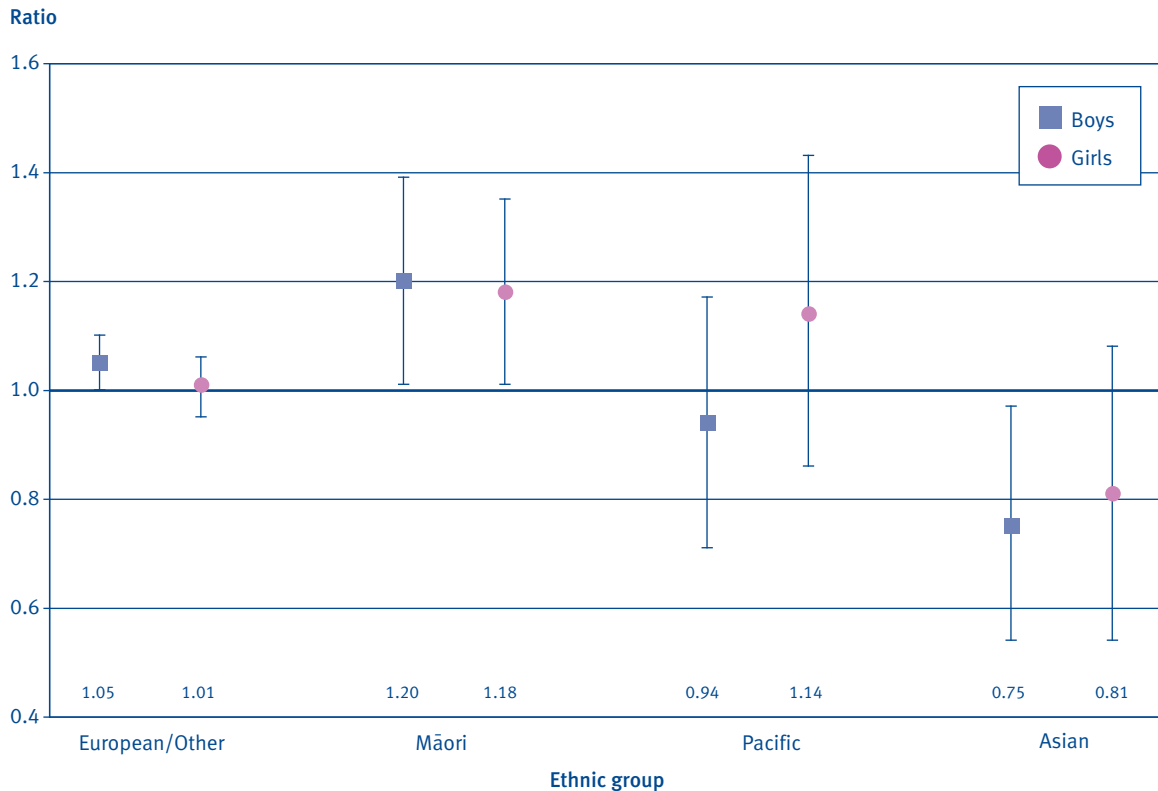


Source: 2006/07 New Zealand Health Survey

Public hospital use (excluding emergency departments) in the previous 12 months, by ethnic group

Māori boys and girls were significantly more likely than boys and girls in the total population to have used public hospital services other than an emergency department in the previous 12 months. Asian boys were significantly less likely than boys in the total population to have used public hospital services other than an emergency department in the previous 12 months (Figure 6.54).

Figure 6.54: Children who used a public hospital service (excluding ED) in the previous 12 months, by ethnic group and gender (age standardised rate ratio)

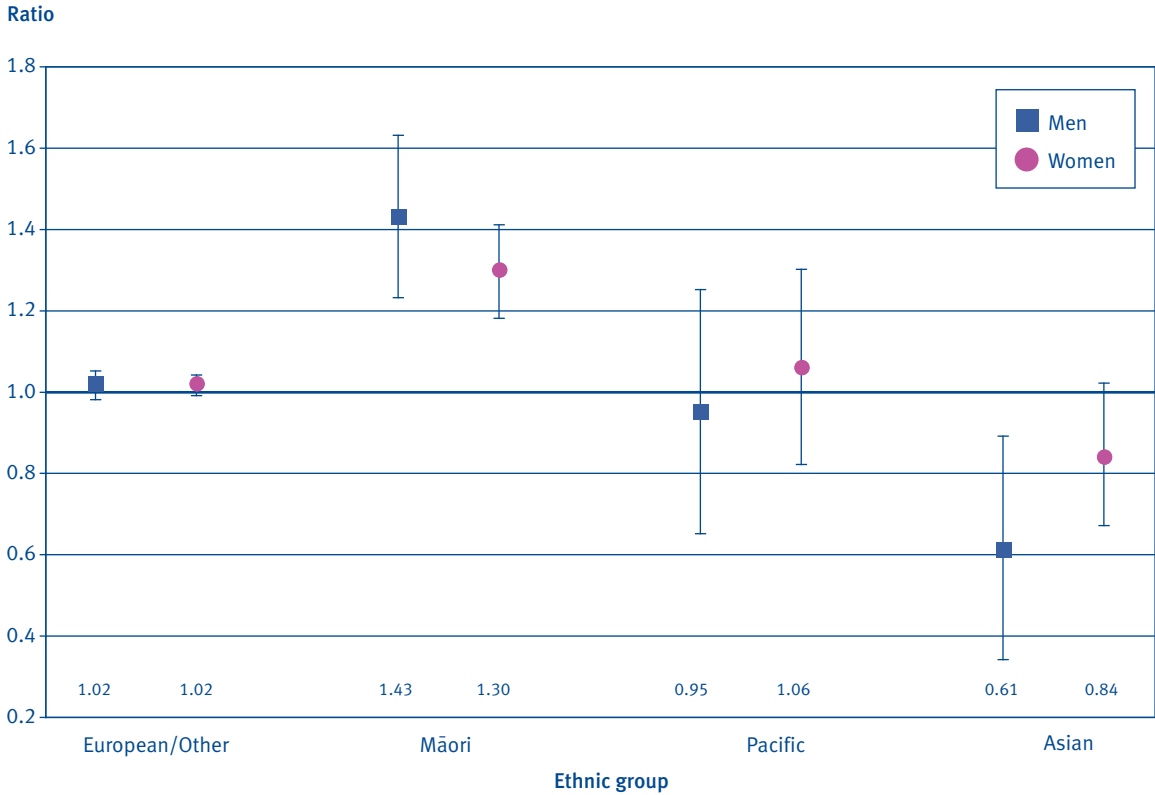


Source: 2006/07 New Zealand Health Survey

Notes: Age standardised to the WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged from birth to 14 years. Total response standard output for ethnic groups has been used.

