

Amputee
Statistical Database
for the
United Kingdom

1999/00

Information & Statistics Division
NHSScotland

on behalf of
National Amputee Statistical Database
(NASDAB)

Edinburgh 2002

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ISBN 1 84134 008 0

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Foreword

It is a source of considerable pleasure and not a little relief that I am able to introduce this Annual Report. It is the third in an ongoing series and coincides with my ten years of involvement with the National Amputee Statistical Database (NASDAB) project. This particular exercise in data collation took place during the much feared millennial date change. Although the overall impact of this was far less than feared, a number of the databases submitting information to NASDAB were severely affected. Despite this additional difficulty, the data set amassed for the year was virtually complete. The deficits are identified with the individual tables.

The cases of amputation identified in this Report are those individuals with amputations occurring in the year who are then referred to rehabilitation services for assessment for prosthetic treatment. It is thus not a true incidence database; the NASDAB Steering Group intends to incorporate Department of Health data to provide an indication of the incidence of amputations in future Reports.

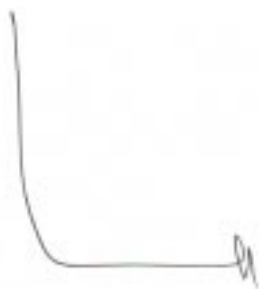
In his foreword to the preceding Annual Report, Roger Swain mentioned the possible development to NASDAB Report to include a prescription database. I am pleased to tell you that this has been accepted by the stakeholders to be an important extension to the Database. The Steering Group will therefore undertake the preparatory work leading to a pilot prescription database. This in turn will be used to seek funding to support the collection and analysis of what will become a substantial data resource. A valuable derivative of this will be an indicative total population undergoing treatment, as opposed to the total case load identified elsewhere in the Report.

All the NASDAB Reports will be available via the Internet. At the moment, access is obtained via our database manager, ISD NHSScotland. The web site address is given at the beginning of the Report. It is hoped that the Steering Group will be able to establish its own NASDAB site in the near future.

Several features of this Report are worthy of comment. The Steering Group has decided that, as the data was proving impossible to collect, the table providing information on ethnic origin was not useable. This table has therefore not been included in the Report and the data will no longer be extracted from Centres. One of the data interpretation difficulties (common to NASDAB and its DHSS predecessor) and possibly of importance only in the UK is the number of true knee disarticulations. There is no consensus as to which amputation level contains the smaller number of Gritti-Stokes amputations. The NASDAB minimum data set as originally conceived regarded this type of amputation effectively as a knee disarticulation but alternative views exist. The Steering Group welcomes responses from the readership concerning the significance of the problem and any necessary modification to the data set.

This complex undertaking would not be possible without the continued enthusiasm of the members of the Steering Group to whom I extend many thanks. It is important to recognise the invaluable contribution of our database managers, the Information and Statistics Division of NHSScotland, whose patience and diligence are astounding. NASDAB was initially developed using funds provided by the BHTA and this support merits recognition in each Report. Our year to year funding comes from the individual subscribing amputee care centres, everyone of which contributes data and financial support. Finally, I wish to recognise on behalf of all of us the generosity of our patients in permitting the collation of individual data sets. All the data in NASDAB is rendered anonymous to protect confidentiality; the database manager maintains a separate master list which would enable individuals to be identified should the database demonstrate an overwhelming clinical need.

The Steering Group hopes to be able to publish the next Annual Report, for 2000-2001, by the end of this year. The data sets in the first four years of NASDAB will allow additional analytical possibilities. The next Report may thus be a rather more challenging document. I feel certain that our next year's work will be stimulating and I look forward to the completion of the prescription database trial in time for the next Annual Report.



Robin Luff FRCS FRCP
Chairman
NASDAB Steering Group

Current membership of the NASDAB steering group

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Mrs Joan Forrest, ISD Scotland
Mr Angus Berthinussen, RSL Steeper
Mr Robert Graham, NHS Purchasing and Supply Agency
Mr Jason Hughes, Cardiff Prosthetic Service Centre
Dr Nick Jayawardana, Hull Prosthetic Service Centre
Mr Simon Keymer, Addenbrookes Prosthetic Service Centre
Dr Jeff Lindsay, West Midlands Regional Rehabilitation Centre
Dr Robin Luff, Kings Prosthetic Service Centre (Chairperson)
Mrs Kathy Spiller, Wrexham Prosthetic Service Centre
Mrs Sue Walker, Stanmore Disablement Services Centre
Mr Simon Webster, British Healthcare Trades Association
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Introduction

This is the third in a series of Annual Reports based on the data provided from prosthetic service centres in the United Kingdom for the year ending 31st March 2000. The first report (ISBN 1 84134 001 4) was published in June 1999, the second report (ISBN 1 84134 0030) was published in December 2000. The information contained in this 1999/00 Annual Report is derived from details supplied by centres in England, Northern Ireland, Scotland and Wales.

Points of interest

- There was a total of 5,443 new referrals to prosthetic service centres in the United Kingdom for the year ending 31st March 2000. This is almost four percent fewer than in 1998/99 (5665); the gender breakdown of referrals are however about identical over the two years.
- The overall median ages of all referrals, male and female are almost identical to last year (65 and 70 years respectively).
- Around one quarter of males and two fifths of females are aged 75 or over at the time of referral.
- Upper limb amputations accounted for just over four per cent of the total; lower limb amputations accounted for ninety-one per cent of the total; and congenital absence cases accounted for just over four per cent.
- The most common level of amputation remains at a trans-tibial level accounting for fifty per cent of all referrals (excluding cases which did not specify an amputation level). Only very rarely are patients referred with both upper and a lower limb amputation. This years number (20 cases) however, is an increase of 8 compared to last year.
- The most common cause of upper limb amputation remains trauma. For lower limbs, dysvascularity was the reported cause in sixty-eight per cent of cases where a cause was reported.
- The number of cases where no cause has been provided has halved between 1998/99 and 1999/00 from 1090 to 494.
- Overall, forty-two per cent of referrals to prosthetic service centres were seen within two weeks of their referral date.

UK Prosthetic Services
NEW REFERRALS

New referrals

The table below shows the total number of referrals to each of the UK's prosthetic service centres for the four quarters ending 31st March 2000. Overall across the UK, the number of amputees referred has decreased by 3.9 per cent from last year.

The quarterly analysis does not support the existence of seasonal variation in the incidence of referral after amputation.

The differing sizes of population served by centres is reflected in the very large variation in numbers of referrals per annum e.g. 16 in Inverness compared with 368 in Birmingham.

Table 1 New referrals to prosthetic service centres : 1999/00

Prosthetic Service Centre	Quarter ending				Total	Number of registrations ²	New referrals as % of registrations
	30 Jun '99	30 Sep '99	31 Dec '99	31 Mar '00			
Aberdeen	12	7	8	10	37	517	7.2
Belfast	30	27	21	24	102	1 657	6.2
Birmingham	102	77	91	98	368	4 058	9.1
Bristol	38	29	31	31	129	1 870	6.9
Cambridge	30	31	27	27	115	1 259	9.1
Cardiff	42	36	32	43	153	1 510	10.1
Carlisle	14	11	11	9	45	471	9.6
Cleveland	27	29	26	27	109	1 125	9.7
Derby	12	11	16	9	48	380	12.6
Dundee	23	23	20	31	97	780	12.4
Edinburgh	20	15	22	27	84	1 363	6.2
Exeter	33	29	30	26	118	1 130	10.4
Gillingham	47	41	52	62	202	1 939	10.4
Glasgow (Strathclyde University)	16	18	3	4	41	509	8.1
Glasgow (Westmarc)	35	34	40	39	148	3 150	4.7
Hull	17	24	10	18	69	825	8.4
Inverness	4	2	6	4	16	285	5.6
Isle of Wight ¹	1	-	-	4	5	175	2.9
Leeds	45	43	36	19	143	2 339	6.1
Leicester	12	7	3	3	25	626	4.0
Liverpool (Fazackerley)	39	48	27	40	154	1 269	12.1
London (Charing Cross)	16	13	23	5	57	751	7.6
London (Harold Wood)	78	69	52	72	271	2 466	11.0
London (Kings)	17	33	26	37	113	1 514	7.5
London (Roehampton)	62	62	50	15	189	2 986	6.3
London (Stanmore)	32	38	27	33	130	1 973	6.6
Luton & Dunstable	25	16	18	21	80	812	9.9
Manchester	103	62	77	69	311	3 009	10.3
Newcastle	48	46	48	52	194	2 031	9.6
Northampton	18	16	14	20	68	613	11.1
Norwich	21	26	18	24	89	1 241	7.2
Nottingham	36	53	43	44	176	1 853	9.5
Oxford	37	42	36	47	162	1 834	8.8
Plymouth	33	18	39	22	112	1 101	10.2
Portsmouth	20	27	24	36	107	1 940	5.5
Preston	49	56	47	51	203	1 590	12.8
Ringwood	24	28	21	22	95	828	11.5
Sheffield	51	53	55	63	222	2 047	10.8
Stoke	31	43	28	32	134	1 039	12.9
Sussex	26	30	31	36	123	1 552	7.9
Swansea	23	21	24	31	99	920	10.8
Wirral	23	33	25	24	105	917	11.5
Wolverhampton	41	21	29	32	123	1 015	12.1
Wrexham	11	17	19	25	72	874	8.2
All centres	1 424	1 365	1 286	1 368	5 443	62 143	8.8

1 1998/99 data.

2 See appendix one.

Gender and age

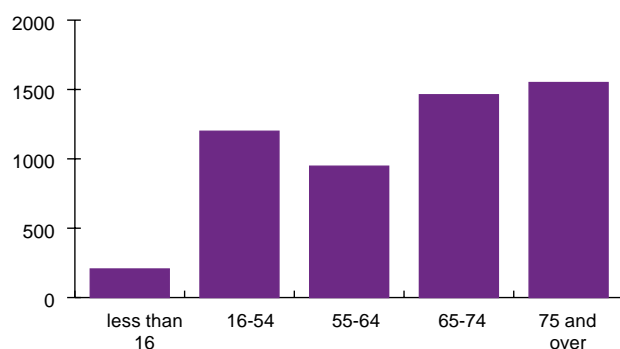
There is a marked gender difference in median age at presentation, the median for males being 65 and for females 70 years of age. There are marked local variations for the median age, with for example the value for males at Inverness being 72 compared to London (Kings) at 59. For females the median ages are 77 years at Wolverhampton whilst at Derby the median age is 58 years.

