

6 Problems managed

A comparison of encounters with male and female patients found that the overall rate of problems managed was significantly lower at encounters with male patients (143.9 per 100) than at those with females (149.0 per 100) (Table 4.2).

6.1 Number of problems managed at encounter by patient sex

Table 6.1 shows the differences in the number of problems managed at encounters with male and female patients. Male patients were significantly more likely to have only one problem managed (67.1% of encounters) than were female patients (64.1%). In contrast males were less likely to have three problems managed (7.2%) than were females (8.2%).

Table 6.1: Number of problems managed at encounter by patient sex

Number of problems managed at encounter	Male (n = 44,308)			Female (n = 59,366)		
	Per cent of encounters	95% LCL	95% UCL	Per cent of encounters	95% LCL	95% UCL
One problem	67.1	65.9	68.3	64.1	62.9	65.3
Two problems	23.8	23.0	24.6	25.3	24.6	26.0
Three problems	7.2	6.7	7.7	8.2	7.7	8.6
Four problems	1.9	1.3	2.5	2.5	2.0	2.9
Total (n,%)	44,308	100.0	..	59,366	100.0	..

Note: Shading indicates statistically significant differences. LCL—lower confidence limit; UCL—upper confidence limit.

6.2 Problems managed by ICPC-2 chapter and patient sex

Table 6.2 shows the rate of problems managed within ICPC-2 chapters by patient sex. Table 6.2 also presents the results from the parsimonious model. These are described in Section 6.4. There were six ICPC-2 chapters where male patients had significantly higher relative rates of problems managed than did female patients. These were problems:

- relating to the respiratory system (25.6 per 100 male encounters compared with 23.2 per 100 female encounters)
- associated with the skin (19.0 per 100 male encounters compared with 15.6 for those with females)
- pertaining to the musculoskeletal system (18.2 per 100 male encounters compared with 16.0 per 100 female encounters)
- relating to the circulatory system (17.4 per 100 male encounters compared with 15.5 per 100 female encounters)
- associated with the digestive system (10.7 per 100 male encounters compared with 9.5 per 100 female encounters)

- relating to the ear (5.3 per 100 male encounters compared with 3.9 for those with females).

Male patients had significantly lower relative rates of problems managed across three ICPC-2 chapters compared with female patients. These were problems relating to:

- the neurological system (3.5 per 100 encounters compared with 4.2 per 100 encounters with females)
- the genital system (3.3 per 100 male encounters compared with 10.8 per 100 female encounters)
- the urological system (2.0 per 100 encounters with male patients compared with 3.9 for those with females).

Table 6.2: Problems managed by ICPC-2 chapters, by patient sex (in rank order of male problems managed), univariate and multiple logistic analysis

Problems managed	Univariate analysis										Parsimonious model			
	Male (n = 44,308)					Female (n = 59,366)					Male:Female			
	Rank	Rate per 100 encounters ^(a)	95% LCL	95% UCL	Rank	Rate per 100 encounters ^(a)	95% LCL	95% UCL	Unadjusted OR	Adjusted OR	95% CI	Unadjusted OR	Adjusted OR	95% CI
Respiratory	1	25.6	24.8	26.5	1	23.2	22.5	24.0	1.13	1.13	1.08-1.19	1.13	1.13	1.08-1.19
Skin	2	19.0	18.3	19.6	3	15.6	15.1	16.1	1.26	1.33	1.27-1.40	1.26	1.33	1.27-1.40
Musculoskeletal	3	18.2	17.5	18.8	2	16.0	15.5	16.6	1.17	1.27	1.20-1.33	1.17	1.27	1.20-1.33
Circulatory	4	17.4	16.5	18.3	4	15.5	14.7	16.3	1.12	1.20	1.14-1.26	1.12	1.20	1.14-1.26
General & unspecified	5	14.2	13.6	14.8	5	13.7	13.1	14.2	1.04	1.15	1.10-1.21	1.04	1.15	1.10-1.21
Digestive	6	10.7	10.3	11.1	8	9.5	9.2	9.9	1.13	1.21	1.14-1.28	1.13	1.21	1.14-1.28
Psychological	7	9.8	9.0	10.6	6	11.0	10.5	11.6	0.87	NS	—	0.87	NS	—
Endocrine & metabolic	8	9.7	9.1	10.3	9	8.7	8.3	9.2	1.12	1.19	1.12-1.26	1.12	1.19	1.12-1.26
Ear	9	5.3	5.0	5.6	12	3.9	3.6	4.1	1.38	1.35	1.25-1.46	1.38	1.35	1.25-1.46
Neurological	10	3.5	3.2	3.7	11	4.2	4.0	4.5	0.82	0.89	0.81-0.98	0.82	0.89	0.81-0.98
Genital system	11	3.3	3.0	3.6	7	10.8	10.2	11.4	0.30	0.38	0.35-0.41	0.30	0.38	0.35-0.41
Eye	12	2.9	2.7	3.2	14	2.6	2.4	2.8	1.13	1.15	1.04-1.28	1.13	1.15	1.04-1.28
Urology	13	2.0	1.7	2.2	13	3.9	3.6	4.1	0.49	0.56	0.50-0.63	0.49	0.56	0.50-0.63
Blood	14	1.6	1.1	2.2	15	1.8	1.6	1.9	0.93	NS	—	0.93	NS	—
Social problems	15	0.7	0.0	1.4	16	1.1	0.8	1.4	0.61	0.73	0.60-0.89	0.61	0.73	0.60-0.89
Pregnancy & family planning	—	—	—	—	10	7.5	7.0	8.0	—	—	—	—	—	—
Total problems (n)	63,740	144.0	141.9	145.8	88,433	149.0	147.0	150.9	..	..	..	..	..	..

