

NHS BLOOD AND TRANSPLANT

BOWEL ADVISORY GROUP

POTENTIAL BOWEL DONORS AND LOCATION

POTENTIAL BOWEL DONORS

- 1 From 14 April 2011 offering data for the bowel has been recorded in the UK Transplant Registry (UKTR). For any offered bowel it is assumed that consent was obtained for donation. Note that as consent is taken separately for the different organs, consent may not have been given for the bowel. Also, if there is no suitable blood group identical/compatible patient awaiting an intestinal transplant or the donor is outside agreed criteria, the bowel may not have been offered.
- 2 In order to be able to determine the potential for bowel donation from donors after brain death (DBD), 654 DBD who donated at least one solid organ for the intention of transplantation, between 14 April 2011 and 29 February 2012, were identified using data stored in the UKTR.
- 3 In the offering process, a donor bowel is offered for donation if the donor satisfies the following criteria:
 - donor age less than or equal to 65 years and donor weight less than or equal to 100 kg, with a BMI less than or equal to 30 kg/m² for adult offers
 - donor age less than 16 years or donor weight less than 35 kg for paediatric offers then adult offers.

Some intestinal transplant centres apply additional donor criteria to that described above.

- 4 Of the 654 DBD who donated at least one solid organ for the intention of transplantation, 62 (9%) donors were from the Republic of Ireland and 16 (2%) were from overseas.
- 5 188 (29%) of the DBD had offering data for the bowel recorded in the UKTR. Of these, one was from the Republic of Ireland and four were from overseas (61 DBD from the Republic of Ireland and 12 DBD from overseas had no offering data recorded). 13 of these (all UK DBD) were outside the offering criteria described above and these offers were subsequently declined.
- 6 For the remaining 175 potential bowel donors, consent was obtained for the liver and pancreas for all UK DBD. For the five non-UK DBD, the liver and/or pancreas were offered in the UK for four DBD. For one DBD only the bowel was offered.
- 7 **Table 1** summarises the liver, pancreas and bowel transplants resulting from the pool of 175 potential bowel donors, broken down by donor blood group, weight, BMI and age.

Table 1 Transplants performed using organs from potential bowel donors identified from donors after brain death who donated at least one solid organ for the intention of transplantation where bowel was offered, between 14 April 2011 and 29 February 2012

	No. donors N	Liver		Organs transplanted Pancreas		Bowel	
		N	%	N	%	N	%
Donor blood group							
O	93	79	85	41	44	12	13
A	58	55	95	24	41	7	12
B	17	16	94	10	59	2	12
AB	7	6	86	1	14	0	-
Donor weight (kg)							
<20	6	4	67	2	33	3	50
20-<35	4	3	75	1	25	3	75
35-50	11	11	100	4	36	2	18
>50	154	138	90	69	45	13	8
Donor BMI (kg/m²)							
<18.5	14	12	86	6	43	6	43
18.5-<25	105	96	91	47	45	13	12
25-<30	56	48	86	23	41	2	4
Donor age (years)							
0-15	14	11	79	5	36	8	57
16-35	48	43	90	27	56	5	10
36-50	58	53	91	31	53	6	10
51-65	55	49	89	13	24	2	4
Total	175	156	89	76	43	21	12

Note: Five potential bowel donors from republic of Ireland or overseas are included in this table

- 8 Of the 175 potential bowel donors, only 21 (12%) bowels were transplanted compared to 156 (89%) livers and 76 (43%) pancreases.
- 9 **Table 2** summarises the reasons for declining offers of adult bowels, by donor centre. Of the 161 potential adult bowels offered, 148 were declined (92%).
- 10 **Table 3** summarises the reasons for declining offers of paediatric bowels, by donor centre. Of the 14 potential paediatric bowels offered, 6 were declined (43%).

Table 2 Reasons for decline of offers for bowels from potential bowel donors, between 14 April 2011 and 29 February 2012, by adult transplant centres

Reasons for decline	Transplant centre				All declined offers	
	Cambridge		Oxford			
	N	%	N	%	N	%
Donor reasons	77	88	124	92	201	90
Donor unsuitable - size	41	47	18	13	59	26
HLA/ABO type	5	6	46	34	51	23
Donor unsuitable - past history	17	19	25	19	42	19
Donor unsuitable - age	5	6	10	7	15	7
X-match positive	1	1	15	11	16	7
Poor function	5	6	1	1	6	3
Other disease	1	1	1	1	2	1
Donor unsuitable - virology	0	-	2	1	2	1
Medication	1	1	0	-	1	<1
Donor unsuitable - cod	1	1	1	1	2	1
Donor unstable	0	-	1	1	1	<1
Infection	0	-	1	1	1	<1
Anatomical	0	-	1	1	1	<1
Organ damaged	0	-	1	1	1	<1
Family refused permission	0	-	1	1	1	<1
Recipient reasons	3	3	3	2	6	3
Recipient unfit	2	2	3	2	5	2
Recipient did not need transplant	1	1	0	-	1	<1
Logistical	8	9	8	6	16	7
No time	3	3	3	2	6	3
No suitable recipients	2	2	2	1	4	2
Centre already retrieving/transplanting	1	1	1	1	2	1
Transport difficulties	1	1	0	-	1	<1
No Beds/staff/theatre	0	-	1	1	1	<1
Other	1	1	1	1	2	2
Total	88	100	135	100	223	100

