

# 7 Problems managed

A 'problem managed' is a formal statement of the provider's understanding of a health problem presented by the patient, family or community, and can be described in terms of a disease, symptom or complaint, social problem or ill-defined condition managed at the encounter. As GPs were instructed to record each problem at the most specific level possible from the information available, the problem managed may at times be limited to the level of a presenting symptom.

At each patient encounter, up to four problems could be recorded by the GP. A minimum of one problem was compulsory. The status of each problem to the patient – new (first presentation to a medical practitioner) or old (follow-up of previous problem) – was also indicated. The concept of a principal diagnosis, which is often used in hospital statistics, is not adopted in studies of general practice where multiple problem management is the norm rather than the exception. Further, the range of problems managed at the encounter often crosses multiple body systems and may include undiagnosed symptoms, psychosocial problems or chronic disease, which makes the designation of a principal diagnosis difficult. Thus the order in which the problems were recorded by the GP is not significant. All problems managed in general practice are included in this section, including those that involved management by a practice nurse. Problems that specifically included management by a practice nurse are reported additionally in Chapter 13.

There are two ways to describe the relative frequency of problems managed: as a percentage of all problems managed in the study, or as a rate of problems managed per 100 encounters. Where groups of problems are reported (for example, cardiovascular problems), it must be remembered that more than one of that type of problem (such as hypertension and heart failure) may have been managed at a single encounter. In considering these results, the reader must be mindful that although a rate per 100 encounters for a single ungrouped problem (for example, asthma, 1.4 per 100 encounters) can be regarded as equivalent to 'asthma is managed at 1.4% of encounters', such a statement cannot be made for grouped concepts (ICPC-2 chapters and those marked with asterisks in the tables).

Data on problems managed in Australian general practice from the BEACH study are reported for each year from 1999–00 to 2008–09 in the 10-year summary report *General practice activity in Australia 1999–00 to 2008–09: 10 year data tables*.<sup>1</sup>

## 7.1 Number of problems managed at encounter

There were 149,462 problems managed, at a rate of 154.6 per 100 encounters in 2008–09. Table 7.1 shows the number of problems managed at each encounter. Only one problem was managed at more than 60% of encounters, two problems were managed at 27% of encounters and almost 10% involved the management of three problems. The management of four problems at an encounter was less common (3% of encounters).

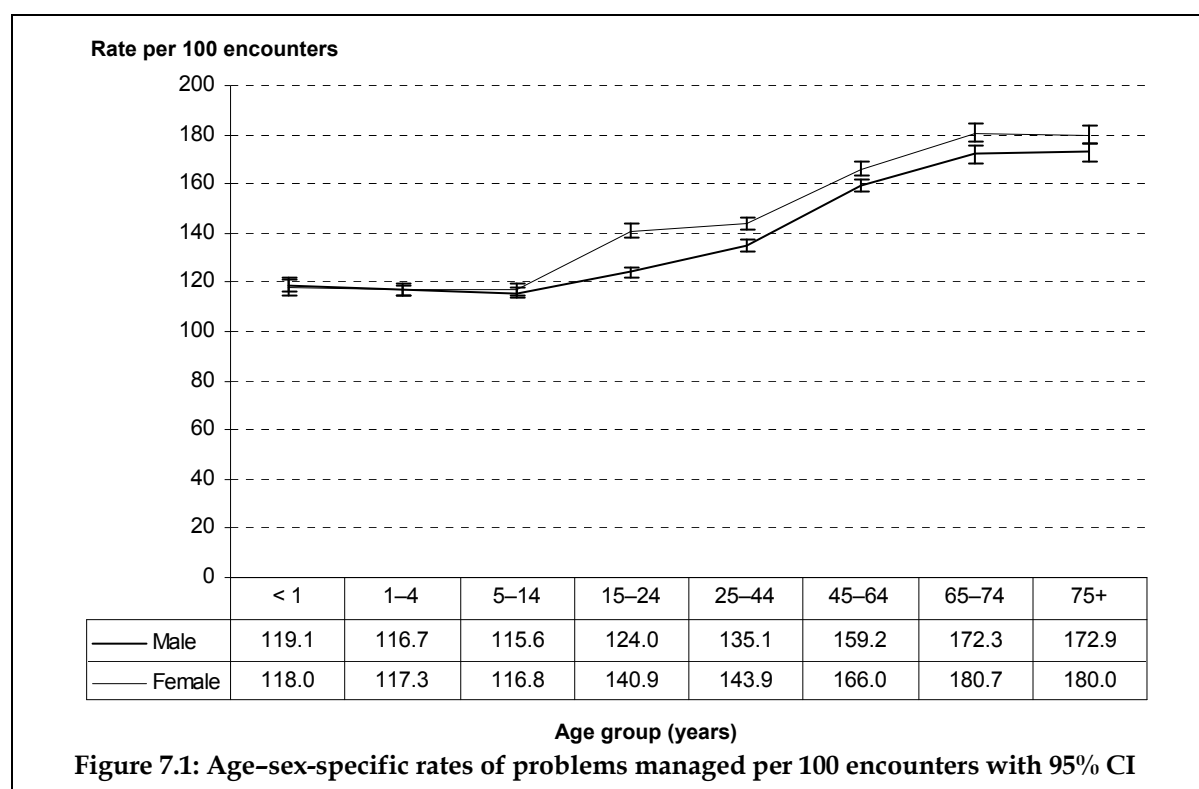
**Table 7.1: Number of problems managed at an encounter**

Number of problems managed at encounter	Number of encounters	Per cent	95% LCL	95% UCL
One problem	58,746	60.8	59.6	61.9
Two problems	25,858	26.7	26.1	27.4
Three problems	9,334	9.7	9.2	10.1
Four problems	2,750	2.8	2.6	3.1
<b>Total</b>	<b>96,688</b>	<b>100.0</b>	<b>—</b>	<b>—</b>

Note: LCL—lower confidence limit; UCL—upper confidence limit.

