

Non-hospital care

Introduction

This chapter presents information on the non-hospital management of cardiovascular disease in Australia. Detailed analysis from two national sources of data (the Australian Bureau of Statistics' National Health Survey 1995; and the Survey of Morbidity and Treatment in General Practice in Australia 1990–91) are presented as well as results from the National Heart Foundation Risk Factor Prevalence Study 1989 survey and the Hunter Region Heart Disease Prevention Programme Risk Factor Prevalence Study.

The limitations of the national data sources, as discussed in the chapter *National data sources*, should be kept in mind when interpreting the results presented here.

Data sources

- **The Australian Bureau of Statistics' National Health Survey 1995** (Australian Bureau of Statistics 1997a; 1997b). Provides national estimates of the self-reported prevalence of cardiovascular conditions and health related actions taken for these conditions.
- **The Survey of Morbidity and Treatment in General Practice in Australia 1990–91** (Bridges-Webb et al. 1992). Provides national estimates of cardiovascular morbidity and its treatment in general practice.
- **The National Heart Foundation Risk Factor Prevalence Study** (Risk Factor Prevalence Study Management Committee 1990). Surveys were conducted in 1980, 1983 and 1989. Participants were randomly selected from Commonwealth electoral rolls. The 1989 survey included men and women aged 20 to 69 years from all capital cities (about 9,300 respondents). Information on history of medical conditions and treatment was obtained in a clinical setting from a self-completion questionnaire.
- **The Hunter Region Heart Disease Prevention Programme Risk Factor Prevalence Study** (Alexander et al. 1995). Surveys were conducted in 1983, 1988–89 and 1994. Participants were selected from the New South Wales electoral roll. The 1994 survey included people aged 35–69 years living in the local government areas of Newcastle, Lake Macquarie, Cessnock, Maitland and Port Stephens. Potential respondents who did not participate in the main study were invited to complete a brief postal questionnaire. There were 1,670 participants in the main study. Information on history of medical conditions and treatment was obtained from a self-completion questionnaire completed in a clinical setting. A further 303 people completed the brief postal questionnaire, which asked about history of medical conditions as well as whether the respondent was currently taking medication for high blood pressure.

Estimates from the Australian Bureau of Statistics' National Health Survey 1995

Prevalence of recent cardiovascular conditions

Based on data from the National Health Survey, an estimated 2,848,342 Australians suffered from a cardiovascular condition in 1995. Of these people, 2,062,938 reported having a recent cardiovascular condition (i.e. experienced in the two weeks prior to interview). Almost all (99.5%) people reporting having a cardiovascular condition in the two weeks prior to interview also reported taking one or more health related action for the condition.

Box 5: Cardiovascular conditions codes

The Australian Bureau of Statistics coded all self-reported conditions to the Ninth Revision (1975) of the International Classification of Diseases (ICD-9). The code list for cardiovascular conditions represents a collapsed ICD-9 list, with most conditions reflecting a broad category of related or similar cardiovascular diseases/conditions. The overall approach in the survey was to classify and code the manifesting condition and not the cause. The Australian Bureau of Statistics' coding procedure reflects the nature of a self-report household survey, where respondents' information was not medically verified. Further, more detailed coding would have resulted in high relative standard errors due to low frequencies that would occur for some conditions and/or population groups.

*A detailed list of the cardiovascular conditions for which estimates are provided, their ICD-9 codes and their derived Australian Bureau of Statistics' codes are provided in **Appendix B**. A summarised list of those cardiovascular conditions follows:*

Condition	ICD-9-CM code	ABS code
Hypertension	401–405	072
Heart disease	391, 394, 398, 410–429	082
Atherosclerosis	440	015
Cerebrovascular disease	430–435, 437	219
Stroke after effects	436, 438	119
Other diseases of the circulatory system	390, 441–448, 451–453, 457–459, 745–747	019
Ill-defined signs and symptoms of heart conditions	Includes heart problems/trouble, irregular heart beat, palpitations	182

Prevalence of recent cardiovascular condition by age

The prevalence of self-reported recent cardiovascular conditions (i.e. in the two weeks prior to interview) increased with age for males and females. Overall, in 1995 10.7% of males and 12.2% of females reported having a recent cardiovascular condition. Males reported a higher proportion of heart disease than females in all age groups. Females reported a greater prevalence of hypertension (9.3%) than did males (7.2%) (Table 2).

Box 6: National Health Survey explanatory notes

Age-specific and age-standardised estimates are provided here. The standard population used for age standardisation was the estimated total mid-year Australian population in 1991 (refer to the Glossary).

Very small estimates are subject to high standard errors (relative to the size of the estimate). In this report, only estimates which were derived from a numerator estimate with a relative standard error of less than 25% are considered reliable. However, estimates with relative standard errors between 25% and 50% have been included and are preceded by an asterisk (e.g. *1.6) to indicate that they should be interpreted with caution. Estimates with relative standard errors greater than 50% have not been shown as they are considered too unreliable for use (Australian Bureau Statistics 1997a). These estimates have been replaced by an asterisk (*).

Definitions of the items included in the tables below are provided in **Appendix A**.