Table 2 Gender and age ; by prosthetic service centre : 1999/00

Prosthetic Service Centre	Males						All ages	Median Age
	less than 16	16-54	55-64	65-74	75 and over	No age given		
Aberdeen	-	7	2	7	6	1	23	67
Belfast	2	21	11	22	13	-	69	65
Birmingham	14	80	42	66	55	-	257	63
Bristol	1	26	17	27	16	-	87	64
Cambridge	7	13	15	22	21	-	78	66
Cardiff	2	27	27	26	23	-	105	63
Carlisle	-	-	-	-	-	-	-	-
Cleveland	1	17	16	24	24	-	82	67
Derby	3	10	3	10	4	-	30	61
Dundee	1	15	14	15	21	-	66	67
Edinburgh	1	12	15	17	8	-	53	63
Exeter	5	15	6	18	24	-	68	71
Gillingham	4	34	22	31	37	-	128	67
Glasgow (Strathclyde University)	1	7	8	9	7	-	32	64
Glasgow (Westmarc)	1	26	28	31	14	3	103	62
Hull	1	8	14	16	11	-	50	66
Inverness	-	1	1	4	4	1	11	72
Isle of Wight ¹	-	-	-	1	1	-	2	80
Leeds	3	23	23	29	20	-	98	65
Leicester	-	3	4	6	1	-	14	64
Liverpool (Fazackerley)	2	28	19	43	10	-	102	66
London (Charing Cross)	-	16	11	13	4	-	44	59
London (Harold Wood)	7	38	43	46	48	-	182	65
London (Kings)	4	34	15	19	16	-	88	59
London (Roehampton)	3	39	20	31	24	-	117	64
London (Stanmore)	10	33	17	16	16	-	92	58
Luton & Dunstable	1	10	14	12	20	-	57	66
Manchester	4	45	46	67	47	-	209	67
Newcastle	2	29	35	44	27	-	137	66
Northampton	-	5	6	17	16	-	44	71
Norwich	1	20	9	17	20	-	67	66
Nottingham	4	31	21	29	38	1	124	66
Oxford	7	21	22	28	34	-	112	68
Plymouth	4	10	14	19	25	-	72	71
Portsmouth	2	20	14	20	22	-	78	66
Preston	2	39	27	42	31	-	141	65
Ringwood	1	14	6	16	19	-	56	69
Sheffield	9	39	21	42	41	1	153	66
Stoke	1	22	17	26	13	1	80	64
Sussex	-	21	17	17	25	-	80	66
Swansea	2	5	15	25	14	-	61	69
Wirral	5	14	14	26	20	-	79	67
Wolverhampton	-	19	14	28	22	-	83	68
Wrexham	-	7	11	15	15	-	48	68
All centres	118	904	716	1 039	877	8	3 662	65

¹ 1998/99 data.

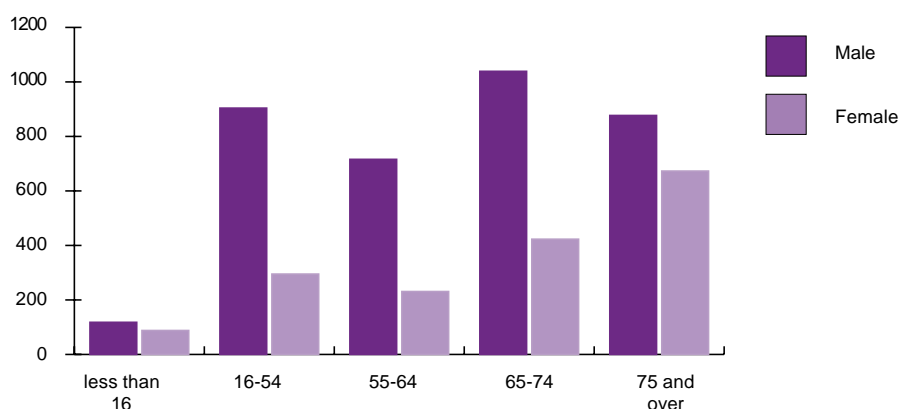
Chart 1a Age : 1999/00



Around one quarter of males, and almost two fifths of females, are aged 75 or over at time of referral. The table also highlights the relatively small number of patients aged under 16 years (about 4% of all new referrals) whose need for support from centres, however, will extend over a much longer time frame than other patients. Over half of these young patients are referred as a result of congenital absence; more detail is provided in table 14.

less than 16	Females					No age given	All ages	Median Age	Gender unspecified	Total	Median Age	Prosthetic Service Centre
	16-54	55-64	65-74	75 and over								
1	1	3	1	8	-	14	75	-	37	70	Aberdeen	
5	5	3	11	9	-	33	69	-	102	66	Belfast	
7	18	16	19	51	-	111	72	-	368	65	Birmingham	
2	7	5	11	16	-	41	69	1	129	67	Bristol	
2	2	3	11	19	-	37	75	-	115	70	Cambridge	
2	8	8	15	15	-	48	71	-	153	65	Cardiff	
-	-	-	-	-	-	-	-	45	45	64	Carlisle	
-	6	3	10	8	-	27	71	-	109	68	Cleveland	
-	5	1	3	2	-	11	58	7	48	58	Derby	
-	5	3	9	13	1	31	72	-	97	69	Dundee	
3	4	6	11	7	-	31	67	-	84	66	Edinburgh	
6	4	6	12	22	-	50	74	-	118	72	Exeter	
4	13	12	11	34	-	74	71	-	202	68	Gillingham	
-	-	1	4	3	1	9	73	-	41	67	Glasgow (Strathclyde University)	
2	8	7	10	17	1	45	68	-	148	65	Glasgow (Westmarc)	
1	3	3	6	6	-	19	72	-	69	67	Hull	
1	-	-	2	1	-	4	71	1	16	72	Inverness	
-	-	-	2	1	-	3	74	-	5	74	Isle of Wight	
1	11	5	12	16	-	45	68	-	143	67	Leeds	
1	4	3	1	2	-	11	57	-	25	59	Leicester	
2	12	7	18	12	-	51	67	1	154	67	Liverpool (Fazackerley)	
-	2	1	5	5	-	13	67	-	57	62	London (Charing Cross)	
2	16	11	21	39	-	89	72	-	271	68	London (Harold Wood)	
4	7	1	3	10	-	25	66	-	113	59	London (Kings)	
5	26	9	12	20	-	72	63	-	189	63	London (Roehampton)	
7	10	4	7	10	-	38	62	-	130	59	London (Stanmore)	
-	3	1	6	13	-	23	76	-	80	70	Luton & Dunstable	
4	17	17	33	31	-	102	69	-	311	67	Manchester	
6	13	4	15	19	-	57	68	-	194	67	Newcastle	
1	4	1	9	9	-	24	70	-	68	71	Northampton	
1	7	1	4	9	-	22	70	-	89	67	Norwich	
-	9	8	12	23	-	52	72	-	176	68	Nottingham	
9	13	7	7	14	-	50	58	-	162	67	Oxford	
2	4	7	10	17	-	40	72	-	112	71	Plymouth	
-	4	5	7	13	-	29	71	-	107	67	Portsmouth	
2	10	10	13	27	-	62	72	-	203	68	Preston	
-	9	5	9	16	-	39	70	-	95	69	Ringwood	
2	8	9	21	29	-	69	72	-	222	69	Sheffield	
-	6	8	13	26	1	54	73	-	134	69	Stoke	
1	-	8	8	15	-	32	73	11	123	69	Sussex	
-	1	3	11	23	-	38	77	-	99	71	Swansea	
1	3	7	9	6	-	26	68	-	105	67	Wirral	
1	5	6	3	24	-	39	77	1	123	70	Wolverhampton	
-	2	3	6	13	-	24	76	-	72	71	Wrexham	
88	295	231	423	673	4	1 714	70	67	5 443	67	All centres	

Chart 1b Age and gender : 1999/00



Level of amputation

Of the 5 398 patients (5443 less 45) whose amputation level was recorded, the great majority (91.1%) were referred following a lower limb amputation. Congenital absence accounts for 3.0 per cent of referrals where the level was recorded; upper limb deficiency accounts for around 4.7 per cent. Partial hand amputations (53/254, 20.8%) are relatively more common than partial foot amputation (73/4959, 1.5%). It is important to note that the completeness in the recording of the level of amputation at centres remained at over 99 per cent.

Table 3 Level of amputation and congenital absence ; by prosthetic service centre : 1999/00

Prosthetic Service Centre	Upper Limb Amputations ¹									Total
	Fore-quarter	Shoulder disarticulation	Trans-humeral	Elbow disarticulation	Trans-radial	Wrist disarticulation	Partial hand	Digits	Double upper amp.	
Aberdeen	-	1	-	-	2	-	-	-	-	3
Belfast	-	-	4	-	1	-	-	-	1	6
Birmingham	-	-	19	-	8	-	7	-	6	40
Bristol	-	-	4	-	1	-	-	1	-	6
Cambridge	2	-	2	-	-	-	4	-	-	8
Cardiff	-	-	1	-	1	1	2	1	-	6
Carlisle	-	-	-	-	1	-	1	-	-	2
Cleveland	-	-	1	-	1	-	1	-	-	3
Derby	-	-	-	-	-	-	-	-	-	-
Dundee	-	-	2	-	2	-	-	1	-	5
Edinburgh	-	-	2	-	1	-	-	-	-	3
Exeter	-	-	-	-	-	-	2	-	-	2
Gillingham	-	1	4	-	1	-	4	-	-	10
Glasgow (Strathclyde University)	-	-	-	-	2	-	-	-	-	2
Glasgow (Westmarc)	-	-	2	-	1	-	-	1	-	4
Hull	-	-	-	-	1	-	1	-	-	2
Inverness	-	-	-	-	-	-	-	-	-	-
Isle of Wight ⁴	-	-	-	-	-	-	-	-	-	-
Leeds	-	-	1	-	1	-	-	-	-	2
Leicester	-	-	1	-	-	-	-	-	-	1
Liverpool (Fazackerley)	-	-	-	-	4	-	1	-	-	5
London (Charing Cross)	-	-	-	-	-	-	-	-	-	-
London (Harold Wood)	2	2	2	-	1	1	3	-	1	12
London (Kings)	-	-	2	-	1	-	2	-	-	5
London (Roehampton)	2	-	4	-	2	-	-	3	-	11
London (Stanmore)	-	2	2	-	5	-	-	4	-	13
Luton & Dunstable	-	-	-	-	-	-	-	-	-	-
Manchester	1	1	2	-	2	-	2	2	1	11
Newcastle	3	-	3	-	2	-	4	-	-	12
Northampton	-	-	1	-	-	-	1	-	-	2
Norwich	-	-	-	1	3	-	1	-	-	5
Nottingham	-	-	4	-	10	-	1	4	-	19
Oxford	-	1	-	-	1	-	4	-	-	6
Plymouth	-	-	1	-	1	-	-	-	-	2
Portsmouth	1	-	-	-	-	-	-	1	-	2
Preston	-	-	4	1	3	1	4	-	-	13
Ringwood	-	-	-	-	2	-	3	-	-	5
Sheffield	1	2	-	-	8	-	2	-	-	13
Stoke	-	-	1	-	2	-	-	-	-	3
Sussex	-	-	3	-	2	-	1	-	-	6
Swansea	-	-	-	-	-	-	1	-	-	1
Wirral	-	-	1	-	1	-	1	-	-	3
Wolverhampton	-	-	-	-	-	-	-	-	-	-
Wrexham	-	-	-	-	-	-	-	-	-	-
All centres	12	10	73	2	74	3	53	18	9	254

1 See also the Upper Limb Amputation tables on pages 14-17 for additional details.

2 See also the Lower Limb Amputation tables on pages 20-23 for additional details.

3 See also the Miscellaneous Group of Amputation tables on pages 26-31 for additional details on complex amputations and congenital absence.

4 1998/99 data.

