

Section 4:

Health Service Utilisation

Chapter 12: General Practitioner Use

Key points

- General practitioners (GPs) were the most widely used of all the health professionals covered in the 1996/97 Health Survey, being visited at least once in the past 12 months by four out of five adults and children.
- Women were one-and-a-half times more likely than men to be frequent users of GP services, with 18% of women and 12% of men visiting a GP six times or more in the past year.
- Age was a significant determinant of people's use of GP services, with over 90% of people in the 65–74 and 75 plus age groups visiting a GP at least once in the year.
- In the 0–14 years age group, younger children were more likely than older children to use GPs, with over 90% of 0–4-year-olds visiting a GP in the past year.
- There were significant differences among ethnic groups in the frequency of GP visits.
- Adults from the lowest family income group, 0–\$20,000, were almost twice as likely as adults from the highest income group, \$50,001 plus, to visit a GP six or more times in the year.
- The last time they visited a GP, just under 7 out of 10 adults and children were given a prescription.
- Nine out of ten adults were either very satisfied or satisfied with their last GP visit.
- Fourteen percent of women and 12% of men said they felt they needed to see a GP in the last 12 months but did not.

Introduction

In New Zealand most GPs or family doctors work in clinics based in the community. They provide a range of general medical services including treatment for common health complaints and prescriptions for medicines. GPs are also the main health professionals people see to obtain referrals to specialist medical services and hospital care. In 1997 there were 3119 GPs working either full-time or part-time in New Zealand (New Zealand Health Information Service 1999).

The Government subsidises the costs of GP services for adults and children using a targeted benefit system that takes into account people's family income, age and frequency of GP use. In 1996/97, total government expenditure on benefits related to GP use was \$239 million (Ministry of Health 1998a).

In the 1996/97 Health Survey, respondents were asked to indicate how many times they had visited a GP in the past 12 months, the reasons they had visited, their level of satisfaction with GP services, and the extent to which they had experienced health problems which they felt needed to be seen by a GP, but in fact were not.*

* Results for 1996/97 Health Survey questions relating to respondents' use of other community-based health professionals are presented in Chapter 13.

Having reliable national-level information on these questions is important for identifying which groups of New Zealanders are more likely to use GP services in the future, and why. It is also useful for assessing how future population change may influence demand for health care and levels of government expenditure on health benefits related to GP use. Information on satisfaction with services is important for ensuring that people are happy with the quality of the GP services they receive, while data on unmet health needs provide a measure of the extent to which various barriers may be limiting the ability of some groups to use GP services appropriately.

Unless otherwise stated, age- and sex-standardised rates, and 95% confidence intervals in parentheses, are given in the text. Tables at the end of this section show key standardised and unstandardised estimates. More detailed tables related to this section are available on the Ministry of Health website (www.moh.govt.nz).

Results

Use of GP services by sociodemographic variables

Use of GP services by age and sex

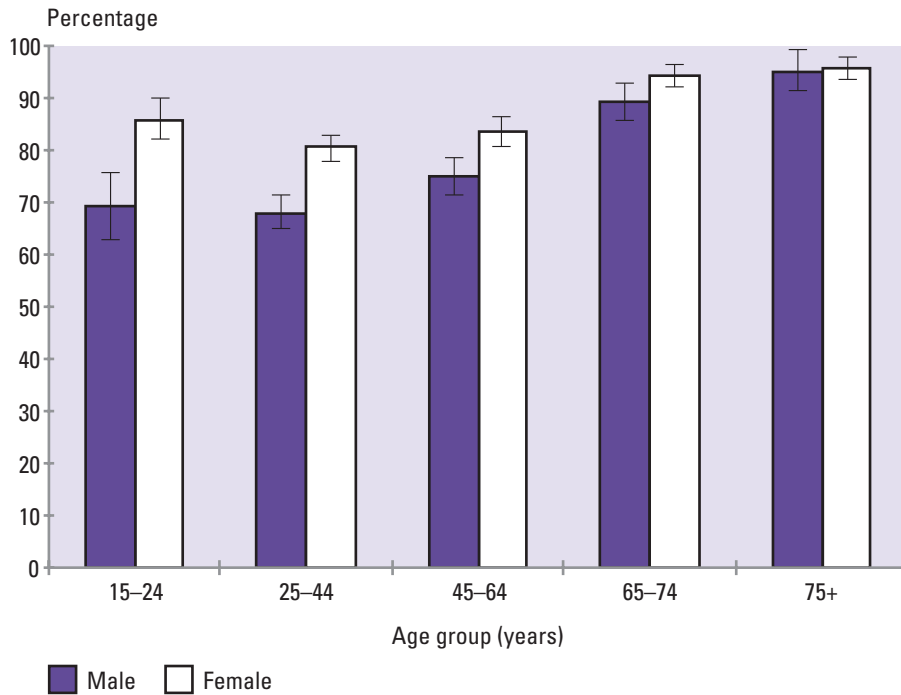
GPs were the most widely used of all the health professionals examined in the 1996/97 Health Survey, with 79.1% (77.7–80.5) of adults (aged 15 years or more) and 80.0% (76.9–83.1) of children (0–14 year olds) visiting a GP at least once in the past year. Translated to the New Zealand population as a whole, this represents an estimated 2,221,000 adults and 671,600 children.

In the 1992/93 Health Survey, 78.6% of the total population (adults and children) visited a GP at least once in the past 12 months.

Adults

Women were more likely than men to visit a GP at least once in the previous year (84.4%; 82.8–86.0 compared to 73.5%; 71.3–75.7; $p < 0.0001$; see Figure 99). Women were also more likely than men to make frequent visits to a GP, with 18.2% (16.6–19.8) of women but only 11.7% (10.1–13.3) of men visiting a GP six times or more in the past year (see Figure 100). Studies suggest these sex differences arise for a number of reasons. They include younger women's greater use of GPs for contraception, pregnancy and childbirth-related health care services, as well as perhaps the tendency for men to be less willing than women to seek professional help for certain kinds of health problems (Ministry of Health 1995; Ministry of Health 1996).

Figure 99: Proportion of adults who visited a GP at least once in the last 12 months, by age and sex

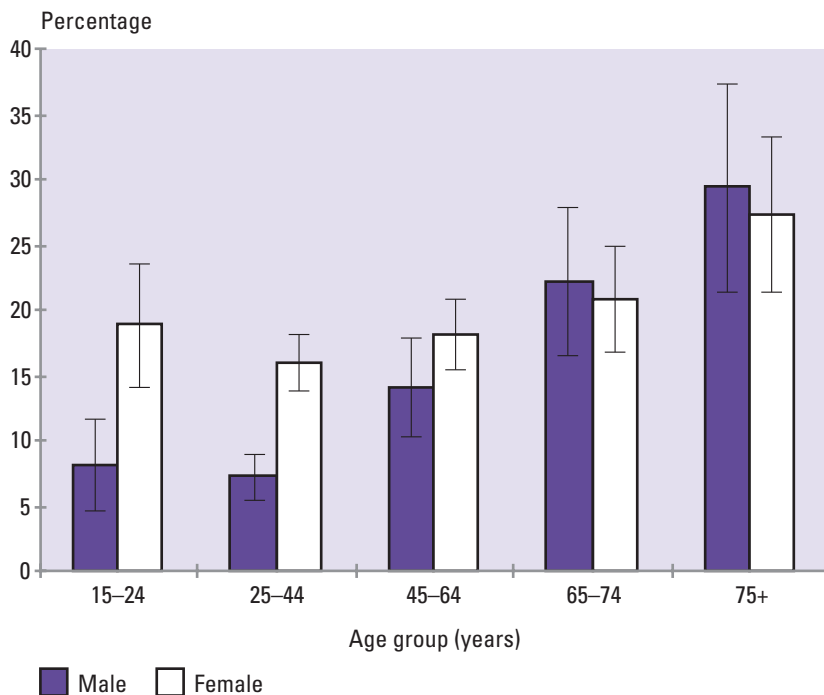


Note: Error bars indicate 95% confidence intervals. For further explanation of graphs, see Appendix 2: Notes to Figures and Tables.

Age was also a significant determinant of people's use of GP services, with older adults more likely than younger adults to have contact with a GP in the past year ($p < 0.0001$). Over 90% of people in the 65–74 and 75 plus age groups (91.5%; 89.3–93.7 and 95.5%; 93.3–97.7 respectively) had seen a GP at least once in this period, a much higher rate than for people in the 25–44 years age group (74.4%; 72.2–76.6).

Older adults also were more likely to be frequent users of GP services (see Figure 100). These differences reflect the fact that older adults are more likely than younger adults to experience serious illnesses or persistent health complaints, and therefore in general are more likely to visit a GP to obtain prevention or treatment services related to these health problems.

Figure 100: Proportion of adults who visited a GP six times or more in the last 12 months, by age and sex



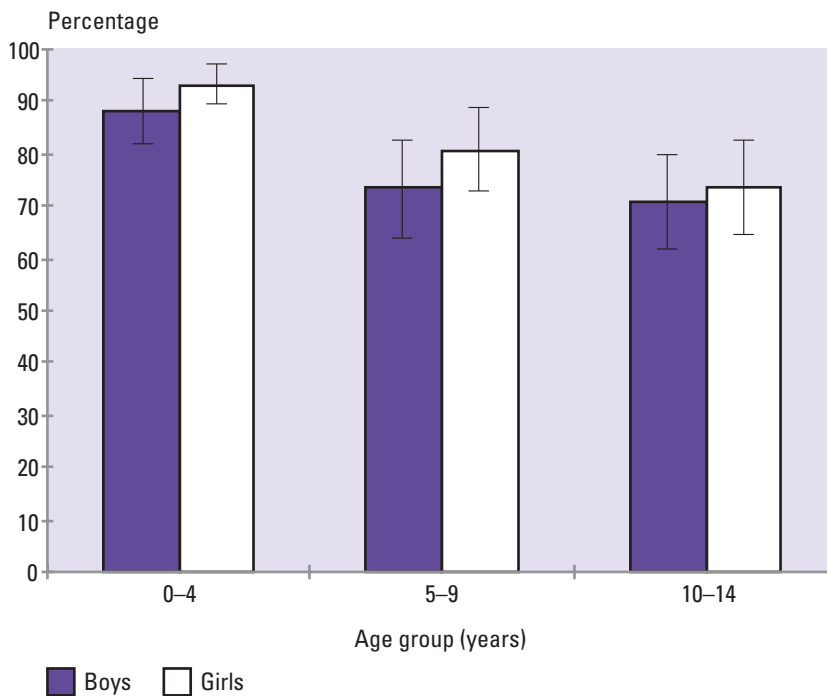
Note: Error bars indicate 95% confidence intervals. For further explanation of graphs, see Appendix 2: Notes to Figures and Tables.

Children

A higher proportion of girls (82.7%; 78.4–87.0) than boys (77.6%; 73.1–82.1) visited a GP in the past 12 months ($p < 0.001$). Younger children were also more likely than older children to use GPs, with about 90% of 0–4-year-olds (90.8%; 87.1–94.5) visiting a GP in the past year (see Figure 101). Similarly, younger children were more frequent users of GPs, with 28.3% (22.8–33.8) of 0–4-year-olds visiting a GP six or more times in the past year, compared with 14.0% (9.1–18.9) of 5–9-year-olds and 8.6% (4.7–12.5) of 10–14-year-olds ($p < 0.0001$).

These trends are in keeping with the results from the 1992/93 Health Survey (Ministry of Health 1995) and other New Zealand studies (Dovey et al 1992; McAvoy et al 1994) and probably at least partly reflect differences in patterns of illness; for example, younger children being more vulnerable than older children to respiratory conditions and infectious diseases (Ministry of Health 1998b). Other likely determinants include the availability of free immunisations for 0–4-year-olds, as well as other subsidised GP services. In July 1997, three-quarters of the way through the interviewing phase of the Health Survey, a revised health benefit scheme for 0–5-year-olds was introduced, making almost all GP visits by children from this age group free of charge.

Figure 101: Proportion of children who visited a GP in the last 12 months, by age and sex



Note: Error bars indicate 95% confidence intervals. For further explanation of graphs, see Appendix 2: Notes to Figures and Tables.

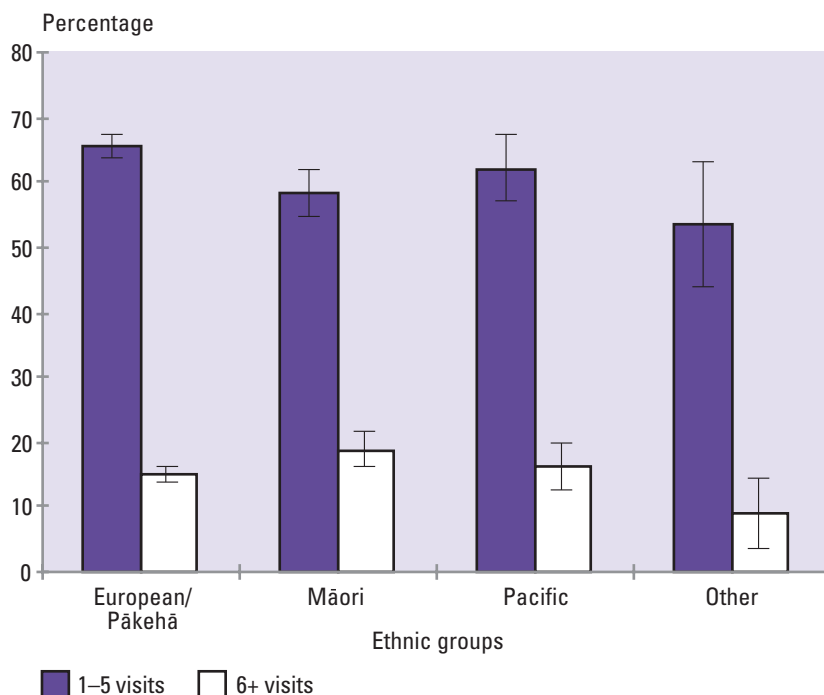
Use of GP services by ethnicity

Adults

Similar proportions of adults in the European/Pākehā, Māori and Pacific ethnic groups had visited a GP at least once in the last 12 months (80.8%; 79.2–82.4, 77.3%; 74.4–80.2 and 78.5%; 74.0–83.0 respectively). However, only 62.3% (52.9–71.7) of people from the Other ethnic group saw a GP over this period. It is difficult to identify the reasons for this latter result, although other 1996/97 Health Survey results suggest that people from the Other ethnic group were less likely than other people to visit GPs for disabilities or long-term health complaints. As well, they were more likely to report not using GP services when they needed to, either because they could not be bothered or did not want to make a fuss.

Across all ethnic groups, women were significantly more likely than men to visit a GP ($p < 0.0001$). People from the Other ethnic group had the greatest sex disparity in GP use, with 73.2% (62.6–83.8) of women but only 50.7% (35.8–65.6) of men in this group seeing a GP in the last year. As already mentioned, these sex differences are likely to reflect younger women's greater use of GPs for contraceptives, pregnancy and childbirth-related health services.

Figure 102: Proportion of adults who visited a GP 1–5 times and 6 or more times in the last 12 months, by ethnicity (age- and sex-standardised)



Note: Error bars indicate 95% confidence intervals. For further explanation of graphs, see Appendix 2: Notes to Figures and Tables.

There were significant differences across ethnic groups in the frequency of GP visits in the past year ($p < 0.0001$). One in five Māori adults (18.9%; 16.0–21.8), 16.3% (12.6–20.0) of Pacific people, 15.0% (13.6–16.4) of European/Pākehā and 8.9% (3.6–14.2) of people from the Other ethnic group visited a GP six or more times in the past year (see Figure 102). The higher proportion of Māori people who were frequent GP users may reflect, among other things, higher health needs. As other sections of this report show, Pacific people are also likely to have higher health needs relative to European/Pākehā, and the fact that GP use among Pacific people is similar to that of European/Pākehā suggests some discrepancy between health needs and GP use in Pacific people.

These results are similar to the results in the 1992/93 Health Survey, where Māori were more likely (20%) than non-Māori (15%) to have seen a GP six or more times in the previous year.

Children

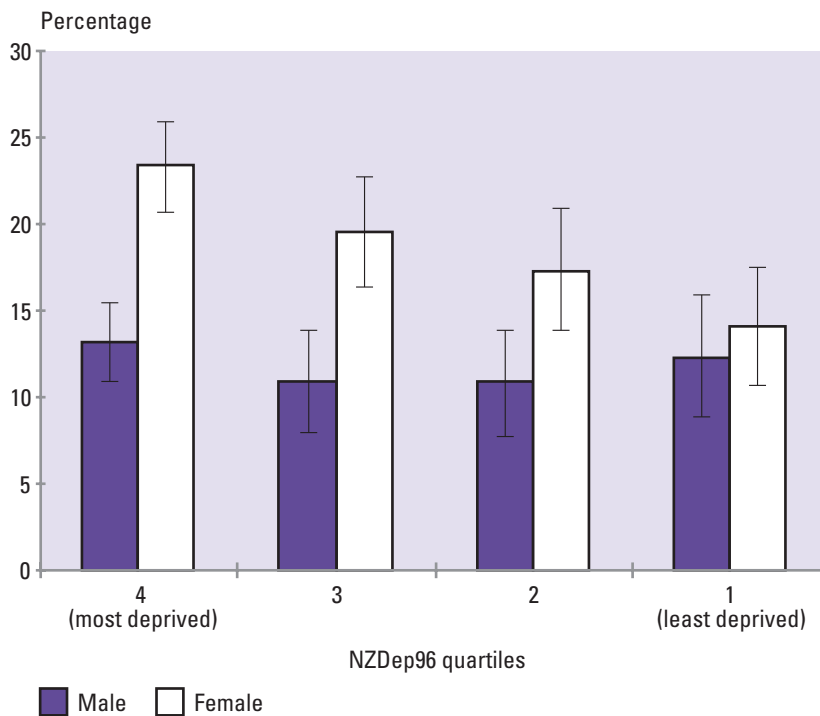
There were no statistically significant ethnic group differences for children’s use of GP services.

Use of GP services by family income, NZ Dep96* and education

The proportion of adults who saw a GP at least once in the past year did not vary markedly across the different family income groups, with 76.4% (72.9–79.9) of adults in the lowest income group (0–\$20,000) visiting a GP, compared with 80.4% (77.5–83.3) of adults in the highest income group (\$50,001+). However, when the frequency of GP visits was examined across income groups, significant differences emerged ($p < 0.01$). For example, 20.1% (17.6–22.6) of adults from the 0–\$20,000 income group and 12.6% (9.1–16.1) of adults in the highest income group visited a GP six or more times in the past year.

* The NZDep96 score measures the level of deprivation in the area in which a person lives, according to a number of census variables, such as the proportion of people in that area who earn low incomes or who receive income support benefits, are unemployed, do not own their own home, have no access to a car, are single-parent families, or have no qualifications. The scores are divided into quartiles from 1 (least deprived) to 4 (most deprived). For more details, see Chapter 1: The Survey.

Figure 103: Proportion of adults who visited a GP six times or more in the last 12 months, by NZDep96 score (age-standardised)



Note: Error bars indicate 95% confidence intervals. For further explanation of graphs, see Appendix 2: Notes to Figures and Tables.

Similarly, people from the least deprived areas of New Zealand were not significantly more likely to visit a GP at least once in the past year than people from the most deprived areas, although people from the most deprived areas were significantly more likely to be frequent users of GP services ($p < 0.01$; see Figure 103).

Mirroring these trends, the proportion of adults who visited a GP at least once in the last year did not differ significantly by education level. However, people with no educational qualifications, or with school only or post-school only qualifications, were more likely to be frequent users of GPs than people who had both a school and post-school qualification (the most highly educated group) ($p < 0.01$).

A number of studies have shown that New Zealanders from socioeconomically disadvantaged groups are more likely to experience certain illnesses, such as heart disease and communicable diseases (National Advisory Committee on Health and Disability 1998). This would partly account for these people being more frequent users of GP services, although it is questionable whether people from lower socioeconomic groups use primary health services enough to meet all their health needs (National Advisory Committee on Health and Disability 1998).

