# 8. Management

The BEACH survey form allowed GPs to record several aspects of patient management initiated at each encounter. Pharmaceutical management was recorded in detail and linked to a patient problem. Other modalities such as counselling, procedures and other treatments were recorded briefly in the doctor's own words and were also related to a single problem. Referrals and hospital admissions were similarly related to a single problem. Provision was made on the form for pathology and imaging orders to be related to multiple problems.

## 8.1 Overview of management

A total of 189,735 management activities were undertaken by GPs at a rate of 196 per 100 encounters and 135 per 100 problems. The most common management activity was medication prescribed, advised or supplied, at a rate of 109.7 per 100 encounters or 75.5 per 100 problems. Other treatments took place at the rate of 43.2 per 100 encounters, referrals at a rate of 11.2, pathology orders at a rate of 24.6 and imaging at a rate of 7.1 per 100 encounters (Table 8.1).

Management type	Number	Rate per 100 encs	95% LCI	95% UCI	Rate per 100 problems	95% LCI	95% UCI
Medications	106,320	109.7	107.4	112	75.5	74.1	76.9
Prescribed	90,710	93.6	91.2	96.1	64.4	62.9	65.9
Advised OTC	8,538	8.8	8	9.6	6.1	5.5	6.6
GP supplied	7,072	7.3	6.3	8.3	5.0	4.3	5.7
Other treatments	41,839	43.2	41.3	45	29.7	28.5	30.9
Clinical	30,380	31.4	29.7	33	21.6	20.5	22.7
Procedural	11,458	11.8	11.2	12.5	8.1	7.7	8.6
Referrals	10,860	11.2	10.8	11.6	7.71	7.4	8.0
Specialist	7,146	7.4	7.1	7.7	5.1	4.9	5.3
Allied health	2,935	3.0	2.8	3.2	2.1	2.0	2.2
Hospital	717	0.7	0.6	0.9	0.5	0.4	0.6
Emergency Dept	60	0.1	0.0	0.6	0.0	0.0	0.4
Pathology	23,872	24.6	17.0	19.3	12.8	12.0	13.5
Imaging	6,844	7.1	4.8	5.6	3.7	3.4	3.9

### Table 8.1: Summary of management

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

Another perspective emerges in analysis of the number of encounters or problems managed for which at least one form of management was initiated by the GP. For example, at least one medication was given at more than two-thirds of encounters and for 59.1% of problems. At least one non-pharmacological treatment was given at 34.5% of encounters and for 26.8% of problems. A referral was made in 10,258 encounters (10.6%) and for 7.6% of problems. At least one investigation was ordered at 18.1% of encounters and for 14.2% of problems. These were most commonly pathology orders, which occurred at 13.2% of encounters (10.0% of problems). Imaging orders occurred less frequently at 6.3% of encounters and for 4.5% of problems (Table 8.2).

Treatment type	Number of encounters	% total encs <sup>(a)</sup> (N=96,901)	Number of problems	% total probs <sup>(a)</sup> (N= 140,824)	
At least one treatment type	81,025	83.6	106,812	75.8 59.1	
At least one medication	66,610	68.7	83,282		
At least one prescription	58,136	60.0	72,204	51.3	
At least one OTC advised	7,623	7.9	7,779	5.5	
At least one GP supplied	5,415	5.6	5,684	4.0	
At least one non-pharmacological treatment	33,411	34.5	37,692	26.8	
At least one clinical treatment	24,758	25.5	27,832	19.8	
At least one therapeutic procedure	10,506	10.8	10,805	7.7	
At least one referral	10,258	10.6	10,640	7.6	
At least one referral to a specialist	6,860	7.1	7,084	5.0	
At least one referral to allied health	2,850	2.9	2,866	2.0	
At least one referral to hospital	708	0.7	717	0.5	
At least one referral to emergency dept	60	0.1	60	0.0	
At least one investigation	17,532	18.1	19,387	14.2	
At least one pathology order	12,831	13.2	14,131	10.0	
At least one imaging order	6,123	6.3	6,317	4.5	

#### Table 8.2: Encounters and problems in which treatments occurred

(a) Column per cent will not total 100% as multiple events may occur in one encounter or in the management of one problem at encounter.

# 8.2 Patterns of pharmacological and nonpharmacological treatment

The common combinations of treatments (pharmacological and non-pharmacological treatment) are illustrated in Table 8.3. Most commonly only a script was given; however, this was combined with a clinical treatment (frequently advice regarding treatment) at 11.2% of encounters and for 6.2% of problems. Other multiple combinations occurred at lower frequencies. No treatment was recorded at 16.4% of encounters and for 24.1% of problems.

Treatment type				% of total	% of total		
1+ Script	1+ OTC	1+ Supplied	1+ Clinical	1+ Procedure	encounters (N=96,901)	problems (N=140,824)	
1					40.2	41.7	
					16.4	24.1	
1			1		11.2	6.2	
			✓		9.2	11.3	
				1	4.9	5.2	
1				1	3.2	1.4	
	✓				2.9	3.0	
		1			2.7	3.0	
1	1				2.0	1.0	
	1		1		1.3	0.9	
✓		1			1.1	0.3	
Total				95.1	98.1		

### Table 8.3: Most frequent treatment combinations