Lower Limb Amputations ²										Miscellaneous Amputations ³					Total		Prosthetic Service Centre
Hemi pelvec-tomy	Hip disartic-ulation	Trans-femoral	Knee disartic-ulation	Trans-tibial	Ankle disartic-ulation	Partial foot	Digits	Double lower amp.	Total	Cross-site amp.	Triple amp.	Quad-ruple amp.	Con-genital absence	No level	Total		
-	-	4	-	27	-	-	-	1	32	-	-	-	1	1	2	37	Aberdeen
-	-	27	2	57	-	1	-	1	88	-	1	-	7	-	8	102	Belfast
2	-	108	5	164	2	-	20	15	316	-	-	2	1	9	12	368	Birmingham
-	-	28	1	84	1	-	-	5	119	1	-	-	3	-	4	129	Bristol
-	-	28	1	67	-	3	-	3	102	-	-	-	5	-	5	115	Cambridge
-	-	49	2	81	-	2	1	8	143	-	-	-	4	-	4	153	Cardiff
-	-	13	-	30	-	-	-	-	43	-	-	-	-	-	-	45	Carlisle
1	-	32	1	63	1	-	-	7	105	-	-	-	-	1	1	109	Cleveland
-	-	13	10	10	2	-	-	-	35	-	-	-	4	9	13	48	Derby
-	1	20	-	68	1	-	-	1	91	-	-	-	-	1	1	97	Dundee
-	1	26	-	42	-	-	-	3	72	-	-	-	3	6	9	84	Edinburgh
-	-	36	8	57	-	1	1	4	107	-	-	-	9	-	9	118	Exeter
-	-	81	4	73	1	-	3	17	179	-	-	-	11	2	13	202	Gillingham
-	-	11	-	24	1	-	-	2	38	-	-	-	-	1	1	41	Glasgow (Strathclyde University)
-	-	45	2	87	1	-	-	3	138	-	-	-	2	4	6	148	Glasgow (Westmarc)
-	1	20	-	38	1	2	-	2	64	1	-	-	2	-	3	69	Hull
-	-	1	1	13	-	-	-	-	15	-	-	-	1	-	1	16	Inverness
-	-	2	-	2	1	-	-	-	5	-	-	-	-	-	-	5	Isle of Wight
1	1	56	-	74	1	3	-	3	139	-	-	-	2	-	2	143	Leeds
-	1	5	-	17	-	-	-	-	23	-	-	-	1	-	1	25	Leicester
-	1	53	-	80	1	2	-	7	144	-	1	-	4	-	5	154	Liverpool (Fazackerley)
-	-	19	-	32	1	-	2	-	54	-	-	-	3	-	3	57	London (Charing Cross)
2	1	104	4	114	5	6	-	12	248	-	-	1	10	-	11	271	London (Harold Wood)
-	3	49	2	42	-	1	-	6	103	1	-	-	4	-	5	113	London (Kings)
2	1	62	1	81	1	4	-	9	161	1	-	2	14	-	17	189	London (Roehampton)
1	1	40	-	52	2	6	-	-	102	-	-	-	15	-	15	130	London (Stanmore)
-	-	25	1	46	-	-	-	7	79	-	-	-	1	-	1	80	Luton & Dunstable
-	-	121	6	145	4	2	-	20	298	-	-	-	2	-	2	311	Manchester
-	1	69	1	89	-	-	3	7	170	-	1	1	7	3	12	194	Newcastle
-	-	23	5	34	-	-	-	4	66	-	-	-	-	-	-	68	Northampton
-	-	27	1	52	1	-	-	-	81	1	-	-	2	-	3	89	Norwich
-	-	32	1	111	1	2	3	1	151	-	-	-	6	-	6	176	Nottingham
1	-	51	5	77	3	-	1	2	140	-	1	1	13	1	16	162	Oxford
-	1	39	2	57	-	1	-	5	105	-	-	-	5	-	5	112	Plymouth
-	1	31	2	62	-	1	2	1	100	-	-	-	4	1	5	107	Portsmouth
-	2	76	2	93	-	7	-	9	189	-	-	-	1	-	1	203	Preston
-	1	37	1	45	-	-	-	5	89	-	-	-	1	-	1	95	Ringwood
1	-	73	13	80	1	21	-	10	199	1	-	1	8	-	10	222	Sheffield
-	-	38	3	79	-	-	2	6	128	-	-	2	1	-	3	134	Stoke
-	-	51	1	56	-	2	1	-	111	-	-	-	-	6	6	123	Sussex
-	-	30	-	56	-	4	-	7	97	-	-	-	1	-	1	99	Swansea
-	-	48	1	45	-	1	1	-	96	-	-	-	6	-	6	105	Wirral
-	-	58	4	61	-	-	-	-	123	-	-	-	-	-	-	123	Wolverhampton
-	-	23	-	41	-	1	-	6	71	-	-	-	1	-	1	72	Wrexham
11	18	1 784	93	2 708	33	73	40	199	4 959	6	4	10	165	45	230	5 443	All centres

Region of residence

This presents the referral patterns from each region to the prosthetic service centres and demonstrates that centres primarily care for local populations. Comparisons between this data in future years will provide a record of changes in referral patterns e.g. as a consequence of the impact of Primary Care Trusts on the activity of English centres. The distribution of centres within regions reflects the population base and geographical factors; centre activity reflects the size of the population and its general health.

Whilst the recording is greatly improved care should be taken when interpreting the table as it refers to both the previous and the current regional structures in England.

Table 4 Region of residence ; by prosthetic service centre : 1999/00

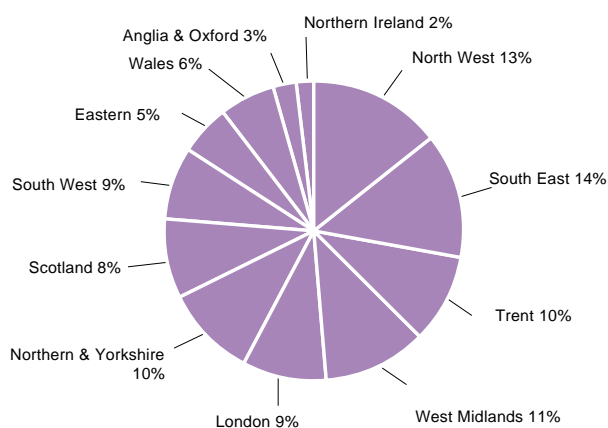
Prosthetic Service Centre	Region ¹														Total	
	Northern & Yorkshire	Trent	West Midlands	North West	Eastern	London	South East	South West	N.I. ³ - East.	N.I. ³ - North.	N.I. ³ - South.	N.I. ³ - Scotland West.	Wales	Invalid/Blank		
Aberdeen	-	-	-	-	-	-	-	-	-	-	-	-	-	37	-	37
Belfast	-	-	-	-	-	-	-	-	32	27	26	17	-	-	-	102
Birmingham	-	2	357	2	1	-	2	-	-	-	-	-	-	1	3	368
Bristol	-	-	-	-	-	-	-	125	-	-	-	-	-	-	4	129
Cambridge	-	12	-	-	103	-	-	-	-	-	-	-	-	-	-	115
Cardiff	-	-	-	-	-	-	-	-	-	-	-	-	-	153	-	153
Carlisle	44	-	-	-	-	-	-	-	-	-	-	-	-	-	1	45
Cleveland	108	-	-	-	-	1	-	-	-	-	-	-	-	-	-	109
Derby	-	48	-	-	-	-	-	-	-	-	-	-	-	-	-	48
Dundee	-	-	-	-	-	-	-	-	-	-	-	-	97	-	-	97
Edinburgh	-	-	-	-	-	-	-	-	-	-	-	-	84	-	-	84
Exeter	-	-	-	-	-	-	-	118	-	-	-	-	-	-	-	118
Gillingham	-	-	-	-	-	14	180	-	-	-	-	-	-	-	8	202
Glasgow (Strathclyde University)	-	-	-	-	-	-	-	-	-	-	-	-	41	-	-	41
Glasgow (Westmarc)	-	-	-	-	-	-	-	-	-	-	-	-	148	-	-	148
Hull	44	25	-	-	-	-	-	-	-	-	-	-	-	-	-	69
Inverness	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	16
Isle of Wight ²	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	5
Leeds	141	1	-	1	-	-	-	-	-	-	-	-	-	-	-	143
Leicester	-	25	-	-	-	-	-	-	-	-	-	-	-	-	-	25
Liverpool (Fazackerley)	-	-	-	153	1	-	-	-	-	-	-	-	-	-	-	154
London (Charing Cross)	-	-	1	-	-	54	1	1	-	-	-	-	-	-	-	57
London (Harold Wood)	-	-	-	-	117	154	-	-	-	-	-	-	-	-	-	271
London (Kings)	-	-	-	-	1	104	8	-	-	-	-	-	-	-	-	113
London (Roehampton)	2	1	-	-	6	71	102	2	-	-	-	-	-	1	4	189
London (Stanmore)	1	-	-	1	31	92	5	-	-	-	-	-	-	-	-	130
Luton & Dunstable	-	-	-	-	80	-	-	-	-	-	-	-	-	-	-	80
Manchester	-	3	-	308	-	-	-	-	-	-	-	-	-	-	-	311
Newcastle	193	-	-	-	-	-	-	-	-	-	-	-	-	-	1	194
Northampton	-	-	-	-	-	-	68	-	-	-	-	-	-	-	-	68
Norwich	-	1	-	1	87	-	-	-	-	-	-	-	-	-	-	89
Nottingham	-	176	-	-	-	-	-	-	-	-	-	-	-	-	-	176
Oxford	-	-	-	-	3	-	136	23	-	-	-	-	-	-	-	162
Plymouth	-	-	-	1	-	-	-	111	-	-	-	-	-	-	-	112
Portsmouth	-	-	-	-	-	-	101	-	-	-	-	-	-	-	6	107
Preston	-	-	-	197	-	-	-	-	-	-	-	-	-	-	6	203
Ringwood	-	3	-	-	-	-	9	83	-	-	-	-	-	-	-	95
Sheffield	5	216	-	-	-	-	-	-	-	-	-	-	-	-	1	222
Stoke	-	6	123	5	-	-	-	-	-	-	-	-	-	-	-	134
Sussex	-	-	-	-	-	-	112	-	-	-	-	-	-	-	11	123
Swansea	-	-	-	-	-	-	-	-	-	-	-	-	99	-	-	99
Wirral	-	-	-	104	-	-	-	-	-	-	-	-	-	1	-	105
Wolverhampton	-	-	123	-	-	-	-	-	-	-	-	-	-	-	-	123
Wrexham	-	-	1	1	-	-	-	-	-	-	-	-	-	70	-	72
Total	538	519	605	774	430	490	729	463	32	27	26	17	386	362	45	5 443

1 See appendix 2 for list of district health authorities included in each region.

2 1998/99 data.

3 N.I. = Northern Ireland.

Chart 2 Region : 1999/00



UK Prosthetic Services

UPPER LIMB AMPUTATIONS

Level of amputation by centre

In table 5 below, the numbers of referrals to each centre (shown in table 3) are expressed as a percentage according to level of amputation. It is important to note that for many centres the total number of upper limb amputee referral is very small and comparisons between centres requires careful examination of the data.