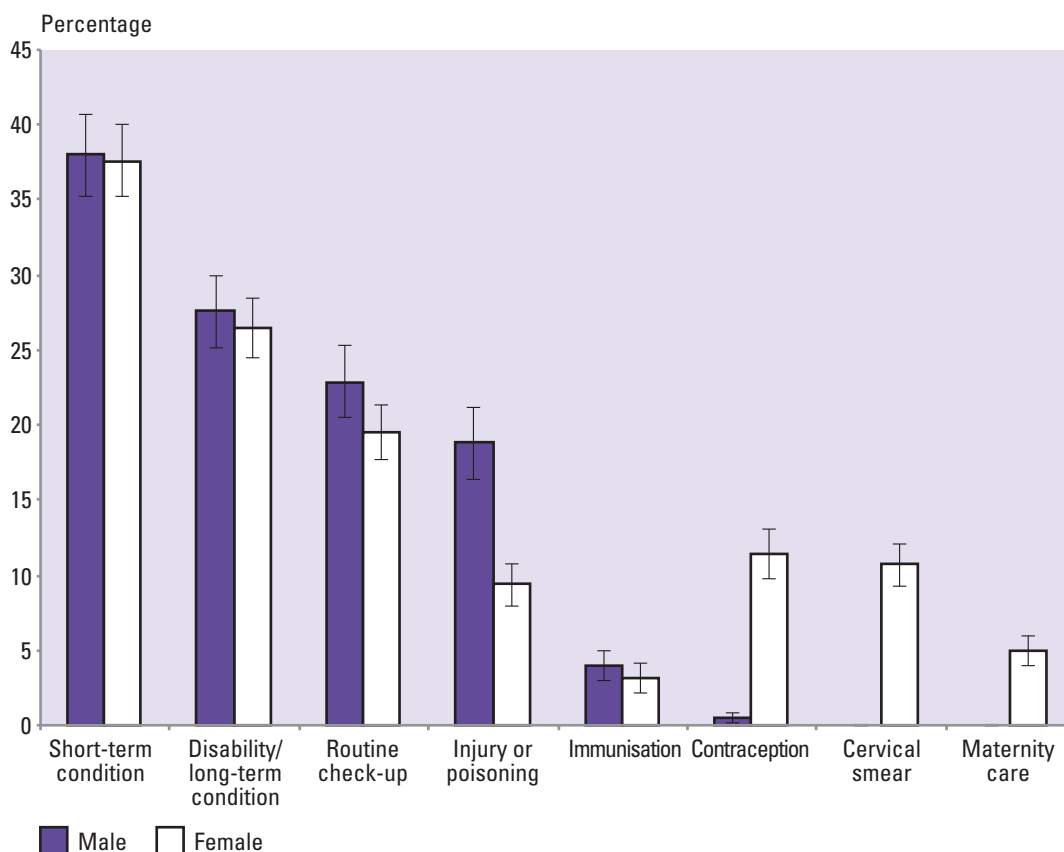
Use of GP services: reasons for use, satisfaction and unmet need

Reasons for visiting a GP

Adults

Treatment for a short-term health condition was the most common reason adults made their most recent visit to a GP in the past year (see Figure 104). The second most common reason was for a disability or long-term health condition. Men were more likely than women to visit a GP for routine check-ups and for an injury or poisoning. This latter result is not surprising given the greater incidence of unintentional and intentional injuries among men, especially young adult men (see Chapter 9: Injuries).

Figure 104: Reasons for adults' most recent GP visit in the last 12 months, by sex (age-standardised)

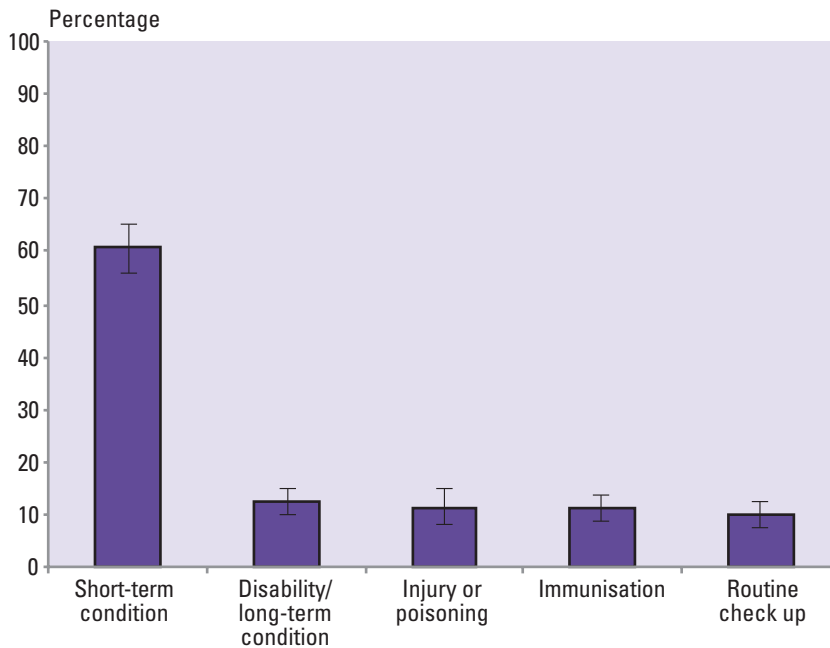


Note: Error bars indicate 95% confidence intervals. For further explanation of graphs, see Appendix 2: Notes to Figures and Tables.

Children

Children, like adults, were most likely to have last visited a GP in the past year for a short-term health condition, with 60.6% (56.1–65.1) of children seeing a GP for this reason. Around 1 in 10 (12.3%; 9.8–14.8) children last visited their GP for services related to a disability or long-term condition, while similar proportions visited for a routine check-up, immunisation, or for treatment for an injury or poisoning (10.2%; 7.7–12.7, 11.3%; 8.8–13.8, and 11.4%; 7.9–14.9 respectively; see Figure 105).

Figure 105: Reasons why children last saw a GP (age- and sex-standardised)



Note: Error bars indicate 95% confidence intervals. For further explanation of graphs, see Appendix 2: Notes to Figures and Tables.

Obtaining a prescription from a GP

Overall, 69.3% (67.7–70.9) of 1996/97 Health Survey adults were given a prescription when they last visited a GP, similar to the rate found in the 1992/93 Health Survey (72%: Ministry of Health 1995). More women than men were given a prescription ($p < 0.01$), and older people were more likely to be given a prescription than younger people ($p < 0.0001$). There were significant differences in the proportion of people who received a prescription from their GP across ethnic groups ($p < 0.001$). Nearly four out of five Pacific adults were given a prescription (79.5%; 74.2–84.8), with 73.6% (70.1–77.1) for Māori, 67.7% (65.7–69.7) for European/Pākehā and 67.1% (55.5–78.7) for the Other ethnic group. In the 1992/93 Health Survey the incidence of prescriptions was similar for Māori and non-Māori (Ministry of Health 1995).

Sixty-seven percent of children (67.6%; 63.5–71.7) were given a prescription on their last visit to a GP, a similar proportion to the adult group. However, in contrast to the situation in the adult group, more boys (70.8%; 65.1–76.5) than girls (64.3%; 58.4–70.2) were given a prescription. Three-quarters of children in the 5–9 years age group were given a prescription (75.8%; 69.3–82.3), higher than the rate for children in the 0–4 (62.5%; 55.4–69.6) and 10–14 years age groups (64.5%; 56.1–72.9).

The reasons for these differences in prescription item use probably relate to a number of factors, including type and severity of illness, as well as GP prescribing habits and patient expectations. Further results from the 1996/97 Health Survey on prescription use are presented in Chapter 14: Prescription Item Use.

Satisfaction with GP services

The 1996/97 Health Survey asked respondents how satisfied or dissatisfied they had been with their last visit to see a GP. Nine out of ten adults (89.4%; 88.4–90.4) said they had been either very satisfied or satisfied with their last GP visit. About 1 in 20 (4.4%; 3.8–5.0) were either dissatisfied or very dissatisfied.

These proportions are very similar to the levels of satisfaction/dissatisfaction with GP services found in the 1992/93 Health Survey (89% satisfied or very satisfied, and 4% dissatisfied or very dissatisfied; Ministry of Health 1995).

Rates of satisfaction with GPs increased significantly with age ($p < 0.0001$), with 85.1% (82.2–88.0) of 15–24-year-olds either satisfied or very satisfied with their last GP visit, compared to 95.6% (94.4–96.8) of those in the 65 plus age group. There were significant differences amongst ethnic groups in levels of satisfaction with GP services ($p < 0.05$). Adults from the Pacific (91.8%; 89.3–94.3), Other (90.3%; 84.0–96.6), European/Pākehā (89.4%; 88.4–90.4), and Māori (87.3%; 84.8–89.8) groups reported being either satisfied or very satisfied with their last GP visit.

When the 4% of adults (4.4%; 3.8–5.0) who were either dissatisfied or very dissatisfied with their last GP visit were asked the reasons why, the two most common groups of reasons given were that the doctor had not spent enough time with them or was not thorough enough (31.4%; 25.3–37.5); and that they did not like the doctor's manner, could not talk to the doctor, or considered the doctor had not listened to them (29.4%; 23.3–35.5).

A question was also asked regarding levels of satisfaction with overall health care; this is reported in Chapter 15: Hospital Use.

Unmet health need

Adults

The 1996/97 Health Survey included questions designed to identify if people had not visited a GP when they felt they had needed to, and the reasons for this. The questions relied on respondents making their own assessments of their past health needs and reasons for not using a GP.

Overall, 11.1% (9.5–12.7) of men and 13.7% (12.1–15.3) of women said they felt they needed to see a GP in the last 12 months but did not. In general, younger adults were more likely than older adults to report this ($p < 0.0001$), with 20.8% (15.9–25.7) of women and 16.9% (12.2–21.6) of men in the 15–24 years age group saying they had not visited a GP when they needed to.

There were significant ethnic group differences in the reporting of unmet health need ($p < 0.01$), with 18.6% (15.5–21.7) of Māori and 17.5% (12.8–22.2) of Pacific adults saying they thought they had needed to see a GP in the past year but did not: more than one-and-a-half times the rates of unmet need identified by European/Pākehā adults and adults from the Other ethnic group (11.6%; 10.4–12.8 and 11.5%; 6.0–17.0 respectively).

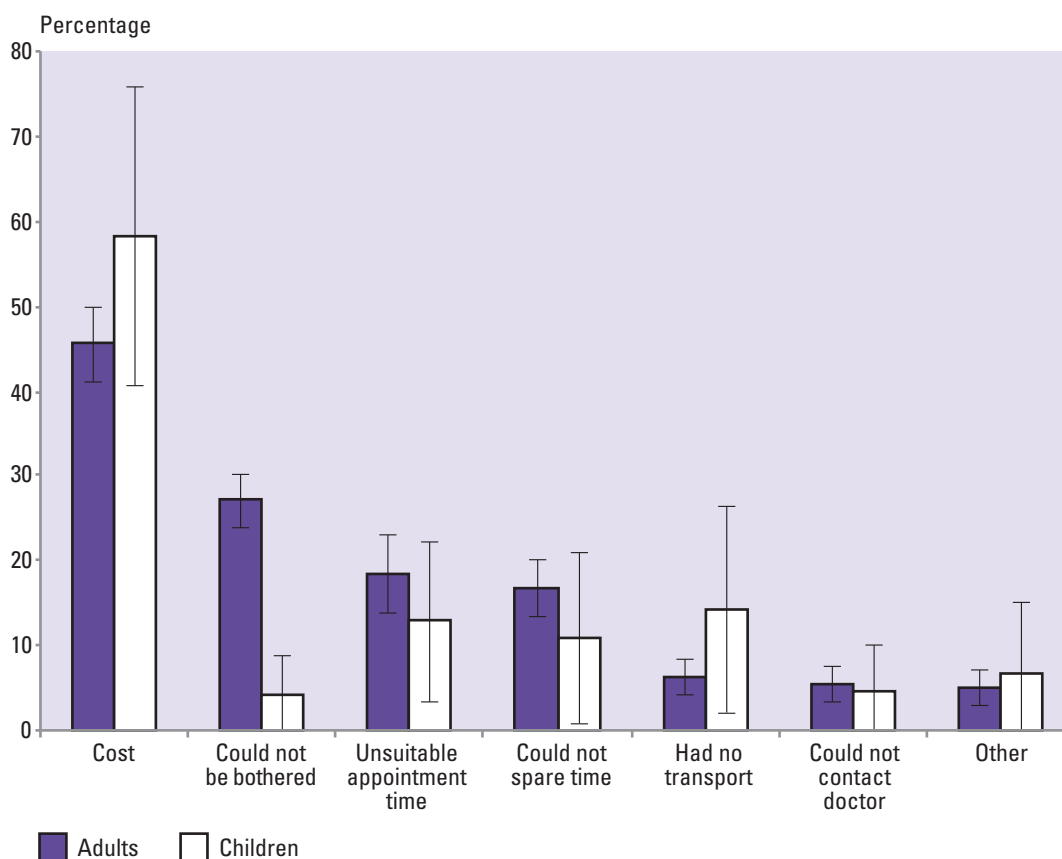
Unmet health need was also related to measures of socioeconomic status, with 15.0% (13.2–16.8) of adults living in the most deprived areas not having visited a GP when they needed to, compared to 9.4% (7.0–11.8) of adults living in the least deprived areas ($p < 0.01$). Similarly, 16.5% (13.8–19.2) of adults from the 0–\$20,000 family income group had not visited a GP when they needed to, one-and-a-half times the rate for adults in the \$50,001 plus family income group (12.1%; 9.7–14.5; $p < 0.05$). However, surprisingly perhaps, rates of unmet health need did not vary significantly by education level.

When asked why they had not seen a GP on these occasions, respondents pointed to various reasons related to factors such as the cost, accessibility and appropriateness of GP services as well as their own individual attitudes, priorities and motivations. This is in keeping with studies that show that the determinants of unmet health need are complex (Aday and Anderson 1974).

Nearly half (45.3%; 40.8–49.8) the adults identified cost as a reason for their unmet health need, with women, younger people, those with lower family incomes and those from more deprived areas more likely to mention this reason. In addition, nearly three-quarters (73.5%; 63.7–83.3) of Pacific adults identified cost as a reason, well above the rate for Māori (48.9%; 39.9–57.9) and European/Pākehā adults (43.2%; 37.3–49.1).

In the 1992/93 Health Survey just over half (55%) of adults with unmet need cited cost as the reason (Ministry of Health 1995).

Figure 106: Main reasons given for unmet need for GP services



Note: Error bars indicate 95% confidence intervals. For further explanation of graphs, see Appendix 2: Notes to Figures and Tables.

Over half the adults identified other reasons apart from cost for their unmet health need. Nearly one in five said they were unable to get an appointment with a doctor soon enough or at a suitable time, or after hours. In addition, just over a quarter of the adults said that they either could not be bothered or did not want to make a fuss. Seventeen percent also indicated that they were unable to spare the time to see a GP. Older people were more likely to say they had not gone to the GP because they could not be bothered or did not want to make a fuss, while younger people were more likely to say they could not spare the time. This suggests that some of this unmet need is for relatively minor complaints, or complaints of a transient nature.

Children

Overall, children appear less likely than adults to miss out on needed GP visits, with the caregivers of 6% of children (6.4%; 4.2–8.6) in the survey reporting that their child had needed to visit a GP in the last 12 months but did not. The most common single reason caregivers gave for their child not seeing a GP was cost, although a range of other reasons were also important, such as lack of transport or an inability to get an appointment with a doctor soon enough or at a suitable time. However, compared to the adult group, caregivers of children were much less likely to indicate they could not be bothered going to the doctor or did not want to make a fuss, with only 4% of caregivers mentioning these reasons (children 4.3%; 0.0–8.8 compared to adults 27.1%; 23.0–31.2).

Table 57: Number of visits to GP in last 12 months, by sociodemographic variables: percent (95% confidence intervals)

	Zero visits			1-5 visits			6 or more visits		
	%		Pop est	%		Pop est	%		Pop est
	(95% CI)			(95% CI)			(95% CI)		
	Unadj	Adj*		Unadj	Adj*		Unadj	Adj*	
Total	21.0 (19.6-22.4)		589,888	64.0 (62.4-65.6)		1,799,520	15.0 (13.8-16.2)		421,230
Sex									
Male	26.8 (24.4-29.2)	26.5 (24.3-28.7)	365,657	61.7 (59.3-64.1)	61.7 (59.3-64.1)	842,000	11.5 (9.9-13.1)	11.7 (10.1-13.3)	157,404
Female	15.5 (13.9-17.1)	15.6 (14.0-17.2)	224,231	66.2 (64.0-68.4)	66.2 (64.0-68.4)	957,519	18.3 (16.7-19.9)	18.2 (16.6-19.8)	263,826
Age									
15-24 years	22.4 (18.5-26.3)	22.1 (18.2-26.0)	117,776	64.2 (59.9-68.5)	64.3 (60.0-68.6)	337,525	13.4 (10.5-16.3)	13.6 (10.7-16.5)	70,316
25-44 years	25.5 (23.3-27.7)	25.6 (23.4-27.8)	289,709	62.7 (60.3-65.1)	62.7 (60.3-65.1)	711,480	11.7 (10.3-13.1)	11.7 (10.3-13.1)	133,103
45-64 years	20.8 (18.4-23.2)	20.7 (18.3-23.1)	155,035	63.1 (60.2-66.0)	63.2 (60.3-66.1)	471,291	16.1 (13.7-18.5)	16.2 (13.8-18.6)	120,505
65-74 years	8.3 (6.1-10.5)	8.5 (6.3-10.7)	20,185	70.3 (66.2-74.4)	70.0 (65.7-74.3)	171,367	21.4 (17.7-25.1)	21.5 (17.8-25.2)	52,262
75+ years	4.5 (2.3-6.7)	4.5 (2.3-6.7)	7183	67.4 (62.5-72.3)	67.3 (62.4-72.2)	107,857	28.1 (23.4-32.8)	28.2 (23.5-32.9)	45,045
Ethnicity									
European/Pākehā	18.9 (17.3-20.5)	19.2 (17.6-20.8)	427,604	65.9 (64.1-67.7)	65.8 (64.0-67.6)	1,486,609	15.2 (13.8-16.6)	15.0 (13.6-16.4)	343,238
Māori	24.3 (21.2-27.4)	22.7 (19.8-25.6)	66,976	58.7 (55.2-62.2)	58.3 (54.8-61.8)	161,902	17.0 (14.5-19.5)	18.9 (16.0-21.8)	47,003
Pacific	23.3 (18.8-27.8)	21.5 (17.0-26.0)	30,715	61.3 (56.6-66.0)	62.2 (56.9-67.5)	80,755	15.4 (12.1-18.7)	16.3 (12.6-20.0)	20,251
Other	44.4 (35.0-53.8)	37.7 (28.3-47.1)	64,592	48.3 (39.5-57.1)	53.3 (43.9-62.7)	70,253	7.4 (3.3-11.5)	8.9 (3.6-14.2)	10,738
Family income									
0-\$20,000	18.1 (15.6-20.6)	23.6 (20.1-27.1)	91,061	58.5 (55.8-61.2)	56.3 (52.4-60.2)	293,715	23.3 (20.9-25.7)	20.1 (17.6-22.6)	117,003
\$20,001-\$30,000	19.4 (16.5-22.3)	22.2 (18.5-25.9)	73,399	63.4 (59.7-67.1)	61.8 (57.7-65.9)	239,824	17.1 (14.4-19.8)	16.0 (13.3-18.7)	64,787
\$30,001-\$50,000	21.5 (18.8-24.2)	20.0 (17.3-22.7)	114,014	64.8 (61.5-68.1)	64.9 (61.6-68.2)	344,225	13.8 (11.4-16.2)	15.1 (12.6-17.6)	73,211
\$50,001+	22.4 (19.7-25.1)	19.6 (16.7-22.5)	194,644	67.8 (64.9-70.7)	67.7 (63.8-71.6)	590,383	9.9 (7.9-11.9)	12.6 (9.1-16.1)	85,823
NZDep96 score									
1 (least deprived)	19.6 (16.5-22.7)	19.0 (15.9-22.1)	158,237	67.7 (64.2-71.2)	67.8 (64.3-71.3)	545,942	12.7 (10.3-15.1)	13.2 (10.7-15.7)	102,017
2	21.7 (18.8-24.6)	21.5 (18.4-24.6)	151,854	64.0 (60.9-67.1)	64.3 (61.0-67.6)	447,819	14.2 (12.0-16.4)	14.2 (11.8-16.6)	99,636
3	21.3 (18.4-24.2)	21.4 (18.5-24.3)	134,495	63.2 (59.9-66.5)	63.2 (59.9-66.5)	398,861	15.4 (13.2-17.6)	15.3 (12.9-17.7)	97,392
4 (most deprived)	21.5 (19.5-23.5)	21.1 (19.1-23.1)	145,301	60.3 (57.9-62.7)	60.5 (58.1-62.9)	406,897	18.1 (16.3-19.9)	18.4 (16.6-20.2)	122,186
Education									
No qualification	19.8 (17.4-22.2)	21.8 (19.3-24.3)	159,161	61.1 (58.6-63.6)	60.6 (57.9-63.3)	490,051	19.1 (16.9-21.3)	17.6 (15.4-19.8)	153,476
School or post-school only	20.0 (17.6-22.4)	20.2 (17.8-22.6)	201,299	65.1 (62.4-67.8)	64.9 (62.2-67.6)	656,548	14.9 (12.9-16.9)	14.9 (12.9-16.9)	150,215
School and post-school	23.1 (20.6-25.6)	21.7 (19.3-24.1)	227,728	65.4 (62.9-67.9)	65.9 (63.2-68.6)	645,706	11.6 (10.0-13.2)	12.5 (10.7-14.3)	114,351

* Adjusted rates are adjusted for age and sex, except when they are age-specific, in which case they are adjusted only for sex, or when they are sex-specific, in which case they are adjusted only for age.