Māori men and women were significantly more likely to have used public hospital services other than an emergency department in the previous 12 months than men and women in the total adult population, while Asian men (SRR 0.61, 0.34–0.89) were significantly less likely than all men (Figure 6.55).

Figure 6.55: Adults who used a public hospital service (excluding ED) in the previous 12 months, by ethnic group and gender (age standardised rate ratio)



Source: 2006/07 New Zealand Health Survey

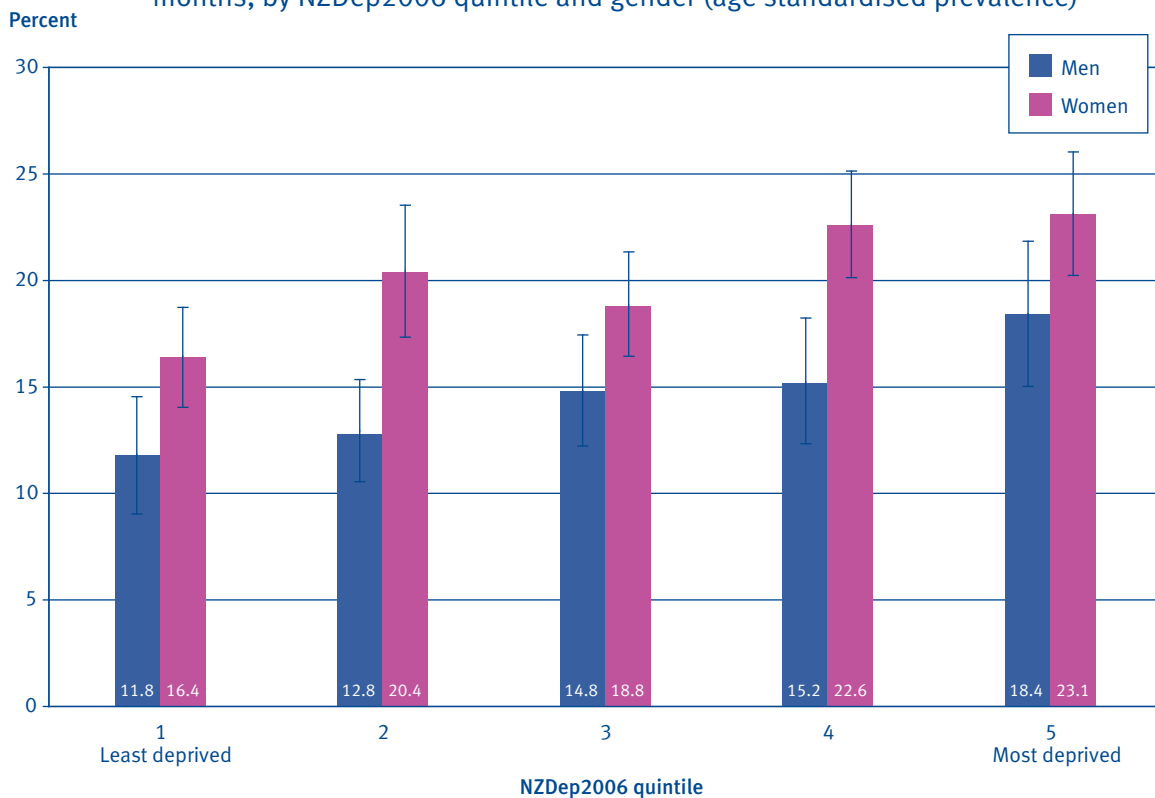
Notes: Age standardised to the WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 15 years and over. Total response standard output for ethnic groups has been used.

Public hospital use (excluding emergency departments) in the previous 12 months, by neighbourhood deprivation

There were no statistically significant differences for children who used public hospital services other than an emergency department in the previous 12 months by neighbourhood deprivation.

Men and women in NZDep2006 quintile 5 (most deprived) were significantly more likely than those in quintile 1 (least deprived) to have used public hospital services other than an emergency department in the previous 12 months (Figure 6.56).

Figure 6.56: Adults who used public hospital services (excluding ED) in the previous 12 months, by NZDep2006 quintile and gender (age standardised prevalence)



