

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. It 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 to the most specific level possible from the information available, the problem managed may at times be limited to the level of presenting symptoms.

At each patient encounter up to four problems could be recorded by the GP, a minimum of one problem being 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 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.

Problems were coded using ICPC-2 PLUS, an extension of the internationally recognised International Classification of Primary Care – 2nd Edition (ICPC-2). ICPC-2 has a bi-axial structure with 17 chapters on one axis and seven components on the other. Chapters are based on body systems, with an additional chapter for psychological problems and one for social problems (see Chapter 2 – Methods).

The relative frequency of problems managed can be described in two ways: 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 (e.g. circulatory problems) it must be remembered that more than one type of problem (e.g. hypertension and oedema) could have been managed at a single encounter. In considering these results the reader must be mindful that while a rate per 100 encounters for a single ungrouped problem (e.g. asthma, 3.2 per 100 encounters) can be regarded as equivalent to 'asthma is managed at 32% of encounters or at 32 per 1,000 encounters', such a statement cannot be made for grouped concepts.

7.1 All problems

7.1.1 Number of problems managed at encounter

A total of 140,824 problems were managed at the 96,901 patient encounters, at an average rate of 145.3 problems per 100 encounters. For the majority of encounters (66.3%) only one problem was managed, while three or more problems were managed at 10% of encounters (Table 7.1).

Table 7.1: Number of problems managed at an encounter

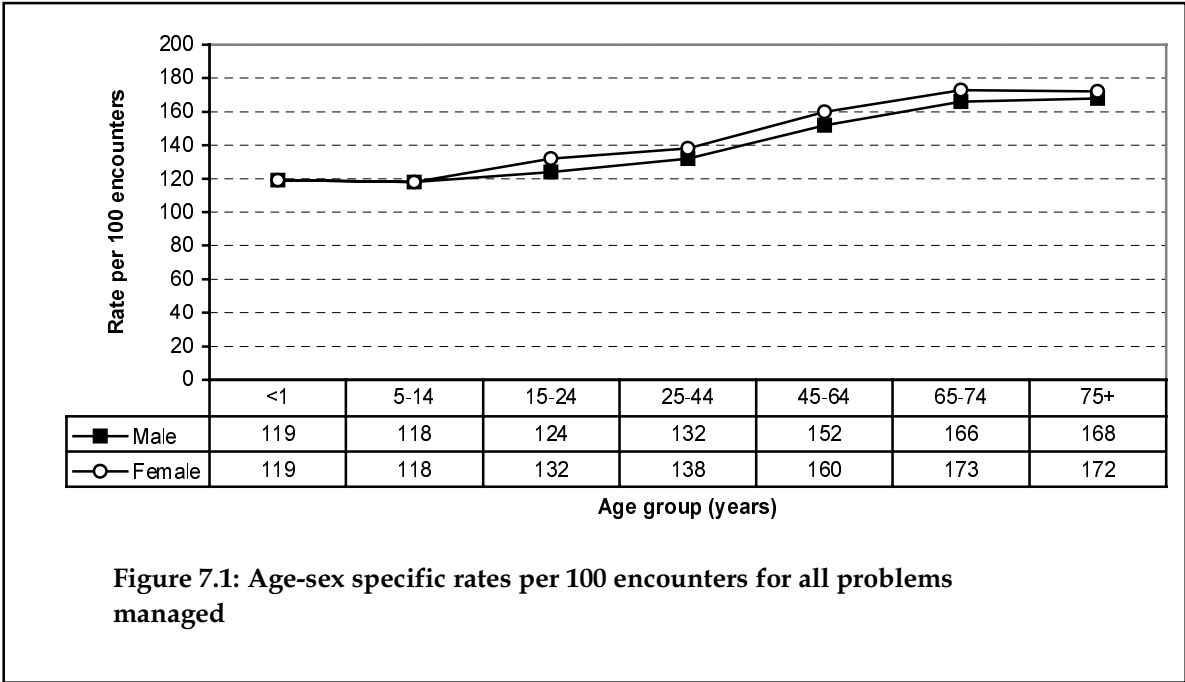
Number of problems managed at encounter	Number of encounters	Col %	95% LCI	95% UCI
One problem	64,214	66.3	65.1	67.4
Two problems	23,359	24.1	23.4	24.8
Three problems	7,421	7.7	7.3	8.1
Four problems	1,907	2.0	1.6	2.3
Total	96,901	100.0

Note: Abbreviations: UCI – Upper confidence interval, LCI – Lower confidence interval.

7.1.2 Age–sex specific rates of problems managed

The number of problems managed per encounter varied by both the age and sex of the patient (Figure 7.1).

Overall, slightly more problems were managed per 100 encounters for female patients (141.4) than for male patients (137.1). For patients aged 15 and under, there appeared to be no difference between males and females in the rate of problems managed. However, for patients aged greater than 15 years there was a general trend for females to have a slightly higher rate of problems managed than males. This difference was greatest in the 45–64 years age group.