Percentages have been rounded to the nearest whole number and are based on small numbers

Table 3 Reasons for decline of offers of bowels from potential bowel donors, between 14 April 2011 and 29 February 2012, by paediatric transplant centres

Reasons for decline	Transplant centre				All declined offers	
	King's College		Birmingham			
	N	%	N	%	N	%
Donor reasons	3	60	6	60	9	60
Donor unsuitable - size	2	40	5	50	7	47
Poor function	1	20	0	0	1	7
Donor unsuitable - age	0	0	1	10	1	7
Recipient reasons	1	20	2	20	3	20
Recipient unfit	1	20	2	20	3	20
Logistical	1	20	2	20	3	20
No suitable recipients	0	0	1	10	1	7
Other	1	20	1	10	2	13
Total	5	100	10	100	15	100

Percentages have been rounded to the nearest whole number and are based on small numbers

LOCATION OF POTENTIAL BOWEL DONORS

- 11 The location of the 175 potential bowel donors was determined using the postcode of the donor hospital where the donor resided. The donor hospitals were mapped to Strategic Health Authorities (StHA). Additionally, for the 21 bowel donors from whom the bowel was transplanted, the donor hospitals were mapped to Primary Care Trusts (PCT).
- 12 **Figure 1** shows the location by StHA of the 175 potential bowel donors and **Figure 2** shows the location by PCT of the 21 bowel donors from whom the bowel was transplanted.
- 13 Members are asked to consider the information presented in these figures to see if it provides evidence to suggest that in some areas of the UK there is a requirement to increase awareness of bowel donation and transplantation and/or intestinal transplantation as a whole.

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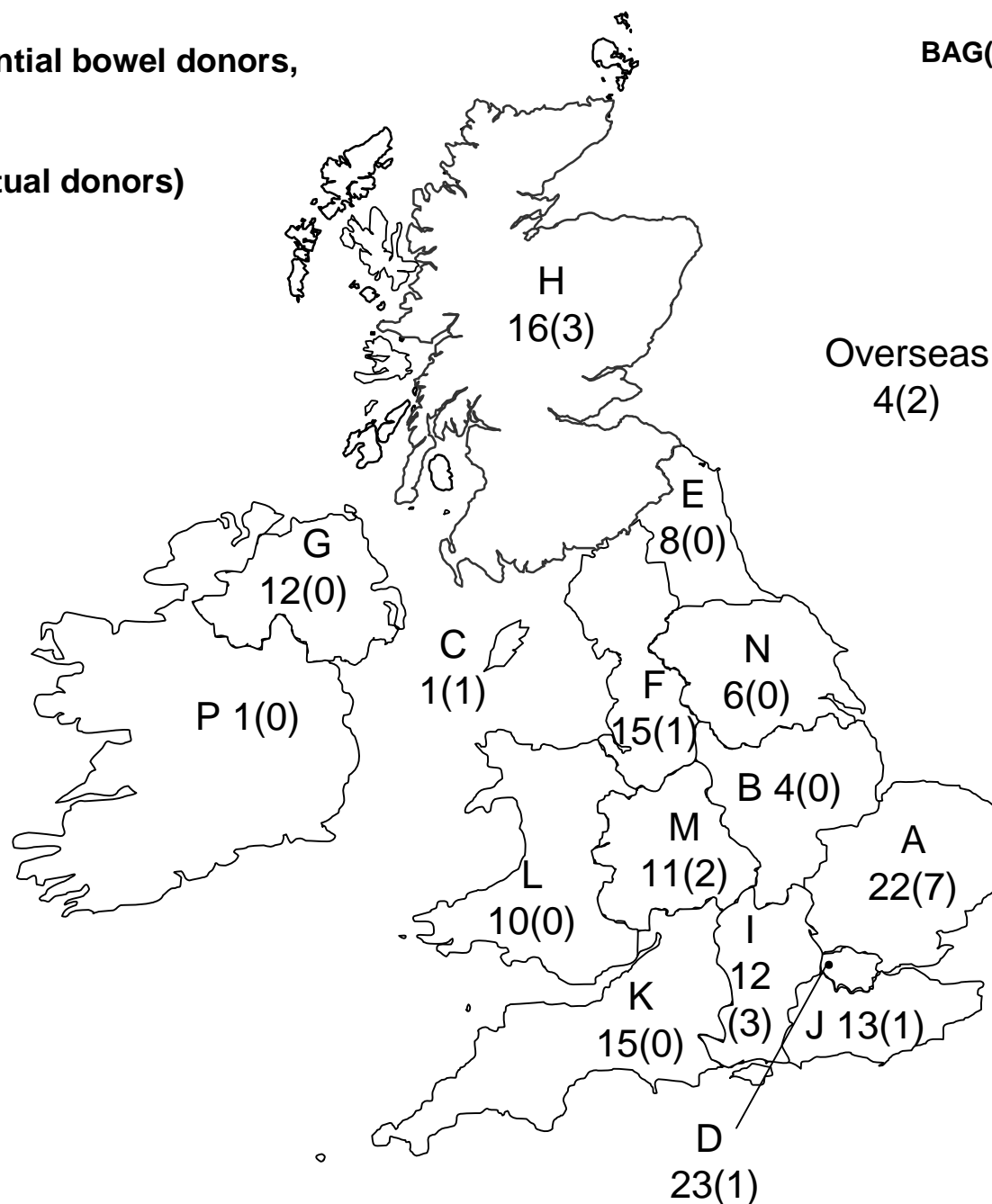
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**Figure 1: Location (StHA) of potential bowel donors,
14 April 2011 – 27 Feb 2012**