Table 5 Level of amputation¹ as a percentage of total number; by prosthetic service centre : 1999/00

Prosthetic Service Centre	Level of amputation									Total no. (= 100 %)
	Fore-quarter	Shoulder disarticulation	Trans-humeral	Elbow disarticulation	Trans-radial	Wrist disarticulation	Partial hand	Digits	Double upper amp.	
	Row percentages ²									
Aberdeen	0	33	0	0	67	0	0	0	0	3
Belfast	0	0	67	0	17	0	0	0	17	6
Birmingham	0	0	48	0	20	0	18	0	15	40
Bristol	0	0	67	0	17	0	0	17	0	6
Cambridge	25	0	25	0	0	0	50	0	0	8
Cardiff	0	0	17	0	17	17	33	17	0	6
Carlisle	0	0	0	0	50	0	50	0	0	2
Cleveland	0	0	33	0	33	0	33	0	0	3
Dundee	0	0	40	0	40	0	0	20	0	5
Edinburgh	0	0	67	0	33	0	0	0	0	3
Exeter	0	0	0	0	0	0	100	0	0	2
Gillingham	0	10	40	0	10	0	40	0	0	10
Glasgow (Strathclyde University)	0	0	0	0	100	0	0	0	0	2
Glasgow (Westmarc)	0	0	50	0	25	0	0	25	0	4
Hull	0	0	0	0	50	0	50	0	0	2
Leeds	0	0	50	0	50	0	0	0	0	2
Leicester	0	0	100	0	0	0	0	0	0	1
Liverpool (Fazackerley)	0	0	0	0	80	0	20	0	0	5
London (Harold Wood)	17	17	17	0	8	8	25	0	8	12
London (Kings)	0	0	40	0	20	0	40	0	0	5
London (Roehampton)	18	0	36	0	18	0	0	27	0	11
London (Stanmore)	0	15	15	0	38	0	0	31	0	13
Manchester	9	9	18	0	18	0	18	18	9	11
Newcastle	25	0	25	0	17	0	33	0	0	12
Northampton	0	0	50	0	0	0	50	0	0	2
Norwich	0	0	0	20	60	0	20	0	0	5
Nottingham	0	0	21	0	53	0	5	21	0	19
Oxford	0	17	0	0	17	0	67	0	0	6
Plymouth	0	0	50	0	50	0	0	0	0	2
Portsmouth	50	0	0	0	0	0	0	50	0	2
Preston	0	0	31	8	23	8	31	0	0	13
Ringwood	0	0	0	0	40	0	60	0	0	5
Sheffield	8	15	0	0	62	0	15	0	0	13
Stoke	0	0	33	0	67	0	0	0	0	3
Sussex	0	0	50	0	33	0	17	0	0	6
Swansea	0	0	0	0	0	0	100	0	0	1
Wirral	0	0	33	0	33	0	33	0	0	3
All centres: %	5	4	29	1	29	1	21	7	4	
All centres: number	12	10	73	2	74	3	53	18	9	254

1 Excludes congenital absence cases.

2 Due to rounding row percentages may not add up to 100 per cent.

Level of amputation by gender

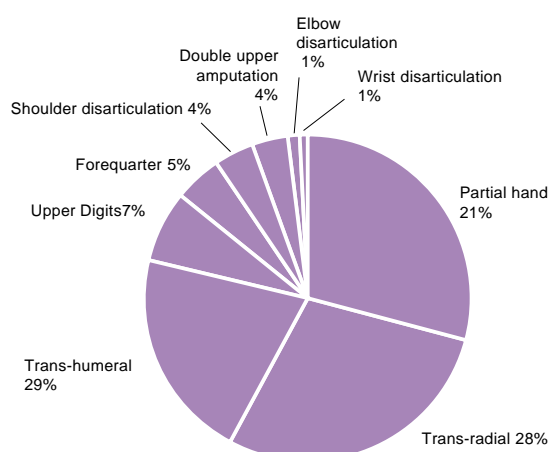
Just over three quarters of upper limb amputee referrals occur in the 16-64 age range (200/254, 78.7%) with the majority of these being male (151/182, 82.9%). The three most common levels of amputation, trans-humeral, trans-radial and partial hand levels, together account for almost 80 per cent of these referrals. The more unusual levels of upper limb amputation tend to be referred to centres with special interests.

Table 6 Level of amputation¹ ; by gender and age : 1999/00

Level of amputation	Males						All ages	Females						All ages	Not Spec-ified	Total
	less than 16	16-54	55-64	65-74	75 and over	No age given		less than 16	16-54	55-64	65-74	75 and over	No age given			
Forequarter	1	3	1	2	-	-	7	-	2	1	1	1	-	5	-	12
Shoulder disarticulation	1	6	1	-	1	-	9	-	-	-	-	1	-	1	-	10
Trans-humeral	4	39	7	3	3	1	57	1	6	5	3	1	-	16	-	73
Elbow disarticulation	-	1	-	-	-	-	1	-	-	1	-	-	-	1	-	2
Trans-radial	7	32	3	7	4	-	53	2	6	3	2	7	-	20	1	74
Wrist disarticulation	-	3	-	-	-	-	3	-	-	-	-	-	-	-	-	3
Partial hand	4	19	4	4	2	-	33	4	10	2	2	1	-	19	1	53
Upper Digits	1	6	1	3	-	-	11	2	2	1	1	-	1	7	-	18
Double upper amputation	3	4	-	1	-	-	8	1	-	-	-	-	-	1	-	9
All upper limb amputations¹	21	113	17	20	10	1	182	10	26	13	9	11	1	70	2	254

1 Excludes congenital absence cases.

Chart 3 Level of amputation : 1999/00



Upper Limb Amputations

Cause and level

Of the 211 (83% of the total) referrals where a cause of limb loss was reported, trauma accounted for 57 per cent, neoplasia for 11 per cent and dysvascularity for 13 per cent.

It should be noted that the completeness of cause of amputation data has improved, decreasing by 10 per cent from last year. In 1999/00 only 43/254 cases had no cause provided recorded compared with 70/257 cases in 1998/99. Although it is possible to record more detailed information on the cause of amputation, in the majority of trauma cases (60/121) no additional detail was provided by centres.

Table 7 Level of amputation ¹ ; by cause of amputation : 1999/00

Cause of amputation	Level of amputation									Total
	Fore-quarter	Shoulder disarticulation	Trans-humeral	Elbow disarticulation	Trans-radial	Wrist disarticulation	Partial hand	Digits	Double upper amp.	
Trauma	4	5	29	1	34	2	32	11	3	121
No Additional Detail	1	2	16	1	18	-	16	5	1	60
Mechanical	2	1	8	-	10	1	9	3	-	34
Electrical	1	2	5	-	6	1	6	-	-	21
Thermal	-	-	-	-	-	-	-	3	2	5
Chemical	-	-	-	-	-	-	1	-	-	1
Dysvascularity	-	-	11	-	14	-	2	1	-	28
No Additional Detail	-	-	6	-	6	-	-	-	-	12
Diabetes Mellitus	-	-	1	-	3	-	-	-	-	4
Non-diabetic Arteriosclerosis	-	-	-	-	3	-	1	-	-	4
Embolism	-	-	2	-	2	-	-	-	-	4
Vasospastic Conditions (inc. Raynaud's)	-	-	1	-	-	-	-	-	-	1
Arteritis (inc. Rheumatoid Arthritis, Autoimmune Disease)	-	-	-	-	-	-	-	1	-	1
Venous Disease	-	-	1	-	-	-	1	-	-	2
Infection	-	-	4	-	3	-	-	1	-	8
No Additional Detail	-	-	3	-	2	-	-	1	-	6
Acute	-	-	1	-	1	-	-	-	-	2
Neoplasia	8	3	6	-	5	-	-	1	-	23
No Additional Detail	2	1	3	-	-	-	-	-	-	6
Malignant - Primary	6	2	3	-	5	-	-	-	-	16
Malignant - Secondary	-	-	-	-	-	-	-	1	-	1
Other - No Additional Detail	-	2	5	1	9	1	9	4	-	31
No Cause Provided	-	-	18	-	9	-	10	-	6	43
All causes¹	12	10	73	2	74	3	53	18	9	254

¹ Excludes congenital absence cases.

Cause and age

Amongst the younger population (16-54) trauma was the most common cause of limb loss accounting for around 70 per cent of all upper limb cases where the cause of amputation was provided. Although spread across all age categories, the referral incidence as a result of neoplasia is particularly marked in the 16-54 age band accounting for 10 of the 23 cases reporting neoplasia. As a consequence of the problem of incomplete or partly specified data, referred to earlier at table 6, these figures can be indicative only.

Table 8 Cause of amputation¹; by age : 1999/00

Cause of amputation	Age Group						Total
	less than 16	16-54	55-64	65-74	75 and over	No age given	
Trauma	11	85	13	7	4	1	121
No Additional Detail	5	41	8	2	3	1	60
Mechanical	4	23	3	3	1	-	34
Electrical	2	16	2	1	-	-	21
Thermal	-	4	-	1	-	-	5
Chemical	-	1	-	-	-	-	1
Dysvascularity	1	10	7	4	6	-	28
No Additional Detail	-	4	2	1	5	-	12
Dibetes Mellitus	-	-	3	-	1	-	4
Non-diabetic Arteriosclerosis	1	1	-	2	-	-	4
Embolism	-	2	1	1	-	-	4
Vasospastic Conditions (inc. Raynauds)	-	1	-	-	-	-	1
Arteritis (inc. Rheumatoid Arthritis, Autoimmune Disease)	-	-	1	-	-	-	1
Venous Disease	-	2	-	-	-	-	2
Infection	2	2	2	1	-	1	8
No Additional Detail	-	2	2	1	-	1	2
Acute	2	-	-	-	-	-	2
Neoplasia	1	10	3	5	4	-	23
No Additional Detail	1	2	1	1	1	-	6
Malignant - Primary	-	8	2	3	3	-	16
Malignant - Secondary	-	-	-	1	-	-	1
Other	8	15	1	5	2	-	31
No Cause Provided	8	19	4	7	5	-	43
All causes	31	141	30	29	21	2	254

Chart 4a Cause of amputation : 1999/00 including 'No cause provided'

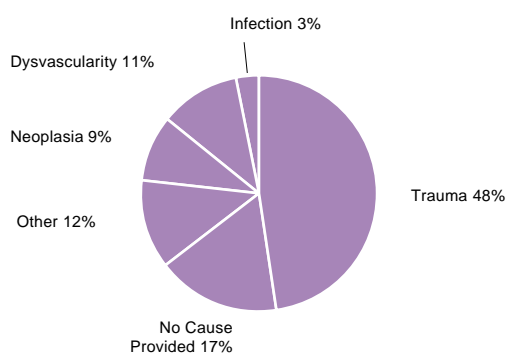
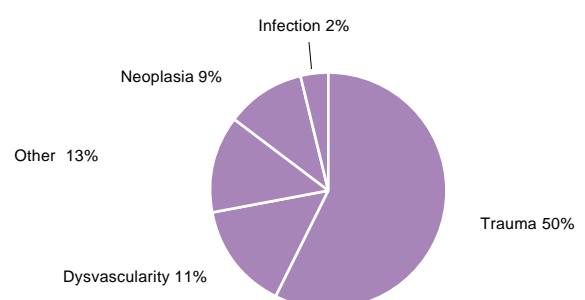


Chart 4b Cause of amputation : 1999/00 excluding 'No cause provided'



UK Prosthetic Services
LOWER LIMB AMPUTATIONS

Lower Limb Amputations

Level of amputation by centre

Just over half of amputees presented with trans-tibial amputations (55%); trans-femoral amputations accounted for 36 per cent of the total. There is substantial local variation in trans-tibial and trans-femoral ratios.

- at Cambridge (102 cases) the ratio is 66%:27%
- at Swansea (97 cases) the ratio is 58%:21%, by contrast
- at Wirral (96 cases) the ratio is 47%:50%.

It is interesting to note that Derby (35 cases) has by far the highest incidence of knee disarticulation amputations at 29 per cent compared to the UK average of 2 per cent.

All other amputation levels were uncommon.