The number of problems managed increased steadily with age. An average of 170 problems were managed per 100 encounters for patients 65 years and older compared with 118 per 100 encounters for patients aged between 1 and 14 years. The number of problems managed reached a peak of 173 problems per 100 encounters for female patients in the 65–74 age group.

7.1.3 Nature of Morbidity

Problems managed by ICPC-2 chapter

Table 7.2 presents (in decreasing order of frequency) the frequency and distribution of problems managed by ICPC-2 chapter. Individual problem types most frequently recorded within each chapter are also included where they represent more than 0.5% of all problems managed. Each ICPC-2 chapter and problem managed is expressed as a percentage of all problems managed and as a rate per 100 encounters with 95% confidence intervals.

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

Problem managed	Number	% total problems	Rate per 100 encs ^(a)	95% LCI	95% UCI
Respiratory	23,554	16.7	24.3	23.6	25.0
URTI	6,623	4.7	6.8	6.4	7.3
Acute bronchitis/bronchiolitis	3,185	2.3	3.3	3.0	3.6
Asthma	3,079	2.2	3.2	3.0	3.4
Immunisation/vaccination - respiratory	2,420	1.7	2.5	1.3	3.7
Sinusitis acute/chronic	1,513	1.1	1.6	1.4	1.7
Tonsillitis*	1,422	1.0	1.5	1.3	1.6
Allergic rhinitis	926	0.7	1.0	0.8	1.1
Musculoskeletal	16,404	11.7	16.9	16.3	17.5
Back complaint*	2,573	1.8	2.7	2.4	2.9
Osteoarthritis*	2,118	1.5	2.2	2.0	2.4
Sprain/strain*	1,790	1.3	1.9	1.6	2.1
Fracture*	1,051	0.8	1.1	0.9	1.2
Skin	15,976	11.3	16.5	16.0	17.0
Contact dermatitis	1,778	1.3	1.8	1.7	2.0
Solar keratosis/sunburn	963	0.7	1.0	0.8	1.2
Laceration/cut	821	0.6	0.9	0.7	1.0
Malignant skin neoplasm	814	0.6	0.8	0.7	1.0
Circulatory	15,638	11.1	16.1	15.4	16.8
Hypertension*	8,000	5.7	8.3	7.8	8.7
Cardiac check-up*	1,204	0.9	1.2	0.9	1.6
Ischaemic heart disease without angina	1,054	0.8	1.1	0.9	1.3
Heart failure	846	0.6	0.9	0.7	1.1
General & unspecified	12,775	9.1	13.2	12.7	13.7
General immunisation/vaccination	2,066	1.5	2.1	1.9	2.4
General check-up*	1,501	1.1	1.6	1.3	1.8
Viral disease NOS	1,284	0.9	1.3	1.1	1.5
Medication request/renew/inject NOS	1,064	0.8	1.1	0.7	1.5

(continued)

Table 7.2 (continued): Distribution of problems managed across ICPC-2 chapters and most frequent individual problems within chapter

Problem managed	Number	% total problems	Rate per 100 encs^(a)	95% LCI	95% UCI
Psychological	10,142	7.2	10.5	10.0	11.0
Anxiety*	1,639	1.2	1.7	1.5	1.9
Depression*	3,367	2.4	3.5	3.3	3.7
Sleep disturbance	1,579	1.1	1.6	1.5	1.8
Digestive	9,926	7.1	10.2	9.9	10.5
Oesophageal disease	1,445	1.0	1.5	1.4	1.6
Gastroenteritis, presumed infection	1,047	0.7	1.1	0.9	1.3
Endocrine & metabolic	8,534	6.1	8.8	8.4	9.2
Diabetes*	2,485	1.8	2.6	2.4	2.7
Lipid disorder	2,392	1.7	2.5	2.3	2.7
Female genital system	6,073	4.3	6.3	5.9	6.6
Female genital check-up/Pap smear*	1,566	1.1	1.6	1.4	1.9
Menopausal complaint	1,428	1.0	1.5	1.3	1.6
Menstrual problems*	772	0.6	0.8	0.7	0.9
Ear	4,757	3.4	4.9	4.7	5.1
Acute otitis media/myringitis	1,745	1.2	1.8	1.6	2.0
Otitis externa	838	0.6	0.9	0.7	1.0
Pregnancy & family planning	3,927	2.8	4.1	3.7	4.4
Pre/post natal check-up*	1,000	0.7	1.0	0.7	1.4
Oral contraception*	946	0.7	1.0	0.8	1.1
Neurological	3,898	2.8	4.0	3.8	4.2
Migraine	910	0.7	0.9	0.8	1.1
Urology	2,754	2.0	2.8	2.7	3.0
UTI*	1,569	1.1	1.6	1.5	1.7
Eye	2,720	1.9	2.8	2.7	3.0
Infectious conjunctivitis	829	0.6	0.9	0.7	1.0
Blood	1,642	1.2	1.7	1.5	1.9
Male genital system	1,364	1.0	1.4	1.3	1.5
Social problems	742	0.5	0.8	0.6	0.9
Total problems	140,824	100.0	145.3	143.5	147.2

(a) Figures do not total 100% as more than one problem can be managed at each encounter. Only frequencies >0.5 included.