The number of problems managed at encounter increased steadily with the age of the patient. Significantly more problems were managed overall at encounters with female patients (157.8 per 100 encounters, 95% CI: 155.7–160.0) than at those with male patients (150.3 per 100 encounters, 95% CI: 148.3–152.3) (results not tabled).

Figure 7.1 shows the age–sex-specific rates of problems managed, and demonstrates that this difference was particularly evident in the 15–24 year age group.



## 7.2 Problems managed by ICPC-2 chapter

The frequency and the distribution of problems managed, by ICPC-2 chapter, are presented in Table 7.2. Rates per 100 encounters and the proportion of total problems are provided at the ICPC-2 chapter level and for frequent individual problems within each chapter. Only those individual problems accounting for at least 0.5% of all problems managed are listed in the table, in decreasing order of frequency.

The most common problems managed were:

- those classified to the respiratory system (20.8 per 100 encounters) – in particular upper respiratory tract infection, respiratory immunisations, acute bronchitis and asthma
- cardiovascular problems (such as hypertension and cardiac check-ups)
- musculoskeletal problems (such as arthritis and back complaints)
- problems of a general and unspecified nature (such as immunisations, check-ups and prescriptions)
- skin problems (such as contact dermatitis and solar keratosis/sunburn) (Table 7.2).

**Table 7.2: Distribution of problems managed, by ICPC-2 chapter and most frequent individual problems within chapter**

<b>Problem managed</b>	<b>Number</b>	<b>Per cent total problems<sup>(a)</sup> (n = 149,462)</b>	<b>Rate per 100 encounters<sup>(b)</sup> (n = 96,688)</b>	<b>95% LCL</b>	<b>95% UCL</b>
<b>Respiratory</b>	<b>20,112</b>	<b>13.5</b>	<b>20.8</b>	<b>20.2</b>	<b>21.4</b>
Upper respiratory tract infection	5,914	4.0	6.1	5.7	6.6
Immunisation/vaccination—respiratory	2,726	1.8	2.8	2.4	3.2
Acute bronchitis/bronchiolitis	2,550	1.7	2.6	2.4	2.8
Asthma	2,117	1.4	2.2	2.1	2.3
Sinusitis	1,312	0.9	1.4	1.2	1.5
Tonsillitis*	852	0.6	0.9	0.8	1.0
Chronic obstructive pulmonary disease	790	0.5	0.8	0.7	0.9
<b>Cardiovascular</b>	<b>17,933</b>	<b>12.0</b>	<b>18.6</b>	<b>17.8</b>	<b>19.3</b>
Hypertension*	9,787	6.5	10.1	9.6	10.6
Cardiac check-up*	1,263	0.8	1.3	1.1	1.5
Atrial fibrillation/flutter	1,257	0.8	1.3	1.2	1.4
Ischaemic heart disease*	1,230	0.8	1.3	1.2	1.4
<b>Musculoskeletal</b>	<b>16,746</b>	<b>11.2</b>	<b>17.3</b>	<b>16.9</b>	<b>17.8</b>
Arthritis—all*	3,685	2.5	3.8	3.6	4.0
Osteoarthritis*	2,666	1.8	2.8	2.6	2.9
Back complaint*	2,636	1.8	2.7	2.6	2.9
Sprain/strain*	1,374	0.9	1.4	1.3	1.5
Fracture*	910	0.6	0.9	0.9	1.0
Osteoporosis	889	0.6	0.9	0.8	1.0
Bursitis/tendonitis/synovitis NOS	826	0.6	0.9	0.8	0.9
Injury musculoskeletal NOS	815	0.5	0.8	0.7	0.9

(continued)

**Table 7.2 (continued): Distribution of problems managed, by ICPC-2 chapter and most frequent individual problems within chapter**