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Total potential donors: 175 (21 actual donors)

A	East of England	22 (7)
B	East Midlands	4 (0)
C	Isle of Man	1 (1)
D	London	23 (1)
E	North East	8 (0)
F	North West	15 (1)
G	Northern Ireland	12 (0)
H	Scotland	16 (3)
I	South Central	12 (3)
J	South East Coast	13 (1)
K	South West	15 (0)
L	Wales	10 (0)
M	West Midlands	11 (2)
N	Yorkshire and The Humber	6 (0)
O	Unknown UK	2 (0)
P	Republic of Ireland	1 (0)
Q	Overseas	4 (2)
	Total	175 (21)



**Strategic Health Authority Potential (Actual)
Donors**

A	East of England	22 (7)
	Bedfordshire	3
	Cambridgeshire	2 (2)
	Great Yarmouth and Waveney	1
	Hertfordshire	6 (1)
	Luton	1 (1)
	Mid Essex	2 (1)
	Norfolk	2 (1)
	Peterborough	1
	South East Essex	2
	South West Essex	1 (1)
	Suffolk	1
B	East Midlands	4 (0)
	Derby City	1
	Leicester City	1
	Leicester County and Rutland	1
	Northamptonshire Teaching	1
C	Isle of Man	1 (1)
	Isle of Man	1 (1)
D	London	23 (1)
	Barnet	1
	Bromley	1
	Camden	1
	Croydon	1 (1)
	Ealing	2
	Enfield	3
	Hammersmith and Fulham	1
	Haringey Teaching	1
	Hillingdon	2
	Hounslow	1
	Harrow	1
	Lewisham	1
	Southwark	2
	Westminster	3
	Wandsworth	2
E	North East	8 (0)
	County Durham	1
	Newcastle	1
	Northumberland	4
	Sunderland teaching	2

F	North West	15 (1)
	Ashford, Leigh and Wigan	2
	Bolton Teaching	1
	Central Lancashire	1
	Cumbria teaching	1
	Liverpool	2 (1)
	North Lancashire Teaching	1
	Salford	2
	Sefton	1
	Tameside and Glossop	1
	Warrington	2
	Wirral	1
G	Northern Ireland	12 (0)
	Belfast	2
	Northern	3
	Southern	1
	South Eastern	3
	Western	3
H	Scotland	16 (3)
	Fife	2 (1)
	Greater Glasgow and Clyde	4
	Orkney	1
	Lothian	5 (2)
	Tayside	1
	Forth Valley	3
I	South Central	12 (3)
	Berkshire East	1
	Berkshire West	2 (1)
	Buckinghamshire	2
	Hampshire	3 (1)
	Milton Keynes	1
	Oxfordshire	2 (1)
	Southampton City	1
J	South East Coast	13 (1)
	Eastern and Coastal Kent	2
	Hastings and Rother	2 (1)
	Surrey	1
	West Kent	3
	West Sussex	5

K	South West	15 (0)
	Bath and NE Somerset	2
	Bournemouth and Poole	1
	Bristol	1
	Gloucestershire	2
	Somerset	4
	South Gloucestershire	1
	Swindon	1
	Torbay	2
	Wiltshire	1
L	Wales	10 (0)
	Abertawe Bro Morgannwg	3
	Betsi Cadwaladr University	3
	Cardiff and Vale University	1
	Cwm Taf	1
	Powys Teaching	2
M	West Midlands	11 (2)
	Birmingham East and North	1
	North Staffordshire	1 (1)
	Sandwell	2
	South Staffordshire	2
	Stoke on Trent	1
	Telford and Wrekin	1
	Walsall Teaching	1
	Worcestershire	2 (1)
N	Yorkshire and The Humber	6 (0)
	Bradford and Airedale Teach.	1
	East Riding of Yorkshire	2
	Kirklees	1
	North Yorkshire and York	1
	Wakefield	1
O	Unknown UK	2 (0)
P	Republic of Ireland	1 (0)
	Dublin	1
Q	Overseas	4 (2)
	TOTAL	175 (21)

Figure 2: Location (PCT) of donors from whom the bowel was transplanted, 14 April 2011 – 27 February 2012

Total intestinal transplants: 21