* Includes multiple ICPC-2 or ICPC-2 PLUS codes (see Appendix III).

Note: Abbreviations: Encs – encounters, UCI – Upper confidence interval, LCI – Lower confidence interval,

Overall, half of the problems managed in general practice related to four major body systems – the respiratory, musculoskeletal, skin and circulatory systems. Other common problems were of a psychological nature or related to the digestive, endocrine/metabolic, or female genital systems. Problems least frequently presented related to the blood and blood

forming organs and the male genital system or were of a social nature. Almost 10% of problems managed were not related to a specific body system and were classified in the general and unspecified chapter.

At a chapter level, **respiratory problems** were the most frequently managed at a rate of 24.3 per 100 encounters, accounting for nearly a fifth (16.7%) of all problems managed. The high occurrence of URTI, bronchitis and asthma contributed to this result. Other common respiratory problems included influenza vaccination, sinusitis and tonsillitis.

Problems related to the **musculoskeletal system** were managed at a rate of 16.9 per 100 encounters. Back complaints (including back pain, disc prolapse and degeneration, and other specific back syndromes) were the most frequent (2.7 per 100 encounters). Other common musculoskeletal problems included osteoarthritis and injuries such as sprains/strains and fractures.

The relative rate of **skin problems** (16.5 per 100 encounters) was almost as high as that of musculoskeletal problems. Contact dermatitis (including non-specific dermatitis and eczema) was most common (1.8 per 100 encounters), followed by solar keratosis and injuries to the skin such as lacerations and cuts. Malignant neoplasms were also seen frequently.

Hypertension (8.3 per 100 encounters) constituted over half of all **circulatory problems** (16.1 per 100 encounters) and was the most frequently managed diagnosis, accounting for 5.7% of all problems. Cardiac related check-ups, ischaemic heart disease and heart failure were other circulatory conditions arising at a relatively high frequency.

The most common problem managed in the **general and unspecified** chapter was general immunisation/vaccination, followed by general check-ups, and ill-defined or unspecified viral illnesses. Medication provision for an unspecified diagnosis/problem was also common (1.1 per 100 encounters).

Problems managed by ICPC-2 component

Examination of problems managed across ICPC-2 components provides an alternative way of viewing the types of matters dealt with at general practice consultations (Table 7.3).

GPs were instructed to record problems managed in the most specific terms available. In an ideal world we could therefore predict that problems managed should fall into three components of ICPC-2, namely the diagnosis/disease, symptoms and complaints, and diagnostic and preventive procedures (e.g. check-up). Although these components were the most frequently recorded, there were a small number of problems described in terms of a prescription, referral, test result or administrative procedure. In these circumstances the lack of clinical description of the underlying problem required the label to be coded in terms of the process described (e.g. diagnosis was recorded as referral to dermatologist).

The majority of problems (65.2%) were described in terms of a diagnosis or disease (e.g. hypertension, depression, asthma) at an average rate of 94.7 per 100 encounters. Problems described in terms of a symptom or complaint (e.g. febrile) represented almost a quarter of all problems managed and were recorded at a rate of 33.0 per 100 encounters. Diagnostic screening and preventive procedures occurred at a rate of 12.8 per 100 encounters and were most commonly check-ups and vaccinations/immunisations. Problems related to the provision of medication and other treatments where no other diagnostic information was given were recorded at a rate of 2.6 per 100 encounters, while problems described in terms of a referral, test result, or administrative procedure were relatively few (less than 2% of all problems).

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

ICPC-2 component	Number	% of total problems	Rate per 100 encs ^(a)	95% LCI	95% UCI
Diagnosis, disease	91,747	65.2	94.7	93.1	96.3
Symptoms & complaints	32,009	22.7	33.0	32.2	33.9
Diagnostic & preventive procedures	12,432	8.8	12.8	12.2	13.5
Medications, treatments & therapeutics	2,529	1.8	2.6	2.3	2.9
Referral & other RFE	936	0.7	1.0	0.7	1.2
Results	786	0.6	0.8	0.5	1.1
Administrative	385	0.3	0.4	0.2	0.6
Total problems	140,824	100.0	145.3	143.5	147.2

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

Note: Abbreviations: Encs – encounters, RFE – reason for encounter, UCI – Upper confidence interval, LCI – Lower confidence interval.