Table 2: Percentage of males and females reporting a recent cardiovascular condition by age group, 1995

Sex/Type of condition	Age group (years)							All ages
	<25	25–34	35–44	45–54	55–64	65–74	75+	
Males								
Hypertension	*0.0	0.9	3.6	10.4	22.2	31.4	31.9	7.2
Heart disease	0.1	0.2	0.4	1.5	6.2	11.6	16.1	2.2
Atherosclerosis	—	—	—	*0.1	0.3	0.6	0.8	0.1
Cerebrovascular disease ^(a)	*0.0	*0.1	*0.1	*0.1	1.0	3.0	2.2	0.3
Other diseases of the circulatory system	0.1	0.3	0.7	2.0	5.6	12.3	11.7	2.2
Ill-defined signs and symptoms of heart conditions	*0.1	*0.1	0.3	0.9	2.9	7.3	9.7	1.3
All cardiovascular^(b)	0.3	1.5	4.6	13.3	31.5	48.9	53.6	10.7
Females								
Hypertension	*0.2	0.9	2.5	10.8	25.6	38.9	40.7	9.3
Heart disease	*	*0.1	0.2	0.7	2.7	6.1	13.3	1.6
Atherosclerosis	—	—	—	*	*0.1	*0.3	*1.9	0.1
Cerebrovascular disease ^(a)	—	*0.0	*	*0.1	0.4	0.9	1.0	0.2
Other diseases of the circulatory system	0.1	0.4	0.7	1.5	3.4	8.5	11.1	1.9
Ill-defined signs and symptoms of heart conditions	0.1	0.2	*0.1	0.7	3.1	5.8	11.0	1.5
All cardiovascular^(b)	0.4	1.6	3.3	13.2	31.4	49.8	57.5	12.2

(a) Includes after-effects of stroke.

(b) Each person may have reported more than one type of condition and therefore components do not add to totals.

—nil

* Subject to high sampling variability.

Source: AIHW derived from the ABS National Health Survey 1995.

Prevalence of recent cardiovascular condition by sex

After adjusting for age, the self-reported prevalence of recent cardiovascular condition in 1995 was about 11.0% for both males and females (Table 3). Hypertension was the most common condition for both females and males. Males reported a slightly higher prevalence rate than females for heart disease and 'other diseases of the circulatory system', while for hypertension the converse was true.

Table 3: Percentage^(a) of people reporting a recent cardiovascular condition by sex, 1995

Type of condition	Males	Females
	Per cent (SE)	
Hypertension	7.3 (0.1)	8.4 (0.1)
Heart disease	2.3 (0.1)	1.4 (0.1)
Atherosclerosis	0.1 (0.0)	0.0 (0.0)
Cerebrovascular disease ^(b)	0.3 (0.0)	0.2 (0.0)
Other diseases of the circulatory system	2.2 (0.1)	1.7 (0.1)
Ill-defined signs and symptoms of heart conditions	1.4 (0.1)	1.3 (0.1)
All cardiovascular	10.9 (0.1)	11.0 (0.1)

(a) Age-standardised to the mid-1991 total Australian population.

(b) Includes after-effects of stroke.

SE: Standard error

Source: AIHW derived from the ABS National Health Survey 1995.

Prevalence of recent cardiovascular condition by State and Territory

Age-standardised prevalence rates for a cardiovascular condition were highest in Tasmania (12.3%) and New South Wales (12.0%), and lowest in the Northern Territory (6.8%) (Table 4). It should be noted that prevalence estimates for atherosclerosis and cerebrovascular disease were too small to report and are not included as separate conditions in Table 4.

Hypertension was the most prevalent condition reported in all States and Territories, with Tasmania and New South Wales having the highest rates and the Northern Territory the lowest.

Table 4: Percentage^(a) of people reporting a recent cardiovascular condition by State and Territory, 1995

Type of condition	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
	Per cent (SE)							
Hypertension	8.8 (0.2)	7.4 (0.2)	7.7 (0.2)	6.9 (0.3)	7.4 (0.3)	9.1 (0.6)	6.8 (0.7)	4.6 (0.8)
Heart disease	1.8 (0.1)	1.8 (0.1)	1.8 (0.1)	1.6 (0.1)	1.7 (0.1)	2.6 (0.3)	2.0 (0.4)	0.7 (0.3)
Other diseases of the circulatory system ^(b)	2.2 (0.1)	1.7 (0.1)	2.0 (0.1)	1.7 (0.1)	2.4 (0.1)	1.7 (0.2)	1.4 (0.3)	0.7 (0.3)
Ill-defined signs and symptoms of heart conditions	1.6 (0.1)	1.2 (0.1)	1.2 (0.1)	1.2 (0.1)	1.0 (0.1)	1.4 (0.2)	1.2 (0.3)	1.5 (0.5)
All cardiovascular^(c)	12.0 (0.2)	10.4 (0.2)	10.5 (0.2)	9.9 (0.4)	10.3 (0.4)	12.3 (0.7)	9.5 (0.9)	6.8 (1.1)

(a) Age-standardised to the mid-1991 total Australian population.