Note: For further explanation of Tables, see Appendix 2: Notes to Figures and Tables.

Table 58: Number of visits to GP in last 12 months, by age and ethnicity, for males:
percent (95% confidence intervals)

Males	Zero visits			1–5 visits			6 or more visits		
	% (95% CI)		Pop est	% (95% CI)		Pop est	% (95% CI)		Pop est
	Unadj	Adj*		Unadj	Adj*		Unadj	Adj*	
Total	26.8 (24.4–29.2)	26.5 (24.3–28.7)	365,657	61.7 (59.3–64.1)	61.7 (59.3–64.1)	842,000	11.5 (9.9–13.1)	11.7 (10.1–13.3)	157,404
Age									
15–24 years	30.7 (24.2–37.2)		81,317	61.2 (54.5–67.9)		161,789	8.1 (4.6–11.6)		21,346
25–44 years	31.9 (28.6–35.2)		175,765	60.9 (57.4–64.4)		335,765	7.2 (5.4–9.0)		39,699
45–64 years	25.1 (21.4–28.8)		93,103	60.8 (56.5–65.1)		225,468	14.1 (10.4–17.8)		52,422
65–74 years	10.8 (7.3–14.3)		12,485	67.2 (60.5–73.9)		78,005	22.1 (16.4–27.8)		25,649
75+ years	4.8 (0.7–8.9)		2,987	65.8 (57.4–74.2)		40,972	29.4 (21.4–37.4)		18,288
Ethnicity									
European/Pākehā	24.4 (22.0–26.8)	24.7 (22.2–27.2)	268,147	63.4 (60.9–66.9)	63.5 (60.8–66.2)	696,255	12.2 (10.4–14.0)	11.9 (10.1–13.7)	133,396
Māori	28.9 (23.6–34.2)	27.2 (22.3–32.1)	37,615	59.4 (53.5–65.3)	58.9 (53.2–64.6)	77,337	11.8 (8.1–15.5)	14.0 (9.7–18.3)	15,318
Pacific	30.1 (22.7–37.5)	27.5 (20.1–34.9)	19,699	60.1 (52.7–67.5)	62.0 (54.0–70.0)	39,297	9.8 (4.9–14.7)	10.4 (5.3–15.5)	6,380
Other	56.1 (42.2–70.0)	49.3 (34.4–64.2)	40,195	40.6 (27.3–53.9)	45.1 (30.8–59.4)	29,111	3.2 (0.0–6.5)	5.6 (0.0–12.9)	2,310

* Adjusted rates are adjusted for age.

Note: For further explanation of Tables, see Appendix 2: Notes to Figures and Tables.

Table 59: Number of visits to GP in last 12 months, by age and ethnicity, for females:
percent (95% confidence intervals)

Females	Zero visits			1–5 visits			6 or more visits		
	% (95% CI)		Pop est	% (95% CI)		Pop est	% (95% CI)		Pop est
	Unadj	Adj*		Unadj	Adj*		Unadj	Adj*	
Total	15.5 (13.9–17.1)	15.6 (14.0–17.2)	224,231	66.2 (64.0–68.4)	66.2 (64.0–68.4)	957,519	18.3 (16.7–19.9)	18.2 (16.6–19.8)	263,826
Age									
15–24 years	14.0 (10.3–17.7)		36,458	67.3 (61.8–72.8)		175,735	18.8 (14.1–23.5)		48,970
25–44 years	19.5 (17.0–22.0)		113,944	64.4 (61.3–67.5)		375,716	16.0 (13.8–18.2)		93,403
45–64 years	16.5 (13.4–19.6)		61,933	65.4 (61.5–69.3)		245,823	18.1 (15.4–20.8)		68,083
65–74 years	6.0 (3.8–8.2)		7,700	73.1 (68.6–77.6)		93,362	20.8 (16.7–24.9)		26,613
75+ years	4.3 (2.1–6.5)		4,197	68.4 (62.3–74.5)		66,884	27.3 (21.4–33.2)		26,757
Ethnicity									
European/Pākehā	13.8 (12.2–15.4)	14.1 (12.3–15.9)	159,457	68.2 (65.8–70.6)	68.0 (65.6–70.4)	790,354	18.1 (16.3–19.9)	17.9 (16.1–19.7)	209,842
Māori	20.2 (16.9–23.5)	18.5 (15.4–21.6)	29,361	58.1 (53.8–62.4)	57.9 (53.4–62.4)	84,565	21.8 (18.3–25.3)	23.6 (19.7–27.5)	31,685
Pacific	16.6 (12.3–20.9)	15.8 (11.1–20.5)	11,016	62.5 (56.6–68.4)	62.3 (55.6–69.0)	41,458	20.9 (16.0–25.8)	21.9 (16.2–27.6)	13,872
Other	33.0 (22.0–44.0)	26.8 (16.2–37.4)	24,397	55.6 (44.4–66.8)	61.1 (49.1–73.1)	41,142	11.4 (4.3–18.5)	12.1 (4.3–19.9)	8,428

* Adjusted rates are adjusted for age.

Note: For further explanation of Tables, see Appendix 2: Notes to Figures and Tables.

Table 60: Reasons given for last seeing a general practitioner, by age and sex: percent (95% confidence intervals)

	Short-term condition		Injury or poisoning		Disability/long-term condition		Routine check-up		Immunisation		Cervical smear		Contraception		Maternity care	
	Unadj	Adj*	Unadj	Adj*	Unadj	Adj*	Unadj	Adj*	Unadj	Adj*	Unadj	Adj*	Unadj	Adj*	Unadj	Adj*
Total	37.8		13.7		27.0		21.0		3.5		10.6		6.4		4.8	
15-24 years	(36.0-39.6)	48.5	(12.3-15.1)	16.7	(25.4-28.6)	16.0	(19.6-22.4)	13.5	(2.7-4.3)	9.2	(9.2-12.0)	5.4	(5.6-7.2)	14.4	4.8	5.9
25-44 years	(43.8-53.2)	42.9	(13.3-20.7)	17.0	(12.6-19.6)	18.4	(10.2-16.8)	15.3	(2.7-8.1)	15.4	(5.9-12.5)	2.0	(10.7-17.3)	9.6	5.9	9.7
45-64 years	(40.2-45.6)	33.7	(14.8-19.2)	11.7	(16.4-20.4)	32.0	(13.3-17.3)	27.4	(1.2-2.8)	10.4	(12.9-17.9)	2.1	(8.0-11.2)	0.7	0.1	0.1
65-74 years	(30.2-37.2)	22.9	(9.3-14.1)	7.0	(28.9-35.1)	48.5	(24.5-30.3)	29.6	(1.3-2.9)	7.8	(7.9-12.9)	3.6	(0.3-1.1)	0.0	0.0	0.0
75+ years	(19.1-26.9)	18.5	(4.8-9.6)	3.9	(43.9-53.3)	53.1	(25.0-34.0)	35.9	(5.1-10.1)	5.7	(1.4-5.8)	0.0	(0.0-0.0)	0.0	0.0	0.0
	(14.3-23.7)		(2.1-5.7)		(47.9-58.5)		(29.9-40.1)		(2.1-9.5)		(0.0-0.0)		(0.0-0.0)			
Males																
Total	38.3	38.0	19.0	18.8	27.2	27.6	22.6	22.9	3.9	4.0	-	-	0.5	0.5	-	-
15-24 years	(35.6-41.0)	48.3	(16.6-21.4)	25.2	(24.8-29.6)	25.2	(20.2-25.0)	13.7	(2.9-4.9)	(3.0-5.0)	-	-	(0.1-0.9)	(0.1-0.9)	-	-
25-44 years	(41.0-55.6)	44.5	(18.9-31.5)	26.8	(10.5-21.9)	19.4	(8.4-19.0)	14.9	(1.4-9.2)				(0.0-1.4)			
45-64 years	(40.2-48.8)	35.0	(22.7-30.9)	12.7	(16.1-22.7)	32.0	(11.8-18.0)	30.4	(1.9-5.1)				(0.3-1.9)			
65-74 years	(29.5-40.5)	22.5	(8.8-16.6)	4.9	(27.3-36.7)	48.1	(25.7-35.1)	31.0	(0.5-2.5)				(0.0-0.3)			
75+ years	(16.6-28.4)	12.3	(2.2-7.6)	4.9	(40.8-55.4)	50.8	(24.3-37.7)	47.5	(4.7-13.7)				(0.0-0.0)			
	(6.8-17.8)		(1.2-8.6)		(42.2-59.4)		(38.9-56.1)		(0.6-8.0)				(0.0-0.0)			
Females																
Total	37.4	37.6	9.4	9.4	26.9	26.5	19.7	19.5	3.2	3.1	10.6	10.7	11.2	11.4	4.8	4.9
15-24 years	(35.2-39.6)	48.7	(8.0-10.8)	10.3	(24.9-28.9)	24.5-28.5	(17.9-21.5)	(17.7-21.3)	(2.2-4.2)	(2.1-4.1)	(9.2-12.0)	(9.3-12.1)	(9.8-12.6)	(9.8-13.0)	(3.8-5.8)	(3.9-5.9)
25-44 years	(42.4-55.0)	41.6	(6.6-14.0)	9.2	(11.2-20.6)	17.6	(9.0-17.6)	15.5	(2.4-8.6)				(19.0-30.8)			
45-64 years	(38.1-45.1)	32.6	(7.0-11.4)	10.9	(15.2-20.0)	31.9	(13.1-17.9)	24.9	(0.3-1.5)				(14.0-19.0)			
65-74 years	(28.5-36.7)	23.4	(8.4-13.4)	9.3	(27.8-36.0)	48.9	(21.0-28.8)	28.1	(1.2-4.0)				(0.4-2.0)			
75+ years	(18.1-28.7)	23.3	(5.6-13.0)	3.2	(42.6-55.2)	54.8	(22.8-33.4)	27.1	(3.6-9.0)				(0.0-0.0)			
	(16.6-30.0)		(1.8-4.6)		(47.9-61.7)		(21.6-32.6)		(2.7-10.9)				(0.0-0.0)			

* Adjusted rates are adjusted for age and sex, except when they are age-specific, in which case they are adjusted only for sex, or when they are sex-specific, in which case they are adjusted only for age.
 Note: For further explanation of Tables, see Appendix 2. Notes to Figures and Tables.

Table 61: Proportion of people who felt they needed to see a GP in last 12 months but did not, by sociodemographic variables: percent (95% confidence intervals)

People reporting need but not visiting GP			
	%		Pop est
	(95% CI)		
	Unadj	Adj*	
Total	12.4 (11.2–13.6)		350,579
15–24 years	18.8 (15.5–22.1)	18.9 (15.6–22.2)	99,184
25–44 years	15.1 (13.3–16.9)	15.2 (13.4–17.0)	172,847
45–64 years	7.6 (6.2–9.0)	7.6 (6.2–9.0)	56,677
65+ years	5.4 (3.8–7.0)	5.4 (3.8–7.0)	21,871
Male total	11.2 (9.6–12.8)	11.1 (9.5–12.7)	154,058
15–24 years	16.9 (12.2–21.6)		44,900
25–44 years	13.8 (11.1–16.5)		76,701
45–64 years	6.3 (4.3–8.3)		23,449
65+ years	5.0 (2.8–7.2)		9008
Female total	13.6 (12.0–15.2)	13.7 (12.1–15.3)	196,521
15–24 years	20.8 (15.9–25.7)		54,284
25–44 years	16.4 (14.0–18.8)		96,146
45–64 years	8.8 (6.6–11.0)		33,228
65+ years	5.7 (3.5–7.9)		12,863
Ethnicity			
European/Pākehā	11.1 (9.9–12.3)	11.6 (10.4–12.8)	251,816
Māori	21.4 (17.7–25.1)	18.6 (15.5–21.7)	59,762
Pacific	16.4 (12.5–20.3)	17.5 (12.8–22.2)	21,727
Other	11.9 (6.8–17.0)	11.5 (6.0–17.0)	17,274
Family income			
0–\$20,000	12.8 (11.0–14.6)	16.5 (13.8–19.2)	64,171
\$20,001–\$30,000	12.4 (9.9–14.9)	14.5 (11.4–17.6)	47,091
\$30,001–\$50,000	11.2 (8.8–13.6)	11.3 (8.8–13.8)	59,787
\$50,001+	12.5 (10.3–14.7)	12.1 (9.7–14.5)	109,667
NZDep96 score			
1 (least deprived)	9.2 (6.8–11.6)	9.4 (7.0–11.8)	74,149
2	12.4 (10.0–14.8)	12.6 (10.1–15.1)	86,772
3	13.5 (11.1–15.9)	13.3 (10.9–15.7)	85,617
4 (most deprived)	15.3 (13.5–17.1)	15.0 (13.2–16.8)	104,042
Education			
No qualification	11.0 (9.2–12.8)	11.8 (9.8–13.8)	88,667
School or post-school only	13.9 (11.7–16.1)	13.5 (11.5–15.5)	140,948
School and post-school	12.1 (10.3–13.9)	11.6 (9.8–13.4)	120,040

* Adjusted rates are adjusted for age and sex, except when they are age-specific, in which case they are adjusted only for sex, or when they are sex-specific, in which case they are adjusted only for age.

Note: For further explanation of Tables, see Appendix 2: Notes to Figures and Tables.

Table 62: Main reasons given for unmet need relating to GPs, by sociodemographic variables: percent (95% confidence intervals)

	Cost (95% CI)		Unsuitable appointment time (95% CI)		Could not spare time (95% CI)		Could not be bothered (95% CI)		Had no transport (95% CI)		Could not contact doctor (95% CI)		Other (95% CI)	
	Unadj	Adj*	Unadj	Adj*	Unadj	Adj*	Unadj	Adj*	Unadj	Adj*	Unadj	Adj*	Unadj	Adj*
Total														
15-24 years	45.3 (40.8-49.8)	46.3 (36.1-56.5)	18.5 (14.0-23.0)	24.3 (14.9-33.7)	16.8 (13.5-20.1)	16.9 (9.8-24.0)	27.2 (23.1-31.3)	26.1 (17.7-34.5)	6.2 (4.2-8.2)	7.7 (3.6-11.8)	5.3 (3.3-7.3)	5.5 (1.6-9.4)	5.1 (3.1-7.1)	1.1 (0.0-2.3)
25-44 years	46.1 (35.9-56.3)	48.5 (41.8-55.2)	24.5 (14.9-34.1)	17.9 (12.2-23.6)	16.9 (9.8-24.0)	18.9 (13.6-24.2)	26.2 (17.8-34.6)	24.3 (18.0-30.6)	7.6 (3.5-11.7)	4.7 (2.5-6.9)	5.5 (4.0-7.0)	4.0 (1.8-6.2)	1.0 (0.0-2.2)	5.7 (2.2-9.2)
45-64 years	48.5 (41.8-55.2)	44.2 (35.4-53.0)	18.0 (12.3-23.7)	11.8 (5.9-17.7)	15.1 (6.7-23.5)	14.9 (6.5-23.3)	24.3 (18.0-30.6)	31.3 (21.9-40.7)	4.7 (2.5-6.9)	3.5 (1.0-6.0)	7.3 (1.8-12.8)	7.3 (1.8-12.8)	10.0 (4.5-15.5)	10.0 (4.5-15.5)
65+ years	44.1 (35.3-52.9)	21.2 (9.9-31.1)	11.8 (5.9-17.7)	14.3 (3.5-25.1)	3.5 (0.0-8.0)	3.5 (0.0-8.0)	44.1 (29.4-58.8)	42.6 (28.1-57.1)	18.5 (7.1-29.9)	18.7 (6.7-30.7)	9.4 (0.0-19.2)	9.9 (0.0-20.3)	5.1 (1.0-9.2)	5.5 (1.0-10.0)
Male total														
15-24 years	41.4 (34.3-48.5)	41.4 (34.3-48.5)	21.6 (12.8-30.4)	21.6 (13.0-30.2)	20.5 (14.8-26.2)	20.4 (14.7-26.1)	30.4 (23.7-37.1)	30.4 (23.7-37.1)	4.8 (2.1-7.5)	4.9 (2.2-7.6)	5.3 (2.2-8.4)	5.3 (2.2-8.4)	3.6 (1.8-5.4)	3.7 (1.7-5.7)
25-44 years	40.0 (23.5-56.5)	43.7 (32.5-54.9)	30.2 (12.6-47.8)	19.6 (9.8-29.4)	18.2 (7.6-28.8)	23.5 (13.9-33.1)	31.5 (17.4-45.6)	33.2 (22.0-44.4)	4.8 (0.0-10.7)	3.4 (0.3-6.5)	3.3 (0.0-7.6)	4.5 (0.8-8.2)	0.5 (0.0-1.1)	3.1 (0.6-5.6)
45-64 years	43.7 (32.5-54.9)	40.9 (27.4-54.4)	19.6 (9.8-29.4)	11.4 (1.4-21.4)	21.5 (6.8-36.2)	21.4 (0.0-42.8)	21.4 (10.2-32.6)	21.4 (10.2-32.6)	3.1 (0.2-6.0)	3.1 (0.2-6.0)	7.0 (0.0-15.2)	7.0 (0.0-15.2)	8.6 (1.2-16.0)	8.6 (1.2-16.0)
65+ years	40.9 (27.4-54.4)	30.1 (10.7-49.5)	11.4 (1.4-21.4)	23.4 (2.6-44.2)	3.5 (0.0-10.2)	3.5 (0.0-10.2)	24.3 (7.1-41.5)	24.3 (7.1-41.5)	21.0 (0.0-42.8)	21.0 (0.0-42.8)	16.5 (0.0-36.3)	16.5 (0.0-36.3)	10.9 (0.9-20.9)	10.9 (0.9-20.9)
Female total														
15-24 years	48.4 (42.7-54.1)	48.6 (42.9-54.3)	16.1 (11.8-20.4)	16.2 (11.7-20.7)	13.9 (9.8-18.0)	13.9 (9.8-18.0)	24.8 (19.9-29.7)	24.6 (19.7-29.5)	7.3 (4.9-9.7)	7.2 (4.8-9.6)	5.3 (2.8-7.8)	5.4 (2.9-7.9)	6.2 (2.9-9.5)	6.2 (2.9-9.5)
25-44 years	51.0 (38.7-63.3)	52.2 (44.2-60.2)	19.9 (9.7-30.1)	16.6 (10.5-22.7)	15.9 (6.9-24.9)	15.2 (9.5-20.9)	22.0 (12.4-31.6)	22.3 (15.2-29.4)	9.8 (4.1-15.5)	9.8 (4.1-15.5)	7.2 (1.1-13.3)	1.5 (0.0-3.5)	1.5 (0.0-3.5)	7.9 (2.0-13.8)
45-64 years	52.2 (44.2-60.2)	46.4 (35.0-57.8)	16.6 (10.5-22.7)	12.0 (4.7-19.3)	10.5 (0.7-20.3)	10.5 (0.7-20.3)	17.2 (11.5-22.9)	10.6 (4.5-16.7)	5.8 (3.1-8.5)	3.8 (0.0-7.7)	3.7 (1.3-6.1)	7.5 (0.4-14.6)	10.9 (3.3-18.5)	10.9 (3.3-18.5)
65+ years	46.4 (35.0-57.8)	13.8 (3.2-24.4)	12.0 (4.7-19.3)	6.7 (0.2-13.2)	3.5 (0.0-9.6)	3.5 (0.0-9.6)	58.0 (40.2-75.8)	44.1 (18.4-69.8)	16.8 (5.2-28.4)	16.8 (5.2-28.4)	4.5 (0.0-12.9)	1.1 (0.0-2.7)	1.1 (0.0-2.7)	7.4 (0.0-20.3)
Ethnicity														
European/Pakeha	42.4 (36.7-48.1)	43.2 (37.3-49.1)	19.0 (14.1-23.9)	19.3 (14.2-24.4)	16.5 (12.0-21.0)	16.6 (12.1-21.1)	29.6 (24.3-34.9)	29.0 (23.7-34.3)	3.9 (2.3-5.5)	3.8 (2.2-5.4)	5.6 (3.2-8.0)	5.5 (3.1-7.9)	5.4 (2.7-8.1)	5.3 (2.6-8.0)
Māori	50.7 (41.5-59.9)	48.9 (39.9-57.9)	18.8 (8.2-29.4)	17.1 (7.9-26.3)	18.6 (11.7-25.5)	17.3 (10.8-23.8)	21.1 (14.2-28.0)	22.3 (15.2-29.4)	13.0 (6.9-19.1)	13.1 (7.0-19.2)	5.5 (2.2-8.8)	5.8 (2.3-9.3)	3.7 (1.3-6.1)	3.8 (1.3-6.3)
Pacific	66.4 (55.6-77.2)	73.5 (63.7-83.3)	8.0 (1.9-14.1)	7.6 (0.9-14.3)	14.8 (6.6-23.0)	12.7 (5.1-20.3)	12.2 (5.3-19.1)	10.6 (4.5-16.7)	12.5 (3.1-21.9)	17.5 (1.8-33.2)	2.0 (0.0-4.9)	1.6 (0.0-4.1)	4.2 (0.3-8.1)	3.1 (0.2-6.0)
Other	42.2 (18.5-65.9)	42.4 (15.9-68.9)	24.2 (7.3-41.1)	20.8 (4.3-37.3)	16.9 (0.0-34.1)	22.3 (0.0-49.2)	32.3 (12.1-52.5)	44.1 (18.4-69.8)	7.5 (0.0-16.3)	4.3 (0.0-9.6)	4.5 (0.0-13.3)	3.3 (0.0-9.8)	5.2 (0.0-13.8)	7.4 (0.0-20.3)

* Adjusted rates are adjusted for age and sex, except when they are age-specific, in which case they are adjusted only for sex, or when they are sex-specific, in which case they are adjusted only for age.
 Note: For further explanation of Tables, see Appendix 2: Notes to Figures and Tables.

