

7 Medications

As reported earlier (Table 4.2) encounters with males generated the same overall medication rate (including prescribed medications, advised over-the-counter medications and medications supplied by the GP) as those with female patients.

7.1 Rates of medications prescribed (in groups and subgroups) by patient sex

Table 7.1 demonstrates the prescription of common medication groups and subgroups, by patient sex, in rank order for prescription rates for male patients. Encounters with males generated significantly higher prescription rates than those with females in three groups of medications.

- Male patients had a significantly higher rate of prescription in the cardiovascular medication group (15.4 per 100 encounters) in comparison with their female counterparts (12.5). This trend was maintained throughout most cardiovascular medication subgroups. However, the only significant difference was for 'other cardiovascular medications' (which includes lipid-lowering medications), with prescription rates for encounters with males (3.2 per 100 encounters) higher than for those with females (1.8).
- Respiratory medications (at the group level) were prescribed significantly more often at encounters with male patients (8.2 per 100 encounters) than at those with females (6.9). The medication subgroup 'bronchodilators' reflected this pattern, being prescribed at a significantly higher rate at encounters with males (4.3 per 100 encounters) than at those with females (3.4).
- Medications acting on the musculoskeletal system at the group (6.6 per 100 encounters) and subgroup (5.1 per 100 encounters) level were prescribed significantly more often at encounters with males than at those with females (5.1 and 4.2 respectively).

There were five medication types that were prescribed at significantly lower rates at encounters with males than at those with females.

- Although the antibiotic medication group showed no overall significant difference, the subgroup 'other antibiotics' were prescribed relatively less often at encounters with males (3.1 per 100 encounters) than at those with females (3.7).
- Medications classified as 'anti-emetic/anti-nausea' had a significantly lower prescription rate at encounters with male patients (1.2 per 100 encounters) than at those with female patients (1.9).
- Psychological medications were prescribed significantly less often at encounters with males (6.8 per 100 encounters) than at those with females (8.1). This trend was reflected through most subgroups but was only significant in the 'anti-depressants' subgroup with male patients having a prescription rate of 2.3 per 100 encounters compared with 3.4 for female patients.
- Hormones were prescribed at a significantly lower rate (4.2 per 100 encounters) at encounters with male patients than at those with female patients (7.1).

- Medications in the urogenital group were prescribed significantly less often at encounters with males (1.4 per 100 encounters) than at those with females (2.5).

Table 7.1: Relative prescribing rates of common medication groups and subgroups by patient sex

Medication group	Medication subgroup	Males (n = 44,308)				Females (n = 59,366)			
		Rank	Rate per 100 encs	95% LCL	95% UCL	Rank	Rate per 100 encs	95% LCL	95% UCL
Antibiotics		1	16.5	15.7	17.3	1	16.3	15.9	16.9
	Penicillins		1.7	1.3	2.0		1.4	1.1	1.6
	Broad spectrum penicillins		5.2	4.7	5.6		4.4	4.0	4.8
	Tetracycline		1.2	0.8	1.6		1.1	0.8	1.4
	Cephalosporins		3.9	3.4	4.4		4.2	3.8	4.6
	Other antibiotics		3.1	2.8	3.4		3.7	3.4	4.0
Cardiovascular		2	15.4	14.3	16.4	2	12.5	11.7	13.3
	Anti-hypertensives		7.7	7.1	8.3		6.7	6.2	7.2
	Anti-angina		1.6	1.1	2.0		1.1	0.8	1.5
	Beta-blockers		1.8	1.4	2.2		1.8	1.5	2.1
	Other cardiovascular medications		3.2	2.8	3.6		1.8	1.6	2.1
	CNS		3	12.0	11.3	12.7	3	11.3	10.7
Simple analgesics			5.2	4.7	5.7		4.8	4.3	5.3
Narcotic analgesics			1.7	0.6	2.7		1.1	0.5	1.7
Compound analgesics			3.1	2.8	3.5		2.9	2.6	3.1
Anti-emetic/anti-nausea			1.2	0.8	1.5		1.9	1.7	2.1
Respiratory		4	8.2	7.5	9.0	6	6.9	6.3	7.4
	Bronchodilators		4.3	3.8	4.8		3.4	3.0	3.8
	Asthma preventives		2.8	2.3	3.2		2.4	2.1	2.7
Psychological		5	6.8	6.3	7.3	4	8.1	7.6	8.5
	Sedative hypnotics		1.8	1.4	2.2		2.0	1.8	2.3
	Anti-anxiety		2.1	1.6	2.5		2.1	1.8	2.5
	Anti-depressants		2.3	2.0	2.6		3.4	3.1	3.7
Musculoskeletal		6	6.6	6.2	7.0	7	5.1	4.8	5.3
	NSAID/anti-rheumatoid		5.1	4.7	5.5		4.2	4.0	4.5
Allergy, immune		7	5.6	5.0	6.3	8	4.9	4.4	5.4
	Vaccines		4.8	4.1	5.5		4.0	3.4	4.6
Skin		8	4.8	4.4	5.1	9	4.5	4.2	4.8
	Anti-infection skin		1.1	0.7	1.4		0.9	0.7	1.2
	Topical steroids		2.8	2.6	3.1		2.8	2.6	3.0
Digestive		9	4.6	4.2	4.9	10	4.1	3.8	4.4
	Anti-ulcerants		2.4	2.1	2.7		2.0	1.8	2.3