(b) Does not include atherosclerosis, cerebrovascular disease or after-effects of stroke.

(c) Includes atherosclerosis, cerebrovascular disease and after-effects of stroke.

SE: Standard error

Source: AIHW derived from the ABS National Health Survey 1995.

Action taken for a recent cardiovascular condition

Action taken for a recent cardiovascular condition by age

Over 99% of people reporting a recent cardiovascular condition also reported taking a health related action for that condition. The proportion of people with a recent condition reporting taking action for that condition, was lowest among people aged less than 34 years (Table 5).

More males aged 65–74 years than females in that age group reported consulting a doctor for a recent cardiovascular condition. Females aged 25–34 and 45–54 years were more likely than males in those age groups to visit a doctor for a recent cardiovascular condition (Table 6).

Table 5: Percentage of males and females reporting taking action for a recent cardiovascular condition by age group, 1995

Sex	Age group (years)							All ages
	<25	25–34	35–44	45–54	55–64	65–74	75+	
Males	91.1	97.7	99.8	99.6	99.3	99.8	99.8	99.5
Females	89.7	94.2	99.1	99.5	99.5	99.8	99.7	99.4

Source: AIHW derived from the ABS National Health Survey 1995.

Table 6: Percentage of males and females reporting consulting a doctor for a recent cardiovascular condition by age group, 1995

Sex	Age group (years)							All ages
	<25	25–34	35–44	45–54	55–64	65–74	75+	
Males	41.0	26.0	12.0	11.4	11.7	12.9	12.4	12.8
Females	41.1	30.5	12.0	18.2	11.6	8.8	12.9	12.6

Source: AIHW derived from the ABS National Health Survey 1995.

Action taken for a recent cardiovascular condition by sex

After adjusting for age, 96.3% of males and 94.9% of females who reported a recent cardiovascular condition reported taking some action for the condition (Table 7). Males (99.7%) were more likely than females (88.6%) to report taking action for 'other diseases of the circulatory system'. Females were more likely than males to take action for hypertension and 'ill-defined signs and symptoms of heart conditions' (Table 7).

Table 7: Percentage^(a) of people reporting taking action for a recent cardiovascular condition by sex, 1995

Type of condition	Males	Females
	Per cent (SE)	
Hypertension	69.9 (1.2)	90.1 (1.3)
Heart disease	81.4 (2.6)	80.6 (3.1)
Atherosclerosis	24.6 (3.5)	24.6 (4.7)
Cerebrovascular disease ^(b)	50.0 (4.8)	45.5 (5.1)
Other diseases of the circulatory system	99.7 (3.2)	88.6 (3.0)
Ill-defined signs and symptoms of heart conditions	72.8 (3.1)	89.0 (3.5)
All cardiovascular	96.3 (1.3)	94.9 (1.2)

(a) Age-standardised to the mid-1991 total Australian population.

(b) Includes after-effects of stroke.

SE: Standard error

Source: AIHW derived from the ABS National Health Survey 1995.

Visiting a doctor was the most commonly reported action taken for a recent cardiovascular condition among both males (21.0%) and females (22.8%) (Table 8).

Males were more likely than females to report a day of reduced activity for a recent cardiovascular condition (7.3% compared to 2.5%) and a day off work or school (5.0% compared to 1.6%) (Table 8). However, this may reflect that fewer women are among the employed workforce.

Table 8: Percentage^(a) of people reporting taking action for a recent cardiovascular condition by action taken and sex, 1995

Action taken	Males	Females
	Per cent (SE)	
Doctor consultation	21.0 (0.9)	22.8 (1.0)
Consulted other health professional	0.8 (0.1)	4.0 (0.5)
Day of reduced activity	7.3 (0.7)	2.5 (0.2)
Day off work or school	5.0 (0.8)	1.6 (0.4)

(a) Age-standardised to the mid-1991 total Australian population.

SE: Standard error

Source: AIHW derived from the ABS National Health Survey 1995.

Action taken for a recent cardiovascular condition by State and Territory

After age standardisation, the proportions of people taking some action for a recent cardiovascular condition varied between the States and Territories from 98.2% in Queensland to 69.0% in the Australian Capital Territory. The proportions of people taking action for heart disease varied from 68.7% in Queensland to 45.1% in Western Australia (Table 9).

Table 9: Percentage^(a) of people reporting taking action for a recent cardiovascular condition by State and Territory, 1995

Type of condition	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
	Per cent (SE)							
Hypertension	75.9 (1.4)	77.4 (1.8)	75.6 (2.1)	69.4 (2.9)	76.1 (3.1)	70.1 (4.5)	60.4 (6.7)	54.0 (9.8)
Heart disease	61.9 (2.6)	61.7 (3.0)	68.7 (4.1)	45.1 (4.0)	49.3 (4.1)	46.2 (5.6)	62.1 (12.0)	*54.3 (26.1)
Other diseases of the circulatory system ^(b)	85.0 (3.3)	81.1 (4.1)	57.4 (3.3)	63.3 (5.2)	72.2 (5.0)	46.2 (6.5)	69.6 (15.2)	*37.5 (17.1)
Ill-defined signs and symptoms of heart conditions	61.2 (2.6)	72.0 (4.3)	60.8 (4.3)	61.8 (6.0)	61.3 (6.5)	46.3 (7.4)	29.8 (7.2)	*48.9 (17.9)
All cardiovascular^(c)	90.9 (1.4)	93.0 (1.8)	98.2 (2.3)	80.3 (2.9)	90.0 (3.1)	77.4 (4.5)	69.0 (6.4)	74.9 (12.1)

(a) Age-standardised to the mid-1991 total Australian population.