Table 63: Number of visits to a GP in last 12 months, for children: percent (95% confidence intervals)

Children	Zero visits			1–5 visits			6 or more visits		
	% (95% CI)		Pop est	% (95% CI)		Pop est	% (95% CI)		Pop est
	Unadj	Adj*		Unadj	Adj*		Unadj	Adj*	
Total	20.0 (16.9–23.1)		167,436	63.0 (59.5–66.5)		528,721	17.0 (14.5–19.5)		142,879
Age									
0–4 years	9.2 (5.5–12.9)	9.2 (5.5–12.9)	25,630	62.5 (56.6–68.4)	62.5 (56.6–68.4)	173,845	28.3 (22.8–33.8)	28.3 (22.8–33.8)	78,579
5–9 years	23.0 (16.5–29.5)	23.0 (16.5–29.5)	68,491	63.0 (55.6–70.4)	63.0 (55.6–70.4)	187,199	14.0 (9.1–18.9)	14.0 (9.1–18.9)	41,514
10–14 years	27.8 (21.5–34.1)	27.8 (21.5–34.1)	73,315	63.6 (56.7–70.5)	63.6 (56.7–70.5)	167,677	8.6 (4.7–12.5)	8.6 (4.7–12.5)	22,786
Ethnicity									
European/Pākehā	19.9 (16.0–23.8)	19.7 (15.8–23.6)	107,590	63.2 (58.9–67.5)	62.9 (58.6–67.2)	340,831	16.9 (13.6–20.2)	17.4 (14.1–20.7)	91,004
Māori	19.7 (13.6–25.8)	20.7 (14.2–27.2)	36,294	58.5 (51.1–65.9)	57.5 (49.7–65.3)	107,677	21.7 (14.6–28.8)	21.8 (14.4–29.2)	39,997
Pacific	15.5 (4.9–26.1)	14.8 (5.2–24.4)	9878	68.9 (56.2–81.6)	70.4 (58.4–82.4)	43,883	15.6 (6.4–24.8)	14.8 (6.2–23.4)	9946
Other	26.3 (10.4–42.2)	26.6 (11.5–41.7)	13,673	70.0 (54.1–85.9)	69.2 (54.3–84.1)	36,331	3.7 (0.0–8.2)	4.1 (0.0–9.0)	1931

* Adjusted rates are adjusted for age and sex, except when they are age-specific, in which case they are adjusted only for sex.

Note: For further explanation of Tables, see Appendix 2: Notes to Figures and Tables.

Table 64: Reasons given for visiting GP in last 12 months, for children: percent (95% confidence intervals)

Children	Short-term condition		Injury or poisoning		Disability/long-term condition		Routine check up		Immunisation	
	% (95% CI)		% (95% CI)		% (95% CI)		% (95% CI)		% (95% CI)	
	Unadj	Adj*	Unadj	Adj*	Unadj	Adj*	Unadj	Adj*	Unadj	Adj*
Total	60.6 (56.1–65.1)		11.4 (7.9–14.9)		12.3 (9.8–14.8)		10.2 (7.7–12.7)		11.3 (8.8–13.8)	
Sex										
Male	62.8 (56.7–68.9)	62.8 (56.7–68.9)	11.2 (7.3–15.1)	11.2 (7.3–15.1)	13.7 (9.8–17.6)	13.7 (9.8–17.6)	7.3 (4.6–10.0)	7.3 (4.6–10.0)	9.0 (5.7–12.3)	9.0 (5.7–12.3)
Female	58.4 (51.5–65.3)	58.4 (51.5–65.3)	11.6 (5.7–17.5)	11.6 (5.7–17.5)	11.0 (7.5–14.5)	11.0 (7.5–14.5)	13.2 (8.7–17.7)	13.2 (8.7–17.7)	13.7 (9.6–17.8)	13.7 (9.6–17.8)
Age										
0–4 years	64.4 (58.1–70.7)	64.4 (58.1–70.7)	4.5 (1.2–7.8)	4.5 (1.2–7.8)	11.6 (7.9–15.3)	11.6 (7.9–15.3)	15.7 (11.2–20.2)	15.7 (11.2–20.2)	18.4 (13.3–23.5)	18.4 (13.3–23.5)
5–9 years	65.2 (56.2–74.2)	65.2 (56.2–74.2)	11.2 (4.3–18.1)	11.2 (4.3–18.1)	12.9 (8.2–17.6)	12.9 (8.2–17.6)	5.5 (2.0–9.0)	5.5 (2.0–9.0)	6.8 (3.3–10.3)	6.8 (3.3–10.3)
10–14 years	50.0 (41.4–58.6)	50.0 (41.4–58.6)	20.8 (13.5–28.1)	20.8 (13.5–28.1)	12.5 (7.4–17.6)	12.5 (7.4–17.6)	8.6 (2.7–14.5)	8.6 (2.7–14.5)	7.3 (3.8–10.8)	7.3 (3.8–10.8)
Ethnicity										
European/Pākehā	59.3 (53.4–65.2)	59.6 (53.9–65.3)	14.7 (9.6–19.8)	14.4 (9.5–19.3)	10.8 (7.9–13.7)	10.9 (8.0–13.8)	9.0 (5.9–12.1)	9.2 (6.1–12.3)	11.2 (7.9–14.5)	11.4 (7.9–14.9)
Māori	62.6 (53.4–71.8)	61.7 (52.1–71.3)	7.2 (1.9–12.5)	6.6 (1.7–11.5)	16.9 (10.8–23.0)	16.9 (10.6–23.2)	11.9 (5.6–18.2)	12.3 (5.4–19.2)	10.6 (5.1–16.1)	10.8 (5.3–16.3)
Pacific	59.1 (43.0–75.2)	59.5 (43.4–75.6)	3.8 (0.0–8.1)	5.0 (0.0–10.9)	13.4 (2.8–24.0)	11.6 (2.4–20.8)	17.9 (8.3–27.5)	17.6 (8.0–27.2)	12.1 (3.7–20.5)	12.0 (3.4–20.6)
Other	69.6 (53.7–85.5)	69.0 (52.9–85.1)	1.4 (0.0–4.1)	1.7 (0.0–5.0)	10.6 (0.0–21.4)	12.0 (0.0–25.7)	7.0 (0.0–16.2)	7.9 (0.0–17.7)	15.0 (2.3–27.7)	13.6 (2.8–24.4)

* Adjusted rates are adjusted for age and sex, except when they are age-specific, in which case they are adjusted only for sex, or when they are sex-specific, in which case they are adjusted only for age.

Note: For further explanation of Tables, see Appendix 2: Notes to Figures and Tables.

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Chapter 13: Use of Other Health Professionals

Key points

- Over 4 in 10 adults visited a pharmacist for health advice or to obtain medicines in the past 12 months, with women more likely than men to visit a pharmacist for these reasons. Under a third of children were taken to or visited a pharmacist to obtain health advice or medicines.
- About a third of adults visited a dentist or dental nurse in the past 12 months, although adult rates of contact with a dentist or dental nurse decreased with age. In the 0–14 years age group, more than half had visited a dentist or dental nurse in the past year, with over 70% of 5–9 and 10–14-year-olds doing so.
- Over a quarter of adults visited a public or private medical specialist in the last 12 months. For both men and women, specialist contact was significantly related to age, with over 40% of those in the 65–74 and 75 plus age groups visiting a specialist during this period.
- Just under a quarter of adults saw either a GP's practice nurse, midwife, district nurse, public health nurse, Plunket nurse or some other kind of nurse in the past 12 months.
- In the 25–44 years age group, 8% of women had seen a midwife in the last 12 months.
- Virtually all the health professionals referred to in the 1996/97 Health Survey were more likely to be visited by European/Pākehā adults. Similar trends were evident for children.
- In general, adults in the lower family income groups were less likely than those in the higher family income groups to use dentists or dental nurses, opticians and physiotherapists. However, rates of contact with medical specialists, nurses and pharmacists were related less strongly to people's family income levels.
- Altogether, 11% of men and 13% of women indicated that they had needed to see a health professional other than a GP in the last 12 months but did not.

Introduction

Apart from GPs, a variety of other health professionals provide health and disability-related services to people in the community. They include dentists, dental nurses, district nurses, public health nurses, Plunket nurses, practice nurses, midwives, pharmacists, physiotherapists, optometrists, podiatrists, social workers, psychologists and medical specialists.

The 1996/97 Health Survey examined how much contact New Zealanders have with these different health professionals (see Figure 107). This information will be used for predicting future trends in the use of community-based health professionals and the associated health workforce, and professional training requirements.

Unless otherwise stated, age- and sex-standardised rates, and 95% confidence intervals in parentheses, are given in the text. Tables related to this section are available on the Ministry of Health website (www.moh.govt.nz).

Results

Use of other health professionals

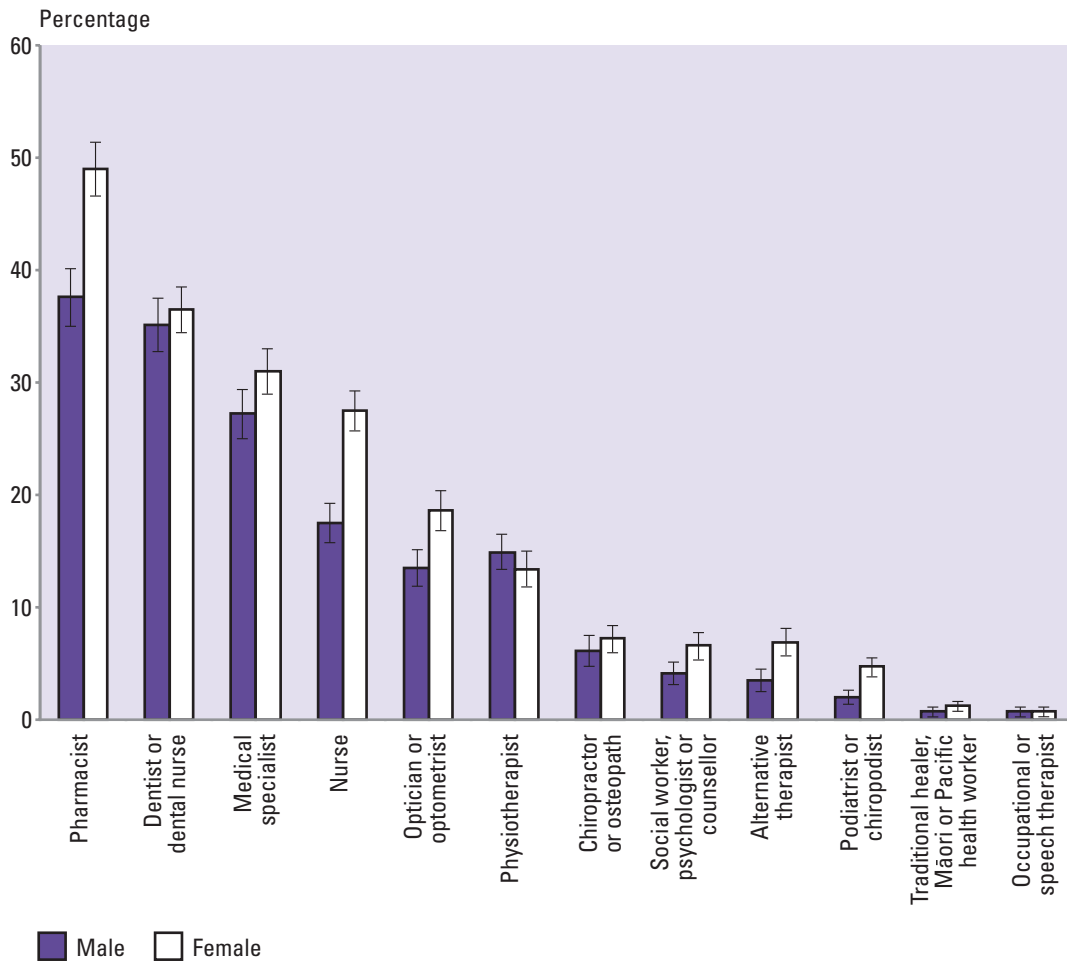
Pharmacists

After GPs, pharmacists were the next most widely used community-based health professionals, with 43.5% (41.5–45.5) of adults visiting a pharmacist for health advice or to obtain medicines in the past 12 months.* Women were more likely than men to visit a pharmacist for these reasons ($p < 0.0001$), with almost half of all women visiting a pharmacist at least once in the previous year (49.0; 46.7–51.3; men: 37.6; 35.1–40.1). Age was not a significant determinant of women's level of contact with a pharmacist, although older men were more likely than younger men to visit a pharmacist for health advice or medicines.

Compared to adults, children were less likely to use the services of a pharmacist in the past year, with under a third of children being taken to or visiting a pharmacist to obtain health advice or medicines. Younger children (0–4 and 5–9 years) were more likely than older children (10–14 years) to visit a pharmacist for these reasons, which is similar to the pattern found in the 1992/93 Health Survey (Ministry of Health 1995).

* Chapter 14: Prescription Use, indicates that a higher proportion of adults (7 in every 10), obtained at least one prescription item, including repeat prescription items, in the past year. This is substantially higher than the 44% of adults who visited a pharmacist in the past 12 months for health advice or to obtain medicines. One reason for this difference may be that not all people personally visit a pharmacist to collect their prescription items. Family members, friends or health professionals may obtain their prescription items for them. This may be particularly the case for children.

Figure 107: Health professionals used by adults in the past 12 months, by sex

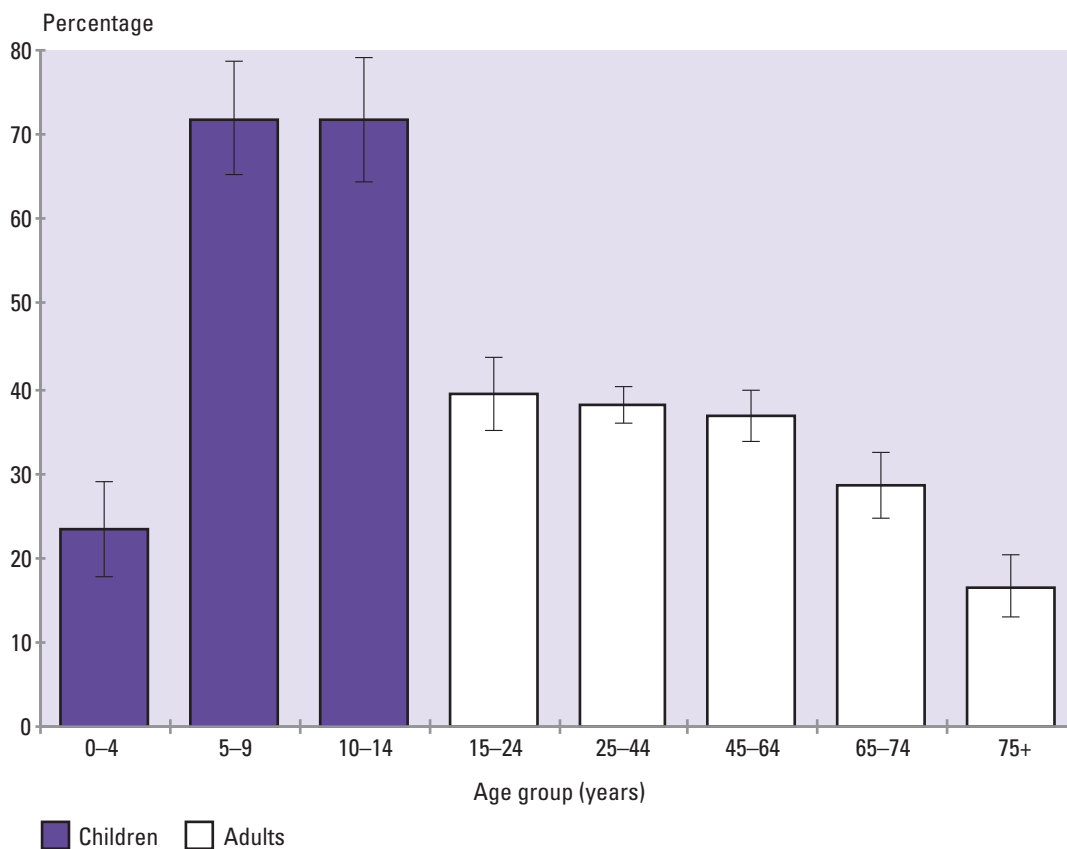


Note: Error bars indicate 95% confidence intervals. For further explanation of graphs, see Appendix 2: Notes to Figures and Tables.

Dentists and dental nurses

Over a third of adults (35.8%; 34.2–37.4) visited a dentist or dental nurse in the past 12 months, with men and women having similar rates of contact (35.1%; 32.7–37.5 and 36.5%; 34.5–38.5 respectively). Contact with a dentist or dental nurse diminished with age ($p < 0.001$), with a little under 40% of 15–24 year olds (39.4%; 35.1–43.7) and 24–44 year olds (37.9%; 35.7–40.1) visiting a dentist or dental nurse in the past year, compared to 28.4% (24.5–32.3) of 65–74 year olds and 16.5% (12.8–20.2) of people in the 75 plus group (see Figure 108).

Figure 108: Proportion of children and adults who visited a dentist or dental nurse in the last 12 months, by age



Note: Error bars indicate 95% confidence intervals. For further explanation of graphs, see Appendix 2: Notes to Figures and Tables.

Compared to adults, a much greater proportion of children, more than half, had visited a dentist or dental nurse in the past year, with over 70 percent of those in the 5–9 and 10–14 year age groups having done so. These relatively high rates of contact reflect the availability of free dental care for school-aged children and for young people engaged in full-time study up to the age of 18.

Medical specialists

Over a quarter of adults visited a public or private medical specialist in the past year, with a higher proportion of women visiting than men (31.0%; 29.0–33.0 compared to 27.2%; 25.0–29.4; $p < 0.001$). For both men and women, specialist contact was significantly related to age ($p < 0.0001$), with only 21.1% (17.6–24.6) of 15–24-year-olds visiting a medical specialist, compared to over 40% of those in the 65–74 and 75 plus age groups (41.3%; 37.0–45.6 and 44.6%; 39.3–49.9 respectively).

In general, adults were most likely to visit a medical specialist either at the specialist’s private rooms or at a private hospital. However, those in the 65 plus age group, those with lower family incomes, as well as those from the Māori and Pacific ethnic groups, were more likely to visit a specialist at a public hospital.

