

10. Non-pharmacological management

For each problem managed, GPs could record up to two non-pharmacological treatments provided. These were divided into two categories: clinical treatments, the majority of which were advice and counselling; and procedural treatments, which encompassed all procedures normally carried out by general practitioners (e.g. removal of sutures, application/removal of plaster). Observations of the patient such as ‘blood pressure’ measurements, regarded as routine clinical measurements were not included.

At least one non-pharmacological treatment was provided at one-quarter of all encounters. Overall 41,839 non-pharmacological treatments were recorded, a rate of 43 per 100 encounters, and 30 per 100 problems managed. In terms of problem management, at least one non-pharmacological treatment was provided for 20 in every 100 problems managed. Clinical treatments (22 per 100 problems) were more common than procedural treatments (8 per 100 problems) (Table 10.1).

Table 10.1: Non-pharmacological treatments – summary table

	Number	Rate per 100 encs ^(a)	95% LCI	95% UCI	Rate per 100 problems ^(b)	95% LCI	95% UCI
At least one non-pharmacological treatment	33,411	25.4	24.0	26.7	20.1	19.0	21.2
Non-pharmacological treatments	41,839	43.2	41.3	45.0	29.7	28.5	30.9
Clinical treatments	30,380	31.4	29.7	33.0	21.6	20.5	22.7
Procedural treatments	11,458	11.8	11.2	12.5	8.1	7.7	8.6

(a) Figures do not total 100% as more than one treatment can be described at each encounter.

(b) Figures do not total 100% as more than one treatment can be described for each problem.

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

10.1 Clinical treatments

10.1.1 Number of clinical treatments at encounter

There were 30,380 clinical treatments provided, at a rate of 31.4 per 100 encounters (Table 10.1). At three-quarters of consultations (74.5%), and for the vast majority of problems (80.2%), the GP recorded no clinical treatments. At 20.6% of encounters one clinical treatment was provided, while relatively few had two or more (Table 10.2).

Table 10.2: Number of clinical treatments provided

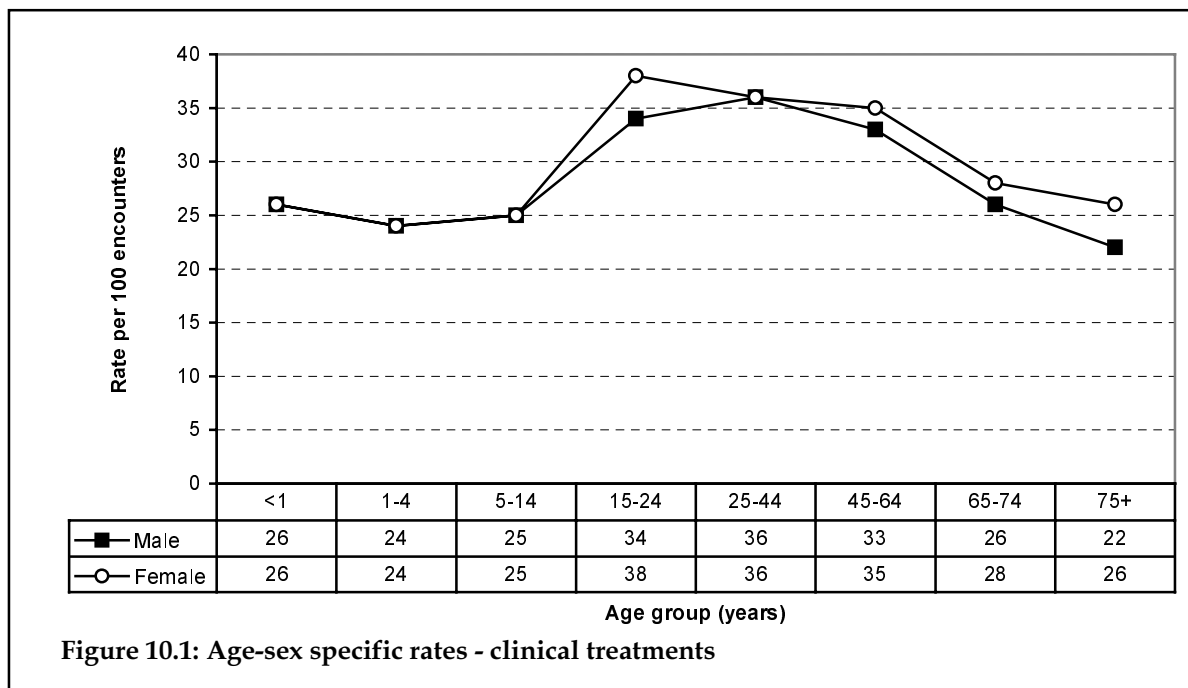
Number of clinical treatments	Number of encounters	% of encounters	Number of problems	% of problems
Nil	72,143	74.5	112,991	80.2
One	19,973	20.6	25,285	18.0
Two	4,074	4.2	2,548	1.8
Three	589	0.6	—	—
Four or more	121	0.1	—	—
Total*	96,900	100.0	140,824	100.0