Most frequent problems managed

The 30 most commonly recorded problems are listed in descending order of frequency in Table 7.4. In this analysis the specific chapter to which ‘across chapter concepts’ (immunisation/vaccination and prescriptions) apply is ignored and the concept grouped to all other similar concepts. For example, immunisation/vaccination includes flu vaccination (from chapter R) as well as those for childhood immunisation (chapter A), hepatitis immunisation (chapter D) and neurological immunisations such as hibtiter (chapter N).

The 30 most frequently managed problems accounted for almost half of all problems managed. Hypertension was the most common, accounting for almost 6% of all problems managed, at a rate of 8.3 per 100 encounters. This was followed by URTI, which was recorded at a rate of 6.8 per 100 encounters and immunisation/vaccination (5.2 per 100 encounters). Together these top three problems accounted for nearly 15% of all problems managed and their relative frequency was notably higher than that of all other problems managed.

Depression was the fourth most commonly managed problem (3.5 per 100 encounters), followed closely by bronchitis, asthma and back complaint. A number of chronic conditions followed, including diabetes, lipid disorders and osteoarthritis at a rate of 2.6, 2.5 and 2.2 per 100 encounters respectively.

The remaining problems in the top 30 included some problems from body systems that were relatively low in frequency. Although problems involving the ear chapter accounted for only 3.4% of problems overall, otitis media is among the top 30 problems managed. Similarly, urological problems were relatively infrequent overall (only 2.0% of total problems – Table 7.2), however urinary tract infections were among the most frequent problems.

It is also notable that a number of non-diagnostic problem labels fell into the top 30 problems most frequently managed by general practitioners. These included preventive care (immunisations/vaccinations), general and body systems specific check-ups (female genital, reproductive and circulatory chapters) and medication provision or review.

Table 7.4: Most frequently managed problems

Problem managed	Number	% of total problems	Rate per 100 encs^(a)	95% LCI	95% UCI
Hypertension*	8,000	5.7	8.3	7.8	8.7
URTI	6,623	4.7	6.8	6.4	7.3
Immunisation/vaccination (all)*	5,025	3.6	5.2	4.7	5.7
Depression*	3,367	2.4	3.5	3.3	3.7
Acute bronchitis/bronchiolitis	3,185	2.3	3.3	3.0	3.6
Asthma	3,079	2.2	3.2	3.0	3.4
Back complaint*	2,573	1.8	2.7	2.4	2.9
Diabetes*	2,485	1.8	2.6	2.4	2.7
Lipid disorder	2,392	1.7	2.5	2.3	2.7
Osteoarthritis*	2,118	1.5	2.2	2.0	2.4
Sprain/strain*	1,790	1.3	1.9	1.6	2.1
Contact dermatitis	1,778	1.3	1.8	1.7	2.0
Acute otitis media/myringitis	1,745	1.2	1.8	1.6	2.0
Anxiety*	1,639	1.2	1.7	1.5	1.9
Sleep disturbance	1,579	1.1	1.6	1.5	1.8
UTI*	1,569	1.1	1.6	1.5	1.7
Female genital check-up/Pap smear*	1,566	1.1	1.6	1.4	1.9
Sinusitis acute/chronic	1,513	1.1	1.6	1.4	1.7
General check-up*	1,501	1.1	1.6	1.3	1.8
Oesophageal disease	1,445	1.0	1.5	1.4	1.6
Menopausal complaint	1,428	1.0	1.5	1.3	1.6
Tonsillitis*	1,422	1.0	1.5	1.3	1.6
Prescription (all)*	1,360	1.0	1.4	1.1	1.7
Viral disease NOS	1,284	0.9	1.3	1.1	1.5
Cardiac check-up*	1,204	0.9	1.2	0.9	1.6
Ischaemic heart disease without angina	1,054	0.8	1.1	0.9	1.3
Fracture*	1,051	0.8	1.1	0.9	1.2
Gastroenteritis, presumed infection	1,047	0.7	1.1	0.9	1.3
Pre/post natal check-up*	1,000	0.7	1.0	0.7	1.4
Solar keratosis/sunburn	963	0.7	1.0	0.8	1.2
<i>Subtotal</i>	<i>66,786</i>	<i>47.4</i>	<i>..</i>	<i>..</i>	<i>..</i>
Total problems	140,824	100	145.3	143.5	147.2

(a) Figures do not total 100% as more than one problem can be managed at each encounter. Also only frequencies >0.5% are included.

* Includes multiple ICPC-2 or ICPC-2 PLUS codes (see Appendix III).