(b) Does not include atherosclerosis, cerebrovascular disease or after-effects of stroke.

(c) Includes atherosclerosis, cerebrovascular disease and after-effects of stroke.

SE: Standard error

* Estimate subject to high sampling variability.

Source: AIHW derived from the ABS National Health Survey 1995.

Estimates from the Survey of Morbidity and Treatment in General Practice in Australia 1990–91

Cardiovascular problems managed

On average, 147 problems were managed at every 100 encounters. Of all problems managed, 45.2% were new problems. A new problem is one that is new to the patient and has not been treated by a general practitioner before; it is the first consultation for a new episode of an acute problem, or the first consultation for a new chronic problem (Bridges-Webb et al. 1992).

In 1990–91, cardiovascular conditions were the second most frequently managed problems in general practice after respiratory conditions (Bridges-Webb et al. 1992). Cardiovascular problems accounted for 12.5% of all problems managed and were managed at an average rate of 18.4 problems per 100 encounters (Table 10). Approximately 14% of cardiovascular problems managed were new problems (Table 11).

For both males and females, the average number of cardiovascular problems managed per 100 encounters rose with age (Figure 1). In the younger age groups (< 25 years) there was little difference between males and females in the rate of problems managed. Between the ages of 25 and 74 years, males had higher rates of cardiovascular problems managed per 100 encounters than females. However, from age 75 years onwards, the rate of cardiovascular problems managed was higher for females than males.

During the survey period there were 98,789 patient encounters. At least one cardiovascular problem was managed at 16,486 of these encounters (16.7%) (Table 10). At 90% of these encounters only one cardiovascular problem was managed. However at 9%, two cardiovascular problems were managed while at the remaining 1%, three cardiovascular problems were managed.

Of all specific conditions managed in general practice in 1990–91, hypertension was the most frequent (Sayer et al. 1994). It accounted for 6.4% of all problems managed, and an average of 9.5 hypertension problems were managed at every 100 encounters (Table 10). Only 5% of all hypertension problems managed were new, reflecting the chronic nature of hypertension (Table 11).

The rate of hypertension problems managed per 100 encounters peaked for both males and females in the 65–74 year age group (Figure 2). From age 65 years, the average number of hypertension problems managed per 100 encounters was higher for females than males.

Other frequently managed cardiovascular conditions were heart failure, ‘other and chronic coronary heart disease’, angina and cerebrovascular disease (Table 10). For each of these conditions, the average number of problems managed per 100 encounters increased with age, and males tended to have higher rates of problems managed than females (Figure 3).

Table 10: Problems managed and patient encounters^(a) for cardiovascular conditions, 1990–91

Condition	ICPC code(s) ^(b)	Number of patient encounters	Number of problems managed	Percentage of all problems managed (N=145,645)	Problems managed per 100 encounters (N=98,789)
Rheumatic heart disease	K71	49	49	< 0.1	< 0.1
Angina	K74	731	731	0.5	0.7
Acute myocardial infarction	K75	71	71	< 0.1	0.1
'Other and chronic coronary heart disease'	K76	1,347	1,347	0.9	1.4
<i>All coronary heart disease</i>	<i>K74, K75, K76</i>	<i>2,131</i>	<i>2,149</i>	<i>1.5</i>	<i>2.2</i>
Heart failure	K77	1,621	1,621	1.1	1.6
Hypertension	K86, K87	9,348	9,351	6.4	9.5
Cerebrovascular disease	K89, K90	614	615	0.4	0.6
Atherosclerosis	K91	44	44	< 0.1	< 0.1
Peripheral vascular disease	K92	427	427	0.3	0.4
All cardiovascular conditions	K	16,486	18,194	12.5	18.4

(a) Number of encounters where at least one problem was managed for the condition.

(b) Refer to Appendix D.

Source: AIHW derived from the Survey of Morbidity and Treatment in General Practice in Australia 1990–91.