<b>Problem managed</b>	<b>Number</b>	<b>Per cent total problems<sup>(a)</sup> (n = 149,462)</b>	<b>Rate per 100 encounters<sup>(b)</sup> (n = 96,688)</b>	<b>95% LCL</b>	<b>95% UCL</b>
<b>General &amp; unspecified</b>	<b>16,491</b>	<b>11.0</b>	<b>17.1</b>	<b>16.4</b>	<b>17.7</b>
Immunisation/vaccination—general	2,575	1.7	2.7	2.5	2.9
General check-up*	2,375	1.6	2.5	2.3	2.7
Prescription NOS	1,478	1.0	1.5	1.3	1.8
Viral disease, other/NOS	1,143	0.8	1.2	1.0	1.4
Results tests/procedures NOS	1,075	0.7	1.1	1.0	1.2
Abnormal results/investigations NOS	818	0.5	0.8	0.8	0.9
Administrative procedures NOS	738	0.5	0.8	0.7	0.9
<b>Skin</b>	<b>16,426</b>	<b>11.0</b>	<b>17.0</b>	<b>16.5</b>	<b>17.5</b>
Contact dermatitis	1,864	1.2	1.9	1.8	2.0
Solar keratosis/sunburn	1,196	0.8	1.2	1.1	1.4
Malignant neoplasm skin	1,177	0.8	1.2	1.1	1.4
Laceration/cut	884	0.6	0.9	0.8	1.0
Skin disease, other	832	0.6	0.9	0.8	0.9
<b>Endocrine &amp; metabolic</b>	<b>13,026</b>	<b>8.7</b>	<b>13.5</b>	<b>12.9</b>	<b>14</b>
Diabetes, non-gestational*	3,927	2.6	4.1	3.8	4.3
Lipid disorders	3,787	2.5	3.9	3.7	4.2
Vitamin/nutritional deficiency	1,063	0.7	1.1	1.0	1.2
Hypothyroidism/myxoedema	736	0.5	0.8	0.7	0.8
<b>Psychological</b>	<b>11,997</b>	<b>8.0</b>	<b>12.4</b>	<b>11.9</b>	<b>12.9</b>
Depression*	4,112	2.8	4.3	4.0	4.5
Anxiety*	1,867	1.2	1.9	1.8	2.1
Sleep disturbance	1,511	1.0	1.6	1.4	1.7
Tobacco abuse	679	0.5	0.7	0.6	0.8
<b>Digestive</b>	<b>10,128</b>	<b>6.8</b>	<b>10.5</b>	<b>10.2</b>	<b>10.8</b>
Oesophageal disease	2,411	1.6	2.5	2.3	2.7
Gastroenteritis*	1,355	0.9	1.4	1.3	1.5
<b>Female genital system</b>	<b>5,908</b>	<b>4.0</b>	<b>6.1</b>	<b>5.7</b>	<b>6.6</b>
Female genital check-up/Pap smear*	1,956	1.3	2.0	1.8	2.3
Menopausal complaint	781	0.5	0.8	0.7	0.9
<b>Ear</b>	<b>3,757</b>	<b>2.5</b>	<b>3.9</b>	<b>3.7</b>	<b>4.1</b>
Acute otitis media/myringitis	1,048	0.7	1.1	1.0	1.2
Excessive ear wax	808	0.5	0.8	0.8	0.9
<b>Neurological</b>	<b>3,630</b>	<b>2.4</b>	<b>3.8</b>	<b>3.6</b>	<b>3.9</b>
<b>Pregnancy &amp; family planning</b>	<b>3,536</b>	<b>2.4</b>	<b>3.7</b>	<b>3.4</b>	<b>3.9</b>
Pregnancy*	1,232	0.8	1.3	1.1	1.4
Oral contraception*	1,111	0.7	1.1	1.0	1.3

(continued)

**Table 7.2 (continued): Distribution of problems managed, by ICPC-2 chapter and most frequent individual problems within chapter**

<b>Problem managed</b>	<b>Number</b>	<b>Per cent total problems<sup>(a)</sup> (n = 149,462)</b>	<b>Rate per 100 encounters<sup>(b)</sup> (n = 96,688)</b>	<b>95% LCL</b>	<b>95% UCL</b>
<b>Urology</b>	<b>3,205</b>	<b>2.1</b>	<b>3.3</b>	<b>3.2</b>	<b>3.5</b>
Urinary tract infection*	1,606	1.1	1.7	1.6	1.8
<b>Eye</b>	<b>2,614</b>	<b>1.8</b>	<b>2.7</b>	<b>2.6</b>	<b>2.8</b>
Infectious conjunctivitis	734	0.5	0.8	0.7	0.8
<b>Male genital system</b>	<b>1,980</b>	<b>1.3</b>	<b>2.1</b>	<b>1.9</b>	<b>2.2</b>
<b>Blood</b>	<b>1,401</b>	<b>0.9</b>	<b>1.5</b>	<b>1.3</b>	<b>1.6</b>
<b>Social</b>	<b>573</b>	<b>0.4</b>	<b>0.6</b>	<b>0.5</b>	<b>0.7</b>
<b>Total problems</b>	<b>149,462</b>	<b>100.0</b>	<b>154.6</b>	<b>152.6</b>	<b>156.5</b>

(a) Figures do not total 100, as more than one problem can be recorded at each encounter.

(b) Only those individual problems accounting for  $\geq 0.5\%$  of total problems are included.

\* Includes multiple ICPC-2 or ICPC-2 PLUS codes (see Appendix 4, <[www.aihw.gov.au/publications/index.cfm/subject/19](http://www.aihw.gov.au/publications/index.cfm/subject/19)>).

Note: LCL—lower confidence limit; UCL—upper confidence limit; NOS—not otherwise specified; BMI—body mass index.

### 7.3 Problems managed by ICPC-2 component

Problems managed in general practice may also be examined using the components of the ICPC-2 classification to provide a more thorough understanding of the types of problems managed during general practice encounters. Table 7.3 lists the distribution of problems managed by ICPC-2 component.

In the BEACH program, participating GPs are instructed to record the problem being managed at the encounter at the highest diagnostic level possible using the currently available evidence. As such, almost two-thirds of problems were expressed as diagnoses or diseases (65.2%), with the majority of other problems described as symptoms or complaints (20.8%), or as diagnostic or preventive procedures such as check-ups (9.7%). However, in some situations, rather than providing clinical details about the problem under management, a 'process' was recorded. That is, the problem was described in such terms as 'test result', or an administrative procedure, or as a 'prescription'.