Table 9 Level of amputation¹ as a percentage of total number; by prosthetic service centre : 1999/00

Prosthetic Service Centre	Level of amputation									Total no. (= 100 %)
	Hemi pelve-tomy	Hip disarticulation	Trans-femoral	Knee disarticulation	Trans-tibial	Ankle disarticulation	Partial foot	Digits	Double lower amp.	
	Row percentages ³									
Aberdeen	0	0	13	0	84	0	0	0	3	32
Belfast	0	0	31	2	65	0	1	0	1	88
Birmingham	1	0	34	2	52	1	0	6	5	316
Bristol	0	0	24	1	71	1	0	0	4	119
Cambridge	0	0	27	1	66	0	3	0	3	102
Cardiff	0	0	34	1	57	0	1	1	6	143
Carlisle	0	0	30	0	70	0	0	0	0	43
Cleveland	1	0	30	1	60	1	0	0	7	105
Derby	0	0	37	29	29	6	0	0	0	35
Dundee	0	1	22	0	75	1	0	0	1	91
Edinburgh	0	1	36	0	58	0	0	0	4	72
Exeter	0	0	34	7	53	0	1	1	4	107
Gillingham	0	0	45	2	41	1	0	2	9	179
Glasgow (Strathclyde University)	0	0	29	0	63	3	0	0	5	38
Glasgow (Westmarc)	0	0	33	1	63	1	0	0	2	138
Hull	0	2	31	0	59	2	3	0	3	64
Inverness	0	0	7	7	87	0	0	0	0	15
Isle of Wight ²	0	0	40	0	40	20	0	0	0	5
Leeds	1	1	40	0	53	1	2	0	2	139
Leicester	0	4	22	0	74	0	0	0	0	23
Liverpool (Fazackerley)	0	1	37	0	56	1	1	0	5	144
London (Charing Cross)	0	0	35	0	59	2	0	4	0	54
London (Harold Wood)	1	0	42	2	46	2	2	0	5	248
London (Kings)	0	3	48	2	41	0	1	0	6	103
London (Roehampton)	1	1	39	1	50	1	2	0	6	161
London (Stanmore)	1	1	39	0	51	2	6	0	0	102
Luton & Dunstable	0	0	32	1	58	0	0	0	9	79
Manchester	0	0	41	2	49	1	1	0	7	298
Newcastle	0	1	41	1	52	0	0	2	4	170
Northampton	0	0	35	8	52	0	0	0	6	66
Norwich	0	0	33	1	64	1	0	0	0	81
Nottingham	0	0	21	1	74	1	1	2	1	151
Oxford	1	0	36	4	55	2	0	1	1	140
Plymouth	0	1	37	2	54	0	1	0	5	105
Portsmouth	0	1	31	2	62	0	1	2	1	100
Preston	0	1	40	1	49	0	4	0	5	189
Ringwood	0	1	42	1	51	0	0	0	6	89
Sheffield	1	0	37	7	40	1	11	0	5	199
Stoke	0	0	30	2	62	0	0	2	5	128
Sussex	0	0	46	1	50	0	2	1	0	111
Swansea	0	0	31	0	58	0	4	0	7	97
Wirral	0	0	50	1	47	0	1	1	0	96
Wolverhampton	0	0	47	3	50	0	0	0	0	123
Wrexham	0	0	32	0	58	0	1	0	8	71
All centres: %	0	0	36	2	55	1	1	1	4	
All centres: total no.	11	18	1784	93	2708	33	73	40	199	4959

1 Excludes congenital absence cases.

2 1998/99 data.

3 Due to rounding row percentages may not add up to 100%

Level of amputation by gender

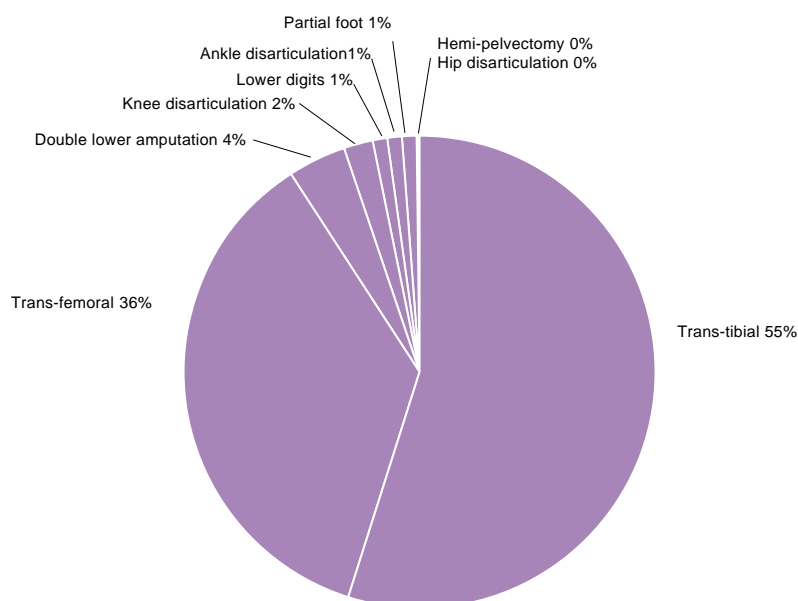
Two thirds of lower limb amputees referred in 1999/00 were male (68%). Just over half of all amputations in males were at the trans-tibial level (56%) with a slightly lower proportion in females (55%); the great majority of the remaining amputations were at the trans-femoral level (34% males and 36% females). It is evident that the incidence of trans-femoral amputation increases with age in women.

Table 10 Level of amputation¹; by gender and age : 1999/00

Level of amputation	Males						All ages	Females						All ages	Not Specified	Total
	less than 16	16-54	55-64	65-74	75 and over	No age given		less than 16	16-54	55-64	65-74	75 and over	No age given			
Hemi-pelvectomy	-	5	1	1	-	-	7	-	4	-	-	-	-	4	-	11
Hip disarticulation	-	6	3	2	1	-	12	-	3	1	2	-	-	6	-	18
Trans-femoral	7	214	219	407	309	1	1 157	4	69	71	163	298	-	605	22	1 784
Knee disarticulation	2	6	7	12	27	-	54	1	5	1	9	22	-	38	1	93
Trans-tibial	18	439	407	526	496	4	1 890	11	131	123	204	311	3	783	35	2 708
Ankle disarticulation	2	16	3	2	2	-	25	1	4	-	3	-	-	8	-	33
Partial foot	1	20	11	9	3	-	44	1	9	4	5	10	-	29	-	73
Lower digits	-	11	6	13	2	-	32	1	4	1	1	1	-	8	-	40
Double lower amputation	2	34	36	38	23	1	134	2	12	13	22	16	-	65	-	199
All lower limb amputations¹	32	751	693	1 010	863	6	3 355	21	241	214	409	658	3	1 546	58	4 959

1 Excludes cases of congenital absence.

Chart 5 Level of amputation : 1999/00



Lower Limb Amputations

Cause and level

The preponderance of dysvascularity as a cause of amputation is clearly evident (68% of all lower limb amputations). It is important to note the reported incidence of lower limb amputation arising from dysvascularity has increased from 56 per cent in 1998/99 to 68 per cent this year. The most common level of amputation among neoplasia cases is at a trans-femoral level, accounting for almost half of all neoplasia.

Although the aim is to collect the cause of amputation at a more detailed level, only the most basic level of detail was provided in 1999/00 for over half of trauma cases.

Table 11 Level of amputation¹ ; by cause of amputation : 1999/00

Cause of amputation	Level of amputation									Total
	Hemi pelvectomy	Hip disarticulation	Trans-femoral	Knee disarticulation	Trans-tibial	Ankle disarticulation	Partial foot	Digits	Double lower amp.	
Trauma	-	3	135	6	242	12	15	6	19	438
No Additional Detail	-	2	70	3	137	2	9	4	6	233
Mechanical	-	-	36	3	64	6	4	1	2	116
Electrical	-	1	27	-	36	2	2	-	7	75
Thermal	-	-	-	-	2	2	-	1	2	7
Chemical	-	-	2	-	3	-	-	-	2	7
Dysvascularity	-	4	1 092	50	1 726	10	36	14	115	3 047
No Additional Detail	-	2	375	17	556	3	11	3	29	996
Diabetes Mellitus	-	1	224	15	658	3	17	9	47	974
Non-diabetic Arteriosclerosis	-	-	389	13	406	3	5	2	26	844
Embolism	-	-	21	2	25	-	1	-	-	49
Vasospastic Conditions	-	-	1	-	3	-	-	-	1	5
Disseminated Intravascular Coagulation	-	-	1	-	2	-	-	-	-	3
Endovascular Chemical Trauma	-	1	5	-	3	-	-	-	-	9
Buerger's Disease	-	-	2	-	10	-	-	-	-	12
Iatrogenic Vascular Trauma	-	-	2	-	3	1	-	-	-	6
Arteritis	-	-	3	-	5	-	-	-	3	11
Venous Disease	-	-	69	3	55	-	2	-	9	138
Infection	-	2	70	3	97	2	3	-	6	183
No Additional Detail	-	1	30	1	33	-	2	-	3	70
Acute	-	1	9	2	15	-	1	-	3	31
Chronic	-	-	31	-	49	2	-	-	-	82
Neurological Disorder	-	-	8	2	36	-	1	-	5	52
No Additional Detail	-	-	1	-	9	-	-	-	1	11
Diabetic Neuropathy	-	-	3	-	14	-	1	-	1	19
Infective	-	-	2	2	8	-	-	-	1	13
Spina Bifida	-	-	2	-	3	-	-	-	2	7
Poliomyelitis	-	-	-	-	1	-	-	-	-	1
Peripheral Nerve Injury	-	-	-	-	1	-	-	-	-	1
Neoplasia	7	6	51	1	33	-	6	-	-	104
No Additional Detail	2	2	11	1	11	-	4	-	-	31
Benign	1	-	1	-	1	-	-	-	-	3
Malignant - Primary	3	4	36	-	21	-	2	-	-	66
Malignant - Secondary	1	-	3	-	-	-	-	-	-	4
Other	2	3	257	12	322	5	8	3	29	641
No Cause Provided	2	-	171	19	252	4	4	17	25	494
All causes¹	11	18	1 784	93	2 708	33	73	40	199	4 959

¹ Excludes congenital absence cases.

Cause and age

It is worth noting that no cause provided has dropped from (1090/5160) 21 per cent in 1998/99 to (494/4959) 10 per cent in 1999/00. Although an improvement on last year, there is still considerable variation in the completeness in recording aetiology across centres.

The information in the table should be analysed with care and any conclusions drawn from it should reflect this.

The majority of amputations as a result of trauma occur in the relatively young (<54, 63%). The figures demonstrate clearly the strong association between dysvascularity as a cause of limb loss, and increasing age.

Table 12 Cause of amputation¹ ; by age : 1999/00

Cause of amputation	Age Group						Total
	less than 16	16-54	55-64	65-74	75 and over	No age given	
Trauma	12	275	59	39	53	-	438
No Additional Detail	8	126	38	31	30	-	233
Mechanical	1	86	10	5	14	-	116
Electrical	3	54	8	2	8	-	75
Thermal	-	5	2	-	-	-	7
Chemical	-	4	1	1	1	-	7
Dysvascularity	10	370	610	1 010	1 039	8	3 047
No Additional Detail	5	117	187	325	361	1	996
Diabetes Mellitus	3	124	236	327	280	4	974
Non-diabetic Arteriosclerosis	2	80	144	302	313	2	843
Embolism	-	14	9	12	15	-	50
Vasospastic Conditions	-	-	-	3	2	-	5
Disseminated Intravascular Coagulation	-	1	-	-	2	-	3
Endovascular Chemical Trauma	-	5	-	-	4	-	9
Buerger's Disease	-	6	3	2	1	-	12
Iatrogenic Vascular Trauma	-	3	2	1	-	-	6
Arteritis	-	3	-	6	2	-	11
Venous Disease	-	17	29	32	59	1	138
Infection	7	44	30	47	54	1	183
No Additional Detail	2	18	9	22	19	-	70
Acute	4	8	6	4	9	-	31
Chronic	1	18	15	21	26	1	82
Neurological Disorder	-	21	11	8	12	-	52
No Additional Detail	-	6	1	-	4	-	11
Diabetic Neuropathy	-	6	5	5	3	-	19
Infective	-	1	4	3	5	-	13
Spina Bifida	-	7	-	-	-	-	7
Poliomyelitis	-	1	-	-	-	-	1
Peripheral Nerve Injury	-	-	1	-	-	-	1
Neoplasia	6	46	14	23	15	-	104
No Additional Detail	3	12	6	7	3	-	31
Benign	-	1	2	-	-	-	3
Malignant - Primary	3	31	6	15	11	-	66
Malignant- Secondary	-	2	-	1	1	-	4
Other	12	128	116	185	199	1	641
No Cause Provided	6	116	81	117	161	13	494
All causes¹	53	1 000	921	1 429	1 533	23	4 959

1 Excludes congenital absence cases.

Chart 6a Cause of amputation : 1999/00 including 'No cause provided'

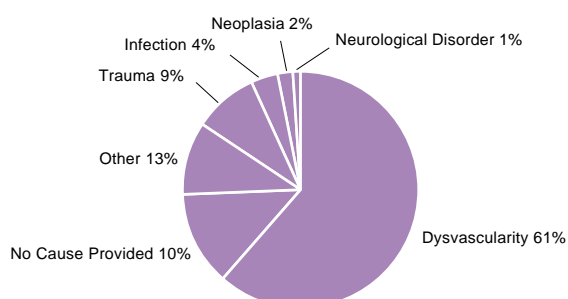
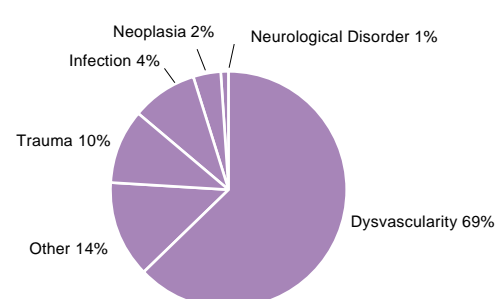


Chart 6b Cause of amputation : 1999/00 excluding 'No cause provided'



UK Prosthetic Services
MISCELLANEOUS

Multiple amputations

A cross site presentation is defined as the synchronous presentation of upper and lower limb deficiencies. The numbers are small but this subgroup is important to identify since the care costs for each case can be substantial.