* Totals may not equal N due to rounding of weighted encounters.

10.1.2 Age–sex specific rates of clinical treatments

There were few differences between males and females in the age–sex specific rates of treatments provided. This is interesting as these treatments include much of the psychosocial counselling provided by GPs, and some might have expected that these would be provided relatively more often to females than to males.

Rates of counselling and advice were understandably lower in childhood (ranging between 24 and 26 per 100 encounters), and peaked for females in young adulthood, declining gradually through the older age groups (Figure 10.1).



10.1.3 Most frequent clinical treatments

The most frequent clinical treatments were advice or education about self-management of the problem (e.g. take fluids and rest) which accounted for 14.4% of all non-pharmacological treatments and occurred at a rate of 6.2 per 100 encounters. Advice about weight or nutrition (including advice about diet and weight management) was provided at a rate of 3.8 per 100 encounters. GPs also provided a range of counselling and advice about other aspects of health such as drug and alcohol use, smoking, exercise, life-style and relationship issues, although these were relatively infrequent (Table 10.3).

General or unspecified advice or education was given at a rate of 3.5 per 100 encounters. Counselling about the problem being managed (2.9 per 100 encounters) and counselling of a psychological nature (2.5 per 100 encounters) also occurred frequently. The role of the GP in dealing with the psychosocial aspects of the patient's health are quantified to some extent by these figures.

Table 10.3: Most frequent clinical treatments

Treatment*	Number	% of non-pharmacological treatments	Rate per 100 encs ^(a) (N=96,901)	95% LCI	95% UCI
Advice/education—treatment	6,006	14.4	6.2	5.5	6.8
Counsel/advice—nutrition/weight	3,636	8.7	3.8	3.4	4.1
Advice/education	3,394	8.1	3.5	2.7	4.3
Counselling—problem	2,832	6.8	2.9	2.4	3.5
Counselling—psychological	2,409	5.8	2.5	2.2	2.8
Advice/education—medication	2,321	5.6	2.4	2.1	2.7
Reassurance, support	1,588	3.8	1.6	1.3	2.0
Counsel/advice—exercise	1,318	3.2	1.4	0.9	1.8
Observe/wait	991	2.4	1.0	0.5	1.5
Other admin/document	849	2.0	0.9	0.7	1.1
Counsel/advice—health/body	792	1.9	0.8	0.3	1.4
Sickness certificate	708	1.7	0.7	0.3	1.1
Counsel/advice—smoking	603	1.4	0.6	0.4	0.8
Counsel/advice—relationship	389	0.9	0.4	0.2	0.6
Counsel/advice—prevention	376	0.9	0.4	0.1	0.7
Counsel/advice—relaxation	351	0.8	0.4	0.1	0.6
Counsel/advice—alcohol	341	0.8	0.4	0.1	0.6
Counsel/advice—life-style	295	0.7	0.3	0.0	0.8
Family planning	282	0.7	0.3	0.0	0.6
Counsel/advice—other	174	0.4	0.2	0.0	0.4
Counsel/advice—drug abuse	163	0.4	0.2	0.0	0.9
Counsel/advice—pregnancy	122	0.3	0.1	0.0	0.5
Counsel/advice—STDs	119	0.3	0.1	0.0	0.6
Counsel/advice—occupational	94	0.2	0.1	0.0	0.4
Advice/education—mothercare	94	0.2	0.1	0.0	0.6
Advice—care of other person	89	0.2	0.1	0.0	0.5
<i>Subtotal: most frequent clinical treatments</i>	<i>30,334</i>	<i>72.5</i>	<i>..</i>	<i>..</i>	<i>..</i>
Total non-pharmacological treatments	41,839	100.0	43.2	41.3	45.0