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

Note: Shading indicates statistically significant differences. LCL—lower confidence limit; UCL—upper confidence limit; OR—odds ratio; CI—confidence interval; NS—not statistically significant. Univariate analysis can examine multiple events per chapter per encounter; odds ratio examines the presence of at least one event per chapter per encounter (see Method, Section 2.2).

6.3 Most frequent problems managed by patient sex

Table 6.3 shows the most frequently managed problems by patient sex in rank order for problems managed at encounters with males. Table 6.3 also presents the parsimonious model. These results are described in Section 6.4.

There were seven significant differences in the relative rates of problems managed, with four problems being more common at encounters with male patients than at encounters with females. Those problems managed significantly more often at encounters with males, than females, were:

- back complaints (3.3 per 100 encounters compared with 2.3 per 100)
- diabetes (3.2 per 100 encounters compared with 2.3 per 100)
- lipid disorders (3.2 per 100 encounters compared with 2.2 per 100)
- general check-up (2.2 per 100 encounters compared with 1.4 per 100).

Those problems managed at a significantly lower relative rate at encounters with male patients were:

- depression (2.6 per 100 encounters) compared with encounters with female patients (4.0)
- genital check-up (0.1 per 100 encounters) compared with female encounters (2.7)
- urinary tract infections (UTI) (0.6 per 100 encounters) compared with female encounters (2.6).

Table 6.3: The ten most frequent problems managed by patient sex, univariate and multiple logistic analysis

Problems managed	Univariate analysis										Parsimonious model			
	Male (n = 44,308)					Female (n = 59,366)					Male:Female			
	Rank	Rate per 100 encounters ^(a)	95% LCL	95% UCL	Rank	Rate per 100 encounters ^(a)	95% LCL	95% UCL	Unadjusted OR	Adjusted OR	95% CI	Unadjusted OR	Adjusted OR	95% CI
Hypertension*	1	8.4	7.9	8.9	1	8.4	7.9	9.0	0.99	0.94	0.89-0.99	0.99	0.94	0.89-0.99
Upper respiratory tract infection	2	7.6	6.9	8.2	2	6.9	6.4	7.4	1.10	NS	—	1.10	NS	—
Immunisation/vaccination (all)*	3	4.9	4.4	5.5	3	4.4	3.9	4.8	1.13	NS	—	1.13	NS	—
Asthma	4	3.5	3.2	3.8	5	3.0	2.8	3.3	1.16	NS	—	1.16	NS	—
Acute bronchitis/ bronchiolitis	5	3.4	3.1	3.8	6	3.0	2.7	3.3	1.15	NS	—	1.15	NS	—
Back complaint*	6	3.3	2.9	3.6	10	2.3	2.1	2.6	1.41	1.44	1.30-1.60	1.41	1.44	1.30-1.60
Diabetes*	7	3.2	2.8	3.6	12	2.3	2.0	2.6	1.40	1.37	1.24-1.52	1.40	1.37	1.24-1.52
Lipid disorder	8	3.2	2.8	3.6	13	2.2	2.0	2.5	1.43	1.41	1.28-1.55	1.43	1.41	1.28-1.55
Depression*	9	2.6	2.3	2.9	4	4.0	3.7	4.3	0.64	0.71	0.65-0.78	0.64	0.71	0.65-0.78
General check-up *	10	2.2	1.8	2.6	24	1.4	1.2	1.7	1.55	1.58	1.40-1.78	1.55	1.58	1.40-1.78
**Genital check-up*	188	0.1	0.0	1.2	7	2.7	2.3	3.1	0.05	0.07	0.05-0.10	0.05	0.07	0.05-0.10
**Urinary tract infection*	51	0.6	0.2	1.0	8	2.6	2.4	2.8	0.23	0.23	0.20-0.27	0.23	0.23	0.20-0.27
**Menopausal symptom	—	—	—	—	9	2.4	2.1	2.7	—	—	—	—	—	—
Subtotal (n, %)	19,049	29.8	..	..	27,165	30.7	..	..	..	..	..	..	..	..
Total problems (n)	63,740	144.0	141.9	145.8	88,433	149.0	147.0	150.9	..	..	..	..	..	..