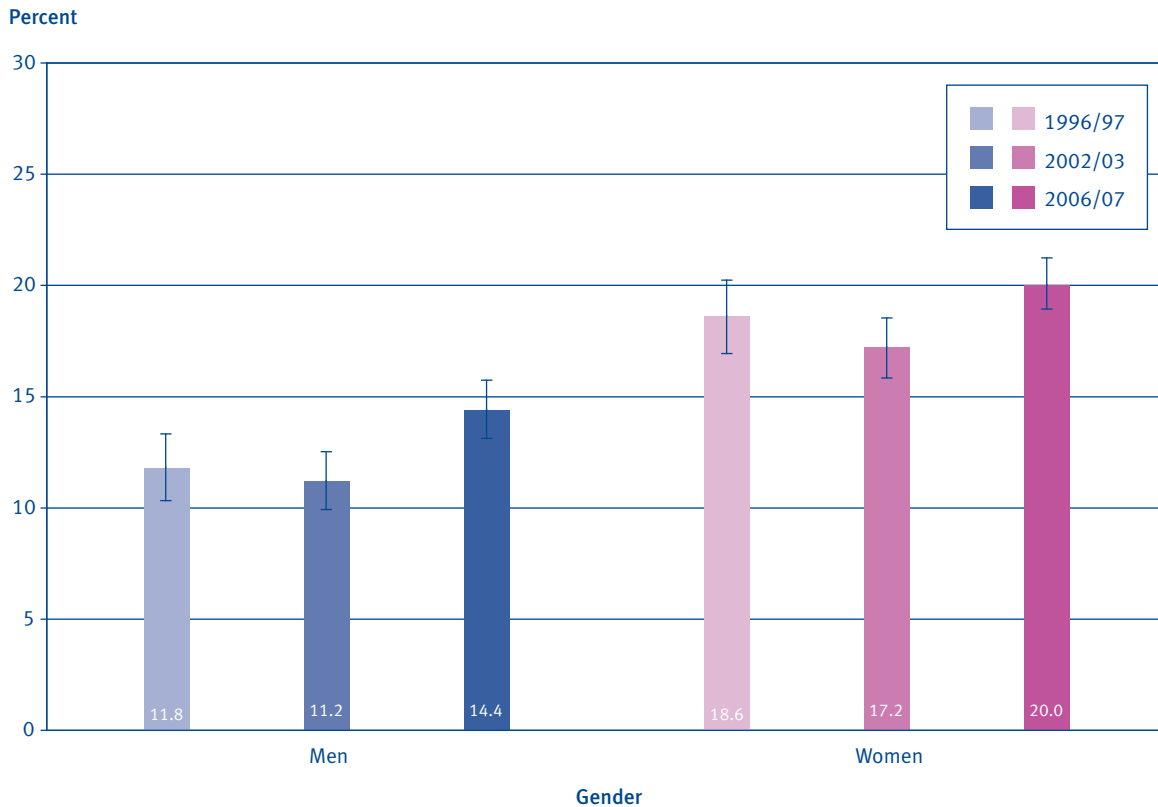
Source: 2006/07 New Zealand Health Survey

Time trends in use of public hospitals (excluding emergency department)

There were no significant differences in public hospital use from 1996/97 to 2006/07 for children, adjusted for age.

For both men and women, there was a significant increase in the use of public hospital services between 2002/03 and 2006/07, adjusted for age (Figure 6.57). This same pattern occurred for Māori men and women (Figure 6.58).

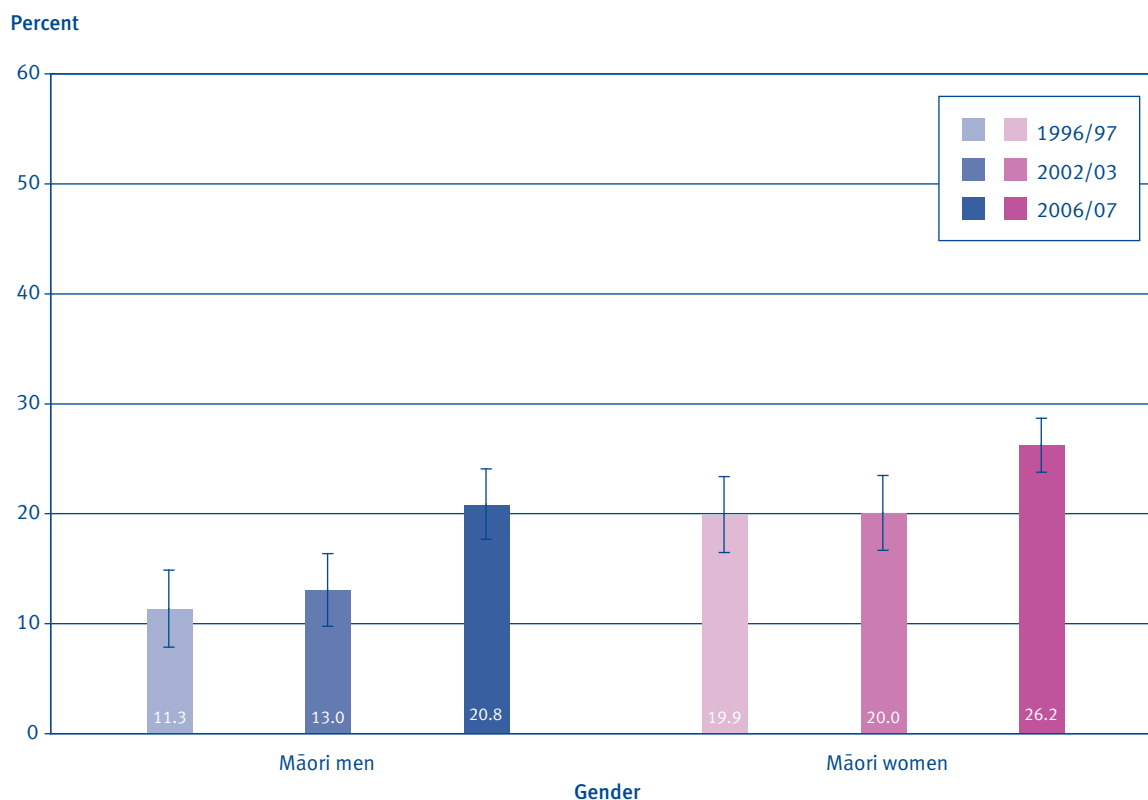
Figure 6.57: Use of public hospital in previous 12 months (excluding ED) for adults, by gender, 1996/97, 2002/03, 2006/07 (age standardised prevalence)



Source: 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys

Note: Data from previous years have been reanalysed to allow for comparability.

Figure 6.58: Use of public hospital in previous 12 months (excluding ED) for Māori adults, by gender, 1996/97, 2002/03, 2006/07 (age standardised prevalence)



Source: 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys

Note: Data from previous years have been reanalysed to allow for comparability.

Private hospital use

Introduction

There are a number of private hospitals in New Zealand that provide treatment for non-urgent conditions. The use of private hospitals is generally funded by individuals themselves or through medical insurance.

What were the survey questions?

In the 2006/07 New Zealand Health Survey, adult participants and the parents of child participants were asked whether they/their child had used a service at or been admitted to a private hospital in the previous 12 months, and if so, the type of service(s): outpatient, day treatment or inpatient (stayed overnight).