**Table 7.3: Distribution of problems managed, by ICPC-2 component**

ICPC-2 component	Number	Per cent of total problems ( <i>n</i> = 149,462)	Rate per 100 encounters <sup>(a)</sup> ( <i>n</i> = 96,688)	95% LCL	95% UCL
Diagnosis, diseases	97,514	65.2	100.9	99.1	102.6
Symptoms & complaints	31,031	20.8	32.1	31.3	32.9
Diagnostic & preventive procedures	14,452	9.7	15.0	14.2	15.7
Medications, treatments & therapeutics	3,204	2.1	3.3	3.0	3.6
Results	1,475	1.0	1.5	1.4	1.7
Referrals & other RFEs	950	0.6	1.0	0.9	1.1
Administrative	836	0.6	0.9	0.8	1.0
<b>Total problems</b>	<b>149,462</b>	<b>100.0</b>	<b>154.6</b>	<b>152.6</b>	<b>156.5</b>

(a) Figures do not total 100, as more than one problem can be managed at each encounter.

Note: LCL—lower confidence limit; UCL—upper confidence limit; RFE—reason for encounter.

## 7.4 Most frequently managed problems

Overall, there were 154.6 problems managed per 100 encounters. Table 7.4 shows the most frequently managed individual problems in general practice, in decreasing order of frequency. These 30 problems accounted for more than half of all problems managed.

In this analysis, the specific chapter to which ‘across chapter concepts’ (check-ups, immunisation/vaccination and prescriptions) apply is ignored and the concept is grouped with all similar concepts regardless of body system. For example, immunisation/vaccination includes vaccinations for influenza, childhood diseases, and hepatitis.

The far right-hand column in Table 7.4 lists the percentage of each problem that was new to the patient. The problem is considered new if it is a new problem to the patient or a new episode of a recurrent problem, and the patient has not been treated for that problem by any medical practitioner before. This can provide a measure of general practice incidence. For example, only 5.8% of all contacts with diabetes were new diagnoses. In contrast, more than three-quarters of upper respiratory tract infection (URTI) problems were new to the patient, suggesting that the majority of people attend the GP for URTI only once per episode.

The most common problems managed were hypertension (10.1 per 100 encounters), check-ups (6.7), URTI (6.1), immunisation/vaccination (5.7) and depression (4.3) (Table 7.4).

**Table 7.4: Most frequently managed problems**

<b>Problem managed</b>	<b>Number</b>	<b>Per cent of total problems (n = 149,462)</b>	<b>Rate per 100 encounters<sup>(a)</sup> (n = 96,688)</b>	<b>95% LCL</b>	<b>95% UCL</b>	<b>Per cent new problems<sup>(b)</sup></b>
Hypertension*	9,787	6.5	10.1	9.6	10.6	5.0
Check-up—all*	6,478	4.3	6.7	6.3	7.1	37.6
Upper respiratory tract infection	5,914	4.0	6.1	5.7	6.6	76.8
Immunisation/vaccination—all*	5,514	3.7	5.7	5.2	6.2	49.5
Depression*	4,112	2.8	4.3	4.0	4.5	16.2
Diabetes—all*	3,952	2.6	4.1	3.9	4.3	5.8
Lipid disorders*	3,787	2.5	3.9	3.7	4.2	12.5
Arthritis—all*	3,685	2.5	3.8	3.6	4.0	17.8
Back complaint*	2,636	1.8	2.7	2.6	2.9	22.6
Acute bronchitis/bronchiolitis	2,550	1.7	2.6	2.4	2.8	72.5
Oesophageal disease	2,411	1.6	2.5	2.3	2.7	15.3
Asthma	2,117	1.4	2.2	2.1	2.3	17.2
Prescription—all*	2,060	1.4	2.1	1.9	2.4	5.0
Anxiety*	1,867	1.2	1.9	1.8	2.1	20.5
Contact dermatitis	1,864	1.2	1.9	1.8	2.0	45.7
Urinary tract infection*	1,606	1.1	1.7	1.6	1.8	62.6
Sleep disturbance	1,511	1.0	1.6	1.4	1.7	19.3
Test results*	1,475	1.0	1.5	1.4	1.7	30.1
Sprain/strain*	1,374	0.9	1.4	1.3	1.5	60.1
Gastroenteritis*	1,355	0.9	1.4	1.3	1.5	79.7
Sinusitis acute/chronic	1,312	0.9	1.4	1.2	1.5	66.5
Atrial fibrillation/flutter	1,257	0.8	1.3	1.2	1.4	6.1
Pregnancy*	1,232	0.8	1.3	1.1	1.4	39.6
Ischaemic heart disease*	1,230	0.8	1.3	1.2	1.4	7.6
Solar keratosis/sunburn	1,196	0.8	1.2	1.1	1.4	48.2
Malignant neoplasm skin	1,177	0.8	1.2	1.1	1.4	52.9
Viral disease, other/NOS	1,143	0.8	1.2	1.0	1.4	75.7
Oral contraception*	1,111	0.7	1.1	1.0	1.3	17.6
Vitamin/nutritional deficiency	1,063	0.7	1.1	1.0	1.2	32.5
<i>Subtotal</i>	<i>76,776</i>	<i>51.4</i>	—	—	—	—
<b>Total problems</b>	<b>149,462</b>	<b>100.0</b>	<b>154.6</b>	<b>152.6</b>	<b>156.5</b>	<b>37.1</b>

(a) Figures do not total 100, as more than one problem can be recorded at each encounter. Also, only more frequently managed problems are included.

(b) The proportion of problems of this type that were new problems (the first presentation of a problem, including the first presentations of a recurrence of a previously resolved problem, but excluding the presentation of a problem first assessed by another provider).

\* Includes multiple ICPC-2 or ICPC-2 PLUS codes (see Appendix 4, <[www.aihw.gov.au/publications/index.cfm/subject/19](http://www.aihw.gov.au/publications/index.cfm/subject/19)>).

Note: LCL—lower confidence limit; UCL—upper confidence limit; NOS—not otherwise specified.