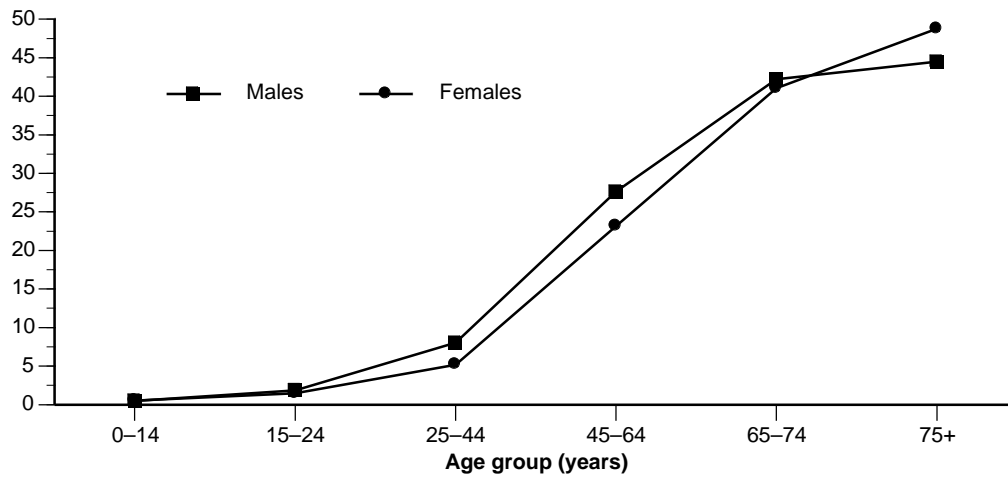
Table 11: Distribution of new and old cardiovascular problems managed, 1990–91

Condition	ICPC code(s) ^(a)	Problem status		
		New problems	Old problems	Unknown status
		Per cent		
Rheumatic heart disease	K71	3.8	85.2	10.9
Angina	K74	17.5	77.6	4.9
Acute myocardial infarction	K75	42.2	55.1	2.7
'Other and chronic coronary heart disease'	K76	6.3	88.0	5.7
<i>All coronary heart disease</i>	<i>K74, K75, K76</i>	<i>11.3</i>	<i>83.4</i>	<i>5.3</i>
Heart failure	K77	10.2	82.8	7.0
Hypertension	K86, K87	5.4	89.2	5.4
Cerebrovascular disease	K89, K90	26.8	68.6	4.7
Atherosclerosis	K91	14.2	79.4	6.4
Peripheral vascular disease	K92	23.1	72.0	4.9
All cardiovascular conditions	K	13.6	80.0	6.4

(a) Refer to Appendix D.

Source: AIHW derived from the Survey of Morbidity and Treatment in General Practice in Australia 1990–91.

Problems managed per 100 encounters

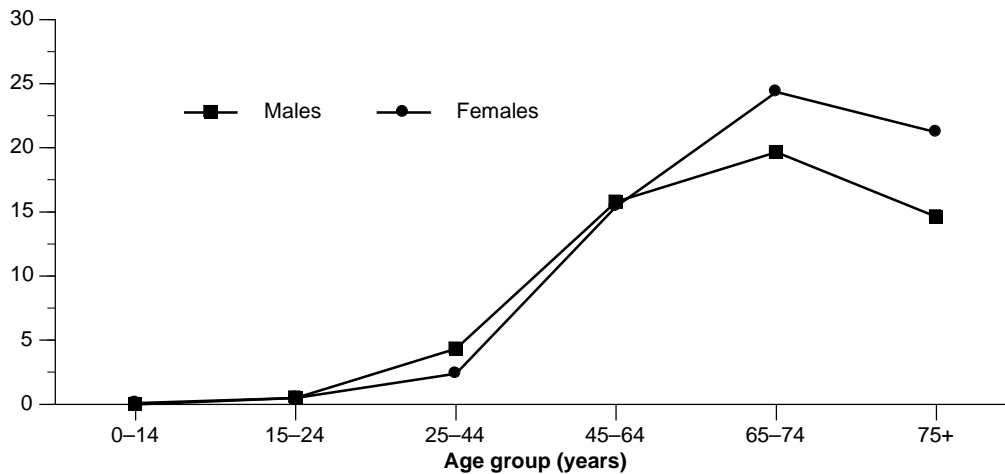


Refer to Table S2

Source: AIHW derived from the Australian Survey of Morbidity and Treatment in General Practice 1990-91.

Figure 1: Cardiovascular problems, age-sex specific rates per 100 encounters, 1990-91