Parents of child participants were also asked what type of procedure was carried out if their child had day treatment or was an inpatient.

Private hospital use in previous 12 months

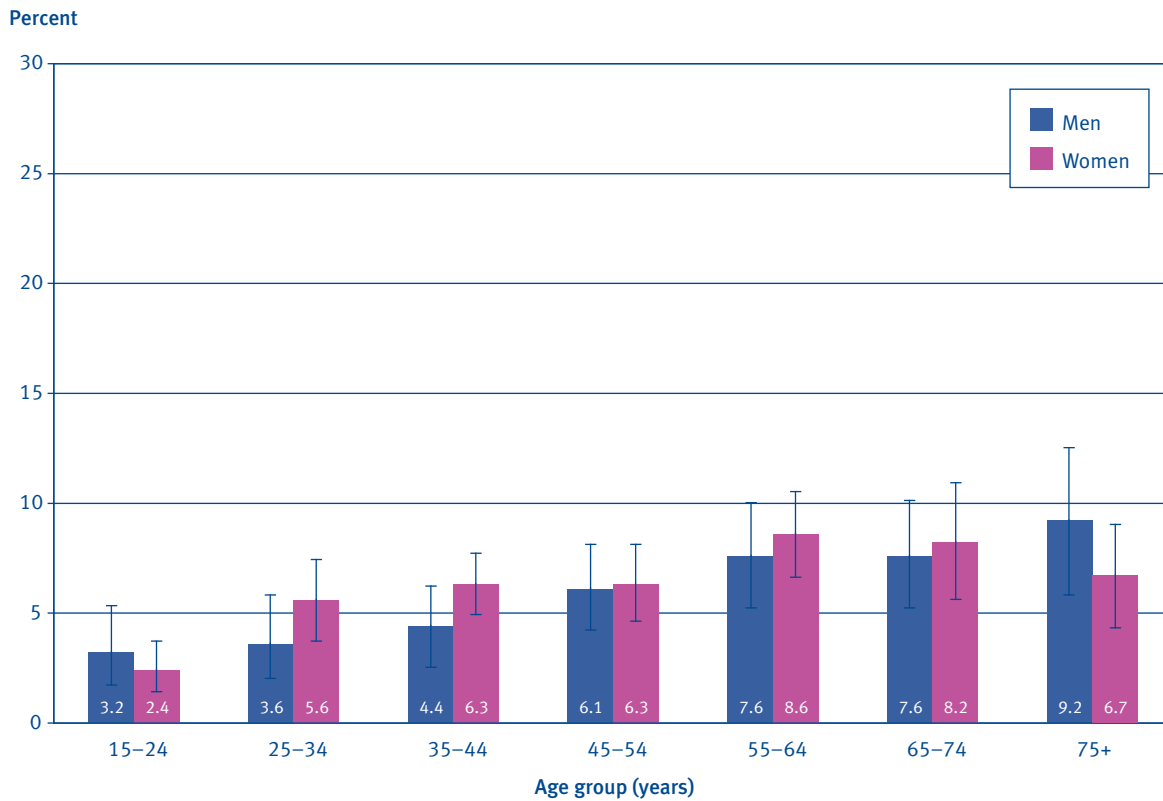
One in eighteen (5.7%, 5.2–6.2) adults and 1 in 59 (1.7%, 1.2–2.3) children had used a service at a private hospital in the previous 12 months. There were too few children who used private hospital services in the survey for any meaningful comparison to be made by age, ethnic group or neighbourhood deprivation.

Of those adults who had used private hospital services in the previous 12 months, 45.2% (40.4–49.9) were admitted for day treatment and 34.6% (30.3–38.9) were admitted as an inpatient.

Private hospital use in previous 12 months, by age group

For adults, the use of private hospital services increased with age, although none of the differences between age groups was significant. Women aged 15–24 years were significantly less likely than older women to have used a service at a private hospital in the previous 12 months (Figure 6.59).

Figure 6.59: Use of private hospital services in the previous 12 months for adults, by age group and gender (unadjusted prevalence)