(a) Figures do not total 100% as more than one non-pharmacological treatment can be managed at each encounter. Also only percentages $\geq 0.2\%$ included.

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

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

10.1.4 Problems managed with clinical treatments

Table 10.4: Top 30 problems managed with a clinical treatment

Problem managed	Number	% probs managed with a clinical treatment	Rate per 100 encs ^(a) (N=96,901)	95% LCI	95% UCI
Depression*	1,565	5.6	1.6	1.4	1.8
URTI	1,192	4.3	1.2	0.9	1.6
Hypertension*	913	3.3	0.9	0.7	1.1
Anxiety*	726	2.6	0.8	0.6	0.9
Lipid disorder	704	2.5	0.7	0.5	0.9
Diabetes*	659	2.4	0.7	0.5	0.9
Gastroenteritis, presumed infection	545	2.0	0.6	0.3	0.8
Asthma	535	1.9	0.6	0.3	0.8
Back complaint*	525	1.9	0.5	0.3	0.8
Sprain/strain*	495	1.8	0.5	0.3	0.7
Acute stress reaction	439	1.6	0.5	0.2	0.7
Viral disease NOS	427	1.5	0.4	0.2	0.7
Obesity (BMI> 30)	338	1.2	0.4	0.1	0.6
Acute bronchitis/bronchiolitis	321	1.2	0.3	0.1	0.6
Osteoarthritis*	301	1.1	0.3	0.1	0.5
Gastrointestinal infection	299	1.1	0.3	0.0	0.6
Immunisation/vaccination (all)*	281	1.0	0.3	0.0	0.6
Contact dermatitis	278	1.0	0.3	0.1	0.5
Sleep disturbance	271	1.0	0.3	0.1	0.5
UTI*	228	0.8	0.2	0.0	0.4
Menopausal complaint	228	0.8	0.2	0.0	0.5
Menstrual problems*	203	0.7	0.2	0.0	0.4
Constipation	200	0.7	0.2	0.0	0.4
Weakness/tiredness general	198	0.7	0.2	0.0	0.4
General check-up*	197	0.7	0.2	0.0	0.5
Tobacco abuse	188	0.7	0.2	0.0	0.5
Drug abuse	187	0.7	0.2	0.0	0.9
Oesophageal disease	179	0.6	0.2	0.0	0.4
Pregnancy*	177	0.6	0.2	0.0	0.5
Bruise/contusion	175	0.6	0.2	0.0	0.4
<i>Subtotal:top 30 problems managed with clinical treatment</i>	<i>12,973</i>	<i>46.6</i>	<i>..</i>	<i>..</i>	<i>..</i>
Total problems managed with clinical treatment	27,832	100.0	28.7	27.3	30.2

(a) Figures do not total 100% as more than one treatment can be described at each encounter. Also only treatments $\geq 0.5\%$ included.