## 7.5 Most common new problems

For each problem managed, participating GPs are asked to indicate whether the problem under management is a new problem for the patient. The problem is considered new if it is a new problem to the patient or a new episode of a recurrent problem, and the patient has not been treated for that problem by any medical practitioner before. Table 7.5 lists the most common new problems managed in general practice in 2008–09, in decreasing order of frequency. Overall, 55,459 problems (37.1% of all problems) were specified as being new, being managed at a rate of 57.4 per 100 encounters.

The far right-hand column of this table shows the proportion of total contacts with this problem reported as being a new problem for the patient. This provides an idea of the incidence of each problem. For example, the 666 new cases of depression represented only 16% of all GP contacts with diagnosed depression, suggesting that more than four out of five contacts for depression were for ongoing management. In contrast, four out of five gastroenteritis cases were first consultations to a medical practitioner for this episode of gastroenteritis. The balance (20%) would have been follow-up consultations for this episode of this problem. This indicates that most patients only require one visit to a GP for the management of an episode of gastroenteritis.

The most common new problems managed were largely acute in nature and included upper respiratory tract infections (4.7 per 100 encounters), immunisations/vaccinations (2.8), acute bronchitis (1.9), general check-ups (1.1) and gastroenteritis (1.1) (Table 7.5).

**Table 7.5: Most frequently managed new problems**

<b>New problem managed</b>	<b>Number</b>	<b>Per cent of total new problems (n = 55,459)</b>	<b>Rate per 100 encounters<sup>(a)</sup> (n = 96,688)</b>	<b>95% LCL</b>	<b>95% UCL</b>	<b>Per cent of this problem<sup>(b)</sup></b>
Upper respiratory tract infection	4,540	8.2	4.7	4.4	5.0	76.8
Immunisation/vaccination—all*	2,727	4.9	2.8	2.5	3.1	49.5
Acute bronchitis/bronchiolitis	1,848	3.3	1.9	1.8	2.1	72.5
General check-up*	1,106	2.0	1.1	1.0	1.3	46.6
Gastroenteritis*	1,079	1.9	1.1	1.0	1.2	79.7
Urinary tract infection*	1,006	1.8	1.0	1.0	1.1	62.6
Sinusitis acute/chronic	872	1.6	0.9	0.8	1.0	66.5
Viral disease, other/NOS	866	1.6	0.9	0.7	1.0	75.7
Contact dermatitis	852	1.5	0.9	0.8	1.0	45.7
Sprain/strain*	825	1.5	0.9	0.8	0.9	60.1
Female genital check-up*	813	1.5	0.8	0.7	1.0	41.6
Acute otitis media/myringitis	746	1.3	0.8	0.7	0.8	71.2
Depression*	666	1.2	0.7	0.6	0.8	16.2
Tonsillitis*	623	1.1	0.6	0.6	0.7	73.1
Malignant neoplasm skin	622	1.1	0.6	0.6	0.7	52.9
Back complaint*	594	1.1	0.6	0.6	0.7	22.6
Solar keratosis/sunburn	577	1.0	0.6	0.5	0.7	48.2
Conjunctivitis, infectious	575	1.0	0.6	0.5	0.7	78.3

(continued)

**Table 7.5 (continued): Most frequently managed new problems**

New problem managed	Number	Per cent of total new problems (n = 55,459)	Rate per 100 encounters <sup>(a)</sup> (n = 96,688)	95% LCL	95% UCL	Per cent of this problem <sup>(b)</sup>
Excessive ear wax	504	0.9	0.5	0.5	0.6	62.3
Hypertension*	489	0.9	0.5	0.5	0.6	5.0
Abnormal test results*	488	0.9	0.5	0.4	0.6	48.3
Pregnancy*	488	0.9	0.5	0.4	0.6	39.6
Osteoarthritis*	483	0.9	0.5	0.4	0.6	18.1
Lipid disorders*	473	0.9	0.5	0.4	0.6	12.5
Bursitis/tendonitis/synovitis NOS	461	0.8	0.5	0.4	0.5	55.8
Respiratory infection, other	444	0.8	0.5	0.4	0.6	77.6
Test results*	444	0.8	0.5	0.4	0.5	30.1
Fracture*	433	0.8	0.4	0.4	0.5	47.6
Skin disease, other	433	0.8	0.4	0.4	0.5	52.1
Laceration/cut	402	0.7	0.4	0.4	0.5	45.5
<i>Subtotal</i>	<i>26,479</i>	<i>47.7</i>	—	—	—	—
<b>Total new problems</b>	<b>55,459</b>	<b>100.0</b>	<b>57.4</b>	<b>56.0</b>	<b>58.7</b>	—

(a) Figures do not total 100, as more than one new problem can be recorded at each encounter. Also, only the most frequently managed new problems are included.

(b) The proportion of total contacts with this problem that were accounted for by new problems.

\* Includes multiple ICPC-2 or ICPC-2 PLUS codes (see Appendix 4, <[www.aihw.gov.au/publications/index.cfm/subject/19](http://www.aihw.gov.au/publications/index.cfm/subject/19)>).

Note: LCL—lower confidence limit; UCL—upper confidence limit; NOS—not otherwise specified.

## 7.6 Most frequently managed chronic problems

To identify chronic conditions, a chronic condition list<sup>28</sup> classified according to ICPC-2 was applied to the BEACH data set. More than a third (35.6%) of the problems managed in general practice were chronic in nature. At least one chronic problem was managed at 41.5% of encounters (95% CI: 40.6–42.5), and chronic problems were managed at an average rate of 55.1 per 100 encounters.

