

9 Referrals, tests and investigations

9.1 Referrals

In BEACH, only new referrals are recorded. Renewals of referrals are not included. As shown in Chapter 4 (Table 4.2), 5,705 referrals to specialists, allied health professionals, hospitals or emergency departments were given to patients aged 65 years and over at a rate of 12.1 referrals per 100 encounters. Patients of 65–74 years were more often referred to specialists (8.6 per 100 encounters) than those of 75 years and over (7.6 per 100 encounters).

Ophthalmologists were the specialists to whom older people were most often referred, at a rate of 1.3 per 100 encounters. This was constant across both the younger and older age groups. Twice as many referrals to hospital were given for patients aged 75 years and over (0.8 per 100 encounters) than for those of 65–74 years (0.4 per 100 encounters) but this difference failed to reach statistical significance, possibly due to the small sample size (Table 9.1).

Physiotherapists were the only allied health professionals represented in the top 10 referrals for encounters with patients aged 65 years or more, at a rate of 0.9 referrals per 100 encounters. They ranked second in the professionals to whom referrals were given.

Table 9.1: Most common referrals

Professional to whom referred	65–74 (n = 24,003)			75+ (n = 25,644)			Total 65+ (n = 49,647)		
	Rate per 100 encs	95% LCL	95% UCL	Rate per 100 encs	95% LCL	95% UCL	Rate per 100 encs	95% LCL	95% UCL
Specialists	8.6	8.1	9.2	7.6	7.0	8.1	8.1	7.7	8.4
Ophthalmologist	1.3	0.4	2.1	1.3	0.7	1.8	1.3	1.0	1.6
Surgeon	0.9	0.0	1.8	0.8	0.0	1.6	0.8	0.5	1.2
Cardiologist	0.9	0.0	1.7	0.8	0.1	1.5	0.8	0.5	1.2
Orthopaedic surgeon	0.8	0.0	1.7	0.6	0.0	1.4	0.7	0.3	1.0
Dermatologist	0.6	0.0	1.8	0.6	0.0	1.5	0.6	0.2	1.0
Urologist	0.6	0.0	1.6	0.4	0.0	1.5	0.5	0.1	0.9
ENT	0.5	0.0	1.8	0.4	0.0	1.3	0.4	0.0	0.8
Gastroenterologist	0.5	0.0	1.8	0.4	0.0	1.6	0.4	0.0	0.9
Allied health	2.5	1.8	3.2	2.8	2.2	3.4	2.7	2.3	3.0
Physiotherapist	0.8	0.0	2.0	0.9	0.1	1.7	0.9	0.4	1.3
Hospital	0.4	0.0	1.9	0.8	0.0	1.7	0.6	0.2	1.1
Total referrals	2,966	—	—	3,054	—	—	6,020	—	—

Note: Encs—encounters; LCL—lower confidence limit; UCL—upper confidence limit; ENT—ear, nose and throat.

9.2 Pathology test orders

In GP encounters with patients aged 65 years and over, an average of 33.5 pathology tests were ordered per 100 encounters (Table 4.2), full blood counts being the most common (4.7 orders per 100 encounters) (Table 9.2).

No statistically significant differences emerged when specific pathology order rates were compared for encounters with patients of 65–74 years and 75 years and over. This may be due to the small size of the sample. However, it is interesting to note that pathology tests for lipids, liver function tests and glucose tests were recorded at somewhat higher rates at encounters with patients aged between 65 and 74 years (Table 9.2). This may reflect the higher management rates of diabetes and lipid disorders in the younger age group.