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

Note: Abbreviations: Probs – problems, Encs – encounters, UCI – Upper confidence interval, LCI – Lower confidence interval.

A total of 27,832 problems included a clinical treatment as part of their management. The top 30 (Table 10.4) accounted for almost half (47.0%) of all problems for which a clinical treatment was used. The problem most frequently managed was depression (5.6% of problems managed with a clinical treatment), followed by URTI (4.3%), hypertension (3.3%) and anxiety (2.6%).

10.1.5 The inter-relationship of a clinical treatment with other variables. Example: Counselling and advice for weight/nutrition

A clinical treatment of counselling/advice for weight or nutrition was assigned when the GP provided counselling, advice or education about diet, nutrition or weight management. This group was the second most frequent clinical treatment provided, accounting for 8.7% of all clinical treatments across 3,457 encounters. This treatment was given for 3,571 problems managed at these encounters. The majority of patients were female (57.7%), aged 25–64 years. Comparisons to the total dataset indicate that the proportion of patients who were female is normal; however, the age distribution for patients receiving weight/nutrition counselling is not, with patients in the 25–64 age group being over-represented.

Rates for RFEs are presented as a rate per 100 encounters where counselling/advice for weight/nutrition occurred, while problems managed, prescriptions, other treatments, pathology and imaging, and referrals are presented as rates per 100 problems managed.

Reasons for encounter

A total of 6,029 reasons for encounter were described at a rate of 174.4 per 100 encounters by patients who received weight/nutrition counselling. This is notably higher than that of the total dataset (146.3). Similarly, the number of problems managed at these encounters was higher in this group than across all encounters.

Patients within this sub-group most commonly presented to the GP for test results (12.6 per 100 encounters where counselling and advice for weight/nutrition was given), cardiac check-ups, abdominal pain and diarrhoea.

Problems managed

Counselling for weight/nutrition was given for problems and disorders where weight and diet are important in the treatment of the condition. Some of the problems reflect the growing incidence of life-style related health problems, while others, such as gastrointestinal problems, may have been either caused or managed by dietary factors.

Problems most commonly managed when weight/nutrition counselling was provided were lipid disorders (14.8), diabetes (9.7) and hypertension (7.4). The weight of the patient was itself considered the problem for both obese (8.7) and overweight (4.3) patients.

Gastrointestinal problems managed included gastroenteritis (5.9) and gastrointestinal infections (3.8) as well as constipation (3.4).

Prescriptions

Pharmacological treatments given together with the counselling and advice were varied, reflecting the range of problems under management. Overall, prescribing rates for problems concurrently managed with weight/nutrition counselling were less (48.4) than those for all problems managed. Medications classified as other CVS drugs (including lipid-lowering agents) were most frequently prescribed (5.0 per 100 problems managed), anti-hypertensives (4.5) and hypoglycaemic medications (3.9). Various digestive treatments such

as anti-diarrhoeals (2.7) and laxatives (2.3) appeared in the most frequent medications, with a small number of anti-obesity drugs (1.6). Herbal remedies and dietary agents were classified as 'miscellaneous' and these were prescribed at a rate of 2.5 per 100 problems treated with weight/nutrition advice.

Other treatments

As well as advice about their weight/diet, some patients at these encounters were advised about exercise (16.1), general treatment (3.4), life-style (1.7) and alcohol (1.3).

Referrals, tests and investigations

Referrals for patients receiving counselling for weight/nutrition (4.7) were less frequent than average. Most common referrals included those to dietitians (1.2) and gastroenterologists (0.6).

Pathology was ordered at a rate of 28.3 per 100 problems managed with weight/nutrition counselling. This was higher than pathology rates for all problems (17.0 per 100 problems). This high rate is somewhat explained by the relative frequency of the management of problems that are often monitored by pathology (e.g. lipid disorder). Blood tests were ordered relatively often at these encounters, chemistry tests being most common (20.0 per 100 problems managed).