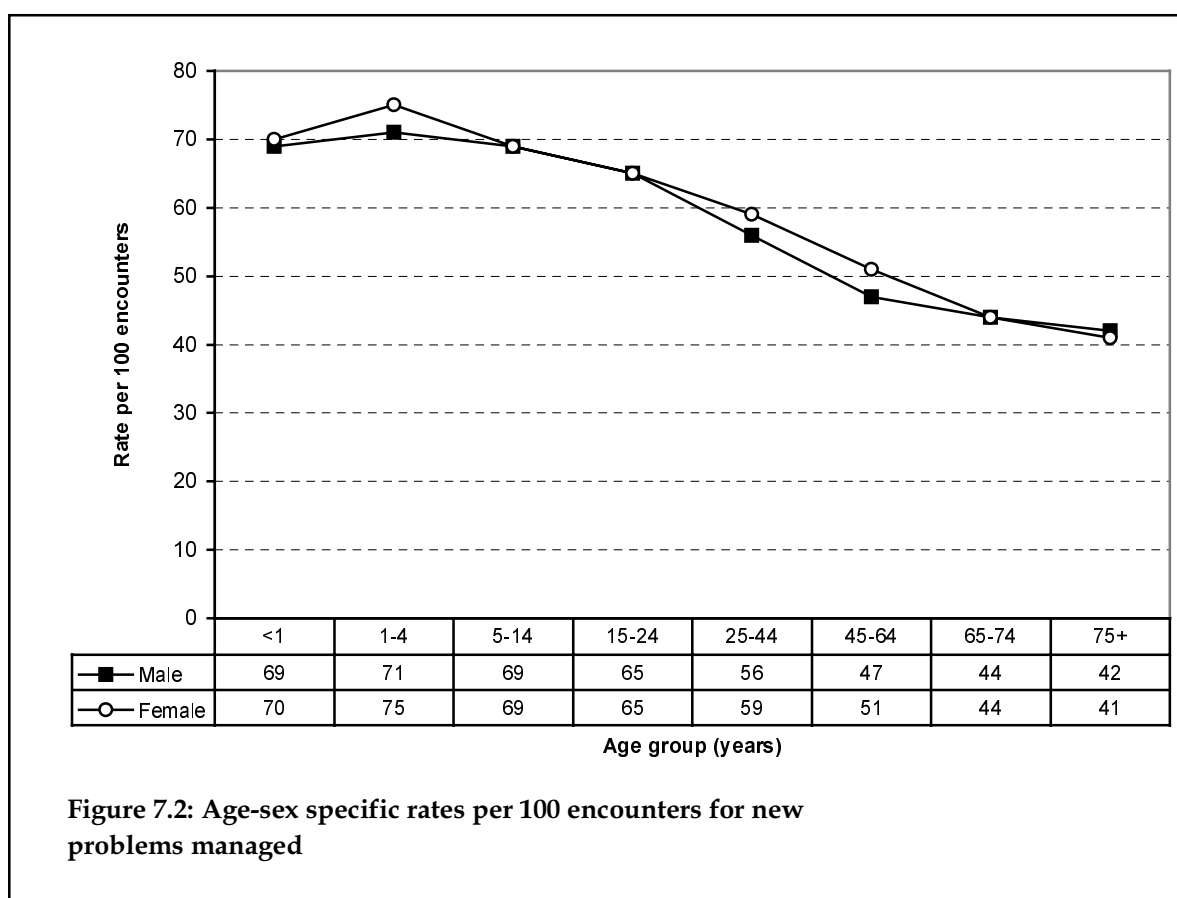
Note: Abbreviations: Encs – encounters, UCI – Upper confidence interval, LCI – Lower confidence intervals.

7.2 New problems

For each problem managed, a problem status was assigned – new or old. A new problem is defined as the first presentation of a problem to any medical practitioner. This includes new episodes of a recurrent problem and excludes the presentation of a problem first assessed by another provider. Hence, a new problem is the first consultation for a new episode of an acute problem or the first consultation for a new chronic problem. An old problem is defined as a previously assessed problem which requires ongoing (follow-up) care. Missing data (where no problem was status indicated) were eliminated from this analysis.

7.2.1 Age–sex specific rates of new problems managed

Of the 140,824 problems managed, a problem status was nominated for 108,735 (77.2%). Of these, 52,774 (44.4%) were new. The distribution of new problems managed per 100 encounters by age (Figure 7.2) is notably different from that for total problems (Figure 7.1). Although the sex of the patient appeared to have little effect on the rate of new problems managed, as age increased the relative rate of new problems decreased. This trend is consistent with the assumption that new problems presented to the GP tend to be acute, and that older patients are more likely to attend for chronic problems in contrast to acute conditions in younger people.



