

11 Referrals and admissions

A referral is defined as the process by which the responsibility for part or all of the care of a patient is temporarily transferred to another health care provider. Only new referrals arising at the encounter were included (i.e. continuations were not recorded). For each problem managed, GPs could record up to two referrals. These included referrals to specialists, to allied health professionals, to hospitals for admission or to the emergency department. Referrals to hospital outpatient clinics were classified as specialist referrals.

11.1 Number of referrals and admissions

The patient was given at least one referral at 10.0% of all encounters for 7.0% of all problems managed. More than one referral could be recorded at an encounter. As a result, there were 10,167 referrals made at a rate of 10.5 per 100 encounters. The most frequent were referrals to a medical specialist (7.3 per 100 encounters), followed by referrals to allied health services (2.3). Very few patients were referred to hospital for admission (0.4 per 100 encounters) or to the hospital emergency department (0.1 per 100). Referrals to a specialist were given more often (5.1 per 100 problems managed) than to an allied health professional (1.6) (Table 11.1).

Table 11.1: Summary of referrals and admissions

	Number	Rate per 100 encounters (<i>n</i> =96,973)	95% LCL	95% UCL	Rate per 100 problems (<i>n</i> =139,092)	95% LCL	95% UCL
At least one referral	9,681	10.0	9.6	10.4	7.0	6.7	7.2
Referrals	10,167	10.5	10.1	10.9	7.3	7.0	7.6
Specialist	7,096	7.3	7.0	7.6	5.1	4.9	5.3
Allied health service	2,206	2.3	2.1	2.5	1.6	1.5	1.7
Hospital	423	0.4	0.3	0.6	0.3	0.2	0.4
Emergency department	123	0.1	0.0	0.4	0.1	0.0	0.3
Other referrals	319	0.3	0.0	0.6	0.2	0.0	0.4

Note: LCL—lower confidence limit, UCL—upper confidence limit.

11.2 Most frequent referrals

Of the 10,167 referrals, 91.5% (*n*=9,302) were referrals to specialists or allied health services. The top ten provider types in each category accounted for 71.3% of all referrals to medical specialists and 82.9% of those to allied health services (Table 11.2).

The most frequent referrals made to specialist medical practitioners were to surgeons (10.6% of all referrals to medical specialists), ophthalmologists (10.2%), orthopaedic surgeons (9.8%) and dermatologists (8.3%).

Forty per cent of referrals to allied health services were to physiotherapists and these accounted for 9.5% of all referrals. These were followed by referrals to dieticians (7.5% of all referrals to allied health professionals), podiatrists and chiropodists (7.5%), dentists (7.2%) and psychologists (6.9%) (Table 11.2).

Table 11.2: The most frequent referrals to specialists and allied health professionals

Professional to whom patient referred	Number	Per cent of all referrals	Per cent of referral group	Rate per 100 encounters (n=96,973)	95% LCL	95% UCL
Medical specialist	7,096	76.3	100.0	7.3	7.0	7.6
Referral; surgeon	750	8.1	10.6	0.8	0.6	0.9
Referral; ophthalmologist	724	7.8	10.2	0.8	0.6	0.9
Referral; orthopaedic surgeon	698	7.5	9.8	0.7	0.6	0.8
Referral; dermatologist	591	6.4	8.3	0.6	0.5	0.7
Referral; ENT	508	5.5	7.2	0.5	0.4	0.7
Referral; gynaecologist	503	5.4	7.1	0.5	0.4	0.7
Referral; cardiologist	426	4.6	6.0	0.4	0.3	0.6
Referral; gastroenterologist	390	4.2	5.5	0.4	0.2	0.6
Referral; urologist	236	2.5	3.3	0.2	0.1	0.4
Referral; psychiatrist	234	2.5	3.3	0.2	0.1	0.4
<i>Subtotal: top ten specialist referrals</i>	<i>5,060</i>	<i>54.4</i>	<i>71.3</i>	<i>..</i>	<i>..</i>	<i>..</i>
Allied health and other professionals	2,206	23.7	100.0	2.3	2.1	2.5
Referral; physiotherapy	886	9.5	40.1	0.9	0.7	1.1
Referral; dietician/nutrition	166	1.8	7.5	0.2	0.0	0.4
Referral; podiatrist/chiropracist	165	1.8	7.5	0.2	0.0	0.4
Referral; dentist	159	1.7	7.2	0.2	0.0	0.5
Referral; psychologist	153	1.6	6.9	0.2	0.0	0.4
Referral; acoustic testing	87	0.9	3.9	0.1	0.0	0.3
Referral; diabetes education	61	0.7	2.8	0.1	0.0	0.4
Referral; counsellor	60	0.7	2.7	0.1	0.0	0.5
Referral; optometrist	46	0.5	2.1	0.1	0.0	0.4
Referral; chiropractor	45	0.5	2.1	0.1	0.0	0.5
<i>Subtotal: top ten allied health referrals</i>	<i>1,829</i>	<i>19.7</i>	<i>82.9</i>	<i>..</i>	<i>..</i>	<i>..</i>
Total specialist & allied health referrals	9,302	100.0	..	9.6	9.2	10.0

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

11.3 Problems that were referred

A referral to a specialist was provided for a total of 7,241 problems managed. The ten problems most commonly associated with a referral to a specialist accounted for 18.7% of all problems referred to a specialist. The problems most often referred were diabetes (accounting for 2.7% of problems referred to a specialist), malignant neoplasms of the skin (2.4%), and pregnancy (2.4%) (Table 11.3).