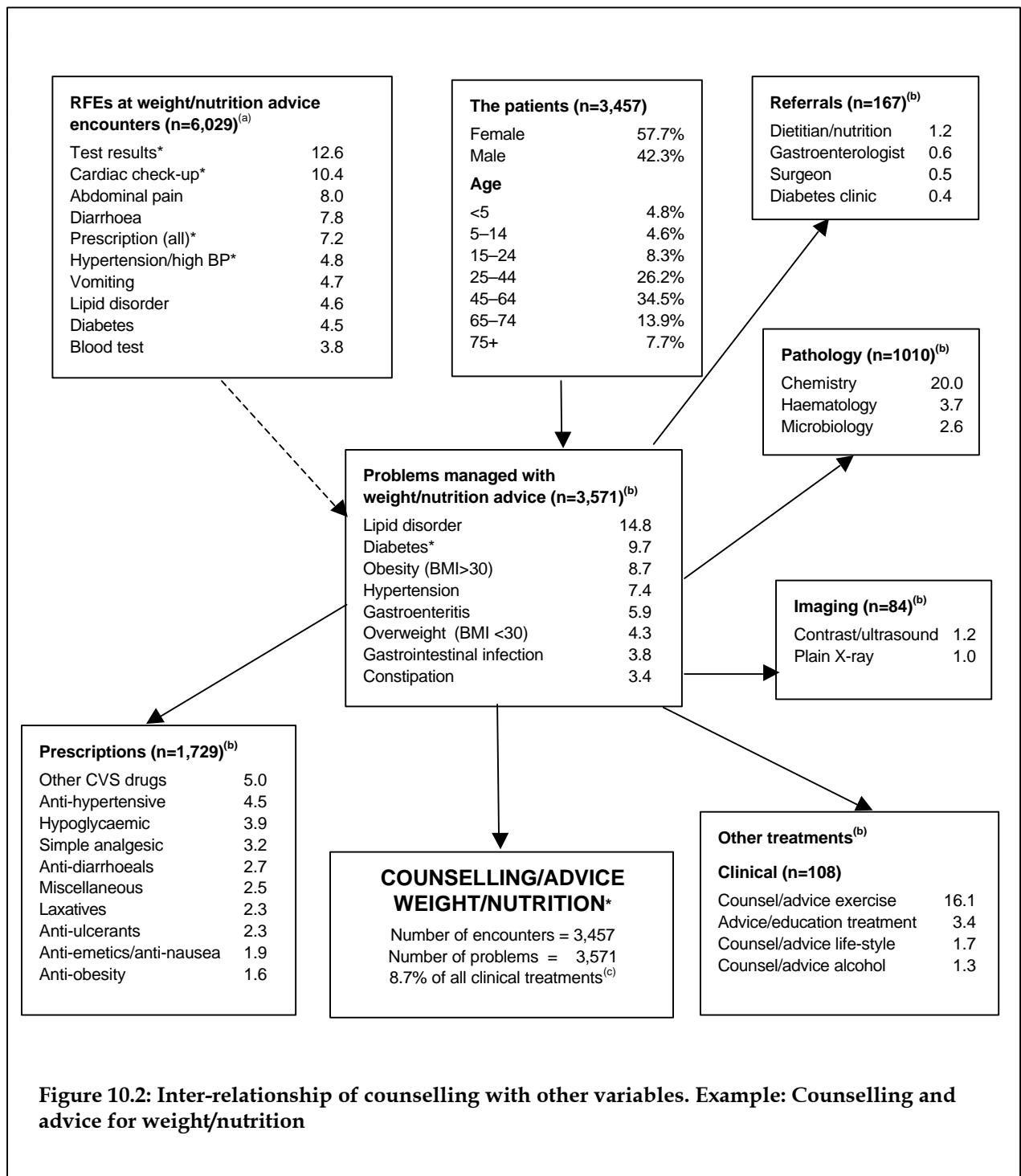


Figure 10.2: Inter-relationship of counselling with other variables. Example: Counselling and advice for weight/nutrition

