

# 7 Medications

As previously shown in Chapter 4 (Table 4.2), medications were prescribed, advised or supplied at an average rate of 131.6 medications per 100 encounters with patients aged 65 years and over. This is far higher than the average for all general practice encounters, of 108.2 per 100 encounters.<sup>75</sup>

This section investigates only medications prescribed by the GP for the management of problems during the encounter. Medications supplied by the GP or advised for purchase (OTC) have been excluded from this analysis. In Table 7.1, medications have been divided into groups and subgroups, rather than generic names. This increases the sample size of each group, and provides more meaningful information, particularly considering the vast numbers and types of medications prescribed to older people.

Medications acting on the cardiovascular system were the most commonly prescribed for patients aged 65 years and over, at an average rate of 31.6 prescriptions per 100 encounters. Antihypertensives were the most common of these (17.0 per 100 encounters), reflecting the high management rate of hypertension at encounters with these older patients.

Within the cardiovascular group, other cardiovascular system medications (which include lipid-lowering medications) were prescribed significantly more often for patients aged between 65 and 74 years (6.7 per 100 encounters) than for patients aged 75 years and over (3.9 per 100).

Medications acting on the central nervous system were the second most often prescribed to patients of 65 years and over. They were given significantly more often at encounters with patients of 75+ years (14.5 per 100 encounters) than to those aged 65–74 years (12.5 per 100). This was largely due to the higher prescription rate for simple analgesics (7.5 per 100 encounters compared with 5.9 per 100 encounters).

Antibiotics were the third group of medications most frequently prescribed, at a rate of 10.1 per 100 encounters, and there was no difference in the prescription rate for patients in the two age groups.

Hormones were prescribed at a significantly higher rate at encounters with patients aged 65–74 years (10.4 per 100 encounters) than at those with patients aged 75 years or more (6.9 per 100 encounters), and this difference was reflected in the prescribing rate of hypoglycaemic agents (5.1 per 100 encounters with 65–74 year olds and 3.1 per 100 for those aged 75+). This reflects the higher rate of diabetes managed in the younger age group (see Table 6.2).

Musculoskeletal medications were prescribed significantly more often at encounters with patients of 65–74 years (9.4 per 100 encounters) than at encounters with older patients (7.5 per 100 encounters). This result was reflected specifically in prescription rates of non-steroidal anti-inflammatory drugs (NSAIDs), which were prescribed to patients aged 65 to 74 years at a rate of 7.7 per 100 encounters, compared with 5.9 per 100 encounters with patients aged 75 years and over.

Medications acting on the urogenital system were prescribed significantly more often to patients aged 75 years and over (5.8 per 100 encounters compared with 3.9 per 100 encounters), particularly diuretics (5.0 per 100 encounters compared with 3.1 per 100 encounters for those aged of 65–74 years) (Table 7.1).