Table 13 Multiple amputation ; by prosthetic service centre, cause of amputation ¹, gender and age : 1999/00

Prosthetic Service Centre	Cause of amputation	Males			Females			Total	
		less than 16	16 - 54	55-64	Total	less than 16	55-64		Total
Cross site amputation		-	4	1	5	-	1	1	6
Bristol	Trauma - Electrical	-	1	-	1	-	-	-	1
Hull	Dysvascularity - Diabetes Mellitus	-	-	1	1	-	-	-	1
London ^(Kings)	Trauma - Electrical	-	1	-	1	-	-	-	1
London ^(Roehampton)	Trauma - Mechanical	-	-	-	-	-	1	1	1
Norwich	Trauma - No Additional Detail	-	1	-	1	-	-	-	1
Sheffield	Trauma - No Additional Detail	-	1	-	1	-	-	-	1
Triple amputation		1	-	-	1	2	1	3	4
Belfast	Other - No Additional Detail	-	-	-	-	1	-	1	1
Liverpool ^(Fazackerley)	Dysvascularity - Disseminated Intravascular Coagulation	-	-	-	-	1	-	1	1
Newcastle		1	-	-	1	-	-	-	1
Oxford	Infection - Acute	-	-	-	-	-	1	1	1
Quadruple amputation		3	3	-	6	2	2	4	10
Birmingham	No Cause Provided	1	1	-	2	-	-	-	2
London ^(Harold Wood)	Infection - Chronic	-	-	-	-	1	-	1	1
London ^(Roehampton)	Infection - Acute	1	-	-	1	-	1	1	2
Newcastle	Other - No Additional Detail	-	-	-	-	1	-	1	1
Oxford	Infection - Acute	-	-	-	-	-	1	1	1
Sheffiled	Infection - Chronic	-	1	-	1	-	-	-	1
Stoke	Total	1	1	-	2	-	-	-	2
	Trauma - No Additional Detail	1	-	-	1	-	-	-	1
	Infection - Acute	-	1	-	1	-	-	-	1
Total		4	7	1	12	4	4	8	20

1 Excludes congenital absence cases.

Congenital absence

Overall, males accounted for over half of new cases with congenital limb loss (58.6% for upper limb, 52.7% for lower limbs). Although patients with congenital limb loss may typically be referred at a young age a sizable number (62/165, 37.5% for all levels) presented after the age of 15; it is interesting to note that 47 per cent of congenital lower limb deficiency is recorded as presenting aged 16 or greater where as the reverse is true in congenital upper limb deficiency patients. Note however that the total represents an average of over three cases per centre per annum.

Table 14 Congenital absence ; by prosthetic service centre, gender and age : 1999/00

Prosthetic Service Centre	Males						Females						Total	
	less than 16	16-54	55-64	65-74	75 and over	No age given	All ages	less than 16	16-54	55-64	65-74	75 and over		All ages
Upper limb														
Aberdeen	-	-	-	1	-	-	1	-	-	-	-	-	-	-
Belfast	1	1	-	-	-	-	2	2	-	-	-	-	2	-
Birmingham	-	-	-	-	-	-	-	-	1	-	-	-	1	-
Bristol	-	-	-	-	-	-	-	1	-	-	-	-	1	-
Cambridge	2	-	-	1	-	-	3	-	-	-	-	-	-	-
Cardiff	1	-	-	-	-	-	1	2	1	-	-	-	3	-
Derby	1	-	-	-	-	-	1	-	-	-	-	-	-	-
Edinburgh	-	1	-	-	-	-	1	2	-	-	-	-	2	-
Exeter	4	-	-	-	-	-	4	4	-	-	-	-	4	-
Gillingham	3	2	-	-	-	-	5	1	2	-	-	-	3	-
Glasgow (Westmarc)	1	-	-	-	-	-	1	1	-	-	-	-	1	-
Inverness	-	1	-	-	-	-	1	-	-	-	-	-	-	-
Leeds	-	-	-	-	-	-	-	1	-	-	-	-	1	-
Liverpool (Fazackerley)	1	-	-	-	-	-	1	1	1	-	-	-	2	-
London (Harold Wood)	3	1	-	-	-	-	4	1	-	-	-	-	1	-
London (Kings)	1	-	-	-	-	-	1	-	-	-	-	-	-	-
London (Roehampton)	1	2	-	-	-	-	3	1	1	-	-	-	2	-
London (Stanmore)	3	-	-	-	-	-	3	2	-	-	-	-	2	-
Manchester	1	-	-	-	-	-	1	1	-	-	-	-	1	-
Newcastle	-	2	-	-	-	-	2	1	1	-	-	-	2	-
Norwich	1	-	-	-	-	-	1	-	-	-	-	-	-	-
Nottingham	-	1	-	-	-	-	1	-	1	-	-	-	1	-
Oxford	1	1	-	-	-	-	2	3	-	2	-	-	5	-
Plymouth	2	-	-	-	-	1	3	1	-	-	-	-	1	-
Portsmouth	2	-	-	-	-	-	2	-	-	-	-	-	-	-
Preston	-	1	-	-	-	-	1	-	-	-	-	-	-	-
Sheffield	4	-	-	-	-	-	4	1	-	-	-	-	1	-
Stoke	-	1	-	-	-	-	1	-	-	-	-	-	-	-
Swansea	1	-	-	-	-	-	1	-	-	-	-	-	-	-
Wirral	4	-	-	-	-	-	4	1	1	-	-	-	2	-
Total	38	14	-	1	-	1	55	27	9	2	-	-	38	-
Lower limb														
Belfast	-	-	1	1	-	-	2	1	-	-	-	-	1	-
Bristol	-	-	-	-	-	-	-	1	-	-	-	-	1	1
Cambridge	-	-	-	-	-	-	-	2	-	-	-	-	2	-
Derby	2	-	-	-	-	-	2	-	-	-	1	-	1	-
Exeter	1	-	-	-	-	-	1	-	-	-	-	-	-	-
Gillingham	-	1	-	1	-	-	2	1	-	-	-	-	1	-
Hull	1	-	-	-	-	-	1	1	-	-	-	-	1	-
Leeds	1	-	-	-	-	-	1	-	-	-	-	-	-	-
Leicester	-	-	-	-	-	-	-	1	-	-	-	-	1	-
Liverpool (Fazackerley)	-	-	-	-	-	-	-	-	1	-	-	-	1	-
London (Charing Cross)	-	3	-	-	-	-	3	-	-	-	-	-	-	-
London (Harold Wood)	1	2	-	-	-	-	3	-	2	-	-	-	2	-
London (Kings)	-	-	-	-	-	-	-	2	1	-	-	-	3	-
London (Roehampton)	-	3	-	-	1	-	4	2	3	-	-	-	5	-
London (Stanmore)	6	-	-	-	-	-	6	3	1	-	-	-	4	-
Luton & Dunstable	1	-	-	-	-	-	1	-	-	-	-	-	-	-
Newcastle	-	1	-	-	-	-	1	2	-	-	-	-	2	-
Norwich	-	1	-	-	-	-	1	-	-	-	-	-	-	-
Nottingham	3	-	-	-	-	-	3	-	1	-	-	-	1	-
Oxford	2	-	-	-	-	-	2	2	1	1	-	-	4	-
Plymouth	-	1	-	-	-	-	1	-	1	-	-	-	1	-
Portsmouth	-	-	-	-	1	-	1	-	1	-	-	-	1	-
Ringwood	-	1	-	-	-	-	1	-	-	-	-	-	-	-
Sheffield	1	1	-	-	-	-	2	1	-	-	-	-	1	-
Wrexham	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Total	19	14	1	2	2	-	38	19	12	1	1	1	33	1
All congenital absence	57	28	1	3	2	1	93	46	21	3	1	1	71	1

No level of amputation

This table identifies some of the problems with data quality. It is clear that the data should be interpreted with great care to avoid misinterpretation.

Table 15 Cases where no level of amputation was provided ; by prosthetic service centre, gender and age : 1999/00

	Males						Females						Not specified	Total	
	less than 16	16-54	55-64	65-74	75 and over	No age given	All ages	less than 16	16-54	55-64	65-74	75 and over			All ages
Aberdeen	-	-	-	-	-	1	1	-	-	-	-	-	-	-	1
No Cause Provided	-	-	-	-	-	1	1	-	-	-	-	-	-	-	1
Birmingham	4	-	-	-	-	-	4	5	-	-	-	-	5	-	9
No Cause Provided	4	-	-	-	-	-	4	5	-	-	-	-	5	-	9
Cleveland	-	-	1	-	-	-	1	-	-	-	-	-	-	-	1
No Cause Provided	-	-	1	-	-	-	1	-	-	-	-	-	-	-	1
Derby	-	-	-	3	-	-	3	-	2	-	-	-	2	4	9
No Cause Provided	-	-	-	3	-	-	3	-	2	-	-	-	2	4	9
Dundee	-	-	1	-	-	-	1	-	-	-	-	-	-	-	1
Dysvascularity	-	-	1	-	-	-	1	-	-	-	-	-	-	-	1
- No Additional Detail	-	-	1	-	-	-	1	-	-	-	-	-	-	-	1
Edinburgh	-	1	1	1	1	-	4	1	-	-	-	1	2	-	6
Dysvascularity	-	1	1	1	1	-	4	1	-	-	-	1	2	-	6
- No Additional Detail	-	-	-	-	-	-	-	-	-	-	-	1	1	-	1
No Cause Provided	-	1	1	1	1	-	4	1	-	-	-	-	1	-	5
Gillingham	-	1	1	-	-	-	2	-	-	-	-	-	-	-	2
Infection - No Additional Detail	-	1	1	-	-	-	2	-	-	-	-	-	-	-	2
Other - No Additional Detail	-	1	-	-	-	-	1	-	-	-	-	-	-	-	1
Glasgow (Strathclyde University)	-	-	-	-	-	-	-	-	-	-	1	-	1	-	1
No Cause Provided	-	-	-	-	-	-	-	-	-	-	1	-	1	-	1
Glasgow (Westmarc)	-	-	-	-	-	-	-	-	-	1	2	1	4	-	4
No Cause Provided	-	-	-	-	-	-	-	-	-	1	2	1	4	-	4
Newcastle	-	2	1	-	-	-	3	-	-	-	-	-	-	-	3
Trauma - No Additional Detail	-	2	1	-	-	-	3	-	-	-	-	-	-	-	3
Other - - No Additional Detail	-	-	1	-	-	-	1	-	-	-	-	-	-	-	1
Oxford	-	-	-	-	-	-	-	-	1	-	-	-	1	-	1
No Cause Provided	-	-	-	-	-	-	-	-	1	-	-	-	1	-	1
Portsmouth	-	1	-	-	-	-	1	-	-	-	-	-	-	-	1
No Cause Provided	-	1	-	-	-	-	1	-	-	-	-	-	-	-	1
Sussex	-	-	-	1	-	-	1	1	-	-	1	1	3	2	6
No Cause Provided	-	-	-	1	-	-	1	1	-	-	1	1	3	2	6
Total	4	5	5	5	1	1	21	7	3	1	4	3	18	6	45

Time interval

The table below illustrates the variation from centre to centre in the time interval between date of amputation and referral. The variation is mainly accounted for by differences in surgical and physiotherapy practice and in the operational policies of centres. This table contains valuable information that requires careful interpretation. There is clearly a very wide variation in practices between centres: practise is a composite of referring hospitals and individual centres practices. The intervals recorded will also be affected by intercurrent disease episodes.