In other parts of this chapter, both chronic and non-chronic conditions (for example, diabetes and gestational diabetes) may have been grouped together when reporting (for example, diabetes – all\*, Table 7.4). In this section, only problems regarded as chronic have been included in the analysis. For this reason, the condition labels and figures in this analysis may differ from those in Table 7.4. Where the group used for the chronic analysis differs from that used in other analyses in this report, they are marked with a double asterisk. Codes included in the chronic group may be found in Appendix 5.

Table 7.6 shows the most frequently managed chronic problems in Australian general practice in decreasing order of frequency. These 30 chronic problems together accounted for 82.2% of all chronic problems managed, and for 29.3% of all problems managed. The top six chronic problems made up more than half of all chronic problems managed; these were non-gestational hypertension (18.4% of chronic conditions), depressive disorder (7.7%), non-gestational diabetes (7.4%), lipid disorders (7.1%), chronic arthritis (6.7%) and oesophageal disease (4.5%).

**Table 7.6: Most frequently managed chronic problems**

<b>Chronic problem managed</b>	<b>Number</b>	<b>Per cent of total chronic problems (n = 53,264)</b>	<b>Rate per 100 encounters<sup>(a)</sup> (n = 96,688)</b>	<b>95% LCL</b>	<b>95% UCL</b>
Hypertension (non-gestational)**	9,777	18.4	10.1	9.6	10.6
Depressive disorder**	4,082	7.7	4.2	4.0	4.4
Diabetes (non-gestational)**	3,927	7.4	4.1	3.8	4.3
Lipid disorders**	3,787	7.1	3.9	3.7	4.2
Chronic arthritis**	3,569	6.7	3.7	3.5	3.9
Oesophageal disease	2,411	4.5	2.5	2.3	2.7
Asthma	2,117	4.0	2.2	2.1	2.3
Atrial fibrillation/flutter	1,257	2.4	1.3	1.2	1.4
Ischaemic heart disease**	1,230	2.3	1.3	1.2	1.4
Malignant neoplasm of skin	1,177	2.2	1.2	1.1	1.4
Back syndrome with radiating pain**	974	1.8	1.0	0.9	1.1
Osteoporosis	889	1.7	0.9	0.8	1.0
Chronic obstructive pulmonary disease	790	1.5	0.8	0.7	0.9
Hypothyroidism/myxoedema	736	1.4	0.8	0.7	0.8
Heart failure	668	1.3	0.7	0.6	0.8
Migraine	660	1.2	0.7	0.6	0.8
Shoulder syndrome	610	1.1	0.6	0.6	0.7
Obesity (BMI > 30)	590	1.1	0.6	0.5	0.7
Dementia (incl senile, Alzheimer's)	553	1.0	0.6	0.4	0.7
Gout	523	1.0	0.5	0.5	0.6
Schizophrenia	517	1.0	0.5	0.4	0.6
Anxiety disorder**	449	0.8	0.5	0.4	0.5
Vertiginous syndrome	339	0.6	0.4	0.3	0.4
Chronic acne**	336	0.6	0.3	0.3	0.4
Malignant neoplasm prostate	332	0.6	0.3	0.3	0.4
Back syndrome without radiating pain (excluding arthritis and sprains/strains)**	325	0.6	0.3	0.3	0.4
Chronic alcohol abuse	305	0.6	0.3	0.3	0.4
Psoriasis	291	0.5	0.3	0.3	0.3
Phlebitis/thrombophlebitis	287	0.5	0.3	0.3	0.3
Epilepsy	285	0.5	0.3	0.3	0.3
<i>Subtotal</i>	<i>43,793</i>	<i>82.2</i>	—	—	—
<b>Total problems</b>	<b>53,264</b>	<b>100.0</b>	<b>55.1</b>	<b>53.4</b>	<b>56.8</b>

(a) Figures do not total 100, as more than one chronic problem can be recorded at each encounter. Also, only the most frequently managed chronic problems are included.

\*\* Includes multiple ICPC-2 or ICPC-2 PLUS codes and indicates that this group differs from that used for analysis in other sections of this chapter, as only chronic conditions have been included in this analysis (see Appendix 5 for codes included in analysis of chronic conditions <[www.aihw.gov.au/publications/index.cfm/subject/19](http://www.aihw.gov.au/publications/index.cfm/subject/19)>).

Note: LCL—lower confidence limit; UCL—upper confidence limit; BMI—body mass index, incl—including.

## 7.7 Work-related problems managed

The work-related status of a problem under management is determined by the GP, and is defined as any problem that is likely (in the GP's view) to have resulted from work-related activity, workplace exposures or a pre-existing condition that has been significantly exacerbated by work activity or workplace exposure. Work-related problems were managed at a rate of 2.8 per 100 general practice encounters in 2008-09 (Table 7.7).

The most common group of work-related problems were musculoskeletal problems, accounting for almost two-thirds (59.1%) of work-related problems and managed at a rate of 1.7 per 100 general practice encounters. One in ten musculoskeletal problems managed in general practice were work-related. The most common musculoskeletal work-related problems were back complaints (15.5% of work-related problems), sprains and strains (9.8%), unspecified musculoskeletal injury (9.2%) and fractures (3.6%).

Work-related psychological problems accounted for 11.3% of total work-related problems and were managed at a rate of 0.3 per 100 encounters. These psychological problems accounted for only 2.6% of total psychological problems managed in general practice. The most commonly managed work-related psychological problems were depression (4.6% of work-related problems), acute stress reaction (2.3%) and anxiety (2.0%).