Table 9.2: Most common pathology test orders

Pathology test type	65–74 (<i>n</i> = 24,003)			75+ (<i>n</i> = 25,644)			Total 65+ (<i>n</i> = 49,647)		
	Rate per 100 encs	95% LCL	95% UCL	Rate per 100 encs	95% LCL	95% UCL	Rate per 100 encs	95% LCL	95% UCL
Full blood count	4.7	4.1	5.4	4.7	4.1	5.3	4.7	4.4	5.1
Lipids	3.2	2.4	4.0	1.7	0.8	2.5	2.4	1.9	2.8
Liver function	2.6	1.8	3.4	1.9	1.1	2.7	2.3	1.8	2.7
EUC	1.9	0.7	3.2	2.0	0.9	3.0	2.0	1.3	2.7
Urine MC&S	1.6	0.8	2.4	2.0	1.4	2.6	1.8	1.5	2.1
INR	1.7	0.7	2.7	1.7	1.0	2.5	1.7	1.3	2.2
Glucose	2.1	1.2	3.1	1.2	0.3	2.0	1.6	1.1	2.1
HbA1c	1.4	0.5	2.3	1.0	0.3	1.7	1.2	0.9	1.6
ESR	1.3	0.2	2.3	1.2	0.3	2.1	1.2	0.8	1.7
U&E	1.1	0.0	2.6	1.1	0.0	2.6	1.1	0.2	1.9
<i>Subtotal (n, %)</i>	<i>9,925</i>	<i>59.7</i>	—	<i>5,196</i>	<i>58.6</i>	—	<i>4,729</i>	<i>60.9</i>	—
Total pathology tests (<i>n</i>, %)	8,868	100.0	—	7,766	100.0	—	16,634	100.0	—

Note: Encs—encounters; LCL—lower confidence limit; UCL—upper confidence limit; EUC—electrolytes, urea and creatinine; MC&S—microscopy culture & sensitivity; INR—international normalised ratio; HbA1c glycosated haemoglobin; ESR—erythrocyte sedimentation rate; U&E—urea and electrolytes.

9.3 Imaging orders

Chest x-rays were by far the most common imaging test ordered, at a rate of 1.4 orders per 100 encounters with patients aged 65 years and over. These were followed by knee x-rays and hip x-rays, both ordered at a rate of 0.4 per 100 encounters.

No significant differences in imaging order rates were found between the two age groups. Mammography tended to be ordered at somewhat higher rates for patients of 65–74 years (0.4 per 100 encounters) than for those of 75+ years (0.2 per 100 encounters) (Table 9.3).

Table 9.3: Most common imaging orders

Imaging test ordered	65–74 (n = 24,003)			75+ (n = 25,644)			Total 65+ (n = 49,647)		
	Rate per 100 encs	95% LCL	95% UCL	Rate per 100 encs	95% LCL	95% UCL	Rate per 100 encs	95% LCL	95% UCL
X-ray; chest	1.4	0.4	2.3	1.3	0.6	2.0	1.4	1.0	1.7
X-ray; knee	0.5	0.0	1.8	0.4	0.0	1.4	0.4	0.0	0.9
X-ray; hip	0.4	0.0	1.6	0.4	0.0	1.4	0.4	0.0	0.8
Electrocardiogram	0.3	0.0	2.4	0.3	0.0	2.2	0.3	0.0	1.1
Mammography; female	0.4	0.0	2.1	0.2	0.0	1.9	0.3	0.0	1.0
Ultrasound; abdomen	0.3	0.0	2.0	0.2	0.0	1.5	0.2	0.0	0.8
Densitometry test	0.3	0.0	2.0	0.1	0.0	2.1	0.2	0.0	1.0
X-ray; shoulder	0.2	0.0	2.1	0.2	0.0	1.7	0.2	0.0	0.8
X-ray; spine; lumbosacral	0.2	0.0	1.8	0.2	0.0	1.6	0.2	0.0	0.8
Ultrasound; shoulder	0.3	0.0	2.0	0.2	0.0	1.4	0.2	0.0	0.8
<i>Subtotal (n, %)</i>	<i>1,013</i>	<i>46.0</i>	—	<i>896</i>	<i>49.7</i>	—	<i>1,894</i>	<i>47.3</i>	—
Total imaging tests (n, %)	2,202	100.0	—	1,804	100.0	—	4,006	100.0	—

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