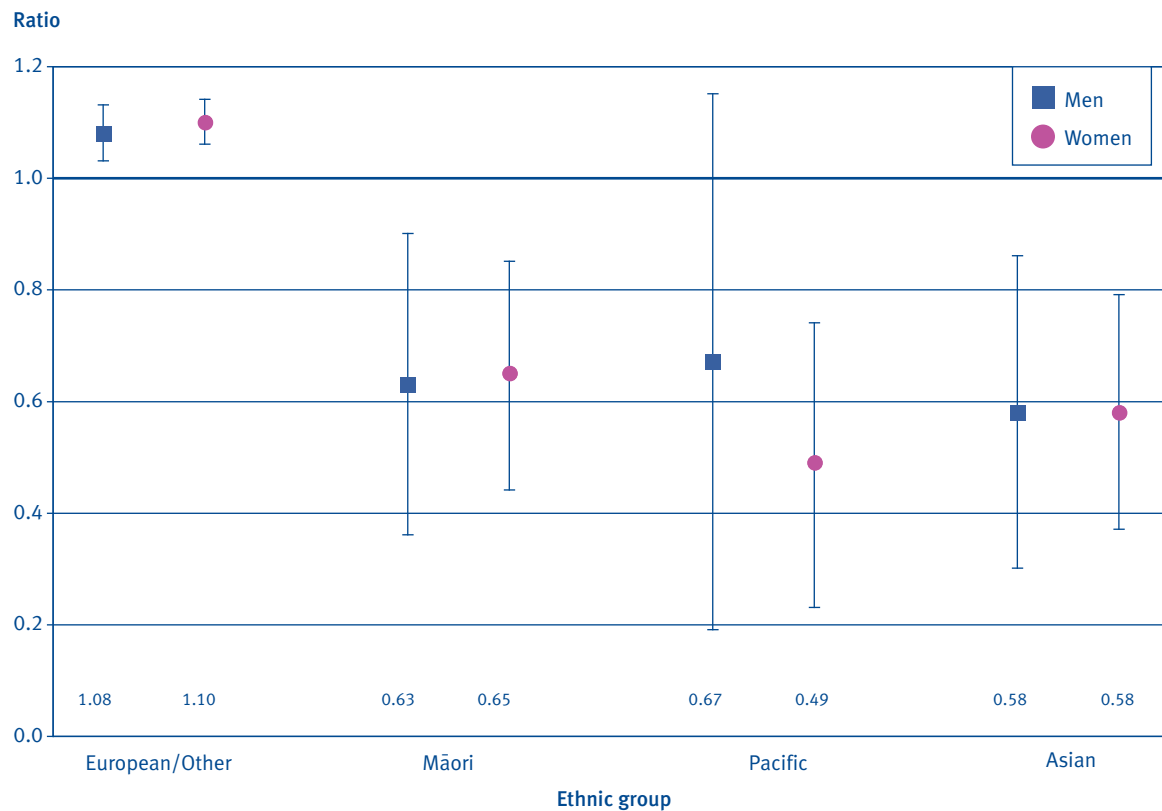


Source: 2006/07 New Zealand Health Survey

Private hospital use in previous 12 months, by ethnic group

European/Other men and women were significantly more likely to have used private hospital services in the previous 12 months than men and women in the total adult population, while Māori and Asian men and women were significantly less likely to have used such services (Figure 6.60). Pacific women were also significantly less likely to have used a private hospital service than women in the total population.

Figure 6.60: Adults who used private hospital services in the previous 12 months, by ethnic group and gender (age standardised rate ratio)



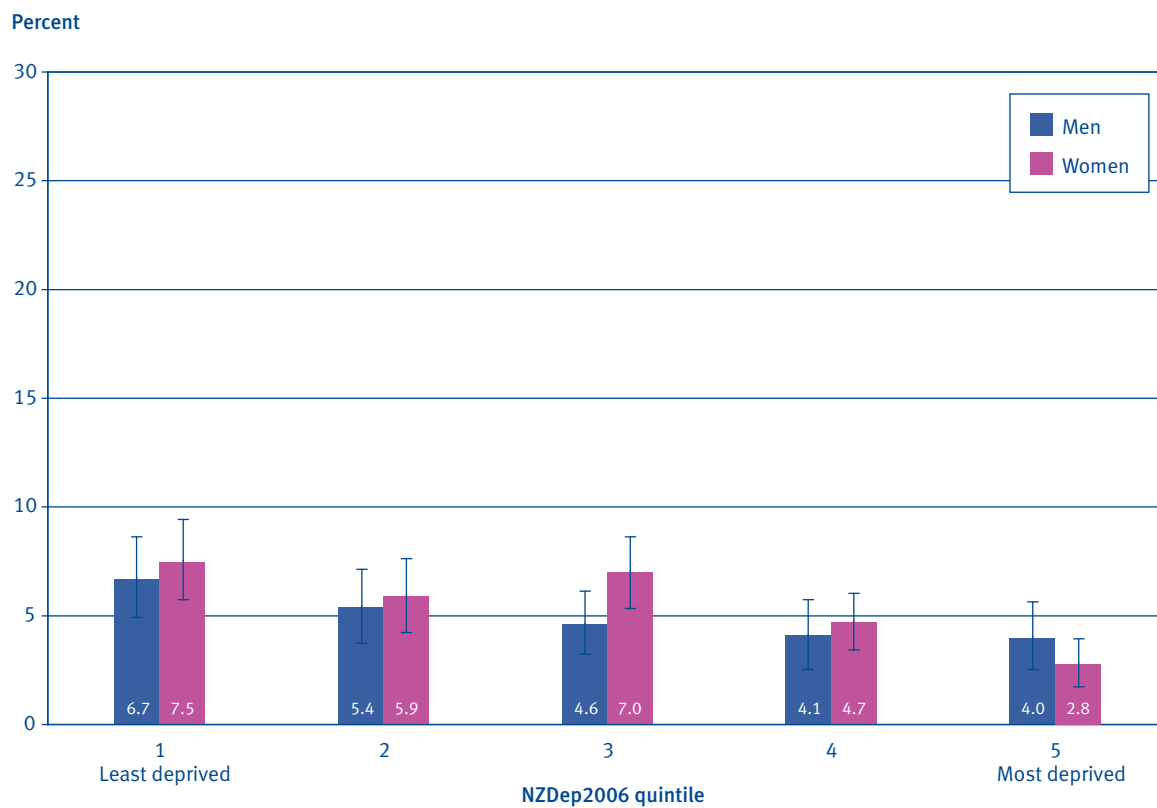
Source: 2006/07 New Zealand Health Survey

Notes: Notes: Age standardised to the WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 15 years and over. Total response standard output for ethnic groups has been used.

Private hospital use in previous 12 months, by neighbourhood deprivation

Women in NZDep2006 quintile 5 (most deprived) were significantly less likely than those in NZDep2006 quintiles 1 (least deprived), 2 and 3 to have used private hospital services in the previous 12 months (Figure 6.61).

Figure 6.61: Adults who used private hospital services in the previous 12 months, by NZDep2006 quintile and gender (age standardised prevalence)