Check-ups related to the patient's work accounted for 4.3% of work-related problems and were performed at a rate of 0.1 per 100 encounters. The majority of these checks were check-ups classified in the general and unspecified chapter of ICPC-2, including pre-employment and employment check-ups.

Other work-related problems not covered in the above groups accounted for 25.4% of work-related problems and included skin injuries not elsewhere classified (3.5% of work-related problems), lacerations (2.7%) and administrative procedures (1.8%).

Although back complaint was the most commonly managed individual work-related problem (accounting for 15.5% of work-related problems), it accounted for only 16.0% of the management of all back complaints. In contrast, musculoskeletal injury (not otherwise specified) accounted for 9.2% of work-related problems but represented 30.9% of all musculoskeletal injuries (not otherwise specified) managed (Table 7.7).

**Table 7.7: Work-related problems, by type and most frequently managed individual problems**

Work-related problem managed	Number	Percentage of total work-related probs (n = 2,733)	Rate per 100 encounters (n = 96,688)	95% LCL	95% UCL	Percentage of this problem <sup>(a)</sup>
<b>Musculoskeletal problems</b>	<b>1,614</b>	<b>59.1</b>	<b>1.7</b>	<b>1.5</b>	<b>1.8</b>	<b>9.6</b>
Back complaint*	423	15.5	0.4	0.4	0.5	16.0
Sprain/strain*	269	9.8	0.3	0.2	0.3	19.6
Injury musculoskeletal NOS	252	9.2	0.3	0.2	0.3	30.9
Fracture*	99	3.6	0.1	0.1	0.1	10.9
Shoulder syndrome	69	2.5	0.1	0.1	0.1	12.7
Bursitis/tendonitis/synovitis NOS	63	2.3	0.1	0.0	0.1	7.6
Tennis elbow	60	2.2	0.1	0.0	0.1	24.4
Acute internal knee damage	58	2.1	0.1	0.0	0.1	21.3
Neck symptom/complaint	51	1.9	0.1	0.0	0.1	15.8

(continued)

**Table 7.7 (continued): Work-related problems, by type and most frequently managed individual problems**

Work-related problem managed	Number	Percentage of total work-related probs (n = 2,733)	Rate per 100 encounters (n = 96,688)	95% LCL	95% UCL	Percentage of this problem <sup>(a)</sup>
<b>Psychological problems</b>	<b>308</b>	<b>11.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.4</b>	<b>2.6</b>
Depression*	126	4.6	0.1	0.1	0.2	3.1
Acute stress reaction	63	2.3	0.1	0.0	0.1	10.7
Anxiety	55	2.0	0.1	0.0	0.1	2.9
<b>Check-up—all*</b>	<b>117</b>	<b>4.3</b>	<b>0.1</b>	<b>0.1</b>	<b>0.2</b>	<b>1.1</b>
General check-up*	96	3.5	0.1	0.1	0.1	4.0
<b>Other work-related problems</b>	<b>694</b>	<b>25.4</b>	<b>0.7</b>	<b>0.6</b>	<b>0.8</b>	<b>0.6</b>
Injury skin, other	94	3.5	0.1	0.1	0.1	17.4
Laceration/cut	74	2.7	0.1	0.1	0.1	8.4
Administrative procedures NOS	50	1.8	0.1	0.0	0.1	6.8
<b>Total work-related problems</b>	<b>2,733</b>	<b>100.0</b>	<b>2.8</b>	<b>2.6</b>	<b>3.0</b>	<b>—</b>

(a) The proportion of total contacts with this problem that were accounted for by work-related problems.

\* Includes multiple ICPC-2 or ICPC-2 PLUS codes (see Appendix 4, <[www.aihw.gov.au/publications/index.cfm/subject/19](http://www.aihw.gov.au/publications/index.cfm/subject/19)>).

Note: Probs—problems; LCL—lower confidence limit; UCL—upper confidence limit; NOS—not otherwise specified. Only the most frequent individual work-related problems accounting for > 1.5% of total work-related problems are reported.

## 7.8 Management of lipid problems in 2008–09

Lipid disorders are commonly managed in general practice, with 3,787 recorded contacts with the problem, a management rate of 3.9 per 100 encounters with patients in the 2008–09 period (Figure 7.2). This represents approximately 4.4 million encounters at which a lipid problem was managed in general practice across Australia in that year.