Table 16a Time interval between date of amputation and referral ; Inc. congenital absence
by prosthetic service centre : 1999/00 (cumulative percentage)

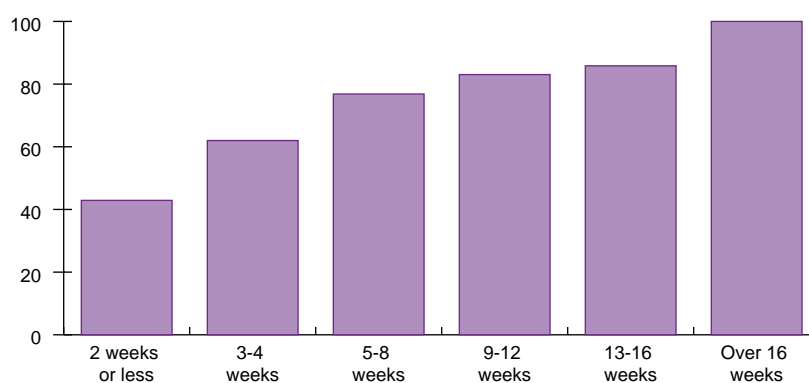
Prosthetic Service Centre	Time interval ¹						Total no. (= 100%)	No Wait Calculated	Total
	2 weeks or less	4 weeks or less	8 weeks or less	12 weeks or less	16 weeks or less	Over 16 weeks			
	Cumulative percentages ³								
Aberdeen	34.3	65.7	94.3	97.1	100.0	100.0	35	2	37
Belfast	62.7	80.4	87.3	90.2	91.2	100.0	102	-	102
Birmingham	50.0	62.8	73.1	77.7	81.5	100.0	368	-	368
Bristol	26.4	58.1	79.8	88.4	90.7	100.0	129	-	129
Cambridge	35.7	60.9	74.8	80.9	85.2	100.0	115	-	115
Cardiff	58.2	76.5	86.3	89.5	92.8	100.0	153	-	153
Carlisle	53.5	74.4	79.1	86.0	88.4	100.0	43	2	45
Cleveland	34.9	51.4	66.1	85.3	89.0	100.0	109	-	109
Derby	-	-	2.6	2.6	2.6	100.0	39	9	48
Dundee	35.1	57.7	76.3	82.5	87.6	100.0	97	-	97
Edinburgh	9.0	39.7	76.9	88.5	92.3	100.0	78	6	84
Exeter	63.6	80.5	89.8	91.5	92.4	100.0	118	-	118
Gillingham	42.6	55.0	67.8	72.8	76.7	100.0	202	-	202
Glasgow (Strathclyde University)	53.8	76.9	89.7	100.0	100.0	100.0	39	2	41
Glasgow (Westmarc)	24.3	55.0	74.3	82.1	87.9	100.0	140	8	148
Hull	37.7	65.2	76.8	82.6	85.5	100.0	69	-	69
Inverness	62.5	68.8	75.0	81.3	81.3	100.0	16	-	16
Isle of Wight ²	20.0	40.0	60.0	80.0	100.0	100.0	5	-	5
Leeds	100.0	100.0	100.0	100.0	100.0	100.0	143	-	143
Leicester	100.0	100.0	100.0	100.0	100.0	100.0	25	-	25
Liverpool (Fazackerley)	46.8	72.7	81.2	84.4	86.4	100.0	154	-	154
London (Charing Cross)	3.5	35.1	56.1	70.2	73.7	100.0	57	-	57
London (Harold Wood)	24.0	50.9	68.6	77.1	79.7	100.0	271	-	271
London (Kings)	26.5	57.5	77.0	83.2	85.8	100.0	113	-	113
London (Roehampton)	4.8	29.1	50.3	57.1	60.3	100.0	189	-	189
London (Stanmore)	36.2	50.8	64.6	66.9	69.2	100.0	130	-	130
Luton & Dunstable	31.3	67.5	85.0	88.8	92.5	100.0	80	-	80
Manchester	100.0	100.0	100.0	100.0	100.0	100.0	310	1	311
Newcastle	9.8	47.4	75.8	84.5	86.6	100.0	194	-	194
Northampton	11.8	25.0	63.2	86.8	95.6	100.0	68	-	68
Norwich	3.4	7.9	34.8	57.3	71.9	100.0	89	-	89
Nottingham	28.7	52.3	69.5	78.2	81.6	100.0	174	2	176
Oxford	25.3	46.9	66.0	79.0	81.5	100.0	162	-	162
Plymouth	83.6	95.5	97.3	100.0	100.0	100.0	110	2	112
Portsmouth	30.1	65.0	83.5	89.3	90.3	100.0	103	4	107
Preston	75.9	79.3	85.2	87.7	89.7	100.0	203	-	203
Ringwood	64.2	78.9	92.6	94.7	95.8	100.0	95	-	95
Sheffield	46.4	68.5	86.0	88.3	90.5	100.0	222	-	222
Stoke	39.6	56.0	76.9	82.8	83.6	100.0	134	-	134
Sussex	2.4	16.7	51.2	64.3	72.6	100.0	84	39	123
Swansea	76.5	89.8	93.9	96.9	96.9	100.0	98	1	99
Wirral	53.3	70.5	83.8	85.7	86.7	100.0	105	-	105
Wolverhampton	19.5	37.4	67.5	82.9	86.2	100.0	123	-	123
Wrexham	31.0	74.6	84.5	87.3	93.0	100.0	71	1	72
All centres (percentage)	42.9	62.0	76.8	83.0	85.8	100.0			
All centres (number)	2 301	1 024	796	333	150	760	5 364	79	5 443

1 2 weeks or less equals 0-14 days; 4 weeks or less equals 15-28 days; etc..

2 1998/99 data.

3 The cumulative percentage has been calculated excluding cases where no date of amputation has been supplied.

Chart 7a Percentage (cumulative) of time taken from amputation to date of referral : 1999/00



The tables should be interpreted in relation to each centres' data from preceding years. The table are not league tables and should not be interpreted as such. It is believed that there is some uncertainty around interpretation of data collection guidelines and this will be addressed in future reports. This information has been presented both including (table 16a) and excluding (table 16b) congenital absence cases. This has been necessary as in congenital absence cases the date of birth is often recorded as the date of referral and this leads to misleading analysis of the hospitalization to referral time interval.

Table 16b Time interval between date of amputation and referral ; Excl. congenital absence
by prosthetic service centre : 1999/00 (cumulative percentage)

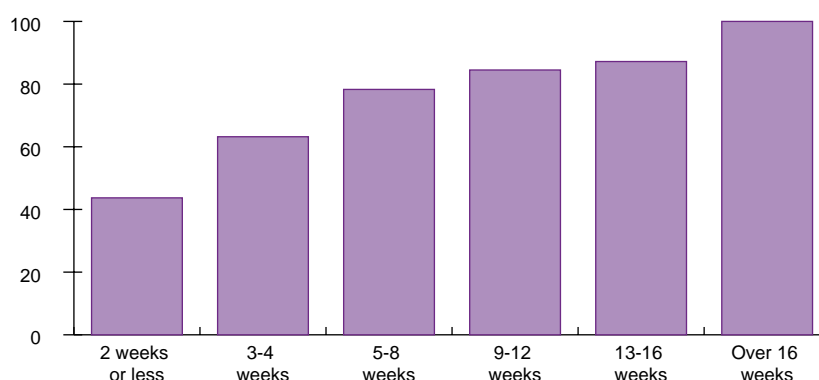
Prosthetic Service Centre	Time interval ¹						Total no. (= 100 %)	No Wait Calculated	Total
	2 weeks or less	4 weeks or less	8 weeks or less	12 weeks or less	16 weeks or less	Over 16 weeks			
	Cumulative percentages ³								
Aberdeen	34.3	65.7	94.3	97.1	100.0	100.0	35	1	36
Belfast	64.2	83.2	90.5	93.7	94.7	100.0	95	-	95
Birmingham	50.1	62.9	73.3	77.9	81.7	100.0	367	-	367
Bristol	26.2	57.9	80.2	88.1	90.5	100.0	126	-	126
Cambridge	37.3	63.6	77.3	83.6	88.2	100.0	110	-	110
Cardiff	59.1	77.9	87.9	91.3	94.6	100.0	149	-	149
Carlisle	53.5	74.4	79.1	86.0	88.4	100.0	43	2	45
Cleveland	34.9	51.4	66.1	85.3	89.0	100.0	109	-	109
Derby	-	-	2.9	2.9	2.9	100.0	35	9	44
Dundee	35.1	57.7	76.3	82.5	87.6	100.0	97	-	97
Edinburgh	9.2	39.5	76.3	88.2	92.1	100.0	76	5	81
Exeter	68.8	86.2	95.4	97.2	97.2	100.0	109	-	109
Gillingham	44.5	57.6	70.7	75.4	78.5	100.0	191	-	191
Glasgow (Strathclyde University)	53.8	76.9	89.7	100.0	100.0	100.0	39	2	41
Glasgow (Westmarc)	24.3	55.0	74.3	82.1	87.9	100.0	140	6	146
Hull	38.8	67.2	79.1	83.6	86.6	100.0	67	-	67
Inverness	66.7	73.3	80.0	86.7	86.7	100.0	15	-	15
Isle of Wight ²	20.0	40.0	60.0	80.0	100.0	100.0	5	-	5
Leeds	100.0	100.0	100.0	100.0	100.0	100.0	141	-	141
Leicester	100.0	100.0	100.0	100.0	100.0	100.0	24	-	24
Liverpool (Fazackerley)	48.0	74.7	83.3	86.7	88.7	100.0	150	-	150
London (Charing Cross)	3.7	37.0	59.3	74.1	77.8	100.0	54	-	54
London (Harold Wood)	24.1	52.1	70.1	78.9	81.2	100.0	261	-	261
London (Kings)	25.7	57.8	78.0	84.4	87.2	100.0	109	-	109
London (Roehampton)	5.1	30.9	53.1	60.6	64.0	100.0	175	-	175
London (Stanmore)	40.0	54.8	69.6	72.2	73.9	100.0	115	-	115
Luton & Dunstable	31.6	68.4	86.1	88.6	92.4	100.0	79	-	79
Manchester	100.0	100.0	100.0	100.0	100.0	100.0	308	1	309
Newcastle	10.2	49.2	78.1	87.2	88.8	100.0	187	-	187
Northampton	11.8	25.0	63.2	86.8	95.6	100.0	68	-	68
Norwich	3.4	8.0	35.6	58.6	73.6	100.0	87	-	87
Nottingham	29.2	53.6	71.4	79.8	83.3	100.0	168	2	170
Oxford	27.5	51.0	71.8	81.9	83.9	100.0	149	-	149
Plymouth	84.1	95.3	97.2	100.0	100.0	100.0	107	-	107
Portsmouth	29.4	64.7	83.3	89.2	90.2	100.0	102	1	103
Preston	76.2	79.7	85.6	88.1	90.1	100.0	202	-	202
Ringwood	63.8	78.7	92.6	94.7	95.7	100.0	94	-	94
Sheffield	47.2	69.2	86.9	88.8	91.1	100.0	214	-	214
Stoke	39.8	56.4	77.4	83.5	84.2	100.0	133	-	133
Sussex	2.4	16.7	51.2	64.3	72.6	100.0	84	39	123
Swansea	76.5	89.8	93.9	96.9	96.9	100.0	98	-	98
Wirral	56.6	74.7	88.9	90.9	91.9	100.0	99	-	99
Wolverhampton	19.5	37.4	67.5	82.9	86.2	100.0	123	-	123
Wrexham	31.0	74.6	84.5	87.3	93.0	100.0	71	-	71
All centres (percentage)	43.7	63.2	78.3	84.5	87.2	100.0			
All centres (number)	2 278	1 015	787	321	143	666	5 210	68	5 278

1 2 weeks or less equals 0-14 days; 4 weeks or less equals 15-28 days; etc.