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

* Includes multiple ICP-2 and ICP-2 PLUS codes (see Appendix 3).

** Indicates a problem managed in the ten most frequently managed problems for female patients, not included in the ten most frequently managed problems for male patients.

Note: Shading indicates statistically significant differences. LCL—lower confidence limit; UCL—upper confidence limit; OR—odds ratio; CI—confidence interval; NS—not statistically significant.

6.4 Multiple logistic regression analyses

Tables 6.2 and 6.3 include the adjusted odds ratios of the problems managed by chapter and the specific problems managed, after adjustment for the significant independent predictors of patient sex. The full model contained variables from three families: morbidity, social factors, and patient and GP demographics (see method, Section 2.2). The parsimonious model found the significant independent predictors to be: patient age; GP age; GP sex; practice location; whether the patient was a concession card holder; status to practice (whether a new or existing patient); and the other listed morbidity (the specific problems listed in Table 6.3 and the ICPC-2 chapters in Table 6.2).

The parsimonious model reports odds ratios, unadjusted and adjusted for other significant predictors of patient sex. These are interpreted as the odds of a male patient having a problem managed where the odds of the event occurring at an encounter with a female are held at one.

In both multivariate analyses (Tables 6.2 and 6.3) no significant differences identified in the univariate analysis were made insignificant or reversed. In both analyses the existing significant differences were replicated and additional significant differences were identified after adjustment.

Four ICPC-2 chapters that were not significant univariately were shown to be significant predictors after adjustment (Table 6.2). These were problems:

- of a general and unspecified nature (adj OR = 1.15)
- associated with the endocrine and metabolic system (adj OR = 1.19)
- related to the eye (adj OR = 1.15)
- of a social nature (adj OR = 0.73).

The problems (classified into ICPC-2 chapters, Table 6.2) that were significantly more likely to be managed at encounters with male patients than at those with female patients, both before and after adjustment, were those associated with the:

- respiratory system (adj OR = 1.13)
- skin (adj OR = 1.33)
- musculoskeletal system (adj OR = 1.27)
- circulatory system (adj OR = 1.20)
- digestive system (adj OR = 1.21)
- ear (adj OR = 1.35).

In both the multivariate and the univariate analyses, encounters with male patients were significantly less likely than those with female patients to have problems managed relating to the:

- neurological system (adj OR = 0.89)
- genital system (adj OR = 0.38)
- urological system (adj OR = 0.56).

In the analysis of specific problems managed (Table 6.3), all the differences identified in the univariate analysis held true after adjustment. However after adjustment a new difference emerged. Male patients were significantly less likely than female patients to have

hypertension managed at their encounters (adj OR = 0.94), although this difference was small.

The problems that were managed at a significantly higher relative rate at encounters with male patients than at those with female patients, both before and after adjustment, were:

- back complaints (adj OR = 1.44)
- diabetes (adj OR = 1.37)
- lipid disorders (adj OR = 1.41)
- general check-up (adj OR = 1.58).

In both the univariate and multivariate analyses, the problems that were managed significantly less often at encounters with male patients than at those with female patients were:

- depression (adj OR = 0.71)
- genital check-up (adj OR = 0.07)
- urinary tract infections (adj OR = 0.23).