### Patient age

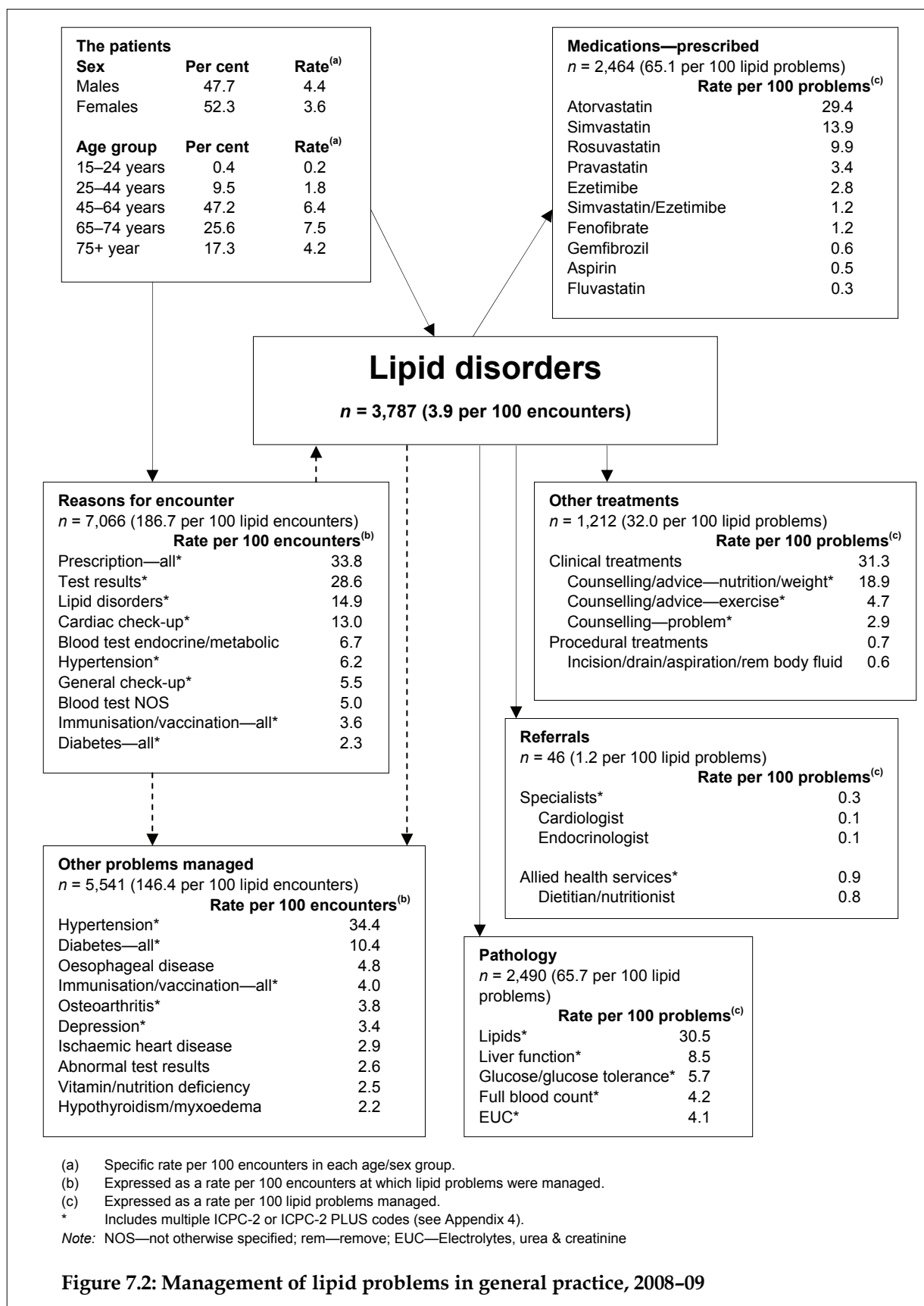
Patients aged 65–74 years were most likely to have lipid problems managed (7.5 per 100 encounters) followed by patients aged 45–64 years (6.4).

### Reasons for encounter

The reason for encounter most often given by these patients was a need for prescriptions (33.8 per 100 lipid encounters). Patients also frequently came for test results, specifically about their lipid disorder, or for a cardiac check-up.

### Other problems managed

Hypertension was the comorbidity most often managed with lipid disorders (34.4 per 100 lipid encounters) followed by diabetes (10.4), oesophageal disease (4.8), immunisations/vaccinations (4.0) and osteoarthritis (3.8).



**Figure 7.2: Management of lipid problems in general practice, 2008–09**

## Medications

The rate of prescribed medications was higher in the management of lipid problems (65.1 per 100 problems) than average for all problems (55.9) in the 2008–09 BEACH year.

The most common medication prescribed for lipid disorders was atorvastatin, at a rate of 29.4 per 100 lipid problems, followed by simvastatin (13.9), rosuvastatin (9.9), pravastatin (3.4), and ezetimibe (2.8).

## Other treatments

Other treatments were provided at a rate of 32.0 per 100 lipid problems. The majority were clinical treatments (31.3 per 100 lipid problems), of which counselling/advice about nutrition and/or weight (18.9) and exercise (4.7) were the most commonly provided to patients with lipid problems.

## Referrals

Referrals for lipid problems were provided at a rate of 1.2 per 100. Referrals to specialists (0.3 per 100) were significantly less common than referrals to allied health professionals (0.9), most of which were to a dietitian or nutritionist.

## Pathology

Pathology was ordered at a rate of 65.7 tests/batteries per 100 lipid problems. The majority were lipid tests (30.5), liver function tests (8.5), glucose tolerance (5.7), full blood count (4.2) and electrolytes, urea and creatinine tests (4.1).

## 7.9 Changes in problems managed over the decade 1999–00 to 2008–09

Data about the problems managed in general practice from each of the last 10 years of the BEACH study from 1999–00 to 2008–09 are reported in the companion report *General practice activity in Australia 1999–00 to 2008–09: 10 year data tables*.<sup>1</sup>

Major changes that have occurred over the decade are described below.

- There was a significant increase in the number of problems managed at encounter, from 146.7 per 100 encounters in 1999–00 to 154.6 in 2008–09. This suggests there were an additional 24.7 million problems managed at GP encounters in Australia in 2008–09 than in 1999–00. This was reflected in significant increases in the management rate of new problems, and in the management rate of chronic conditions.
- The management rate of new problems increased from 45.3 per 100 encounters in 1999–00 to 57.4 in 2008–09, suggesting approximately 18.5 million more GP contacts with management of new problems in 2008–09 than in 1999–00.
- The management rate of chronic conditions significantly increased from 47.2 per 100 encounters in 1999–00 to 55.1 per 100 in 2008–09, suggesting approximately 14.0 million more GP contacts in Australia in 2008–09 with chronic problems than ten years earlier.