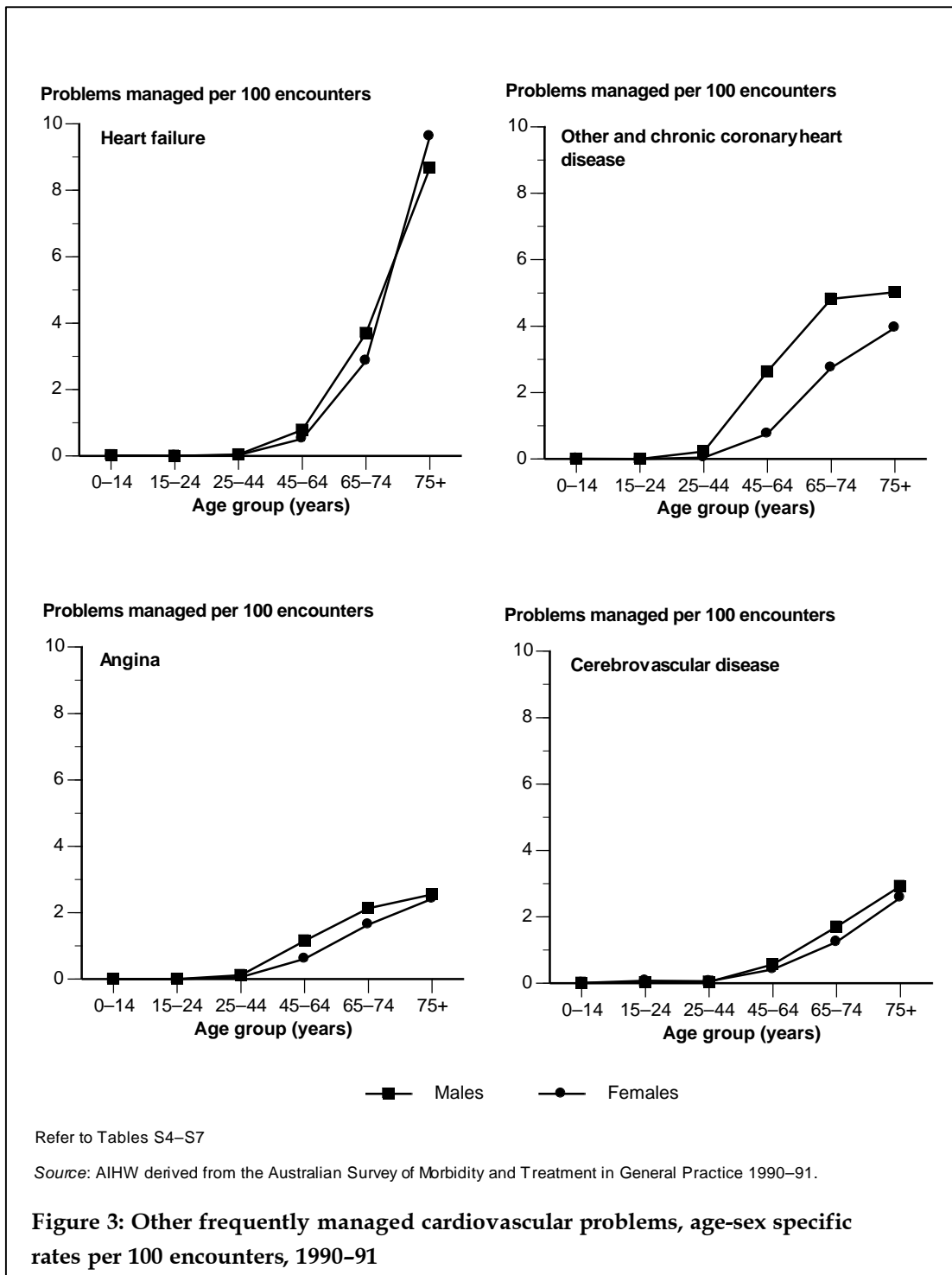
Problems managed per 100 encounters



Refer to Table S3

Source: AIHW derived from the Australian Survey of Morbidity and Treatment in General Practice 1990-91.

Figure 2: Hypertension problems, age-sex specific rates per 100 encounters, 1990-91



Treatment other than prescribing

For each problem managed, doctors were asked to record therapeutic procedures, other procedures, and counselling and advice given (Bridges-Webb et al. 1992). Up to four such treatments could be recorded for each problem managed.

When interpreting the results in this section, it should be remembered that the survey only collected information about treatment provided at the recorded encounter. No information was collected about treatment provided at previous encounters that were not included in the

survey, even if the same problem was managed. This may be a limitation for chronic conditions.

A list of treatments recorded in the Survey of Morbidity and Treatment in General Practice in Australia 1990–91 is provided in **Appendix E**.

The unit record data set provided to the Australian Institute of Health and Welfare included information relating to a total of 39,681 treatments, an average of 40.2 treatments per 100 encounters and 27.2 treatments per 100 problems managed. At least one treatment was recorded at 32.8% of all encounters and for 24.6% of all problems managed.

A total of 2,306 treatments was recorded for cardiovascular problems under management (Table 12). This represented 5.8% of all treatments recorded during the survey period. At least one treatment was recorded for 11.3% of all cardiovascular problems managed.

Although hypertension was the most frequently managed problem in general practice in 1990–91, non prescription treatment for the condition was recorded at only 7.9% of all problems managed for hypertension (Table 12). Sayer et al. (1994) suggest that, due to the chronic nature of hypertension, treatment such as advice and counselling may well have been given at previous visits.

At least one treatment was recorded for nearly one quarter of all peripheral vascular disease problems under management and for 18.7% of all cerebrovascular disease problems (Table 12).

Table 12: Number of treatments recorded for cardiovascular conditions

Condition (ICPC code)	Number of problems managed for condition for which at least one treatment recorded	Percentage of problems managed for condition	Total number of treatments recorded for condition	Percentage of all treatments recorded (N=39,681)
Rheumatic heart disease (K71)	3	6.1	4	< 0.1
Angina (K74)	61	8.3	64	0.2
Acute myocardial infarction (K75)	4	5.6	4	< 0.1
Other and chronic coronary heart disease (K76)	107	7.9	122	0.3
Coronary heart disease (K74-K76)	172	8.0	186	0.5
Heart failure (K77)	105	6.5	124	0.3
Hypertension (K86, K87)	740	7.9	826	2.1
Cerebrovascular disease (K89, K90)	115	18.7	124	0.3
Atherosclerosis (K91)	5	11.4	5	< 0.1
Peripheral vascular disease (K92)	103	24.1	115	0.3
All cardiovascular disease (K)	2,053	11.3	2,306	5.8

Source: AIHW derived from the Survey of Morbidity and Treatment in General Practice in Australia 1990–91.