**Table 7.1: Relative prescribing rates of common medication groups and subgroups**

Medication group	Medication subgroup	65–74 (n = 24,003)			75+ (n = 25,644)			Total 65+ (n = 49,647)		
		Rate per 100 encounters	95% LCL	95% UCL	Rate per 100 encounters	95% LCL	95% UCL	Rate per 100 encounters	95% LCL	95% UCL
<b>Cardiovascular</b>		32.8	31.5	34.2	30.4	28.9	32.0	31.6	30.4	32.8
	Antihypertensive	17.6	16.8	18.5	16.5	15.5	17.5	17.0	16.3	17.8
	Other cardiovascular medications	6.7	6.2	7.3	3.9	3.3	4.4	5.3	4.9	5.6
	Beta-blockers	4.1	3.5	4.7	3.7	3.2	4.3	3.9	3.6	4.3
	Anti-angina	2.7	2.0	3.4	3.8	3.2	4.4	3.2	2.9	3.6
<b>Central nervous system</b>		12.5	11.8	13.2	14.5	13.8	15.3	13.5	13.0	14.1
	Simple analgesic	5.9	5.2	6.5	7.5	6.9	8.1	6.7	6.3	7.1
	Compound analgesic	2.6	2.0	3.3	2.3	1.9	2.8	2.5	2.2	2.8
	Narcotic analgesic	1.6	0.5	2.6	1.9	1.2	2.6	1.7	1.3	2.1
	Anti-emetic/antinauseant	1.4	0.5	2.3	1.6	1.0	2.2	1.5	1.2	1.8
<b>Antibiotics</b>		10.4	9.8	10.9	9.7	9.2	10.3	10.1	9.7	10.4
	Penicillins/cephalosporins	3.1	2.4	3.7	3.3	2.8	3.8	3.2	2.9	3.5
	Other antibiotics	3.0	2.3	3.6	2.8	2.3	3.3	2.9	2.6	3.2
	Broad-spectrum penicillins	2.5	1.8	3.1	2.2	1.6	2.8	2.3	2.0	2.6
<b>Psychological</b>		8.8	8.2	9.4	9.9	9.3	10.6	9.4	9.0	9.8
	Sedatives/hypnotics	2.9	2.2	3.5	4.0	3.4	4.5	3.4	3.1	3.7
	Antidepressant	3.0	2.4	3.6	2.5	2.0	3.1	2.7	2.4	3.0
	Anti-anxiety	2.5	1.8	3.1	2.7	2.2	3.2	2.6	2.3	2.9
<b>Hormones</b>		10.4	9.6	11.2	6.9	6.2	7.6	8.6	8.1	9.1
	Hypoglycaemics	5.1	4.0	6.1	3.1	2.3	3.9	4.1	3.6	4.6
	Corticosteroids	2.1	1.3	2.8	2.0	1.4	2.6	2.0	1.7	2.3
	Sex hormones	2.3	1.4	3.1	0.8	0.0	1.7	1.5	1.1	1.9

*(continued)*

**Table 7.1 (continued): Relative prescribing rates of common medication groups and subgroups**

Medication group	Medication subgroup	65–74 (n = 24,003)			75+ (n = 25,647)			Total 65+ (n = 49,647)		
		Rate per 100 encounters	95% LCL	95% UCL	Rate per 100 encounters	95% LCL	95% UCL	Rate per 100 encounters	95% LCL	95% UCL
<b>Musculoskeletal</b>		9.4	8.8	9.9	7.5	7.0	8.1	8.4	8.0	8.8
	NSAID	7.7	7.2	8.2	5.9	5.4	6.4	6.7	6.4	7.1
<b>Respiratory</b>		7.0	6.0	8.1	5.6	4.7	6.5	6.3	5.8	6.9
	Bronchodilator	3.6	2.7	4.4	2.8	2.1	3.6	3.2	2.8	3.6
	Asthma preventives	2.8	2.0	3.7	2.2	1.4	2.9	2.5	2.1	2.9
<b>Digestive</b>		5.9	5.4	6.5	6.0	5.5	6.5	6.0	5.6	6.3
	Anti-ulcerants	4.1	3.5	4.6	3.5	3.0	4.0	3.8	3.5	4.0
<b>Urogenital</b>		3.9	3.3	4.6	5.8	5.2	6.3	4.9	4.5	5.3
	Diuretic	3.1	2.4	3.8	5.0	4.4	5.6	4.1	3.7	4.4
<b>Blood</b>		3.9	3.2	4.6	5.1	4.5	5.6	4.5	4.1	4.9
	Other blood drug	2.5	1.6	3.4	3.0	2.3	3.6	2.7	2.3	3.1
	Haemopoietic	1.4	0.6	2.3	2.1	1.4	2.8	1.8	1.4	2.1
<b>Allergy, immune system</b>		4.7	3.2	6.2	3.8	2.2	5.4	4.3	3.2	5.3
	Immunisation	4.3	2.5	6.1	3.4	1.4	5.3	3.8	2.5	5.1
<b>Skin</b>		3.8	3.1	4.4	4.2	3.7	4.7	4.0	3.7	4.3
	Topical steroid	2.7	2.0	3.3	2.8	2.4	3.3	2.7	2.5	3.0
<b>Nutrition/metabolic</b>		2.4	1.6	3.1	3.1	2.5	3.8	2.8	2.4	3.1
<b>Ear/nose topical</b>		1.6	0.9	2.3	1.4	0.9	2.0	1.5	1.3	1.8

Note: Shading indicates statistically significant differences between age groups. LCL—lower confidence limit; UCL—upper confidence limit; NSAID—non-steroidal anti-inflammatory drug.