Children had a lower rate of contact than adults with a medical specialist (19.0%; 16.1–21.9), although 26.0% (20.7–31.3) of 0–4-year-olds had seen a medical specialist in the past year.

Nurses

Just under a quarter of adults saw either a GP's practice nurse, midwife, district nurse, public health nurse, Plunket nurse or some other kind of nurse in the past 12 months. More women than men saw a nurse (27.5%; 25.7–29.3 compared to 17.5%; 15.7–19.3 respectively; $p < 0.0001$). Older men were more likely than younger men to see a nurse in the past year, although this pattern did not hold for women. Women in the younger, child-bearing age groups and in the age groups from 65 onwards had significantly higher rates of contact with nurses than women in the 45–64 years age group ($p < 0.0001$). In the 25–44 years age group, 8.2% (6.6–9.8) of women had seen a midwife in the last 12 months.

The type of nurse seen by the greatest proportion of adults in the past year was a GP's practice nurse, with 17.7% (16.5–18.9) of respondents seeing a GP's practice nurse without also seeing the doctor at the same time.

Children were seen by nurses at a higher rate than adults, with 42.1% (37.6–46.6) of children seeing a GP's practice nurse, district nurse, public health nurse, Plunket nurse or other kind of nurse in the past 12 months. Children in the 0–4 years age group were most likely to see a nurse ($p < 0.0001$), with two-thirds (65.5%; 59.0–72.0) doing so in the last year.

Optometrists or opticians

Optometrists or opticians were visited in the past year by about one in five women (18.6%; 16.8–20.4) and one in seven men (13.5%; 11.9–15.1). Not surprisingly, given the relationship between eyesight problems and aging, rates of contact with optometrists or opticians increased significantly in the older age groups, with nearly a third (32.2%; 26.1–38.3) of women in the 75 plus age group visiting an optician or optometrist, compared to only 13.5% (11.3–15.7) of women in the 25–44 years age group ($p < 0.0001$).

Physiotherapists

About one in seven adults visited a physiotherapist in the last 12 months, involving similar proportions of men and women.

Other health service providers

Of the remaining health professionals referred to in the 1996/97 Health Survey, in the last 12 months under 10% of adults had visited a social worker, psychologist or counsellor, an alternative therapist, a podiatrist or chiropodist, a chiropractor or osteopath, a traditional healer or Māori/Pacific health worker, or an occupational or speech therapist.

Ethnicity

Almost all the health professionals referred to in the 1996/97 Health Survey were more likely to be visited by European/Pākehā adults. Forty-five percent (44.9%; 42.7–47.1) of European/Pākehā adults, 42.7% (39.0–46.4) of Māori adults, 36.2% (29.3–43.1) of Pacific adults and 38.0% (29.0–47.0) of adults from the Other ethnic group visited a pharmacist in the past 12 months. European/Pākehā adults (31.6%; 29.8–33.4) saw medical specialists at a substantially higher rate than Māori adults (21.1%; 18.2–24.0), adults from the Other ethnic group (23.0%; 14.0–32.0) and Pacific adults (15.8%; 12.1–19.5; $p < 0.0001$). European/Pākehā adults were 75% more likely than Māori adults to visit a dentist or dental nurse, and more than twice as likely as Pacific adults to do so ($p < 0.0001$).

Similar ethnic-related patterns occurred in the 1992/93 Health Survey (Ministry of Health 1995).

The only health professionals seen by Māori and Pacific adults at a greater rate than Pākehā/Europeans were Māori traditional healers, or Māori and Pacific Island health workers.

Similar trends were evident for children, with European/Pākehā children being more likely to visit a medical specialist, pharmacist, and dentist or dental nurse. For example, nearly three out of five European/Pākehā children (59.4%; 54.5–64.3) visited a dentist or dental nurse in the last year, substantially more than the rate for Pacific children (38.5%; 25.6–51.4; $p < 0.01$).

In general, these ethnic group differences are likely to arise through the complex interaction of factors related to such things as cultural beliefs and expectations, health knowledge, income levels and the accessibility and availability of appropriate services.

Family income, NZDep96 score and education*

For certain health professionals, rates of contact varied significantly by measures of people's socioeconomic status. In general, adults in the lower family income groups were less likely than those in the higher family income groups to use dentists or dental nurses, opticians and physiotherapists. However, rates of contact with medical specialists, nurses and pharmacists were related less strongly to people's level of family income. This is likely to reflect the fact that in New Zealand many of the services obtained from these last three groups are fully funded or subsidised by government.

Use of dentists or dental nurses had a high correlation with family income, with close to twice as many adults in the \$50,001 plus family income group visiting a dentist or dental nurse in the last year than did those in the 0–\$20,000 family income group ($p < 0.0001$). Use of dentists or dental nurses was also closely linked to scores of relative deprivation, with 25.8% (23.6–28.0) of adults living in the most deprived areas of New Zealand using a dentist or dental nurse in the last year, compared to 45.9% (42.8–49.0) of those from the least deprived areas ($p < 0.0001$). Optometrists or opticians, too, were more likely to be visited by adults from the least deprived areas than from the most deprived areas (21.7%; 17.6–25.8 compared to 12.4%; 10.4–14.4; $p < 0.0001$).

Similar trends were evident when people's levels of formal educational attainment were compared with their rates of contact with these health professionals. The highest qualified adults in the 1996/97 Health Survey (those with both school and post-school educational qualifications) were more likely than other adults to visit a dentist or dental nurse, optometrist or optician, pharmacist and physiotherapist in the past year. However, educational level did not appear to be significantly related to rates of contact with nurses or medical specialists, except that in the case of medical specialists adults with higher educational qualifications were more likely to see a specialist privately, whereas those with few or no educational qualifications were more likely to see a specialist at a public hospital.

Unmet health need

Altogether, 11.3% (9.7–12.9) of men and 13.3% (11.7–14.9) of women indicated that they had needed to see a health professional other than a GP in the last 12 months but did not ($p < 0.001$). Adults in the younger age groups were generally more than twice as likely to report this as adults in the older age groups ($p < 0.0001$). In addition, the lower an adult's family income group, the more likely they were to report not using one of these services when they needed to ($p < 0.0001$).

Reference

Ministry of Health. 1995. *Patients in Profile*. Wellington: Ministry of Health.

* The NZDep96 score measures the level of deprivation in the area in which a person lives, according to a number of census variables, such as the proportion of people in that area who earn low incomes or who receive income support benefits, are unemployed, do not own their own home, have no access to a car, are single-parent families, or have no qualifications. The scores are divided into quartiles from 1 (least deprived) to 4 (most deprived). For more details, see Chapter 1: The Survey.

Chapter 14: Prescription Item Use

Key points

- Seven in every ten adults obtained at least one prescription item, including repeat prescription items, in the past year. Women were more likely than men to obtain a prescription item during this period.
- Older adults were more likely than younger adults to obtain 10 or more prescription items.
- European/Pākehā adults were more likely than adults in the Māori, Pacific and Other ethnic groups to obtain 10 or more prescription items.
- One in ten adults said they received a prescription for an item in the last 12 months but had not collected the item.
- In the 0–14 years age group, younger children were more likely than older children to obtain a prescription item, with 79% of 0–4-year-olds obtaining a prescription item compared to 55% of 10–14-year-olds.
- Six percent of children were reported by their caregiver to have had an uncollected prescription item in the last 12 months.

Introduction

A prescription is an order for medicines, appliances or other health-related items issued by a health professional. In most cases, people who obtain a prescription from these health professionals must take it to a registered pharmacist or chemist, who then supplies the item or items listed in the prescription. If a prescription item is included in the Pharmaceutical Schedule, which is a list of over 2500 pharmaceutical and other related medical items subsidised by the government, then adults are required to pay up to \$15 per prescription item. For children, the maximum charge per prescription item is \$10. Adults and children with Community Service Cards pay only \$3 per item. In the year 1997/98, the government, through the Health Funding Authority, spent \$747 million on pharmaceutical subsidies (Ministry of Health 1998a).

The 1996/97 Health Survey gathered national-level sociodemographic information about people's use of prescription items. This included identifying the groups in the population most likely to obtain a relatively high number of prescription items and the groups most likely not to pick up or collect prescription items. This information is useful for assessing why some groups use prescription items more than others, and for predicting likely future demand for prescription items.

The main question used in the 1996/97 Health Survey to collect information on prescription item use by adults was: 'In the last 12 months, have you had any prescription items *for yourself* from the chemist, including any prescription that you might have already told me about?' Caregivers were asked a slightly modified version of this question to collect information about their child's prescription item use. It should be noted that these questions rely on people being able to recall how many prescription items they or their children obtained in the course of a year, which could be difficult for some people, especially if they received a high number of prescription items.*

* It also should be noted that this section refers to prescription item use. A single prescription can list several prescription items.

Unless otherwise stated, age- and sex-standardised rates, and 95% confidence intervals in parentheses, are given in the text. Tables at the end of this section show key standardised and unstandardised estimates. More detailed tables related to this section are available on the Ministry of Health website (www.moh.govt.nz).

Results

Prescription item use by sociodemographic variables

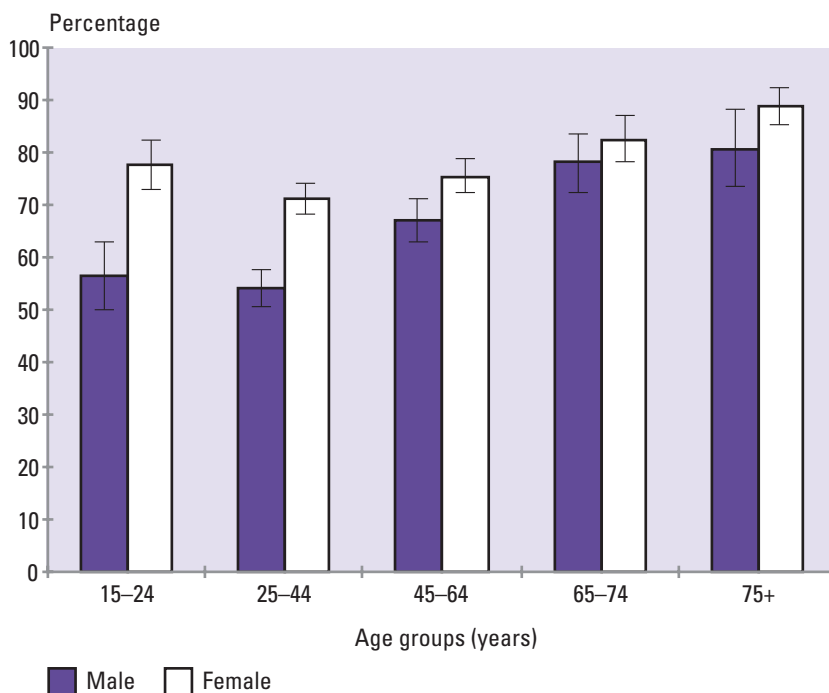
Prescription item use by age and sex

Adults

Seven in every ten adults had obtained at least one prescription item, including repeat prescription items, in the past year. Women were more likely than men to obtain a prescription item ($p < 0.0001$).^{*} Women were also more likely than men to obtain a high number of prescription items (defined as 10 or more prescription items in the past 12 months). Just over one in five women obtained 10 or more prescription items, compared to one in seven men. Applied to the New Zealand adult population as a whole, this represents an estimated 302,750 women and 189,270 men who obtained 10 or more prescription items.

It is unclear exactly why women, and younger women in particular (see Figure 109), should be greater users of prescription items than men. Studies suggest that it may be related to a wide range of factors, with examples being women's use of the contraceptive pill and their greater likelihood of visiting GPs for help with mental health problems (Ministry of Health 1996).

Figure 109: Proportion of adults who had any prescription items in the past 12 months, by age and sex

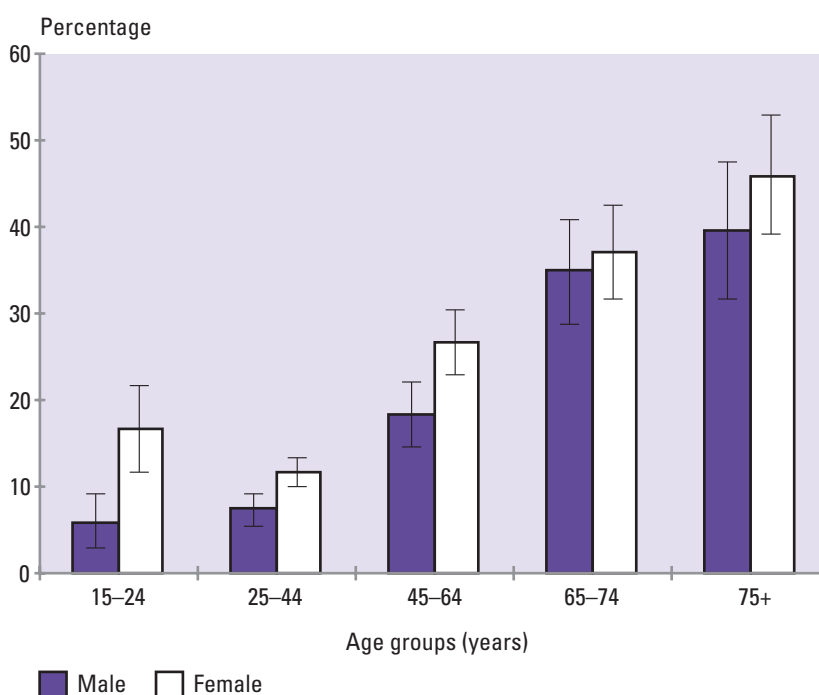


Note: Error bars indicate 95% confidence intervals. For further explanation of graphs, see Appendix 2: Notes to Figures and Tables.

^{*} This result compares closely to the 69% of adults who were given a prescription when they last visited a GP (see Chapter 12: General Practitioner Use), suggesting that a very high proportion of 1996/97 Health Survey respondents obtained their prescriptions from a GP rather than another kind of health professional.

In general, older adults (those aged 45 years or more) were more likely than younger adults to obtain a prescription item, with the highest rate of prescription item use being in the 75 plus age group and the lowest being in the 25–44 years age group ($p < 0.0001$). Older adults were also more likely to be frequent users of prescription items, meaning they obtained 10 or more prescription items in the previous year (see Figure 110). These age differences were similar to those found in the 1992/93 Health Survey (Ministry of Health 1995) and probably largely reflect the fact that older people are more likely to have ongoing health problems such as diabetes and hypertension (see Chapters 7 and 8), many of which involve treatment with prescription medicines.

Figure 110: Proportion of adults who had 10 or more prescription items in the last 12 months, by age and sex

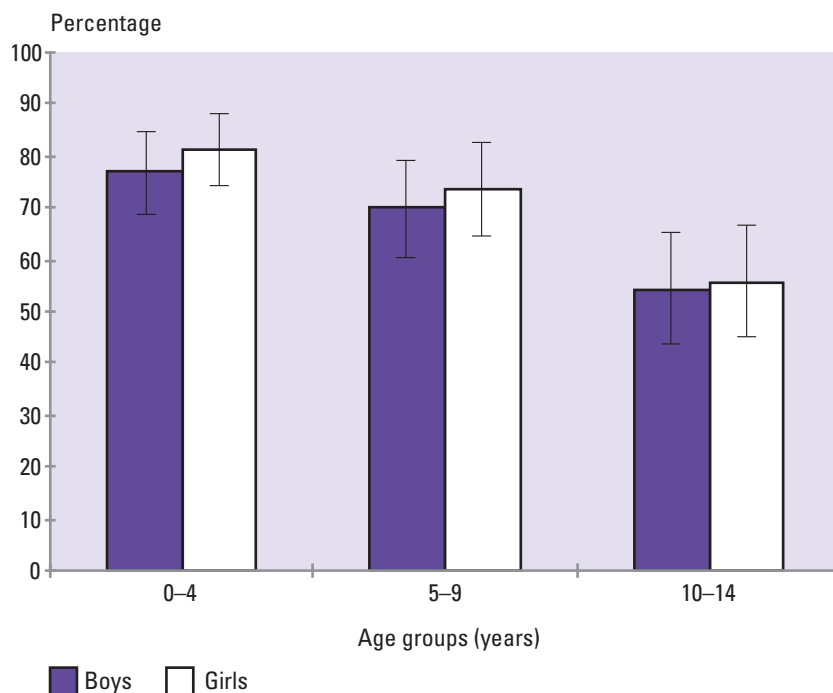


Note: Error bars indicate 95% confidence intervals. For further explanation of graphs, see Appendix 2: Notes to Figures and Tables.

Children

Amongst children aged 0 to 14 years, just over two-thirds obtained a prescription item in the past year. Younger children were more likely than older children to obtain a prescription item, with 79.0% (73.5–84.5) of 0–4-year-olds and 71.7% (65.2–78.2) of 5–9-year-olds obtaining a prescription item, compared with 55.2% (47.4–63.0) of 10–14-year-olds ($p < 0.0001$; see Figure 111). Children in the 0–4 years age group were also more than twice as likely as older children to obtain 10 or more prescription items in the year. As indicated in the previous chapter, younger children are generally more vulnerable than older children to various illnesses (Ministry of Health 1998b), which in turn is likely to be reflected in their rates of doctor visits and prescription item use. In addition, health benefit system changes introduced part way through the 1996/97 Health Survey reduced the cost barriers to GP and prescription item use for some 0–5-year-olds.

Figure 111: Proportion of children who had any prescription items in the last 12 months, by age and sex



Note: Error bars indicate 95% confidence intervals. For further explanation of graphs, see Appendix 2: Notes to Figures and Tables.

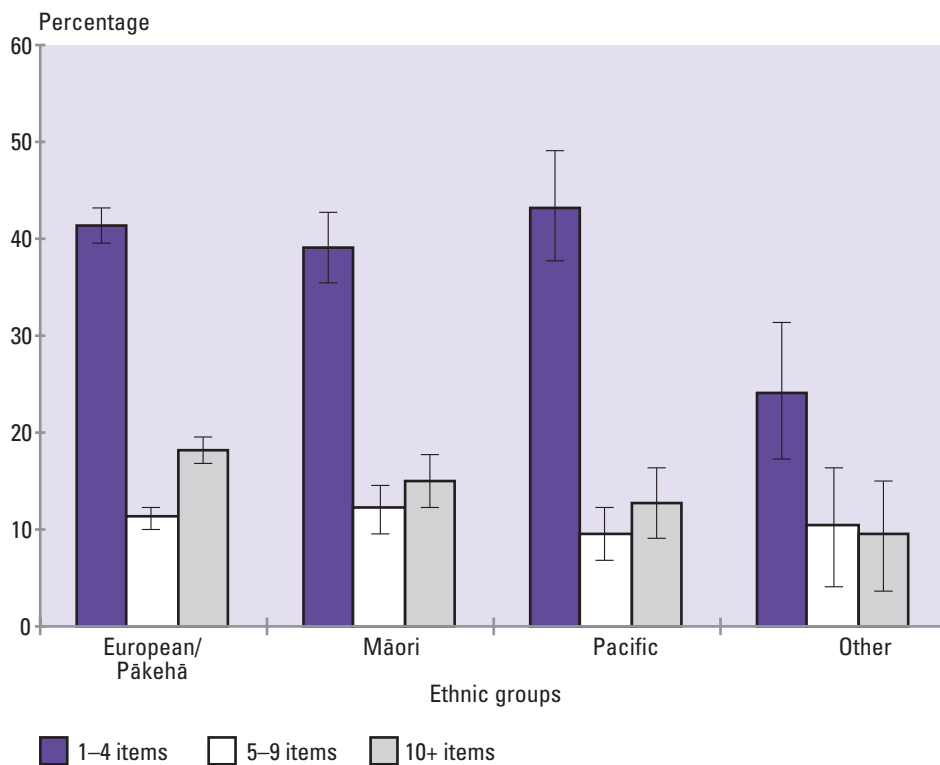
Prescription item use by ethnicity

Adults

There were statistically significant ethnic group differences in the proportion of people who received a prescription item ($p < 0.0001$). Those in the European/Pākehā ethnic group (70.9%; 69.3–72.5) were the most likely to obtain a prescription item in the past 12 months, while those in the Other ethnic group were the least likely (43.9%; 34.9–52.9). European/Pākehā adults were also more likely than adults in the other three ethnic groups to obtain 10 or more prescription items in the year (see Figure 112).