10.2 Procedural treatments

10.2.1 Number of procedures at encounter

Procedural treatments included therapeutic actions undertaken by the GP, with some diagnostic procedures also described in this Chapter. ICPC-2 level codes were grouped across chapters for this analysis due to small numbers within each chapter. There were 11,458 procedural treatments, provided at a rate of 11.8 per 100 encounters (Table 10.1). These occurred relatively rarely across consultations, with at least one procedural treatment recorded at 10.8% of encounters. More than one procedural treatment at an encounter was relatively infrequent (0.9% of encounters). Similarly for problems managed, only 7.2% included one procedural treatment in their management, while 92.3% had no procedural treatments (Table 10.5).

Table 10.5: Number of procedural treatments provided

Number of procedural treatments	Number of encs	% of encs	Number of probs	% of probs
Nil	86,399	89.2	130,020	92.3
One	9,607	9.9	10,149	7.2
Two	849	0.9	655	0.5
Three	31	<0.1	—	—
Four or more	15	<0.1	—	—
Total	96,901	100.0	140,824	100.0

Note: Abbreviations: Encs – encounters, Probs – problems managed.

10.2.2 Age–sex specific rates of procedures

For all age groups except infants, males received relatively more procedural treatments than females. This difference was especially marked in young adults 15–24 years and may reflect higher injury rates for males in this age group (Figure 10.3). Overall, the rate of procedural treatments increased with age, in contrast to clinical treatments which were less frequent in the older age groups.

10.2.3 Most frequent procedures

The most common procedural treatment was excision or removal of tissue, (including destruction, debridement or cauterisation). It accounted for 6.5% of all non-pharmacological treatments and occurred at a rate of 2.8 per 100 encounters (see Table 10.6). This was followed by dressing, compressing or applying pressure (2.0 per 100 encounters). Physical medicine or rehabilitation (including physiotherapy, massage and therapeutic exercises) occurred at a rate of 1.8 per 100 encounters, and accounted for 4.2% of all procedures. Other therapeutic procedures included applying, removing and repairing casts or prosthetic devices (1.0 per 100 encounters) and draining of fluids (1.0 per 100 encounters).

Diagnostic procedures undertaken included taking of Pap smears, glucose tests, physical function tests such as peak flow readings and a small number of endoscopies and electrocardiograms undertaken by GPs themselves. (Note that the majority of diagnostic tests were ordered and are described in Chapter 12 – Investigations.)