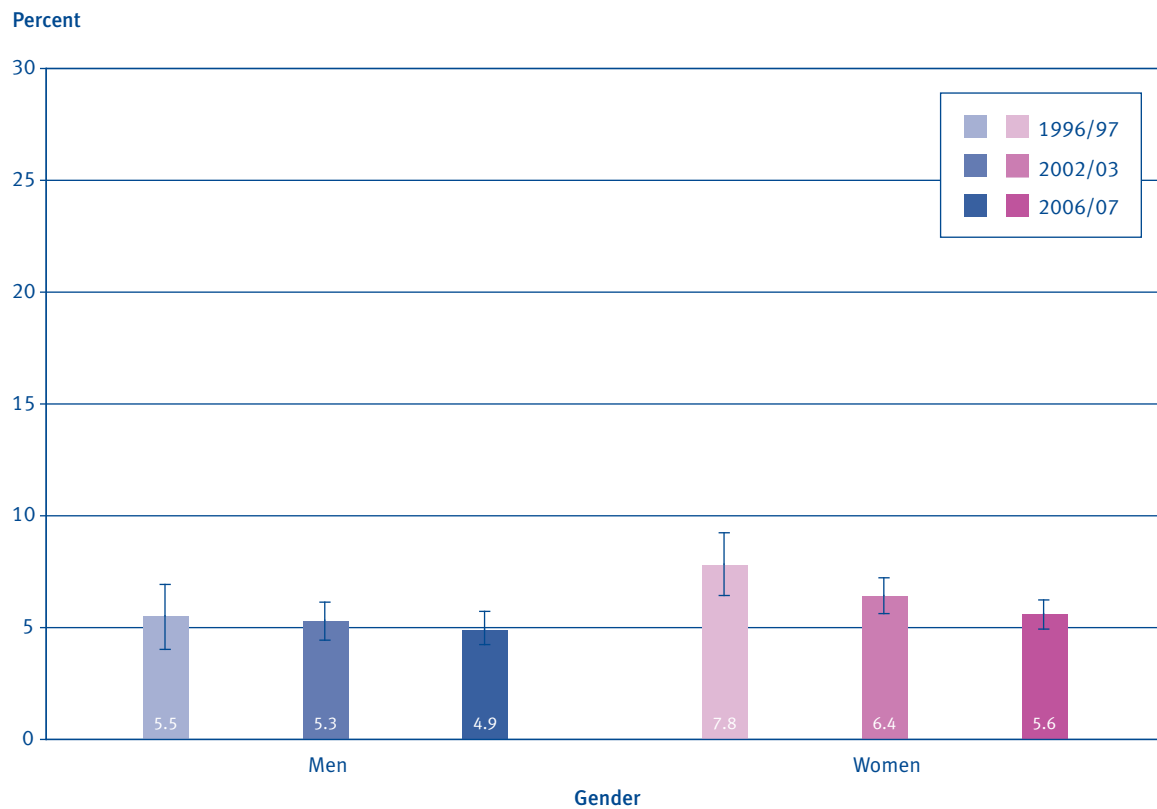


Source: 2006/07 New Zealand Health Survey

Time trends in private hospital use

For children, there were no significant changes in the use of private hospitals between 1996/97 and 2006/07, adjusted for age. From 1996/97 to 2006/07 there was a decreasing trend in the use of private hospital services for women, with no change for men, adjusted for age (Figure 6.62). There were no changes in the use of private hospitals between 1996/97 and 2006/07 for Māori adults, adjusted for age (graph not shown).

Figure 6.62: Private hospital use in previous 12 months for adults, by gender, 1996/97, 2002/03 and 2006/07 (age standardised prevalence)



Source: 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys

Note: Data from previous years have been reanalysed to allow for comparability.

Medical insurance

Individuals with medical insurance may have more timely access to medical treatment than those without insurance, particularly in the case of surgery for non-acute conditions. Medical insurance can also pay for GP visits and prescription costs, and may also include dental and optical care.

What were the survey questions?

In the 2006/07 New Zealand Health Survey, adult participants and the parents of child participants were asked whether they/their child were covered by any health or medical insurance scheme. Adult participants were also asked what type of insurance they had.

Medical insurance coverage

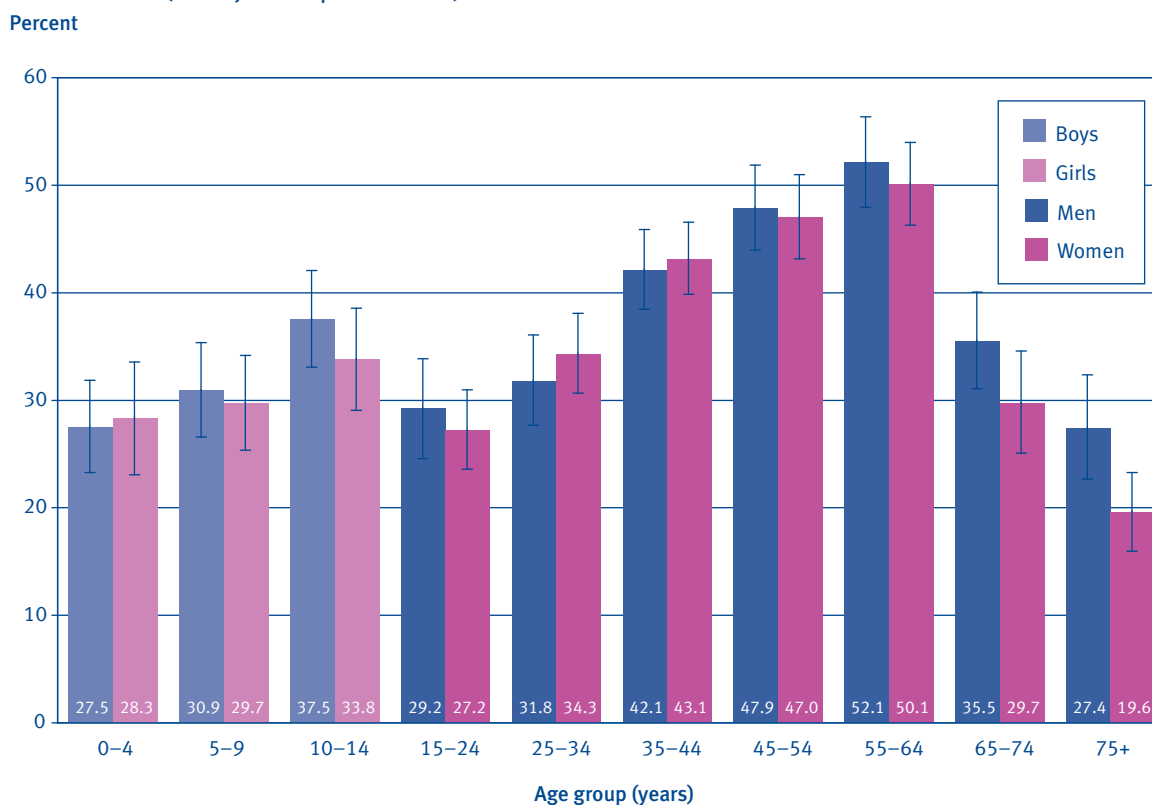
Around one-third of children (31.3%, 29.5–33.2) and almost 40% of adults (38.4%, 37.2–39.5) were covered by medical insurance. There were no statistically significant differences in medical insurance coverage by gender for children or adults, adjusted for age.