The reasons for these differences are likely to be complex, and involve a combination of factors such as patients' attitudes and expectations regarding medicines, health status factors and the costs of prescriptions. People's willingness or ability to visit GPs and other health professionals may also indirectly influence their rate of prescription item use.

Figure 112: Number of prescription items obtained by adults in the last 12 months, by ethnicity (age- and sex-standardised)



Note: Error bars indicate 95% confidence intervals. For further explanation of graphs, see Appendix 2: Notes to Figures and Tables.

Children (0–14-year-olds)

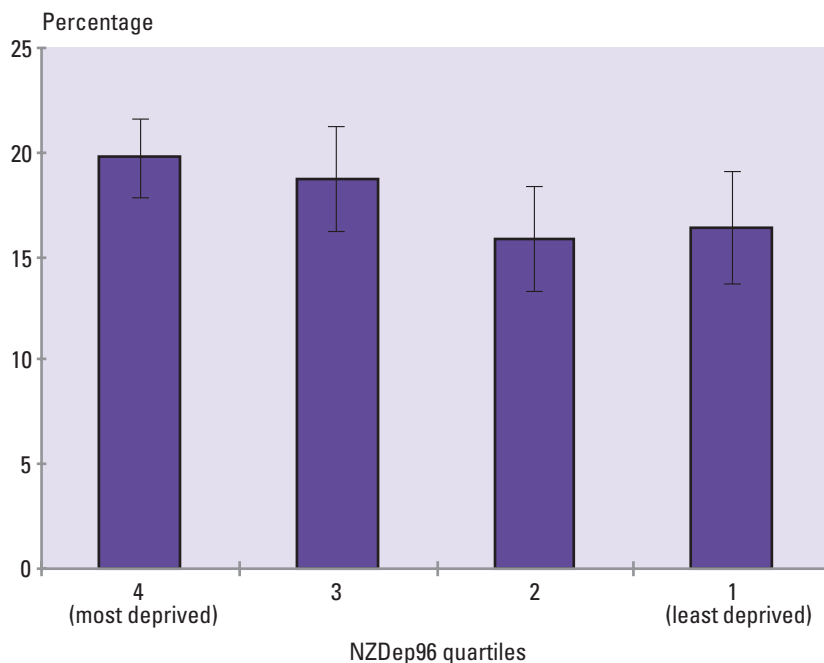
There were no significant ethnic group differences in prescription item use among children.

Prescription item use by family income, NZDep96 score and education*

Across the four family income groups, the four NZDep96 groups and the three education groups, similar proportions of adults (between 68% and 70%) had used a prescription item in the past 12 months. Similarly, there were no significant differences in the likelihood of obtaining 10 or more prescription items amongst family income, NZDep96 or education groups (see Figure 113).

* The NZDep96 score measures the level of deprivation in the area in which a person lives, according to a number of census variables, such as the proportion of people in that area who earn low incomes or who receive income support benefits, are unemployed, do not own their own home, have no access to a car, are single-parent families, or have no qualifications. The scores are divided into quartiles from 1 (least deprived) to 4 (most deprived). For more details, see Chapter 1: The Survey.

Figure 113: Proportion of adults who obtained 10 or more prescription items in the last 12 months, by NZDep96 score (age- and sex-standardised)



Note: Error bars indicate 95% confidence intervals. For further explanation of graphs, see Appendix 2: Notes to Figures and Tables.

Uncollected prescription items

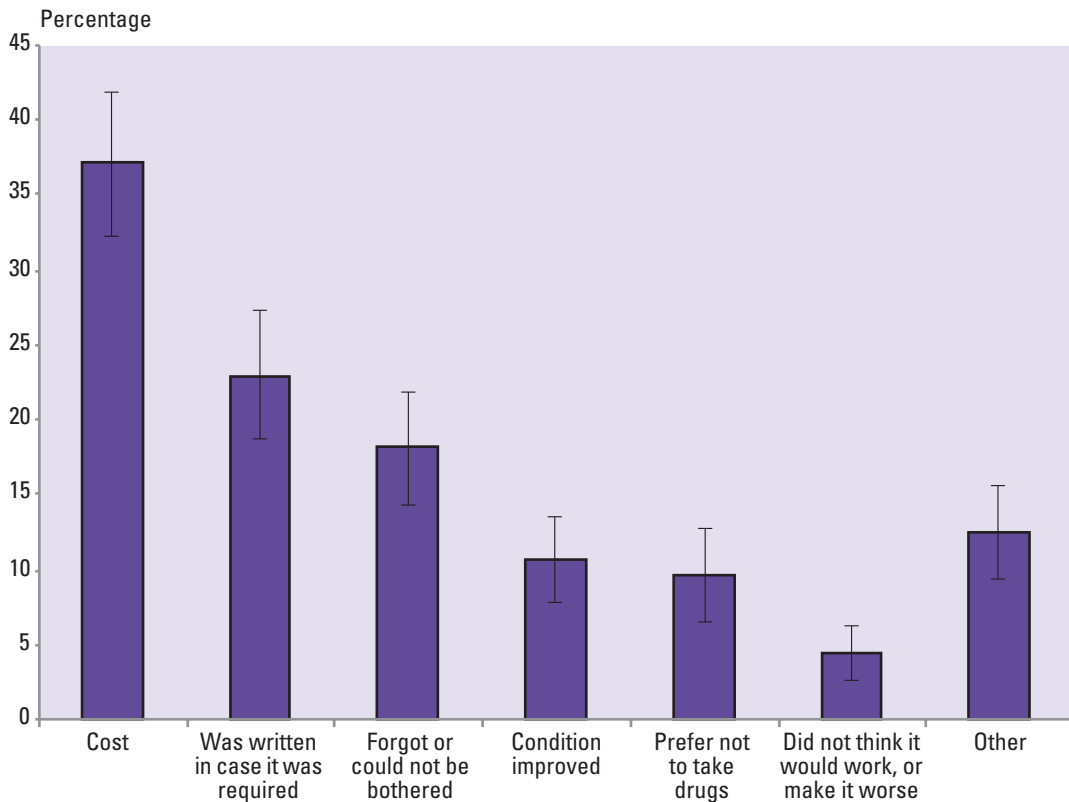
Adults

One in ten adults said they had received a prescription for an item in the last 12 months but had not collected the item. Women (12.1%; 10.7–13.5) were more likely than men (6.7%; 5.5–7.9) not to collect a prescription item ($p < 0.0001$). In general, adults in the younger age groups were more likely than those in the older age groups not to collect a prescription item, with 16.4% (12.5–20.3) of women in the 15–24 years age group not collecting a prescription item ($p < 0.0001$). There were significant differences amongst Māori (12.3%; 9.8–14.8), Pacific (10.8%; 8.1–13.5), European/Pākehā (9.3%; 8.3–10.3) and Other (5.2%; 1.1–9.3) ethnic groups in the non-collection of prescription items ($p < 0.05$).

Rates of prescription item non-collection varied significantly by family income level ($p < 0.01$) and NZDep96 scores ($p < 0.05$), with 12.6% (10.4–14.8) of adults in the 0–\$20,000 family income group not collecting a prescription item in the last year, compared with 7.5% (5.9–9.1) of adults in the \$50,001 plus family income group. However, rates of prescription item non-collection did not differ significantly by education level.

Compared with people who rated their health as excellent or very good, those who rated their health as fair or poor were more likely not to collect a prescription item ($p < 0.0001$).

Figure 114: Reasons adults gave for not collecting a prescription item in the past 12 months



Note: Error bars indicate 95% confidence intervals. For further explanation of graphs, see Appendix 2: Notes to Figures and Tables.

Adults described various reasons for not collecting prescription items (see Figure 114). Just over one in five people had not collected a prescription item because the prescription for the item had been written for them just in case they needed it. This happened more often for women than men, while European/Pākehā adults were more likely to give this reason than adults from any of the other ethnic groups.

Seventeen percent of people did not collect a prescription item because they either forgot or could not be bothered. Men and women were equally likely to give this reason, although people in the youngest and oldest age groups (15–24 years and 65 years plus) were more likely than people in the other age groups to give this reason.

The most popular single reason for not collecting a prescription item was cost, mentioned by 37.1% (32.2–42.0) of respondents. Younger adults, Pacific adults, Māori adults, adults with lower family incomes and adults living in the more deprived areas of New Zealand were more likely than other groups to give this reason.

Children

Six percent (5.6%; 3.6–7.6) of children were reported by their caregiver to have had an uncollected prescription item in the last 12 months. The most common explanation caregivers gave for this was that the prescription item had not been needed any more. Nearly half (42.0%; 23.6–60.4) of all uncollected prescription items for children were said to be for this reason. Cost was the reason given for children not obtaining a prescription in 28.0% (14.3–41.7) of cases.



Table 65: Number of prescription items per year, by sociodemographic variables: percent (95% confidence intervals)

	Zero items			1-4 items			5-9 items			10+ items		
	% (95% CI)		Pop est	% (95% CI)		Pop est	% (95% CI)		Pop est	% (95% CI)		Pop est
	Unadj	Adj*		Unadj	Adj*		Unadj	Adj*		Unadj	Adj*	
Total	31.3 (29.7-32.9)		879,135	40.3 (38.7-41.9)		1,132,158	10.9 (9.9-11.9)		307,265	17.5 (16.3-18.7)		492,028
Sex												
Male	38.7 (36.3-41.1)	38.5 (36.1-40.9)	528,681	39.3 (36.9-41.7)	39.2 (36.8-41.6)	537,293	8.1 (6.7-9.5)	8.2 (6.8-9.6)	110,702	13.9 (12.3-15.5)	14.2 (12.6-15.8)	189,273
Female	24.3 (22.5-26.1)	24.4 (22.6-26.2)	350,454	41.2 (39.2-43.2)	41.3 (39.3-43.3)	594,865	13.6 (12.2-15.0)	13.6 (12.2-15.0)	196,564	21.0 (19.2-22.8)	20.7 (18.9-22.5)	302,756
Age												
15-24 years	32.9 (29.0-36.8)	32.5 (28.6-36.4)	172,540	46.0 (41.7-50.3)	46.0 (41.7-50.3)	241,192	9.9 (7.4-12.4)	10.0 (7.5-12.5)	51,902	11.3 (8.4-14.2)	11.5 (8.6-14.4)	59,157
25-44 years	37.1 (34.7-39.5)	37.1 (34.7-39.5)	422,013	43.1 (40.7-45.5)	43.1 (40.7-45.5)	490,040	10.2 (8.8-11.6)	10.2 (8.8-11.6)	116,236	9.5 (8.1-10.9)	9.5 (8.1-10.9)	108,354
45-64 years	28.7 (26.2-31.2)	28.6 (26.1-31.1)	214,410	37.3 (34.4-40.2)	37.3 (34.4-40.2)	278,900	11.5 (9.5-13.5)	11.6 (9.6-13.6)	86,116	22.5 (20.0-25.0)	22.6 (20.1-25.1)	168,067
65-74 years	19.6 (16.1-23.1)	19.8 (16.3-23.3)	47,350	33.0 (28.7-37.3)	32.9 (28.4-37.4)	79,741	11.5 (8.8-14.2)	11.5 (8.8-14.2)	27,886	36.0 (31.9-40.1)	35.9 (31.8-40.0)	87,000
75+ years	14.3 (10.6-18.0)	14.6 (10.7-18.5)	22,823	26.5 (22.0-31.0)	26.6 (22.1-31.1)	42,285	15.7 (11.6-19.8)	15.6 (11.5-19.7)	25,126	43.5 (38.2-48.8)	43.2 (37.9-48.5)	69,450
Ethnicity												
European/Pākehā	28.8 (27.2-30.4)	29.1 (27.5-30.7)	650,241	40.7 (38.9-42.5)	41.3 (39.3-43.3)	918,857	11.3 (10.1-12.5)	11.3 (10.1-12.5)	255,973	19.2 (17.8-20.6)	18.3 (16.9-19.7)	433,755
Māori	35.8 (32.5-39.1)	33.6 (30.3-36.9)	99,183	41.3 (37.8-44.8)	39.1 (35.6-42.6)	114,413	10.9 (8.7-13.1)	12.1 (9.6-14.6)	30,100	12.1 (9.9-14.3)	15.2 (12.5-17.9)	33,531
Pacific	36.2 (31.5-40.9)	34.4 (29.3-39.5)	46,918	43.9 (39.2-48.6)	43.4 (37.9-48.9)	56,914	9.0 (6.5-11.5)	9.4 (6.7-12.1)	11,705	10.9 (7.8-14.0)	12.8 (9.3-16.3)	14,118
Other	57.1 (48.5-65.7)	56.1 (47.1-65.1)	82,793	29.0 (21.4-36.6)	24.3 (17.4-31.2)	41,973	6.5 (2.8-10.2)	10.3 (4.0-16.6)	9,488	7.3 (2.6-12.0)	9.4 (3.7-15.1)	10,624
Family income												
0-\$20,000	26.0 (23.3-28.7)	31.6 (27.9-35.3)	130,376	33.4 (30.7-36.1)	37.0 (33.5-40.5)	167,205	12.1 (10.3-13.9)	10.7 (8.7-12.7)	60,475	28.5 (26.0-31.0)	20.6 (18.1-23.1)	142,967
\$20,001-\$50,000	28.7 (25.2-32.2)	31.9 (27.8-36.0)	108,257	38.2 (34.7-41.7)	39.1 (35.2-43.0)	144,166	10.8 (8.6-13.0)	10.3 (7.9-12.7)	40,739	22.3 (19.2-25.4)	18.6 (15.7-21.5)	84,307
\$50,001-\$50,000	32.5 (29.4-35.6)	30.8 (27.7-33.9)	172,896	42.5 (39.0-46.0)	42.0 (38.5-45.5)	226,255	11.7 (9.3-14.1)	12.0 (9.5-14.5)	62,477	13.2 (11.0-15.4)	15.2 (12.7-17.7)	70,119
\$50,001+	33.3 (30.2-36.4)	30.2 (26.7-33.7)	289,799	43.0 (39.9-46.1)	42.3 (38.6-46.0)	374,280	10.7 (8.7-12.7)	11.2 (9.0-13.4)	92,983	13.1 (10.7-15.5)	16.3 (12.6-20.0)	113,661

* Adjusted rates are adjusted for age and sex, except when they are age-specific, in which case they are adjusted only for sex, or when they are sex-specific, in which case they are adjusted only for age.
 Note: For further explanation of Tables, see Appendix 2: Notes to Figures and Tables.

continued...

Table 65 (cont)

	Zero items			1-4 items			5-9 items			10+ items		
	% (95% CI)			% (95% CI)			% (95% CI)			% (95% CI)		
	Unadj	Adj*	Pop est	Unadj	Adj*	Pop est	Unadj	Adj*	Pop est	Unadj	Adj*	Pop est
NZDep96 score												
1 (least deprived)	31.1 (27.8-34.4)	30.6 (27.3-33.9)	250,669	40.7 (37.2-44.2)	40.6 (37.1-44.1)	328,164	12.0 (9.8-14.2)	12.3 (10.1-14.5)	96,753	16.2 (13.5-18.9)	16.4 (13.7-19.1)	130,303
2	31.7 (28.6-34.8)	32.1 (28.8-35.4)	221,053	40.9 (37.6-44.2)	41.3 (38.0-44.6)	285,299	10.9 (8.9-12.9)	10.8 (8.8-12.8)	75,665	16.5 (14.0-19.0)	15.8 (13.3-18.3)	115,057
3	31.1 (28.2-34.0)	31.5 (28.6-34.4)	196,888	40.6 (37.5-43.7)	40.3 (37.4-43.2)	256,743	9.5 (7.5-11.5)	9.4 (7.6-11.2)	60,155	18.8 (16.3-21.3)	18.7 (16.2-21.2)	119,109
4 (most deprived)	31.2 (29.0-33.4)	30.8 (28.6-33.0)	210,526	38.8 (36.4-41.2)	38.5 (36.1-40.9)	261,952	11.1 (9.5-12.7)	11.0 (9.4-12.6)	74,693	18.9 (16.9-20.9)	19.7 (17.7-21.7)	127,560
Education												
No qualification	29.0 (26.5-31.5)	31.1 (28.4-33.8)	233,091	37.5 (35.0-40.0)	39.3 (36.6-42.0)	301,293	11.6 (9.6-13.6)	11.2 (9.2-13.2)	93,185	21.9 (19.9-23.9)	18.5 (16.5-20.5)	175,671
School or post-school only	31.1 (28.7-33.5)	31.3 (28.6-34.0)	313,011	41.7 (39.0-44.4)	40.3 (37.6-43.0)	419,924	10.5 (8.9-12.1)	11.3 (9.5-13.1)	105,489	16.8 (14.6-19.0)	17.1 (14.9-19.3)	169,366
School and post-school	33.6 (30.9-36.3)	32.0 (29.3-34.7)	331,585	41.1 (38.4-43.8)	40.9 (38.0-43.8)	405,308	10.7 (9.1-12.3)	10.7 (9.1-12.3)	105,676	14.7 (12.7-16.7)	16.4 (14.0-18.8)	144,749
Self-rated health												
Excellent or very good	38.7 (36.5-40.9)	38.0 (35.8-40.2)	624,655	44.0 (42.0-46.0)	43.6 (41.6-45.6)	709,914	8.8 (7.6-10.0)	8.9 (7.7-10.1)	141,384	8.6 (7.4-9.8)	9.5 (8.3-10.7)	139,223
Good	24.3 (21.8-26.8)	24.8 (22.3-27.3)	197,858	38.0 (35.3-40.7)	38.4 (35.7-41.1)	309,766	14.5 (12.3-16.7)	14.6 (12.4-16.8)	118,349	23.2 (20.8-25.6)	22.2 (19.8-24.6)	188,870
Fair or poor	13.5 (10.2-16.8)	14.7 (11.2-18.2)	45,616	27.9 (23.6-32.2)	29.8 (25.3-34.3)	94,500	12.8 (9.9-15.7)	13.1 (9.8-16.4)	43,427	45.8 (41.5-50.1)	42.4 (37.9-46.9)	154,984

* Adjusted rates are adjusted for age and sex, except when they are age-specific, in which case they are adjusted only for sex, or when they are sex-specific, in which case they are adjusted only for age.
 Note: For further explanation of Tables, see Appendix 2: Notes to Figures and Tables.

Table 66: Number of prescription items per year, by age and ethnicity, for males: percent (95% confidence intervals)

Males	Zero items			1-4 items			5-9 items			10+ items		
	% (95% CI)		Pop est	% (95% CI)		Pop est	% (95% CI)		Pop est	% (95% CI)		Pop est
	Unadj	Adj*		Unadj	Adj*		Unadj	Adj*		Unadj	Adj*	
Total	38.7 (36.3-41.1)	38.5 (36.1-40.9)	528,681	39.3 (36.9-41.7)	39.2 (36.8-41.6)	537,293	8.1 (6.7-9.5)	8.2 (6.8-9.6)	110,702	13.9 (12.3-15.5)	14.2 (12.6-15.8)	189,273
Age												
15-24 years	43.5 (37.2-49.8)		114,958	44.6 (38.1-51.1)		117,736	6.0 (2.7-9.3)		15,774	5.9 (2.8-9.0)		15,704
25-44 years	46.0 (42.5-49.5)		254,488	39.8 (36.5-43.1)		220,086	6.8 (5.0-8.6)		37,864	7.4 (5.4-9.4)		40,682
45-64 years	32.8 (28.7-36.9)		122,050	39.0 (34.7-43.3)		144,829	9.8 (7.1-12.5)		36,423	18.4 (14.7-22.1)		68,257
65-74 years	21.9 (16.4-27.4)		25,230	32.6 (25.9-39.3)		37,551	10.7 (6.4-15.0)		12,355	34.8 (28.7-40.9)		40,037
75+ years	19.3 (12.0-26.6)		11,957	27.6 (20.2-35.0)		17,090	13.4 (6.7-20.1)		8,286	39.7 (31.9-47.5)		24,593
Ethnicity												
European/Pākehā	36.1 (33.6-38.6)	36.5 (34.0-39.0)	397,210	39.9 (37.2-42.6)	40.2 (37.5-42.9)	439,046	8.5 (6.9-10.1)	8.4 (6.8-10.0)	93,605	15.5 (13.7-17.3)	14.9 (13.1-16.7)	170,156
Māori	41.5 (35.8-47.2)	39.2 (33.7-44.7)	54,318	41.8 (35.9-47.7)	39.4 (33.9-44.9)	54,616	8.5 (5.2-11.8)	10.2 (6.1-14.3)	11,174	8.1 (5.6-10.6)	11.2 (7.7-14.7)	10,625
Pacific	42.6 (34.4-50.8)	40.8 (32.4-49.2)	27,205	41.8 (34.2-49.4)	41.1 (32.9-49.3)	26,687	7.0 (3.5-10.5)	7.8 (3.9-11.7)	4,462	8.5 (4.2-12.8)	10.2 (5.3-15.1)	5,441
Other	70.0 (58.4-81.6)	68.4 (56.1-80.7)	49,948	23.7 (13.1-34.3)	20.6 (11.2-30.0)	16,943	2.0 (0.0-4.4)	4.5 (0.0-11.0)	1,461	4.3 (0.0-9.0)	6.5 (0.0-13.9)	3,051

* Adjusted rates are adjusted for age.