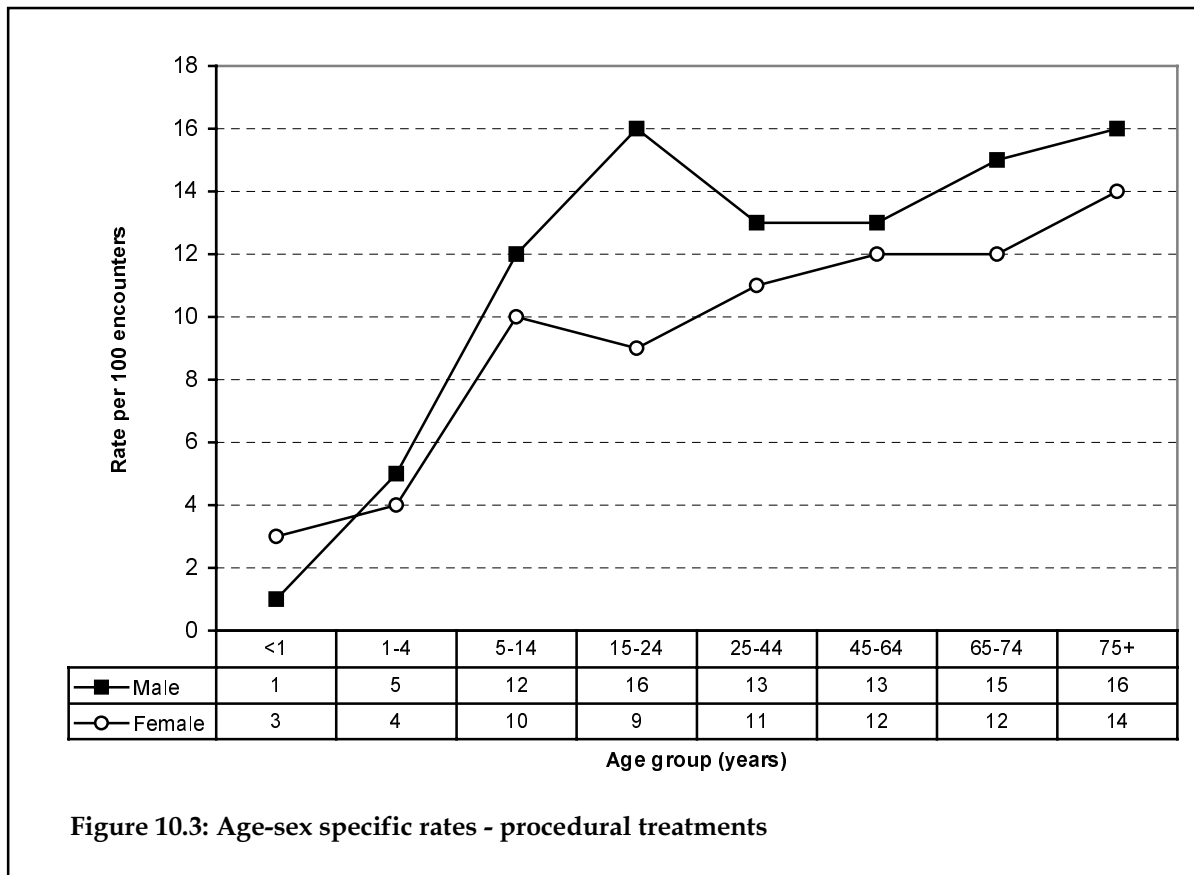


Figure 10.3: Age-sex specific rates - procedural treatments

10.2.4 Problems managed with a procedural treatments

A total of 10,804 problems involved a procedural treatment in their management. The top 30 problems accounted for 64.7% of all problems for which a procedure was used. These problems were commonly associated with skin complaints, injuries of various types, musculoskeletal problems and some chronic complaints such as osteoarthritis, diabetes and asthma (Table 10.7).

The problems most frequently managed with a procedural treatment were solar keratosis/sunburn (6.2% of problems managed by a procedural treatment), followed by lacerations and cuts (5.9%), sprains and strains (4.9%), ear wax (4.4%) and warts (4.2%). It appears that the types of procedures that GPs undertake are of a relatively minor nature. While GPs in rural areas may undertake more complex procedural treatments, most appear to undertake major procedures rarely (Table 10.6).