(continued)

Table 7.1 (continued): Relative prescribing rates of common medication groups and subgroups by patient sex

Medication group	Medication subgroup	Males (n = 44,308)				Females (n = 59,366)			
		Rank	Rate per 100 encs	95% LCL	95% UCL	Rank	Rate per 100 encs	95% LCL	95% UCL
Hormones		10	4.2	3.7	4.7	5	7.1	6.7	7.5
	Sex hormones		0.3	0.0	0.7		3.4	3.1	3.6
	Corticosteroids		1.5	1.1	1.9		1.4	1.1	1.7
	Hypoglycaemics		2.2	1.6	2.8		1.6	1.1	2.0
Ear, nose topical		11	2.7	2.4	3.0	13	2.3	2.1	2.5
	Topical otic		1.1	0.8	1.5		0.8	0.6	1.1
	Topical nose		1.6	1.2	1.9		1.5	1.2	1.7
Eye medications		12	1.8	1.5	2.1	14	1.6	1.4	1.9
	Anti-infectives		1.2	0.9	1.5		1.0	0.7	1.2
Blood		13	1.5	1.1	1.8	15	1.7	1.4	1.9
	Haemopoietic		0.5	0.0	0.9		1.1	0.8	1.4
	Other blood		1.0	0.6	1.3		0.6	0.3	0.9
Urogenital		14	1.4	1.0	1.8	12	2.5	2.2	2.8
	Diuretics		1.3	0.9	1.8		1.6	1.3	2.0
Nutrition/metabolic		15	0.8	0.3	1.2	16	1.4	1.1	1.7
Contraceptives		—	—	—	—	11	3.0	2.8	3.3
	Oral contraception		—	—	—		3.0	2.8	3.3
Total prescribed medications (n)		41,507	93.7	90.9	96.5	55,862	94.1	91.7	96.5

Note: Shading indicates statistically significant differences. Encs—encounters, LCL—lower confidence limit; UCL—upper confidence limit; CNS—central nervous system.

7.2 Most frequently prescribed generic medications by patient sex

‘Generic medications’ refer to the non-proprietary drug name, which reflects the substance in the medication rather than the brand name. While the rank order of the most frequently prescribed generic medications varied slightly between the sexes, there were no significant differences between male and female patients in the relative prescribing rate of each of the 20 most common medications (Table 7.2).

Table 7.2: Most frequently prescribed generic medications by patient sex

Generic medication	Males (n = 44,308)				Females (n = 59,366)			
	Rank	Rate per 100 encs	95% LCL	95% UCL	Rank	Rate per 100 encs	95% LCL	95% UCL
Paracetamol	1	4.1	3.6	4.6	1	4.0	3.6	4.5
Amoxicillin	2	3.4	2.9	3.8	2	2.9	2.6	3.3
Salbutamol	3	2.7	2.3	3.2	6	2.2	1.9	2.4
Paracetamol/Codeine	4	2.7	2.3	3.0	3	2.2	2.0	2.5
Cephalexin	5	1.8	1.4	2.3	4	2.2	1.9	2.5
Amoxicillin/potass.clavulanate	6	1.8	1.4	2.2	10	1.5	1.2	1.8
Cefaclor monohydrate	7	1.7	1.1	2.3	8	1.6	1.2	2.1
Roxithromycin	8	1.7	1.3	2.0	7	1.9	1.6	2.2
Influenza virus vaccine	9	1.6	0.7	2.5	11	1.5	0.7	2.2
Diclofenac sodium systemic	10	1.4	1.0	1.8	12	1.2	0.9	1.4
Temazepam	11	1.3	0.9	1.8	9	1.5	1.3	1.8
Diazepam	12	1.2	0.8	1.7	14	1.0	0.7	1.2
Atenolol	13	1.1	0.7	1.5	13	1.0	0.7	1.3
Ranitidine	14	1.1	0.7	1.4	19	0.9	0.7	1.1
Chloramphenicol eye	15	1.1	0.7	1.4	26	0.8	0.5	1.1
Aspirin	16	1.0	0.6	1.5	30	0.7	0.3	1.1
Simvastatin	17	1.0	0.6	1.5	25	0.8	0.5	1.1
Doxycycline hcl	18	1.0	0.5	1.4	21	0.9	0.6	1.2
Atorvastatin	19	1.0	0.6	1.4	37	0.6	0.3	0.9
**Levonorgesterol/ Ethinyloestradiol	—	—	—	—	5	2.2	2.0	2.4
**Prochlorperazine	46	0.5	0.1	0.9	15	0.9	0.7	1.2
**Budesonide topical nasal	22	0.9	0.5	1.3	16	0.9	0.7	1.2
**Oxamepam	33	0.7	0.2	1.2	17	0.9	0.6	1.3
<i>Subtotal (n, %)</i>	<i>14,783</i>	<i>35.6</i>	<i>..</i>	<i>..</i>	<i>20,425</i>	<i>36.6</i>	<i>..</i>	<i>..</i>
Total prescribed medications (n)	41,507	93.7	90.9	96.5	55,862	94.1	91.7	96.5

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

** Indicates medications that accounted for > 1% of total prescriptions for female patients but did not account for > 1% of total prescriptions for male patients.