Note: For further explanation of Tables, see Appendix 2: Notes to Figures and Tables.

Table 67: Number of prescription items per year, by age and ethnicity, for females: percent (95% confidence intervals)

Females	Zero items			1-4 items			5-9 items			10+ items		
	% (95% CI)		Pop est	% (95% CI)		Pop est	% (95% CI)		Pop est	% (95% CI)		Pop est
	Unadj	Adj*	Unadj	Adj*	Unadj	Adj*	Unadj	Adj*	Unadj	Adj*	Unadj	Adj*
Total	24.3 (22.5-26.1)	24.4 (22.6-26.2)	350,454	41.2 (39.2-43.2)	41.3 (39.3-43.3)	594,685	13.6 (12.2-15.0)	13.6 (12.2-15.0)	196,564	21.0 (19.2-22.8)	20.7 (18.9-22.5)	302,756
Age												
15-24 years	22.1 (17.4-26.8)		57,582	47.4 (41.5-53.3)		123,456	13.9 (10.0-17.8)		36,128	16.7 (11.8-21.6)		43,452
25-44 years	28.7 (25.8-31.6)		167,525	46.3 (43.4-49.2)		269,954	13.4 (11.2-15.6)		78,372	11.6 (9.8-13.4)		67,672
45-64 years	24.6 (21.3-27.9)		92,360	35.7 (31.8-39.6)		134,071	13.2 (10.5-15.9)		49,693	26.5 (22.8-30.2)		99,810
65-74 years	17.4 (12.9-21.9)		22,121	33.3 (27.4-39.2)		42,189	12.2 (8.9-15.5)		15,531	37.0 (31.5-42.5)		46,963
75+ years	11.1 (7.6-14.6)		10,866	25.8 (19.9-31.7)		25,195	17.2 (11.7-22.7)		16,840	45.9 (39.0-52.8)		44,858
Ethnicity												
European/Pākehā	21.8 (19.8-23.8)	22.1 (20.1-24.1)	253,031	41.4 (39.0-43.8)	42.4 (39.9-44.9)	479,811	14.0 (12.4-15.6)	14.1 (12.5-15.7)	162,368	22.7 (20.7-24.7)	21.5 (19.5-23.5)	263,599
Māori	30.6 (26.9-34.3)	28.3 (24.6-32.0)	44,865	40.8 (36.9-44.7)	38.9 (34.6-43.2)	59,797	12.9 (10.2-15.6)	13.8 (10.7-16.9)	18,926	15.6 (12.5-18.7)	19.0 (15.1-22.9)	22,906
Pacific	29.9 (24.4-35.4)	28.4 (22.1-34.7)	19,713	45.9 (39.4-52.4)	45.6 (38.0-53.2)	30,227	11.0 (7.5-14.5)	10.8 (6.9-14.7)	7,243	13.2 (8.5-17.9)	15.3 (10.0-20.6)	8,677
Other	44.7 (33.7-55.7)	44.3 (32.0-56.6)	32,846	34.1 (24.1-44.1)	27.8 (18.6-37.0)	25,030	10.9 (3.8-18.0)	15.8 (5.6-26.0)	8,026	10.3 (2.3-18.3)	12.1 (3.5-20.7)	7,574

* Adjusted rates are adjusted for age.

Note: For further explanation of Tables, see Appendix 2: Notes to Figures and Tables.





Table 68: Number of prescription items per year, for children: percent (95% confidence intervals)

	Zero items			1-4 items			5-9 items			10+ items		
	% (95% CI)		Pop est	% (95% CI)		Pop est	% (95% CI)		Pop est	% (95% CI)		Pop est
	Unadj	Adj*		Unadj	Adj*		Unadj	Adj*		Unadj	Adj*	
Total	31.1 (27.2-35.0)		260,589	50.8 (46.3-55.3)		425,615	9.9 (7.5-12.3)		83,119	8.2 (6.2-10.2)		69,114
Sex												
Male	32.6 (27.3-37.9)	32.6 (27.3-37.9)	139,822	49.0 (43.1-54.9)	49.0 (43.1-54.8)	210,153	9.8 (6.9-12.7)	9.8 (6.9-12.7)	41,888	8.6 (5.9-11.3)	8.6 (5.9-11.3)	36,905
Female	29.5 (24.0-35.0)	29.5 (24.0-35.0)	120,768	52.6 (46.3-58.9)	52.6 (46.3-58.9)	215,461	10.1 (6.6-13.6)	10.1 (6.6-13.6)	41,231	7.9 (5.0-10.8)	7.9 (5.0-10.8)	32,209
Age												
0-4 years	21.0 (15.5-26.5)	21.0 (15.5-26.5)	58,328	51.4 (45.3-57.5)	51.4 (44.6-57.5)	142,542	14.2 (9.7-18.7)	14.2 (9.7-18.7)	39,228	13.4 (9.3-17.5)	13.4 (9.3-17.5)	37,080
5-9 years	28.3 (21.8-34.8)	28.3 (21.8-34.8)	84,023	57.0 (49.6-64.4)	57.0 (49.5-64.5)	169,611	8.6 (5.3-11.9)	8.6 (5.3-11.9)	25,431	6.2 (3.7-8.7)	6.2 (3.7-8.7)	18,289
10-14 years	44.8 (37.0-52.6)	44.8 (37.0-52.6)	118,238	43.0 (35.2-50.8)	43.0 (35.2-50.8)	113,461	7.0 (3.3-10.7)	7.0 (3.3-10.7)	18,460	5.2 (2.1-8.3)	5.2 (2.1-8.3)	13,744
Ethnicity												
European/Pākehā	30.8 (26.1-35.5)	30.4 (25.7-35.1)	165,430	51.0 (45.5-56.5)	50.9 (45.6-56.2)	274,072	10.1 (7.4-12.8)	10.2 (7.5-12.9)	54,139	8.2 (5.7-10.7)	8.4 (5.9-10.9)	43,916
Māori	32.1 (24.1-40.1)	33.5 (25.3-41.7)	59,394	45.7 (36.7-54.7)	44.3 (34.9-53.7)	84,492	12.2 (6.3-18.1)	11.6 (6.1-17.1)	22,505	10.1 (5.2-15.0)	10.6 (5.1-16.1)	18,596
Pacific	20.0 (10.0-30.0)	21.5 (10.9-32.1)	12,809	66.2 (54.4-78.0)	65.5 (53.7-77.3)	42,356	5.1 (0.0-11.4)	4.2 (0.0-9.3)	3245	8.7 (2.8-14.6)	8.8 (3.1-14.5)	5548
Other	44.2 (27.5-60.9)	41.1 (25.2-57.0)	22,956	47.5 (31.2-63.8)	49.2 (33.5-64.9)	24,695	6.2 (0.1-12.3)	7.6 (0.2-15.0)	3229	2.0 (0.0-4.5)	2.2 (0.0-5.1)	1054

* Adjusted rates are adjusted for age and sex, except where they are age-specific, in which case they are adjusted only for sex, or when they are sex specific, in which case they are adjusted only for age.
 Note: For further explanation of Tables, see Appendix 2: Notes to Figures and Tables.

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Chapter 15: Hospital Use

Key points

- Altogether, 15% of adults and 11% of children in the 1996/97 Health Survey had been admitted to some kind of hospital, whether public or private, in the past year.
- For adults, the likelihood of any kind of hospital admission was closely related to age, with 19% of 65–74-year-olds and 25% of those in the 75 years plus age group admitted to a public or private hospital in the past year.
- Amongst children, those in the 0–4 years age group were most likely to be admitted to a public or private hospital, with 20% being admitted in the past year.
- Adults from the Māori, Pacific and European/Pākehā ethnic groups had similar overall rates of hospital admission, with 15–16% of the people in these groups being admitted to either a public or private hospital in the past year.
- Seven percent of adults and 2% of children used a private hospital service of some kind in the past 12 months.
- Rates of use of private hospital services varied significantly by family income and NZDep96 scores, with adults in the highest socioeconomic groups more likely than other adults to use private hospital services.
- About 1 in 10 adults and children were admitted to a public hospital in the last 12 months.
- Adults in the highest family income group (\$50,001 plus) were less likely to be admitted to a public hospital than adults in the other income groups.
- About 1 in 8 adults and 1 in 10 children used a public hospital outpatient department in the past 12 months.
- Eleven percent of adults and 13% of children used a public hospital accident and emergency department in the past year. Men were more likely than women to use an emergency department, although boys had a similar rate to girls.
- Nine out of ten adults reported being either very satisfied or satisfied with their overall health care in the past year.

Introduction

Public hospitals are publicly funded and administered and provide services at no or minimal financial cost to patients. Private hospitals are run by companies or charitable organisations and usually charge fees.

The 1996/97 Health Survey respondents were asked about their use of public and private hospitals in the past 12 months, with specific information collected on inpatient and day-patient services, accident and emergency department services and outpatient department services. This information is useful for developing a clearer understanding of which groups in the New Zealand population are more likely to use different kinds of hospital services, and why.

Unless otherwise stated, age- and sex-standardised rates, and 95% confidence intervals in parentheses, are given in the text. Tables at the end of this section show key standardised and unstandardised estimates. More detailed tables related to this section are available on the Ministry of Health website (www.moh.govt.nz).

Results

Admissions to hospital

Admission to any kind of hospital

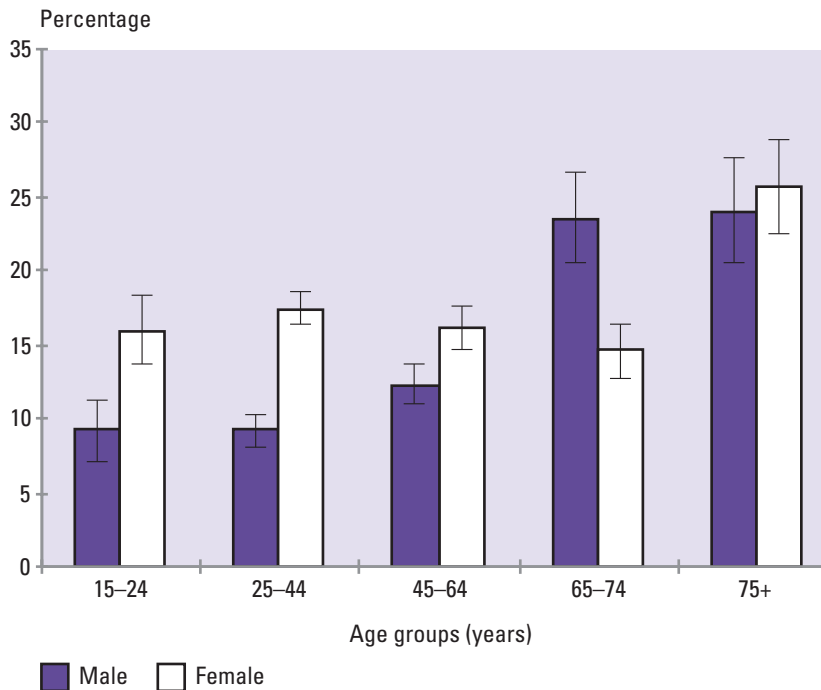
A person is classified as being admitted to a hospital as an inpatient if they stay at a hospital overnight, or for several nights, for treatment or care. They are classified as having been admitted to hospital as a day patient if they stay at a hospital for more than three hours for treatment, but not overnight. Day-patient admissions can include surgical operations as well as other kinds of treatment.

The 1996/97 Health Survey examined how many people were admitted to hospital as an inpatient or day patient, irrespective of whether the admission had been to a public or a private hospital. This information is useful for indicating overall rates of hospital admissions for different groups throughout the country.

Adults

Altogether, 14.6% (13.4–15.8) of adults, or an estimated 412,911 adult New Zealanders, had been admitted to some kind of hospital, whether public or private, in the past year. Women were admitted at a higher rate than men (17.1%; 15.5–18.7 compared to 12.1%; 10.5–13.7; $p < 0.0001$). The likelihood of any kind of hospital admission increased with age ($p < 0.0001$), with only 12.7% (9.8–15.6) of 15–24-year-olds admitted to hospital in the past year, compared to 19.3% (15.6–23.0) of 65–74-year-olds and 25.0% (20.5–29.5) of those in the 75 years plus age group (see Figure 115).

Figure 115: Proportion of adults admitted to any kind of hospital (public or private) in the last 12 months, by age and sex



Note: Error bars indicate 95% confidence intervals. For further explanation of graphs, see Appendix 2: Notes to Figures and Tables.

Adults from the Māori, Pacific and European/Pākehā ethnic groups had similar overall rates of hospital admission, with 15–16% of the people in these groups (15.5%; 12.8–18.2, 14.9%; 11.0–18.8 and 15.1%; 13.7–16.5 respectively) being admitted to either a public or private hospital in the past year. The corresponding rate for people in the Other ethnic group was 10.2% (3.1–17.3).

In the 1992/93 Health Survey there appeared to be a difference between Māori (18%) and non-Māori (13%) rates of hospital admission (Ministry of Health 1995).

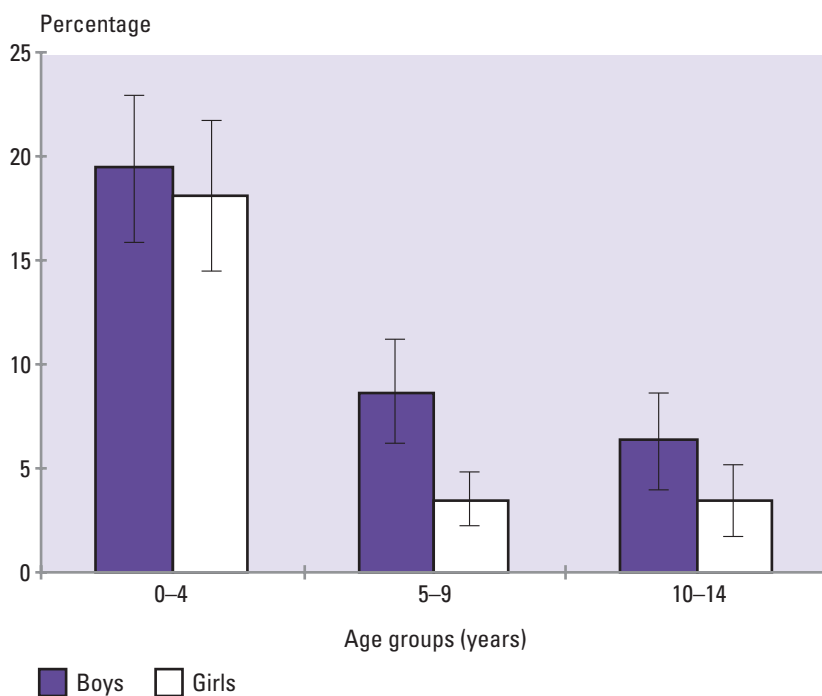
When examined by family income group, NZDep96 score and educational level, rates of overall hospital admission were generally similar, suggesting that adults from the higher socioeconomic groups were just as likely to be admitted to hospital in the last 12 months as adults from the lower socioeconomic groups.

As with all kinds of hospital services, the reasons for these similarities and differences in the use of inpatient and day-patient services are likely to be complex, reflecting, among other things, levels of exposure to disease risk factors, availability and utilisation of preventive and primary health care services, and hospital admission practices.

Children

Compared to adults, a smaller proportion of children (10.9%; 8.5–13.3) had been admitted to any kind of hospital in the past year, an estimated 92,771 young people. Boys (13.0%; 9.5–16.5) were admitted at a higher rate than girls (8.7%; 5.8–11.6) ($p < 0.01$), with children in the youngest age group (0–4 years) most likely to be admitted. One in five (20.2%; 14.9–25.5) of the children in this age group were admitted, compared with 7.1% (4.2–10.0) of 5–9-year-olds and 5.5% (2.6–8.4) of 10–14-year-olds ($p < 0.0001$; see Figure 116).

Figure 116: Proportion of children admitted to any kind of hospital (public or private) in the last 12 months, by age and sex



Note: Error bars indicate 95% confidence intervals. For further explanation of graphs, see Appendix 2: Notes to Figures and Tables.

Children from the different ethnic groups had reasonably similar overall rates of hospital admission, with Pacific children having the lowest rate (8.9%; 1.8–16.0) and Māori children the highest (11.8%; 6.9–16.7).

Admission to a public hospital

As previously mentioned, most New Zealand hospitals are publicly owned, funded and administered. For this reason, it is useful to consider the 1996/97 Health Survey's findings specifically on rates of admission to a public hospital.

Adults

Just over 1 in 10 adults were admitted to a public hospital as an inpatient or day patient at least once in the last year. Women were more likely to be admitted than men, (12.1%; 10.9–13.3 compared to 8.9%; 7.5–10.3; $p < 0.01$). In the 1992/93 Health Survey 13% of New Zealanders were admitted to public hospitals in the previous year (Ministry of Health 1995).

In general, adults in the older age groups were more likely to be admitted to a public hospital than those in the younger age groups ($p < 0.0001$), with 21.5% (17.0–26.0) of people in the 75 plus age group admitted in the past year. Exceptions to this trend were women in the two youngest age groups, 15–24 and 25–44 years (12.0%; 8.3–15.7 and 13.8%; 11.8–15.8 respectively). These women were more likely to be admitted to a public hospital than women in the 45–64 and 65–74 years age groups (8.0%; 6.2–9.8 and 10.2%; 7.3–13.1 respectively), reflecting their use of public hospital maternity services during the child-bearing years.

There were significant differences across ethnic group in the likelihood of being admitted to a public hospital ($p < 0.05$). Fourteen percent (14.2%; 11.5–16.9) of Māori, 13.2% (9.5–16.9) of Pacific adults, 10.5% (9.5–11.5) of European/Pākehā, and 5.6% (0.0–11.5) of adults from the Other ethnic group were admitted to a public hospital in the past year.

Admissions to public hospitals decreased with increasing income ($p < 0.05$), dropping most sharply in the highest income group. Similarly, when people's use of public hospital inpatient and day-patient services was compared to their NZDep96 score, adults from the more deprived NZDep96 groups were more likely to be admitted to a public hospital than adults from the less deprived NZDep96 groups ($p < 0.001$). Fourteen percent (13.5%; 11.9–15.1) of adults from the most deprived areas had been admitted to a public hospital in the past year, compared to 8% (8.2%; 6.2–10.2) of adults from the least deprived areas. In addition, those with fewer educational qualifications were more likely to be admitted to a public hospital ($p < 0.001$).

There was a similar negative association between income and hospital admissions in the 1992/93 Health Survey (Ministry of Health 1995).

One contributing factor to the above trends may be the greater affordability of private medical insurance and private hospital care for people in the higher socioeconomic groups (see the section below on *Use of any service at a private hospital*). As well, people in the lower socioeconomic groups may be more likely than other people to experience health problems that can only be treated by specialised services available in public hospitals.

Children

One in ten children (10.0%; 7.6–12.4) had been admitted to a public hospital as an inpatient or day patient in the past year, representing an estimated 84,489 children throughout the population. Reflecting in part age-related differences in the incidence and severity of illness among children, 0–4-year-olds (18.8%; 13.7–23.9) were more likely than 5–9 (6.2%; 3.5–8.9) and 10–14-year-olds (4.9%; 2.0–7.8) to be admitted to a public hospital ($p < 0.0001$).

Use of any service at a private hospital

Private hospitals provide a range of inpatient and day-patient surgical and medical services. It is therefore useful to examine features of the 1996/97 Health Survey respondents who used a service at a private hospital in the past year.

Adults

According to the 1996/97 Health Survey, 6.8% (5.8–7.8) of adults, or an estimated 189,963 adult New Zealanders, used a private hospital service of some kind in the past 12 months, with women slightly more likely than men to use these services (7.8%; 6.4–9.2 compared to 5.7%; 4.3–7.1; $p < 0.05$). People with the two highest rates of private hospital service use were women in the 45–64 years age group and men in the 65–74 years age group (10.9%; 8.2–13.6 and 9.0%; 4.5–13.5 respectively).