Table 11.3: The ten problems most frequently referred to a medical specialist

Problem managed	Number	Per cent of problems referred	Rate per 100 encounters (n=96,973)	95% LCL	95% UCL
Diabetes*	197	2.7	0.2	0.0	0.4
Malignant skin neoplasm	173	2.4	0.2	0.0	0.4
Pregnancy*	171	2.4	0.2	0.0	0.4
Depression*	143	2.0	0.2	0.0	0.4
Osteoarthritis*	130	1.8	0.1	0.0	0.3
Ischaemic heart disease*	127	1.8	0.1	0.0	0.4
Back complaint*	120	1.7	0.1	0.0	0.4
Hypertension*	110	1.5	0.1	0.0	0.4
Menstrual problems*	93	1.3	0.1	0.0	0.4
Cataract	87	1.2	0.1	0.0	0.4
<i>Subtotal: top ten problems referred to a specialist</i>	<i>1,353</i>	<i>18.7</i>	<i>..</i>	<i>..</i>	<i>..</i>
Total problems referred to specialist	7,241	100.0	7.5	7.1	7.8

* Includes multiple ICPC-2 or ICPC-2 PLUS codes (see Appendix 3).

Note: LCL—lower confidence limit, UCL—upper confidence limit.

Referrals to allied health services were fewer in number ($n=2,206$), possibly because formal referrals to such services are not always required. There were 2,257 problems referred to an allied health professional or service. Table 11.4 shows the ten most common of these. They accounted for 42.2% of all problems referred to allied health services.

Sprains and strains were the problem type most frequently referred to allied health services (8.6% of problems referred), followed by back complaint (8.1%). These problems are those that would be likely to be referred to physiotherapists. Diabetes (5.6%), teeth/gum disease (4.7%) and depression (4.6%) also featured in the top ten problems referred to allied health services. Note that diabetes, depression and back complaints were referred relatively frequently to both allied health professionals and to medical specialists.

There were 423 referrals for hospital admission. The ten most commonly associated problems associated with hospital admission referral are shown in Table 11.5. While the numbers involved are very small it is interesting to note the types of problems for which hospital admission was sought. These included pregnancy (4.6% of problems referred for admission), fracture (4.0%) and appendicitis (3.7%). Cardiovascular problems such as ischaemic heart disease, stroke and heart failure were also referred to hospital relatively frequently.

Table 11.4: The ten problems most frequently referred to allied health services

Problem managed	Number	Per cent of problems referred	Rate per 100 encounters (n=96,973)	95% LCL	95% UCL
Sprain/strain*	193	8.6	0.2	0.0	0.5
Back complaint*	182	8.1	0.2	0.0	0.4
Diabetes*	126	5.6	0.1	0.0	0.4
Teeth/gum disease	107	4.7	0.1	0.0	0.5
Depression*	103	4.6	0.1	0.0	0.3
Osteoarthritis*	58	2.6	0.1	0.0	0.4
Skin injury, other	48	2.1	0.1	0.0	0.4
Bursitis/tendonitis/synovitis NOS	48	2.1	0.1	0.0	0.4
Anxiety*	44	2.0	0.1	0.0	0.5
Obesity (BMI>30)	43	1.9	0.0	0.0	0.4
<i>Subtotal: top ten problems referred to AHS</i>	<i>952</i>	<i>42.2</i>	<i>..</i>	<i>..</i>	<i>..</i>
Total problems referred to AHS	2,257	100.0	2.3	2.1	2.5

* Includes multiple ICPC-2 or ICPC-2 PLUS codes (see Appendix 3).

Note: LCL—lower confidence limit, UCL—upper confidence limit, NOS—not otherwise specified, AHS—allied health service.

Table 11.5: The ten problems most frequently referred to hospital

Problem managed	Number	Per cent of problems referred	Rate per 100 encounters (n=96,973)	95% LCL	95% UCL
Pregnancy*	20	4.6	0.02	0.0	0.6
Fracture*	18	4.0	0.02	0.0	0.5
Appendicitis	16	3.7	0.02	0.0	0.6
Ischaemic heart disease*	15	3.4	0.02	0.0	0.6
Acute bronchitis/bronchiolitis	11	2.6	0.01	0.0	0.7
Stroke/cerebrovascular accident	11	2.5	0.01	0.0	0.7
Pneumonia	9	2.0	0.01	0.0	0.8
Pre/post natal check-up*	9	2.0	0.01	0.0	1.1
Abdominal pain*	9	2.0	0.01	0.0	0.8
Heart failure	9	1.9	0.01	0.0	0.8
<i>Subtotal: top ten problems referred for admission</i>	<i>127</i>	<i>28.8</i>	<i>..</i>	<i>..</i>	<i>..</i>
Total problems referred to hospital	441	100.0	0.45	0.3	0.6

* Includes multiple ICPC-2 or ICPC-2 PLUS codes (see Appendix 3).

Note: LCL—lower confidence limit, UCL—upper confidence limit.