2 1998/99 data.

3 The cumulative percentage has been calculated excluding cases where no date of amputation has been supplied.

Chart 7b Percentage (cumulative) of time taken from amputation to date of referral : 1999/00



APPENDICES

Appendix 1

Number of Estimated Registrations at each Prosthetic Service Centre, 1999

Prosthetic Service Centre	Number of registrations		Total
	Upper Limb	Lower Limb	
Aberdeen	113	404	517
Belfast	316	1 341	1 657
Birmingham	1 084	2 974	4 058
Bristol	385	1 485	1 870
Cambridge	247	1 012	1 259
Cardiff	303	1 207	1 510
Carlisle	110	361	471
Cleveland	165	960	1 125
Derby	-	380	380
Dundee	107	673	780
Edinburgh	275	1 088	1 363
Exeter	224	906	1 130
Gillingham	350	1 589	1 939
Glasgow (Strathclyde University)	109	400	509
Glasgow (Westmarc)	397	2 753	3 150
Hull	169	656	825
Inverness	38	247	285
Isle of Wight	29	146	175
Leeds	412	1 927	2 339
Leicester	156	470	626
Liverpool	125	1 144	1 269
London (Charing Cross)	-	751	751
London (Harold Wood)	405	2 061	2 466
London (Kings)	285	1 229	1 514
London (Roehampton)	747	2 239	2 986
London (Stanmore)	510	1 463	1 973
Luton & Dunstable	-	812	812
Manchester	659	2 350	3 009
Newcastle	368	1 663	2 031
Northampton	99	514	613
Norwich	234	1 007	1 241
Nottingham	464	1 389	1 853
Oxford	288	1 546	1 834
Plymouth	149	952	1 101
Portsmouth	280	1 660	1 940
Preston	301	1 289	1 590
Ringwood	111	717	828
Sheffield	353	1 694	2 047
Stoke	-	1 039	1 039
Sussex	202	1 350	1 552
Swansea	159	761	920
Wirral	199	718	917
Wolverhampton	-	1 015	1 015
Wrexham	149	725	874
Total	11 076	51 067	62 143

Appendix 2

District Health Authorities in each Region

Eastern Region

Bedfordshire
North Essex
South Essex
Suffolk
East & North Hertfordshire
West Hertfordshire
Cambridge
Norfolk

London Region

Hillingdon
Kensington, Chelsea & Westminster
Enfield & Haringey
Redbridge & Waltham Forest
Bexley & Greenwich
Bromley
Croydon
Kingston & Richmond
Lambeth, Southwark & Lewisham
Merton, Sutton & Wandsworth
Barking & Havering
Barnet
Brent & Harrow
Camden & Islington
Ealing, Hammersmith & Hounslow
East London & The City

Northern Ireland

Eastern Health & Social Services Board
Northern Health & Social Services Board
Southern Health & Social Services Board
Western Health & Social Services Board

North West Region

South Lancashire
Liverpool
Manchester
Morecambe Bay
St Helens & Knowsley
Salford & Trafford
Sefton
Stockport
West Pennine
West Hertfordshire
Bury & Rochdale
North Cheshire
South Cheshire
East Lancashire
North West Lancashire
Wigan & Bolton
Wirral

Northern & Yorkshire Region

Bradford
County Durham
East Riding
Gateshead & South Tyneside
Leeds
Newcastle & North Tyneside
North Cumbria
Northumberland
Sunderland
Tees
Wakefield
North Yorkshire
Calderdale & Kirklees

South East Region

Berkshire
Buckinghamshire
East Kent
West Kent
East Surrey
West Surrey
East Sussex, Brighton & Hove
West Sussex
Northamptonshire
Oxfordshire
North & Mid Hampshire
Portsmouth & South East Hampshire
Southampton & South West Hampshire
Isle Of Wight

South West Region

Somerset
South & West Devon
Wiltshire
Avon
Cornwall & Isles Of Scilly
Dorset
North & East Devon
Gloucestershire

Trent Region

Barnsley
North Derbyshire
South Derbyshire
Doncaster
Leicestershire
Lincolnshire
North Nottinghamshire
Nottingham
Rotherham
Sheffield
South Humber

Wales

Gwent
Bro Taf
Dyfed Powys
North Wales
West Glamorgan

West Midlands Region

Birmingham
Coventry
Dudley
Herefordshire
Sandwell
Shropshire
Solihull
North Staffordshire
South Staffordshire
Walsall
Warwickshire
Wolverhampton
Worcester

Source: Codes Development and Allocation, Department of Health.

Appendix 3

Minimum Dataset Fields

Field Name

Patient Number
Date of Birth
Purchaser Code
Centre Code
Gender
Is this a New Amputee
Ethnic Origin

Left Upper Limb Amputation Details

Date of Referral following a Left Upper Amputation
Date of Amputation
Level of Amputation
Cause of Amputation (Aetiology)

Right Upper Limb Amputation Details

Date of Referral following a Right Upper Amputation
Date of Amputation
Level of Amputation
Cause of Amputation (Aetiology)

Left Lower Limb Amputation Details

Date of Referral following a Left Lower Amputation
Date of Amputation
Level of Amputation
Cause of Amputation (Aetiology)

Right Lower Limb Amputation

Date of Referral following a Right Lower Amputation
Date of Amputation
Level of Amputation
Cause of Amputation (Aetiology)

Appendix 4

List of Level and Cause of Amputation Codes

Level of Amputation — Codes used in the Minimum Dataset

Upper Limb

01	Forequarter
02	Shoulder Disarticulation
03	Trans-humeral
04	Elbow Disarticulation
05	Trans-radial
06	Wrist Disarticulation
07	Partial Hand
08	Digits

Lower Limb

09	Hemi-pelvectomy
10	Hip Disarticulation
11	Trans-femoral
12	Knee Disarticulation
13	Trans-tibial
14	Ankle Disarticulation (SYMES)
15	Partial Foot
16	Digits

Cause of Amputation (Aetiology) — Codes used in the Minimum Dataset

Trauma

1.0	No Additional Detail
1.1	Mechanical
1.2	Electrical
1.3	Thermal
1.4	Chemical

Dysvascularity

2.0	No Additional Detail
2.1	Diabetes Mellitus
2.2	Non-diabetic Arteriosclerosis
2.3	Embolism
2.4	Vasospastic Conditions (inc. Raynaud's)
2.5	Disseminated Intravascular Coagulation
2.6	Endovascular Chemical Trauma (= Substance Abuse)
2.7	Buerger's Disease
2.8	Iatrogenic Vascular Trauma
2.9	Arteritis (inc. Rheumatoid Arthritis, Autoimmune Disease)
2.A	Venous Disease

Infection

3.0	No Additional Detail
3.1	Acute
3.2	Chronic

Neurological Disorder

4.0	No Additional Detail
4.1	Diabetic Neuropathy
4.2	Infective (inc. Leprosy, Madura Foot)
4.3	Spina Bifida
4.4	Poliomyelitis
4.5	Peripheral Nerve Injury

Neoplasia

5.0	No Additional Detail
5.1	Benign
5.2	Malignant - Primary
5.3	Malignant - Secondary

Congenital Absence

6.0	No Additional Detail
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Other

7.0	No Additional Detail
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Appendix 5

List of prosthetic service centres (PSC) submitting data

Aberdeen	Grampian Healthcare NHS Trust
Belfast	Musgrave Park Hospital
Birmingham	West Midlands Regional Rehabilitation Centre
Brighton	Sussex Rehabilitation Centre
Bristol	Southmead Hospital
Cambridge	Addenbrookes Disablement Services Centre
Cardiff	Rookwood Artificial Limb Appliance Centre
Carlisle	Carlisle PSC
Charing Cross	Holderness Limb Fitting Centre
Cleveland	Cleveland PSC
Derby	Derby Limb Centre
Dundee	Dundee Limb Fitting Centre
Edinburgh	Rehabilitation Engineering Services
Exeter	Exeter Mobility Centre
Gillingham	Gillingham PSC
Glasgow	University of Strathclyde
Glasgow	Westmarc
Harold Wood	Harold Wood PSC
Hull	East Yorkshire Artificial Limb Unit
Inverness	Medical Physics Dept.
Isle of Wight	The Prosthetic, Orthotic and Podiatry Department
Kings	Kings College Hospitals Rehabilitation Centre
Leeds	Prosthetic Dept.
Leicestershire	Leicestershire PSC
Liverpool	The Donald Tod Rehabilitation Centre
Luton & Dunstable	Luton & Dunstable Limb Fitting Centre
Manchester	Manchester PSC
Newcastle	Newcastle PSC
Northampton	Northampton Artificial Limb Service
Norwich	Norwich PSC
Nottingham	Nottingham Mobility Centre
Oxford	The Mary Marlborough Centre
Plymouth	Plymouth PSC
Portsmouth	Portsmouth PSC
Preston	Preston PSC
Ringwood	Dorset Artificial Limb Centre
Roehampton	Roehampton Rehabilitation Centre
Sheffield	Sheffield Mobility & Specialised Rehabilitation Centre
Stanmore	Stanmore PSC
Stoke	North Midlands Limb Fitting Centre
Swansea	Morrison Artificial Limb & Appliance Centre
Wirral	Wirral Limb Centre
Wolverhampton	Maltings Mobility Centre
Wrexham	Wrexham Artificial Limb & Appliance Centre

Additional information

- 1 The collecting, recording and coding of the data has been a laborious and daunting exercise. Since the integration of the Disablement Service Centres into the National Health Service, record keeping has been more or less confined to those activities relevant to each centre.
- 2 All nil entries give rise to uncertainty about the data validity. Where comments and conclusions in this report are supported by calculation from data, the authors have used data adjusted for nil entries. Any interpretations should be considered and used with this caveat in mind.
- 3 Forty-four centres in the UK have been included in the analysis.
- 4 The data in Upper Limb and Lower Limb Amputation tables does not include cases of congenital absence. Only those cases which had a surgical amputation are presented in the analysis.
- 5 Isle of Wight Prosthetic, Orthotic and Podiatry Department have been unable to provide information for 1999/00. Throughout this report 1998/99 Isle of Wight data has been used. Due to small numbers this does not effect the overall UK picture for 1999/00.
- 6 The allocation of regions from district health authority codes was compiled by ISD from data provided by the Organisational Codes Service of the Department of Health.

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