In the 1996/97 Health Survey nearly 5% of adults were admitted to a private hospital in the past 12 months, compared with 4% in the 1992/93 Health Survey (Ministry of Health 1995).

Rates of use of private hospital services varied significantly by family income ($p = 0.0001$) and NZDep96 scores ($p < 0.0001$), with adults in the highest socioeconomic groups more likely than others to use private hospital services. Amongst those in the \$50,001 plus family income group (10.5%; 6.8–14.2) and those living in the least deprived areas of New Zealand (9.6%; 7.2–12.0), 1 in 10 adults used a private hospital service in the past 12 months, more than twice the rate for those in the 0–\$20,000 (3.7%; 2.5–4.9) family income group and those living in the most deprived areas (3.9%; 2.9–4.9).

Children

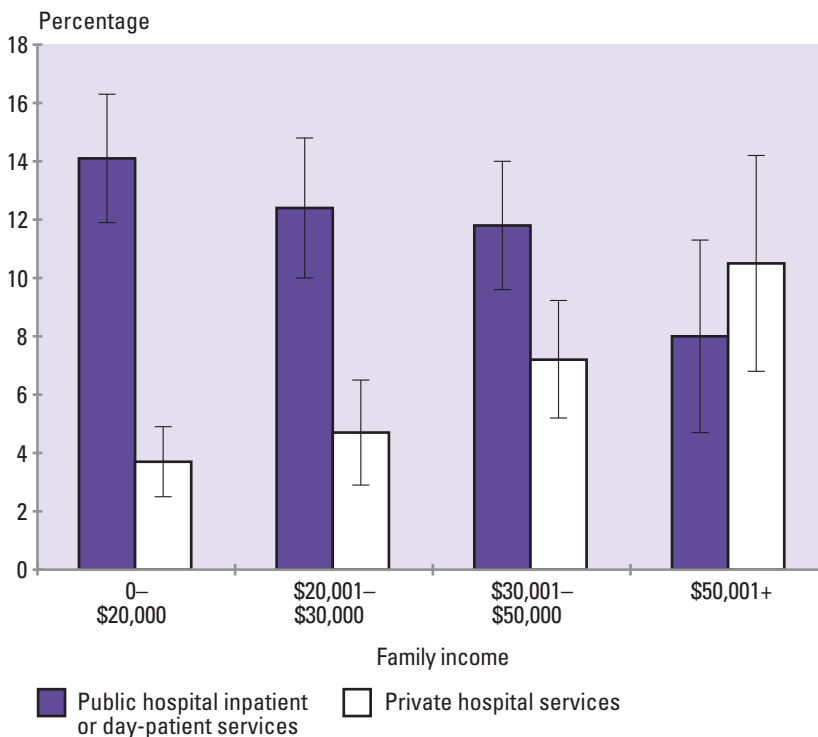
Only 1.9% of children (0.9–2.9) used a service at a private hospital in the past 12 months.

Overall patterns of public and private hospital use

Comparing features of the adults admitted to public hospitals with those of adults who used private hospital services reveals some interesting trends. As Figure 117 shows, adults from the higher income groups were more likely to use private hospital services in the past year, while adults in the lower income groups were more likely to be admitted to public hospitals.

Eight percent (7.6%; 6.4–8.8) of European/Pākehā adults used a private hospital service in the past 12 months, more than twice the rate for Māori and Pacific adults (2.9%; 1.7–4.1 and 2.6%; 1.0–4.2 respectively; $p < 0.0001$). This result may in part reflect differences in socioeconomic status across ethnic groups.

Figure 117: Adults' use of inpatient or day-patient public hospital services and any form of private hospital services in the past 12 months, by family income (age- and sex-standardised)



Note: Error bars indicate 95% confidence intervals. For further explanation of graphs, see Appendix 2: Notes to Figures and Tables.

Other services at public hospitals

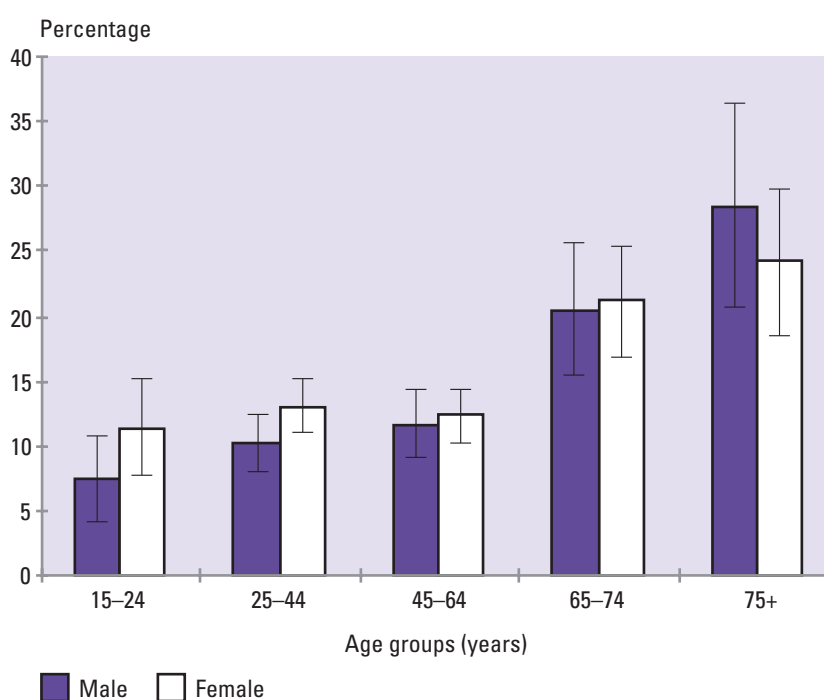
As well as admitting people as inpatients and day patients, public hospitals also provide a variety of services to people without admitting them to hospital. These services are usually obtained at a hospital outpatient department or an accident and emergency department.

The 1996/97 Health Survey found that just over a quarter of adults (26.6%; 25.2–28.0) and a quarter of children (24.9%; 21.0–28.8) were either admitted as an inpatient or day patient to a public hospital, or used a public hospital outpatient department or accident and emergency department in the previous 12 months. Extrapolated to the New Zealand population as a whole, this represents an estimated 750,278 adults and 211,266 children who used some kind of service at a public hospital.

Use of public hospital outpatient department services

In the 1996/97 Health Survey, a person was classified as having attended hospital as an outpatient if they visited a hospital outpatient department ward or clinic for some kind of health care-related service.

Figure 118: Proportion of adults who used a public hospital outpatient department in the last 12 months, by age and sex



Note: Error bars indicate 95% confidence intervals. For further explanation of graphs, see Appendix 2: Notes to Figures and Tables.

Adults

About one in eight adults in the 1996/97 Health Survey (13.0%; 12.0–14.0), an estimated 365,048 adult New Zealanders in the population as a whole, used a public hospital outpatient department in the past 12 months. Reflecting the fact that many of these outpatient departments provide services related to the diseases of aging, older people were more likely to use these services than younger people ($p < 0.0001$), with people in the 75 plus age group (26.1%; 21.4–30.8) almost three times as likely to use an outpatient department as people in the 15–24 years age group (9.5%; 7.0–12.0; see Figure 118).

The 1996/97 Health Survey found that European/Pākehā, Māori and Pacific adults had similar rates of public hospital outpatient department use (10.9%; 9.7–12.1, 12.9%; 10.2–15.6 and 9.6%; 6.7–12.5 respectively), although the rate was lower for adults from the Other ethnic group (6.3%; 1.8–10.8; $p < 0.01$).

In the 1992/93 Health Survey the same proportion (13%) of New Zealanders used a public hospital outpatient department in the past 12 months, and, similarly, there was no difference between Māori and non-Māori (Ministry of Health 1995).

Those adults in the highest family income group, living in least deprived areas of New Zealand and with the highest educational level were less likely than those from other family income, NZDep96 and education groups to use public hospital outpatient department services. In part this will be because adults from the more advantaged socioeconomic groups have fewer long-term health conditions. It may also be because they are more likely to be able to afford to pay for private specialist services, rather than attend a public hospital outpatient department. (As Chapter 13 described, adults from the higher income groups are more likely to see a medical specialist at a private clinic or hospital rather than at a public hospital, whereas the reverse is the case for those in the lower income groups.)

Children

Ten percent (9.9%; 7.7–12.1) of children, an estimated 84,365 children throughout the country, had used a public hospital outpatient department service in the past year. This is slightly lower than the rate of outpatient department use for children in the 1992/93 Health Survey (12%) (Ministry of Health 1995).

Children in the 0–4 years age group (14.7%; 10.6–18.8) were twice as likely as those in the 5–9 (7.6%; 4.7–10.5) and 10–14 years age groups (7.7%; 4.0–11.4) to visit an outpatient department ($p < 0.05$), although children from the Pacific, European/Pākehā and Māori ethnic groups all had similar rates of outpatient department contact (10.9%; 2.9–18.9, 10.4%; 7.7–13.1 and 9.8%; 5.3–14.3 respectively).

Use of public hospital emergency department services

In the 1996/97 Health Survey, a person was classified as an emergency department patient if they visited a public hospital accident and emergency department for health care.

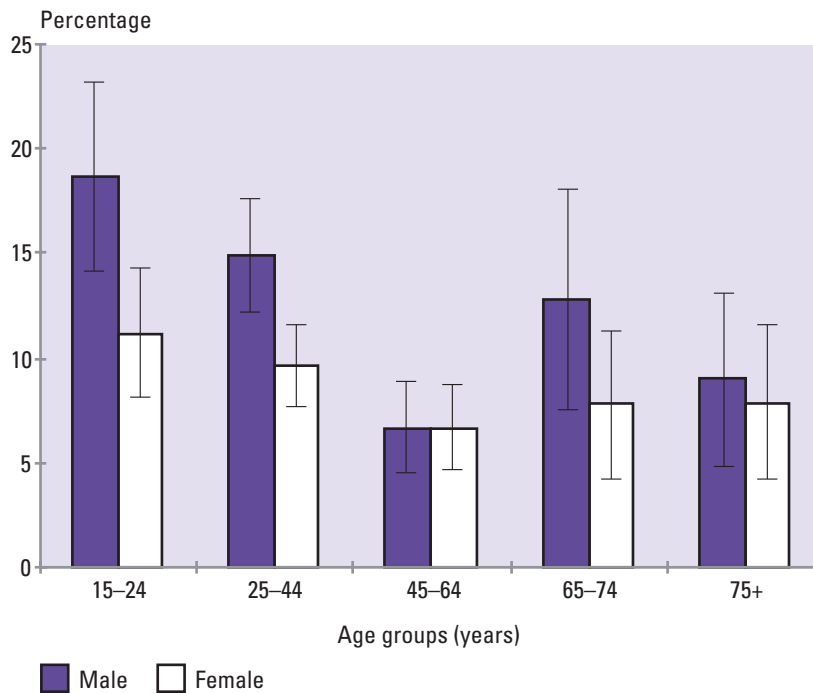
Adults

Over 1 in 10 adults (10.9%; 9.9–11.9) had used a public hospital emergency department service in the past year. Men were more likely than women to use emergency department services ($p < 0.0001$), with an estimated 177,936 men and 128,838 women in the New Zealand population using these services in the previous 12 months. This difference reflects in part the fact that men, especially younger men, are more likely than women to be hospitalised for unintentional and intentional injuries (Public Health Commission 1994).

The previous health survey found that 7% of adults had used a public hospital A&E department service in the past year (Ministry of Health 1995).

The use of emergency departments was associated with age ($p < 0.0001$). Adults in the 15–24 years age group (14.9%; 12.2–17.6) had the highest rate of emergency department use, with 18.7% (14.2–23.2) of men and 11.2% (8.1–14.3) of women in this age group using these services in the past year. By contrast, only 9.0% (4.9–13.1) of men and 7.9% (4.2–11.6) of women in the 75 plus age group used an emergency department (see Figure 119). Again, this trend is likely to be related to young people's greater risk of injury from such things as motor vehicle crashes and assaults (Public Health Commission 1994). There were no significant differences in the use of the emergency departments amongst ethnic groups.

Figure 119: Proportion of adults who used a public hospital accident and emergency department in the past 12 months, by age and sex



Note: Error bars indicate 95% confidence intervals. For further explanation of graphs, see Appendix 2: Notes to Figures and Tables.

While rates of emergency department use were similar across income groups and relative deprivation scores, adults in the most highly educated group were less likely than other adults to use these services ($p < 0.05$). Nine percent (7.2–10.8) of adults with both school and post-school educational qualifications used an emergency department in the past year, about two-thirds the rate for adults with no educational qualifications (12.5%; 10.3–14.7).

Children

Thirteen percent (13.3%; 9.8–16.8) of children, an estimated 113,162 of the country’s young people, used a public hospital emergency department in the past year, with boys having a very similar rate of contact to girls (13.7%; 9.8–17.6 and 13.0%; 8.1–17.9 respectively). This is nearly double the rate identified for children in the 1992/93 Health Survey (7%) (Ministry of Health 1995).

In contrast to the other public hospital services, children’s rates of contact with A&E services were similar across the different age groups. With regard to ethnicity, children from the European/Pākehā group were the most likely to have contact with an A&E department (15.5%; 11.0–20.0), while Pacific children were the least likely (5.4%; 0.3–10.5; $p < 0.01$).

Satisfaction with overall health care

The 1996/97 Health Survey asked respondents about their level of satisfaction with their overall health care* in the past 12 months. Nine out of ten adults (90%; 89.0–91.0) reported being either very satisfied or satisfied with their overall health care. About 1 in 20 (4.3%; 3.2–5.1) were either dissatisfied or very dissatisfied.

* This question was asked of those who had used any health services, not including GP services. The question was: ‘Overall, how do you feel about how you have been looked after by the people you have seen for health care or advice, in the last 12 months?’



Rates of satisfaction increased significantly with age ($p < 0.0001$), with 86% (82.7–89.3) of 15–24 year olds either satisfied or very satisfied with their overall health care, compared with 95.3% (93.3–97.3) of those in the 65 plus age group. There were significant differences between ethnic groups ($p < 0.0001$) in the proportions who were either very satisfied or satisfied with their overall health care, with adults from the Pacific (91.0%; 88.1–93.9), European/Pākehā (90.4%; 89.2–91.6), Other (94.9%; 91.6–98.2) ethnic groups being somewhat more likely than Māori (84.0%; 80.7–87.3) to report being either satisfied or very satisfied with their health care.

Table 69: Admissions to any hospital in the last 12 months, by sociodemographic variables: percent (95% confidence intervals)

Hospital admissions			
	% (95% CI)		Pop est
	Unadj	Adj*	
Total	14.6 (13.4–15.8)		412,911
Sex			
Male	11.9 (10.3–13.5)	12.1 (10.5–13.7)	163,830
Female	17.2 (15.6–18.8)	17.1 (15.5–18.7)	249,081
Age			
15–24 years	12.6 (9.7–15.5)	12.7 (9.8–15.6)	66,260
25–44 years	13.5 (11.9–15.1)	13.4 (11.8–15.0)	153,669
45–64 years	14.2 (12.2–16.2)	14.3 (12.3–16.3)	106,666
65–74 years	18.9 (15.4–22.4)	19.3 (15.6–23.0)	46,126
75+ years	25.1 (20.6–29.6)	25.0 (20.5–29.5)	40,190
Ethnicity			
European/Pākehā	15.1 (13.7–16.5)	15.1 (13.7–16.5)	343,098
Māori	15.7 (12.6–18.8)	15.5 (12.8–18.2)	43,926
Pacific	13.1 (9.8–16.4)	14.9 (11.0–18.8)	17,384
Other	5.8 (2.5–9.1)	10.2 (3.1–17.3)	8504
Family income			
0–\$20,000	19.0 (16.8–21.2)	16.6 (14.2–19.0)	95,955
\$20,001–\$30,000	14.8 (12.3–17.3)	14.0 (11.6–16.4)	55,996
\$30,001–\$50,000	16.1 (13.6–18.6)	16.2 (13.5–18.9)	86,023
\$50,001+	12.0 (9.6–14.4)	14.5 (10.6–18.4)	105,338
NZDep96 score			
1 (least deprived)	14.0 (11.5–16.5)	14.9 (12.2–17.6)	112,947
2	13.5 (11.1–15.9)	13.4 (11.0–15.8)	94,869
3	16.0 (13.8–18.2)	16.0 (13.8–18.2)	101,427
4 (most deprived)	15.3 (13.7–16.9)	15.2 (13.6–16.8)	103,668
Education			
No qualifications	15.4 (13.4–17.4)	15.0 (12.8–17.2)	124,380
School or post-school only	14.9 (12.9–16.9)	14.9 (13.1–16.7)	150,966
School and post-school	13.6 (11.6–15.6)	14.1 (12.1–16.1)	134,764

* Adjusted rates are adjusted for age and sex, except when they are age-specific, in which case they are adjusted only for sex, or when they are sex-specific, in which case they are adjusted only for age.

Note: For further explanation of Tables, see Appendix 2: Notes to Figures and Tables.

Table 70: Admissions to any hospital in the last 12 months, by age and ethnicity, for males: percent (95% confidence intervals)

Hospital admissions			
Males	%(95% CI)		Pop est
	Unadj	Adj*	
Total	11.9 (10.3–13.5)	12.1 (10.5–13.7)	163,830
Age			
15–24 years	9.2 (5.1–13.3)		24,364
25–44 years	9.2 (6.8–11.6)		50,851
45–64 years	12.3 (9.6–15.0)		46,032
65–74 years	23.6 (17.7–29.5)		27,481
75+ years	24.1 (17.2–31.0)		15,101
Ethnicity			
European/Pākehā	12.5 (10.7–14.3)	12.3 (10.5–14.1)	138,280
Māori	12.8 (7.5–18.1)	13.6 (8.9–18.3)	16,867
Pacific	10.2 (5.7–14.7)	13.4 (7.7–19.1)	6,684
Other	2.8 (0.1–5.5)	5.8 (0.0–13.1)	1,999

* Adjusted rates are adjusted for age.

Note: For further explanation of Tables, see Appendix 2: Notes to Figures and Tables.

Table 71: Admissions to any hospital in the last 12 months, by age and ethnicity, for females: percent (95% confidence intervals)

Hospital admissions			
Females	%(95% CI)		Pop est
	Unadj	Adj*	
Total	17.2 (15.6–18.8)	17.1 (15.5–18.7)	249,081
Age			
15–24 years	16.0 (11.5–20.5)		41,896
25–44 years	17.5 (15.3–19.7)		102,818
45–64 years	16.1 (13.2–19.0)		60,634
65–74 years	14.6 (10.9–18.3)		18,644
75+ years	25.6 (19.3–31.9)		25,089
Ethnicity			
European/Pākehā	17.6 (15.8–19.4)	17.6 (15.6–19.6)	204,818
Māori	18.4 (15.1–21.7)	17.4 (14.1–20.7)	27,059
Pacific	16.0 (11.5–20.5)	16.3 (11.2–21.4)	10,699
Other	8.8 (3.1–14.5)	14.4 (2.8–26.0)	6,505

* Adjusted rates are adjusted for age.

Note: For further explanation of Tables, see Appendix 2: Notes to Figures and Tables.

Table 72: Admissions to any hospital in the last 12 months, for children: percent (95% confidence intervals)

Hospital admissions			
Children	% (95% CI)		Pop est
	Unadj	Adj*	
Total	10.9 (8.5–13.3)		92,771
Sex			
Male	13.0 (9.5–16.5)	13.0 (9.5–16.5)	56,737
Female	8.7 (5.8–11.6)	8.7 (5.8–11.6)	36,034
Age			
0–4 years	20.2 (14.9–25.5)	20.2 (14.9–25.5)	56,832
5–9 years	7.1 (4.2–10.0)	7.1 (4.2–10.0)	21,108
10–14 years	5.5 (2.6–8.4)	5.5 (2.6–8.4)	14,831
Ethnicity			
European/Pākehā	10.3 (7.6–13.0)	10.7 (8.0–13.4)	55,998
Māori	13.6 (8.1–19.1)	11.8 (6.9–16.7)	25,405
Pacific	9.8 (2.2–17.4)	8.9 (1.8–16.0)	6387
Other	9.6 (0.4–18.8)	10.5 (0.5–20.5)	4982

* Adjusted rates are adjusted for age and sex, except when they are age-specific, in which case they are adjusted only for sex, or when they are sex-specific, in which case they are adjusted only for age.
Note: For further explanation of Tables, see Appendix 2: Notes to Figures and Tables.

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