One in five (19.4%, 18.6–20.3) adults had comprehensive medical insurance and one in five (18.3%, 17.4–19.2) had medical insurance that covered their hospital bills only.

Medical insurance coverage, by age group

For children, 10–14-year-olds, and for adults, 45–64-year-olds, were more likely to have medical insurance than those in other age groups. Adults aged 15–34 years and those aged over 65 years were significantly less likely to have medical insurance than those aged 45–64 years (Figure 6.63).

Figure 6.63: Medical insurance coverage for children and adults, by age group and gender (unadjusted prevalence)



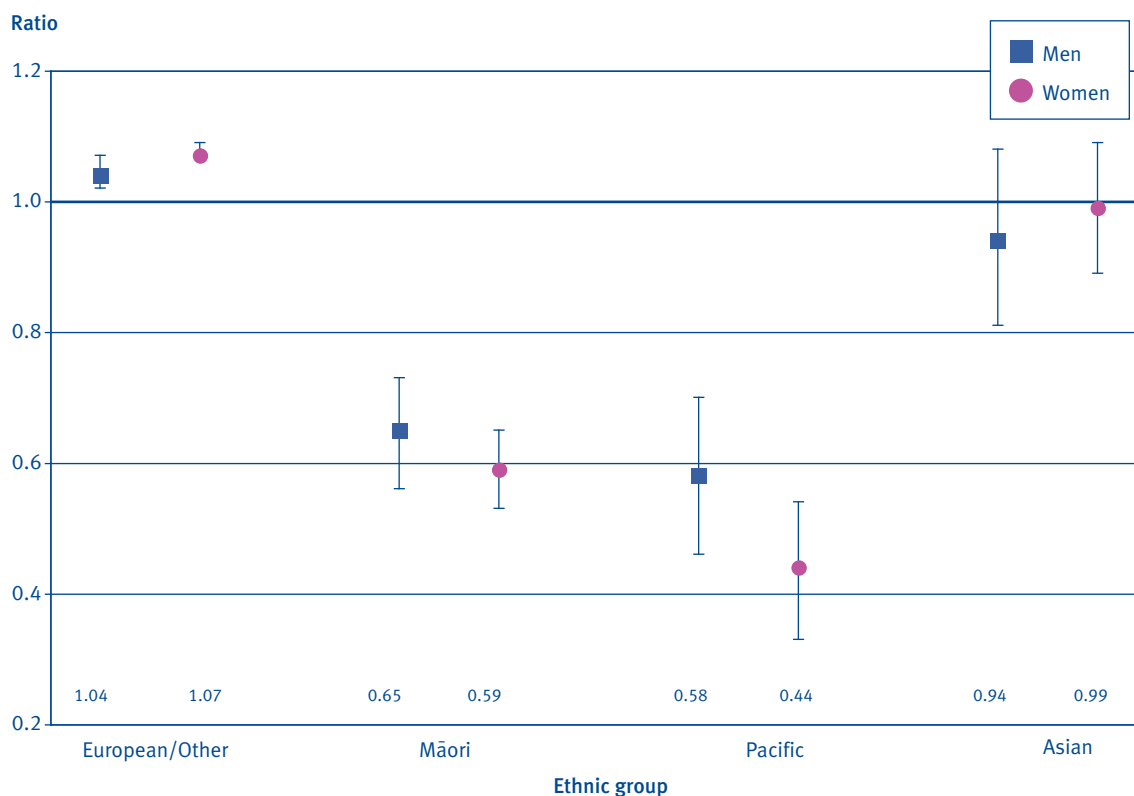
Source: 2006/07 New Zealand Health Survey

Medical insurance coverage, by ethnic group

European/Other children (SRR 1.14, 1.12–1.16) were significantly more likely to have medical insurance cover than all children, while Māori (SRR 0.65, 0.57–0.72) and Pacific (SRR 0.51, 0.42–0.60) children were significantly less likely to have such insurance.

European/Other men and women were significantly more likely to have medical insurance cover than men and women in the total adult population, while Māori and Pacific men and women were significantly less likely to have such insurance (Figure 6.64).

Figure 6.64: Adults with medical insurance, by ethnic group and gender (age standardised rate ratio)