7.2.2 Most common new problems

Table 7.5: Most frequently managed new problems

New problem managed	Number	% of new problems	New problems as a % of the total for that problem	Problem specific rate per 100 enc ^(a)	95% LCI	95% UCI
URTI	4,868	9.2	93.2	5.0	4.6	5.4
Immunisation/vaccination (all)*	2,853	5.4	81.7	2.9	2.5	3.4
Acute bronchitis/bronchiolitis	2,032	3.9	81.3	2.1	1.8	2.4
Acute otitis media/myringitis	1,136	2.2	82.9	1.2	1.0	1.4
Sprain/strain*	1,013	1.9	68.9	1.1	0.8	1.3
Tonsillitis*	995	1.9	88.0	1.0	0.8	1.2
Sinusitis acute/chronic	925	1.8	77.1	1.0	0.8	1.2
UTI*	905	1.7	71.9	0.9	0.8	1.0
Viral disease NOS	899	1.7	85.5	0.9	0.7	1.1
Contact dermatitis	802	1.5	55.0	0.8	0.7	0.9
Gastroenteritis (presumed infection)	763	1.5	90.8	0.8	0.6	1.0
Depression*	666	1.3	24.9	0.7	0.5	0.8
General check-up*	636	1.2	70.6	0.7	0.4	0.9
Conjunctivitis, infectious	592	1.1	90.0	0.6	0.5	0.7
Female genital check-up*	538	1.0	51.3	0.6	0.3	0.8
Otitis externa	502	1.0	69.8	0.5	0.3	0.7
Back complaint*	494	0.9	24.8	0.5	0.4	0.6
Gastrointestinal infection	458	0.9	90.8	0.5	0.3	0.7
Malignant skin neoplasm	444	0.8	70.2	0.5	0.3	0.6
Laceration/cut	442	0.8	69.1	0.5	0.3	0.6
Asthma	440	0.8	18.8	0.5	0.3	0.6
Solar keratosis/sunburn	437	0.8	59.9	0.5	0.3	0.6
Fracture*	418	0.8	52.0	0.4	0.3	0.6
Hypertension*	415	0.8	6.4	0.4	0.2	0.6
Menstrual problems*	396	0.8	63.5	0.4	0.3	0.6
Skin infection (incl post traumatic)	390	0.7	79.4	0.4	0.2	0.6
Osteoarthritis*	390	0.7	22.3	0.4	0.2	0.6
Excessive ear wax	380	0.7	79.7	0.4	0.2	0.5
Bruise/contusion	363	0.7	85.7	0.4	0.2	0.6
Abdominal pain*	360	0.7	66.8	0.4	0.2	0.5
<i>Subtotal</i>	<i>25,951</i>	<i>49.2</i>	<i>..</i>	<i>..</i>	<i>..</i>	<i>..</i>
Total problems	52,774	100	..	54.5	53.0	56.0

(a) Figures do not total 100% as more than one problem can be managed at each encounter. Also only new problems >0.5% are included.

* Includes multiple ICPC-2 or ICPC-2 PLUS codes (see Appendix III).

Note: Abbreviations: Enc – encounters, UCI – Upper confidence interval, LCI – Lower confidence interval, NOS – not otherwise specified

Respiratory problems accounted for almost a quarter (24.4%) of all new problems, followed by those related to the skin (dermatitis, malignant neoplasms, lacerations, solar keratosis), of a general and unspecific nature (fever, unspecified viral illness, weakness/tiredness), or related to the musculoskeletal (sprain/strain, back complaints, fracture) and digestive (gastroenteritis, gastrointestinal infections, abdominal pain) systems. Together these five ICPC-2 chapters represented 69.1% of all new problems (data not presented in tabular form). Table 7.5 lists the most commonly managed new problems in decreasing order of frequency and gives the proportion of all new problems accounted for by each.

There are some notable differences in the frequency distribution of new problems (Table 7.5) when compared to total problems managed (Table 7.2). As expected, most new problems tended to be of an acute (e.g. respiratory or skin infections, musculoskeletal injuries) or preventive nature (e.g. immunisations or check-ups). The most common new problems once again included the respiratory diagnoses of URTI and acute bronchitis which accounted for 9.2% and 3.9% of all new problems respectively. Immunisations, sprains/strains, tonsillitis, sinusitis and UTIs also remained high.

The third numerical column in Table 7.5 describes the number of new problems as a percentage of the total contacts for that problem. Not surprisingly acute problems such as URTI (93.2% new), gastroenteritis (90.8% new) and conjunctivitis (90.0% new) were more likely to present to the GP as a new problem, while contacts related to chronic conditions such as hypertension (6.4% new), asthma (18.8% new), osteoarthritis (22.3% new) and depression (24.9% new) were more likely to be follow-up contacts (i.e. pre-existing conditions).

7.3 The inter-relationship of a problem managed with other variables. Example: Depression

A problem was classified as 'depression' if the GP recorded it in the diagnosis/problem section of the form as either: a complaint, such as 'feeling depressed', which included more specific labels of feeling sad, lonely, unhappy, worried or having low self esteem (ICPC-2 rubric P03); or in diagnostic terms such as a depressive disorder, which included more specific labels of depressive neurosis, postnatal or reactive depression, or anxiety with depression (ICPC-2 rubric P76).