1.1

Table 10.6: Most frequent procedural treatments

Treatment	Number	% of non-pharm treatments	Rate per 100 encs ^(a) (N=96,901)	95% LCI	95% UCI
Excision/removal tissue/biopsy/destruction/debridement/cauterisation	2,712	6.5	2.8	2.6	3.0
Dressing/pressure/compression/tamponade	1,941	4.6	2.0	1.8	2.2
Physical medicine/rehabilitation	1,758	4.2	1.8	1.3	2.4
Repair/fixation-suture/cast/prosthetic device (apply/remove)	978	2.3	1.0	0.9	1.2
Incision/drainage/flushing/aspiration/removal body fluid	965	2.3	1.0	0.9	1.1
Other therapeutic procedures/surgery NEC	839	2.0	0.9	0.2	1.6
Pap smear	553	1.3	0.6	0.3	0.9
Electrical tracings	385	0.9	0.4	0.2	0.6
Local injection/infiltration	291	0.7	0.3	0.0	1.6
Test; glucose	276	0.7	0.3	0.0	0.6
Physical function test	276	0.7	0.3	0.0	0.6
Pregnancy test	159	0.4	0.2	0.0	0.4
Urine test	137	0.3	0.1	0.0	0.7
Diagnostic endoscopy	69	0.2	0.1	0.0	0.9
Other diagnostic procedures	34	0.1	0.0	0.0	0.8
Instrumentation/catheterisation/intubation/dilation	30	0.1	0.0	0.0	0.5
<i>Subtotal: most frequent procedural treatments</i>	<i>11,403</i>	<i>27.3</i>	<i>..</i>	<i>..</i>	<i>..</i>
Total non-pharmacological treatments	41,839	100.0	43.1	41.3	45

(a) Figures do not total 100% as more than one treatment can be described for each problem.

Note: Abbreviations: Non-pharm – non-pharmacological, Encs – encounters, UCI – Upper confidence interval, LCI – Lower confidence interval.

Table 10.7: Top 30 problems managed by a procedural treatment

Problem managed	Number	% of probs managed by a procedural treatment	Rate per 100 encs^(a) (N=96,901)	95% LCI	95% UCI
Solar keratosis/sunburn	671	6.2	0.7	0.5	0.9
Laceration/cut	640	5.9	0.7	0.5	0.8
Sprain/strain*	528	4.9	0.5	0.1	1.0
Excessive ear wax	476	4.4	0.5	0.4	0.6
Warts	455	4.2	0.5	0.3	0.6
Chronic ulcer skin (incl varicose ulcer)	449	4.2	0.5	0.2	0.7
Back complaint*	422	3.9	0.4	0.0	1.1
Malignant neoplasm skin	348	3.2	0.4	0.2	0.6
Female genital check-up/Pap smear*	307	2.8	0.3	0.0	0.7
Fracture*	243	2.3	0.3	0.0	0.5
Diabetes*	214	2.0	0.2	0.0	0.6
Osteoarthritis*	181	1.7	0.2	0.0	0.6
Other skin disease	160	1.5	0.2	0.0	0.5
Benign/uncertain neoplasm skin	159	1.5	0.2	0.0	0.4
Skin infection, post traumatic	134	1.2	0.1	0.0	0.5
Injury musculoskeletal	131	1.2	0.1	0.0	0.4
Neck complaint	130	1.2	0.1	0.0	0.9
Skin complaint	126	1.2	0.1	0.0	0.4
Asthma	124	1.2	0.1	0.0	0.5
Shoulder syndrome	113	1.0	0.1	0.0	0.5
Injury skin	110	1.0	0.1	0.0	0.5
General check-up*	104	1.0	0.1	0.0	0.5
Naevus/mole	101	0.9	0.1	0.0	0.4
Bursitis/tendonitis/synovitis NOS	100	0.9	0.1	0.0	0.4
Boil/carbuncle	99	0.9	0.1	0.0	0.4
Otitis externa	98	0.9	0.1	0.0	0.4
Muscle pain	95	0.9	0.1	0.0	0.5
Neck syndrome	94	0.9	0.1	0.0	0.6
Burns/scalds	91	0.8	0.1	0.0	0.4
Bruise/contusion	91	0.8	0.1	0.0	0.4
<i>Subtotal: top 30 problems managed – procedural treatments</i>	<i>6,994</i>	<i>64.7</i>	<i>..</i>	<i>..</i>	<i>..</i>
Total problems managed with a procedural treatment	10,804	100.0	11.2	10.6	11.7

(a) Figures do not total 100% as more than one problem can be described at each encounter.

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

Note: Abbreviations: Probs – problems, Encs – encounters, UCI – Upper confidence interval, LCI – Lower confidence interval.