Overall, unspecified advice was the most frequently recorded treatment for cardiovascular conditions (Table 13). The next four most commonly recorded treatments for managing cardiovascular disease were counselling about nutrition and weight, providing reassurance and support; treatment advice such as bed rest; and advice to increase drug dosage.

Advice to increase drug dosage was the most frequent form of treatment for heart failure. For hypertension, counselling about nutrition and weight was most commonly given, while for peripheral vascular disease, counselling about smoking was the most frequently recorded treatment. Unspecified advice was the treatment most frequently recorded for angina, 'other and chronic coronary heart disease', and cerebrovascular disease.

Table 13: Five most frequent types of treatment recorded for selected cardiovascular conditions

Condition/treatment	Number of treatments recorded	Percentage of all treatments recorded for condition	Treatments recorded per 100 problems managed for condition
All cardiovascular disease (K)			
Advice Not Otherwise Specified	320	13.9	1.8
Counselling—nutrition/weight	302	13.1	1.7
Reassurance, support	232	10.1	1.3
Treatment advice ^(a)	214	9.3	1.2
Advice to increase drug dosage	162	7.0	0.9
Angina (K74)			
Advice Not Otherwise Specified	14	20.9	1.8
Counselling—health not elsewhere classified	9	13.5	1.2
Treatment advice ^(a)	7	10.7	0.9
Advice to increase drug dosage	6	8.7	0.8
Counselling—smoking	5	7.4	0.7
Other and chronic coronary heart disease			
Advice Not Otherwise Specified	24	19.8	1.7
Counselling—health not elsewhere classified	13	10.3	0.9
Reassurance, support	11	9.0	0.8
Treatment advice ^(a)	11	8.9	0.8
Counselling—nutrition/weight	10	8.0	0.7
Heart failure (K77)			
Advice to increase drug dosage	37	30.2	2.3
Treatment advice ^(a)	20	16.5	1.3
Reassurance, support	12	9.9	0.8
Advice Not Otherwise Specified	9	6.9	0.5
Advice to decrease drug dosage	8	6.7	0.5
Hypertension (K86, K87)			
Counselling—nutrition/weight	184	22.3	2.0
Advice to increase drug dosage	95	11.5	1.0
Advice Not Otherwise Specified	94	11.4	1.0
Advice to stop medication	62	7.5	0.7
Treatment advice ^(a)	53	6.4	0.6
Cerebrovascular disease (K89, K90)			
Advice Not Otherwise Specified	23	18.5	3.7
Treatment advice ^(a)	15	12.4	2.5
Reassurance, support	15	12.2	2.5
Counselling—health not elsewhere classified	13	10.8	2.2
Rest ordered	10	7.9	1.6
Peripheral vascular disease (K92)			
Counselling—smoking	15	13.3	3.6
Bandage/dressing ^(b)	12	10.7	2.9
Treatment advice ^(a)	11	9.3	2.5
Exercise	10	8.8	2.4
Advice Not Otherwise Specified	10	8.7	2.3

(a) Go to bed; take panadol when needed; clear fluids; R.I.C.E.

(b) E.g. clean wound

Source: AIHW derived from the Survey of Morbidity and Treatment in General Practice in Australia 1990–91.

National Heart Foundation Risk Factor Prevalence Study

The 1989 survey of the National Heart Foundation Risk Factor Prevalence Study asked whether respondents had ever been told whether they had any of the following conditions (Risk Factor Prevalence Study Management Committee 1990):

- high blood pressure
- angina
- heart attack (a 'coronary', coronary occlusion, coronary thrombosis, myocardial infarction)
- stroke
- high cholesterol
- high triglycerides.

The survey also asked whether respondents were:

- on tablets for blood pressure;
- having treatment to lower blood fat; and
- on tablets or other treatment for angina.

Similar data were collected in surveys run by the National Heart Foundation in 1980 and 1983. Consistency in survey methods allows trends analysis over this period.

Results

Among males aged 20 to 69 years and living in Australian capital cities in 1989, 17.0% reported having been told that they had high blood pressure (Table 14). For females, the corresponding proportion was 19.7%. The prevalence tended to increase with age for both males and females. Eight per cent of males and females reported being on tablets for blood pressure (Table 15).

An average of 3% of males and 2% of females reported having been told they had angina, and about 1% of males and females were on tablets or other treatment for angina (Tables 14 & 15).

Two per cent of males and 1% of females reported being told they had suffered a heart attack (Table 14). In each age group, the prevalence was generally higher for males than females.

Fewer than 1% of males and females reported having been told they had suffered a stroke.

Males were more likely than females to have been told they had high cholesterol (Table 14). This was also true for high triglycerides. Three per cent of males and 2% of females reported having treatment to lower blood fat (Table 15).