Depression was the fourth most common problem managed in general practice. It presented on 3,367 occasions (at a rate of 3.5 per 100 encounters), accounting for 2.4% of all problems managed. Of these, 666 (19.8%) were new diagnoses of depression (0.7 per 100 encounters). A simple extrapolation based on approximately 103 million Medicare claimed general practice consultations would then suggest there are approximately 3.6 million encounters per year in which GPs manage depression and approximately 709,000 new episodes of depression are diagnosed in general practice in Australia each year.

Figure 7.3 illustrates the relationship of depression with other variables that are collected at the general practice encounter. Depression can be directly linked to patient characteristics such as age and sex, treatments provided, prescriptions written, tests and investigations ordered, and referrals transcribed (solid arrows). Depression can also be indirectly related to patient RFEs (dotted arrow). In addition, other problems that were managed at a 'depression encounter' have been included to give an indication of co-morbidities managed with depression.

Age and sex distribution of patients

Patients managed for depression were more likely to be female (67.9%). The majority of patients (72%) were aged between 25 and 64 years. Comparisons with the age and sex demographics for total encounters (females 58.9%) suggest that female patients were over-represented at depression encounters. Such comparisons also emphasised differences in the age distribution for depression encounters. Young patients of 24 years or less accounted for only 8.3% of those managed for depression compared with 24.4% of all patients. In contrast, patients aged 25 to 44 years were over-represented (39.9%) in this sub-group.

Encounters where a new presentation/diagnosis of depression was managed depicted a similar male to female ratio to that of all patients managed for depression. This suggests that new cases of depression were not influenced by the sex of the patient. Age of the patient, however, appeared to have some impact. Overall, younger patients accounted for a larger proportion of new cases of depression, with patients under 25 years one and a half times more likely to present with a 'new' depressive illness than a previously diagnosed condition. Once again, new episodes of depression were most likely to be managed in patients aged between 25 and 44 years.

Reasons for encounter

At the 3,367 encounters where depression was managed, a total of 5868 patient RFEs were described (174 per 100 depression encounters), somewhat more than in the total dataset (146 per 100 total encounters). For over half of these encounters the patients described their reason for the encounter as depression. Requests for medication (not necessarily for depression) were also a frequent RFE presenting at a rate of 14.1 per 100 depression encounters. Other RFEs included general symptoms such as weakness (4.7 per 100), psychological symptoms and complaints including sleep disturbance (4.6 per 100), anxiety (4.2 per 100) and acute stress (3.8). Miscellaneous preventive procedures such as a general or cardiovascular check-up, back complaints and hypertension were also noted. For encounters where a 'new' depression related problem was managed, the most frequent RFEs returned some dissimilar rates. Medication requests were reduced while symptoms such as weakness, sleep disturbance, anxiety and acute stress reaction were more common than in all depression encounters.

Other problems managed

At each encounter where depression was managed a number of other problems may have arisen. Overall, a total of 3,097 other problems were managed by the GP where a depression contact occurred. The most common co-morbidities managed with depression were similar to those arising in the total dataset. There were, however, some differences in the order they occurred. Most co-morbidities presenting at depression encounters were for a range of chronic conditions such as hypertension (6.7 per 100 depression encounters), back complaints (3.1), menopausal complaints (2.7) and diabetes (2.2). Sleep disturbance (including insomnia), managed at a rate of 2.1 per 100 depression encounters, was the only other common psychological problem managed with depression. Encounters where a 'new' presentation of depression was identified returned similar patterns of co-morbidity.

Prescriptions and other treatments

Counselling was by far the most common form of management, undertaken at a rate of 34.2 per 100 depression encounters and 46.7 per 100 encounters where a new case of depression was identified. Other forms of counselling, advice and reassurance were also common. Note that this compares with an overall use of psychological counselling of only 2.5 per 100 encounters in the total dataset.