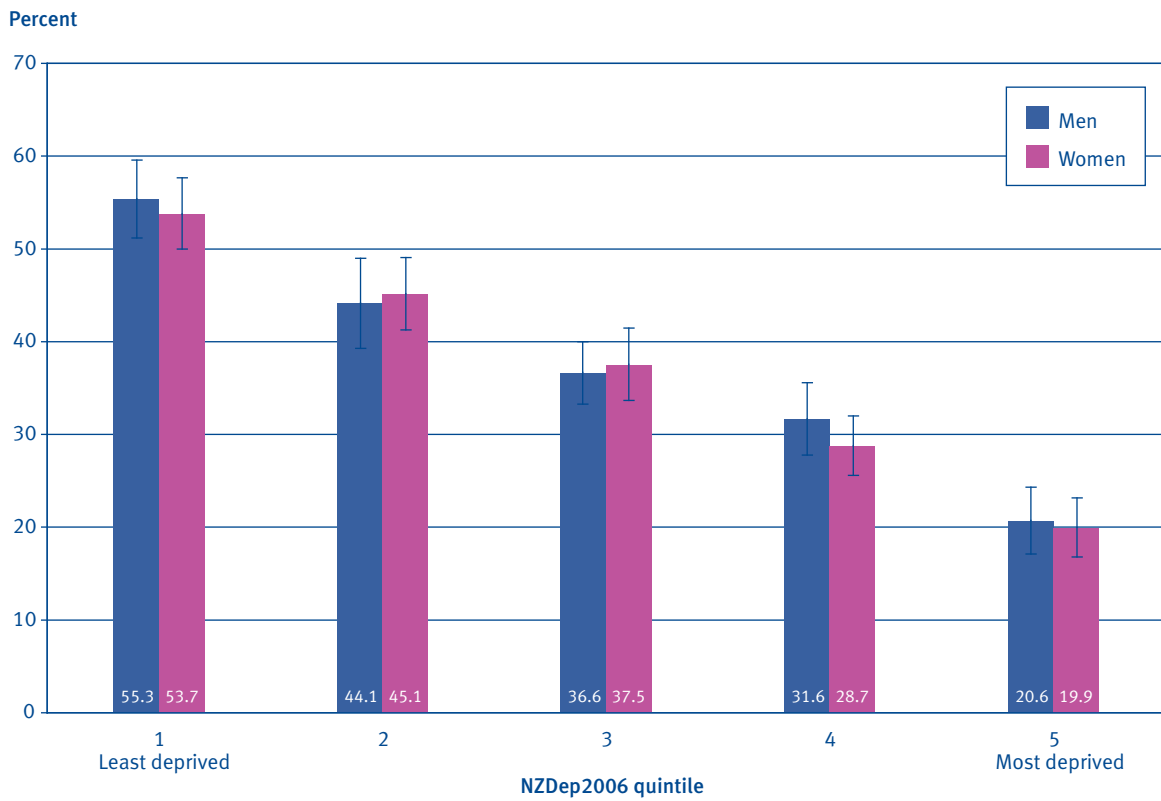
Source: 2006/07 New Zealand Health Survey

Notes: Age standardised to the WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 15 years and over. Total response standard output for ethnic groups has been used.

Medical insurance coverage, by neighbourhood deprivation

Medical insurance cover decreased with increasing deprivation for both children (graph not shown) and adults. Men and women living in NZDep2006 quintile 5 (most deprived) were significantly less likely than all other adults to have medical insurance (Figure 6.65).

Figure 6.65: Medical insurance coverage for adults, by NZDep2006 quintile and gender (age standardised prevalence)



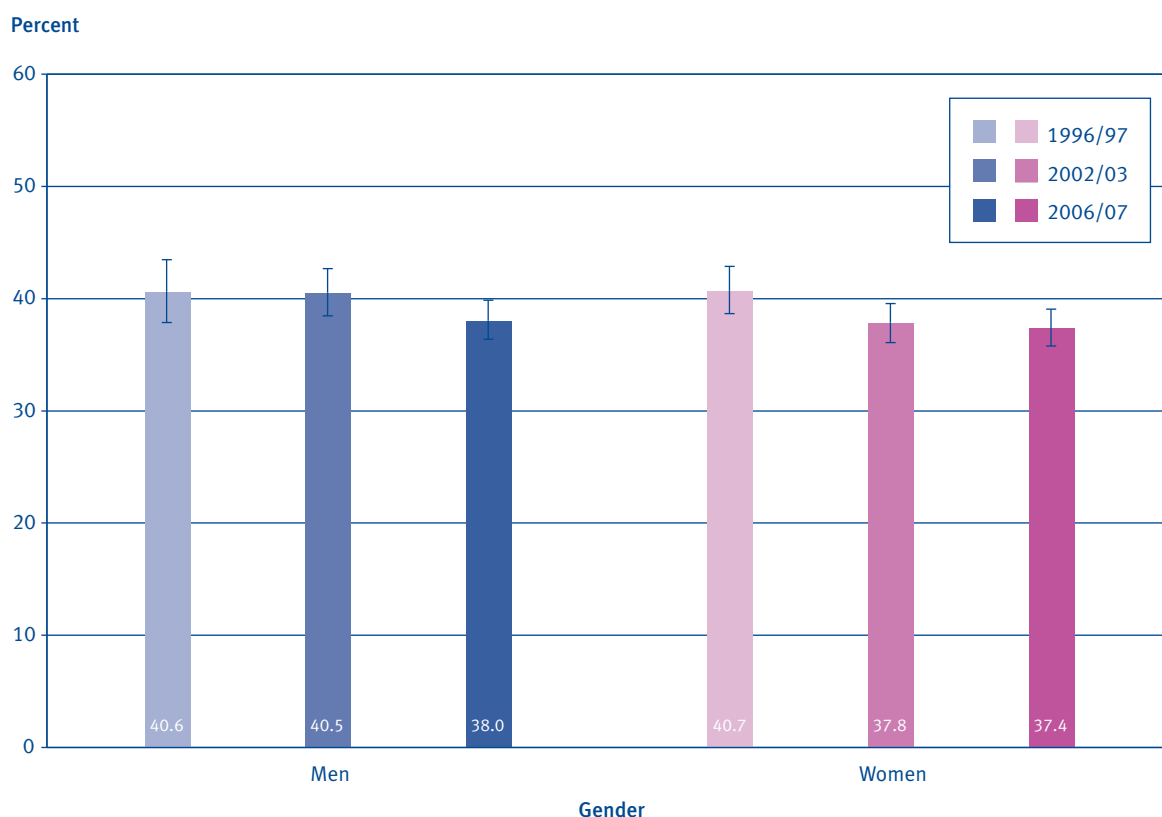
Source: 2006/07 New Zealand Health Survey

Time trends in medical insurance coverage

There was a significant decline in the proportion of women who had medical insurance coverage between 1996/97 and 2002/03 (p-value < 0.05), but there was no change between 2002/03 and 2006/07 (Figure 6.66). There were no significant changes in the prevalence of medical insurance coverage among men between 1996/97 and 2002/03.

Among Māori, there were no changes in the prevalence of medical insurance coverage between 1996/97, 2002/03 and 2006/07, adjusted for age (graph not shown).

Figure 6.66: Medical insurance coverage for adults, by gender, 1996/97, 2002/03 and 2006/07 (age standardised prevalence)



Source: 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys

Note: Data from previous years have been reanalysed to allow for comparability.