Table 14: Percentage of males and females reporting cardiovascular conditions, 1989

Sex/Condition	Age (years)										Total (20–69 years)
	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65–69	
Males											
High blood pressure	5.1	6.3	12.9	15.6	15.0	21.0	22.2	32.1	32.4	36.0	17.0
Angina	—	0.4	0.2	0.2	0.7	2.7	5.1	7.4	12.7	12.4	2.9
Heart attack	—	0.0	0.6	0.1	1.1	2.9	2.6	6.5	10.1	10.4	2.4
Stroke	—	0.2	—	0.1	0.1	0.0	1.3	2.5	2.8	5.3	0.8
High cholesterol	2.7	5.0	9.0	12.3	21.2	23.1	25.8	29.2	25.7	21.1	15.3
High triglycerides	0.8	0.4	2.7	6.0	9.5	8.0	13.9	13.1	12.9	10.8	6.6
Females											
High blood pressure	6.1	10.8	14.0	15.5	14.7	19.3	32.0	33.4	38.0	47.5	19.7
Angina	—	0.0	0.2	1.5	0.9	0.3	1.8	2.4	5.9	11.7	1.8
Heart attack	0.1	—	0.2	0.3	1.0	0.0	1.2	1.6	4.1	5.9	1.1
Stroke	—	0.1	—	—	0.5	0.1	0.8	0.6	1.9	3.6	0.5
High cholesterol	3.9	4.9	6.2	5.5	8.5	9.6	16.0	32.4	30.3	28.8	11.8
High triglycerides	0.1	0.8	0.6	1.5	1.0	2.5	5.0	8.4	6.4	7.1	2.6

Note: 0.0 denotes < 0.05

— nil

Source: Risk Factor Prevalence Study Management Committee 1990.

Table 15: Percentage of males and females having treatment for cardiovascular conditions, 1989

Sex/Treatment	Age (years)										Total (20–69 years)
	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65–69	
Males											
On tablets for blood pressure	0.8	0.5	0.8	3.6	6.6	6.1	13.6	20.3	24.8	30.3	7.9
On tablets or other treatment for angina	—	0.2	—	0.2	0.1	0.6	2.6	3.8	8.0	5.6	1.4
Having treatment to lower blood fat	—	0.2	3.0	2.1	2.6	4.6	6.3	6.6	6.0	10.6	3.3
Females											
On tablets for blood pressure	0.3	0.3	1.2	0.9	4.5	8.3	15.8	20.5	29.1	35.5	8.4
On tablets or other treatment for angina	0.1	—	0.1	0.0	0.6	—	0.9	1.5	3.2	7.0	0.9
Having treatment to lower blood fat	—	0.0	0.1	0.8	0.6	1.1	3.1	6.2	8.6	11.2	2.2

Source: Risk Factor Prevalence Study Management Committee 1990.

Hunter Region Heart Disease Prevention Programme Risk Factor Prevalence Study

The 1994 survey of the Hunter Region Heart Disease Prevention Programme Risk Factor Prevalence Study asked whether respondents had ever been told whether they had any of the following conditions (Alexander et al. 1995):

- angina
- heart attack (a 'coronary', coronary occlusion, coronary thrombosis, myocardial infarction)
- stroke
- high triglycerides.

Respondents were also asked if they had ever been told by a doctor or other medical person that they had high blood pressure, and whether they were currently having treatment with medications for high blood pressure.

For blood cholesterol, respondents were asked if they had ever been told by a doctor or medical person that they had high cholesterol. Participants in the main study who answered yes were then asked whether they were on medication, or a special diet prescribed by a doctor or other medical person for high cholesterol.

Respondents in the main study were also asked if they had ever had pain or discomfort in their chest. If they answered yes, they were then asked if they sought medical attention for it and if they had ever been referred to a heart specialist for it.

Summary of results

In 1994, 5% of males and 3% of females aged 35 to 64 years and living in the Hunter region of New South Wales reported having been told they had angina (Alexander et al. 1995). The reported prevalence of heart attack among males was 3%, while for females it was 2%. One per cent of males and 2% of females reported having been told that they had suffered a stroke.

Chest pain or discomfort had been experienced by 44% of males and 41% of females aged 35 to 64 years and living in the Hunter region of New South Wales in 1994. Of those who had experienced chest pain or discomfort, 64% of males and 72% of females had sought medical attention for it, and 27% of males and 18% of females had been referred to a heart specialist for it.

More than one quarter of Hunter region residents aged 35 to 64 years reported having been told they had high blood pressure (26% of males and 30% of females). Fourteen per cent of males and females were taking medication for high blood pressure in 1994.

Males were more likely than females to have been told they had high triglycerides (7% compared to 4%). Similarly more males than females reported having been told they had high cholesterol (28% compared to 20%). Of those with high cholesterol, most were using no treatment for it (68% of males and 64% of females). Fifteen per cent of males and 21% of females with high cholesterol were on a special diet to control it; 12% of males and 7% of females were using medication for it; and 5% of males and 9% of females were using a combination of special diet and medication to control it.