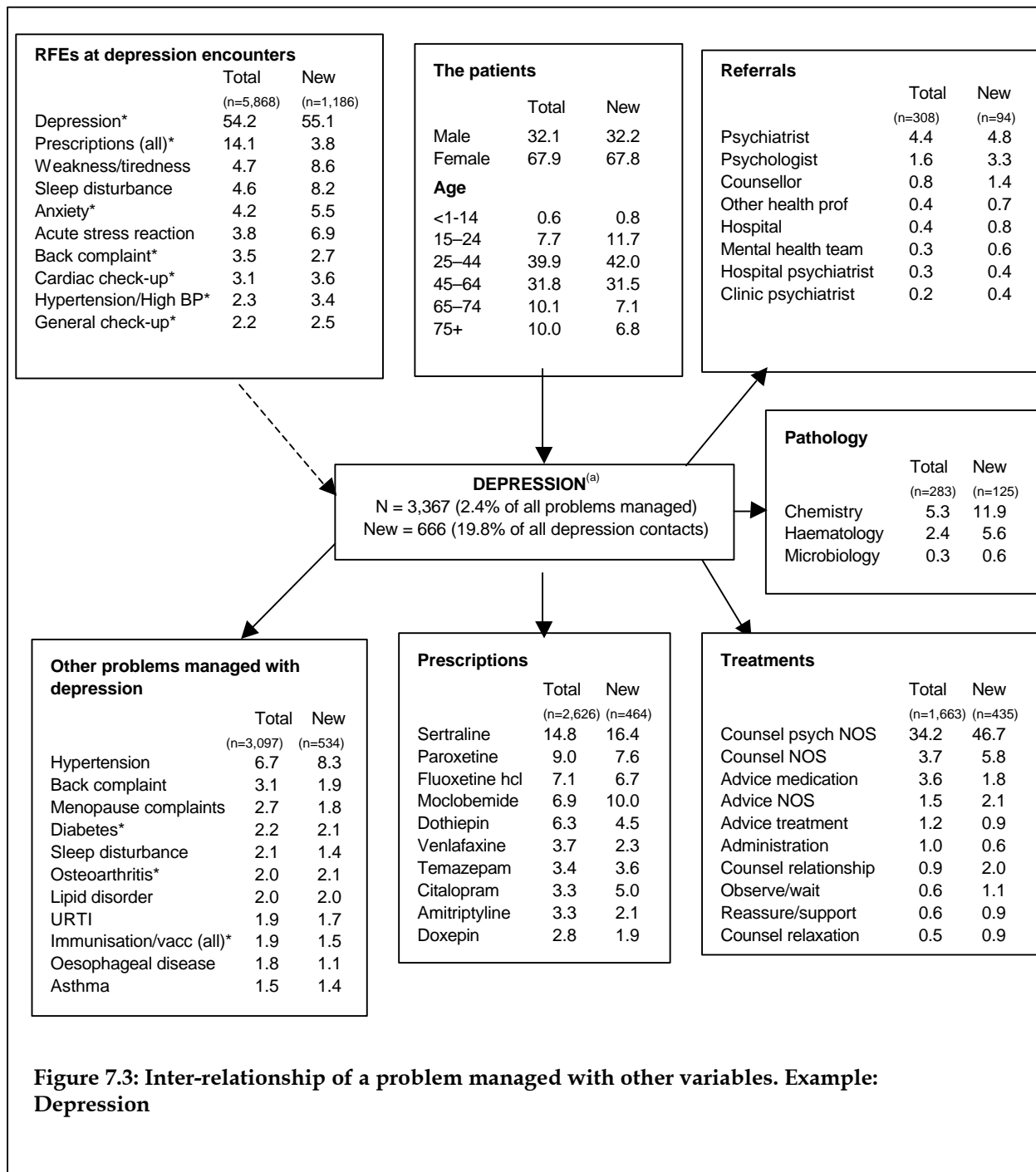
Drugs were prescribed for depression at a rate of 78 per 100 depression contacts, a somewhat higher rate than in the total dataset (64.4 per 100 problems). Prescribing rates for new cases of depression were 69.6 per 100 new depression contacts. Of the 2,626 drugs prescribed for depression, 81.1% were for anti-depressants, 7.0% for anti-anxiety drugs and 5.4% for sedative hypnotics (data not presented). At a generic level, selective serotonin uptake inhibitors (SSRIs) such as sertraline, paroxetine, and fluoxetine hcl were the most common drugs prescribed, followed by the more traditional tricyclic anti-depressants (dothiepin).

Tests and investigations

Overall, rates of pathology orders for encounters where depression was managed (8.4 per 100 depression encounters) were far below those for the total dataset (24.6 per 100 total encounters). Chemistry (e.g. urine analysis), haematological (e.g. full blood counts) and microbiological investigations were the most common pathology tests ordered for depression at the relatively low rates of 5.3, 2.4 and 0.3 per 100 depression encounters respectively. New presentations of depression were investigated quite differently from chronic or follow-up depression encounters. Pathology ordering rates for new cases of depression (18.8 per 100 new depression encounters) were more than double the amount ordered for patients with depression that had been previously diagnosed.

Referrals

Overall, referrals for depression (9.1 per 100 depression encounters) were less frequent than those for the total dataset (11.2 per 100 total encounters). Referrals to medical specialists were the most common, occurring at a rate of 5 per 100 depression encounters. This was largely due to the high number of referrals to psychiatrists (4.4 per 100 depression encounters) which was over ten times that seen in the total dataset (0.3 per 100 total problem encounters). Referrals to an allied health service were also common, occurring at a rate of 3.5 per 100 depression encounters. These included referrals to psychologists, counsellors, miscellaneous other health professionals and mental health teams. Referrals to hospitals, or hospital professionals such as clinic psychiatrists, were also noted. As a whole, new cases of depression recorded a higher referral rate (14.1 per 100 new depression encounters) than that for total depression referrals (9.1 per 100).



* Includes multiple ICPC-2 or ICPC-2 PLUS codes (see Appendix III).

(a) Results are presented as rates per 100 encounters at which depression was managed (N=3,367).