

13.1 Introduction

In this chapter, summary data from the new national Potential Donor Audit (PDA), which commenced on 1 October 2009, is shown for 1 April 2010 to 31 March 2011. The data comprise all audited patient deaths in UK Intensive Care Units (ICUs) and emergency departments, excluding cardiothoracic ICUs and patients aged 76 years and over, in the time period. The data are based on information received by 1 July 2011. **The number of solid organ donors reported in this chapter will differ from that shown in the rest of the report, due to the national PDA excluding specific patients.**

13.2 Definitions

All data shown in this chapter use the following definitions.

Potential donors after brain death (DBD) are defined as patients for whom death was confirmed following neurological tests and who had no absolute or relative medical contraindications to solid organ donation.

Potential donors after circulatory death (DCD) are defined as patients for whom imminent death was anticipated and treatment was withdrawn and who had no absolute or relative medical contraindications to solid organ donation.

Absolute or relative medical contraindications are defined as known HIV positive, known or suspected CJD, active untreated tuberculosis, any malignancy within the past 12 months (excluding brain tumour) and multi-organ failure.

The referral rate is the percentage of patients for whom neurological death was suspected, or imminent death was anticipated, that were discussed with the SN-OD.

The approach rate is the percentage of potential donor families approached for consent to/authorisation for donation.

The consent/authorisation rate is the percentage of potential donor families approached about donation that consented to/authorised donation.

The conversion rate is the percentage of potential donors who became actual donors. *Note that there are many reasons why potential donors do not become actual donors including the family not being approached or the family not consenting to/authorising donation but also coroner/procurator fiscal refusal and the potential donor being found to have additional medical contraindications.*

13.3 Breakdown of audited deaths in ICUs

In the 12-month period there were a total of 29,060 audited patient deaths in the UK. **Figures 13.1 and 13.2** show a detailed breakdown from the number of audited

patient deaths to the number of solid organ donors for potential DBD and DCD, respectively. **Table 13.1** shows the key percentages calculated from the flow chart information. It is unrealistic to expect these rates to be 100%, due to the definitions used in the data collection and justifiable reasons. In particular, the DCD conversion rate is low due to a large proportion of potential DCD having a prolonged time to death which results in deterioration of organs making them unsuitable for transplant.

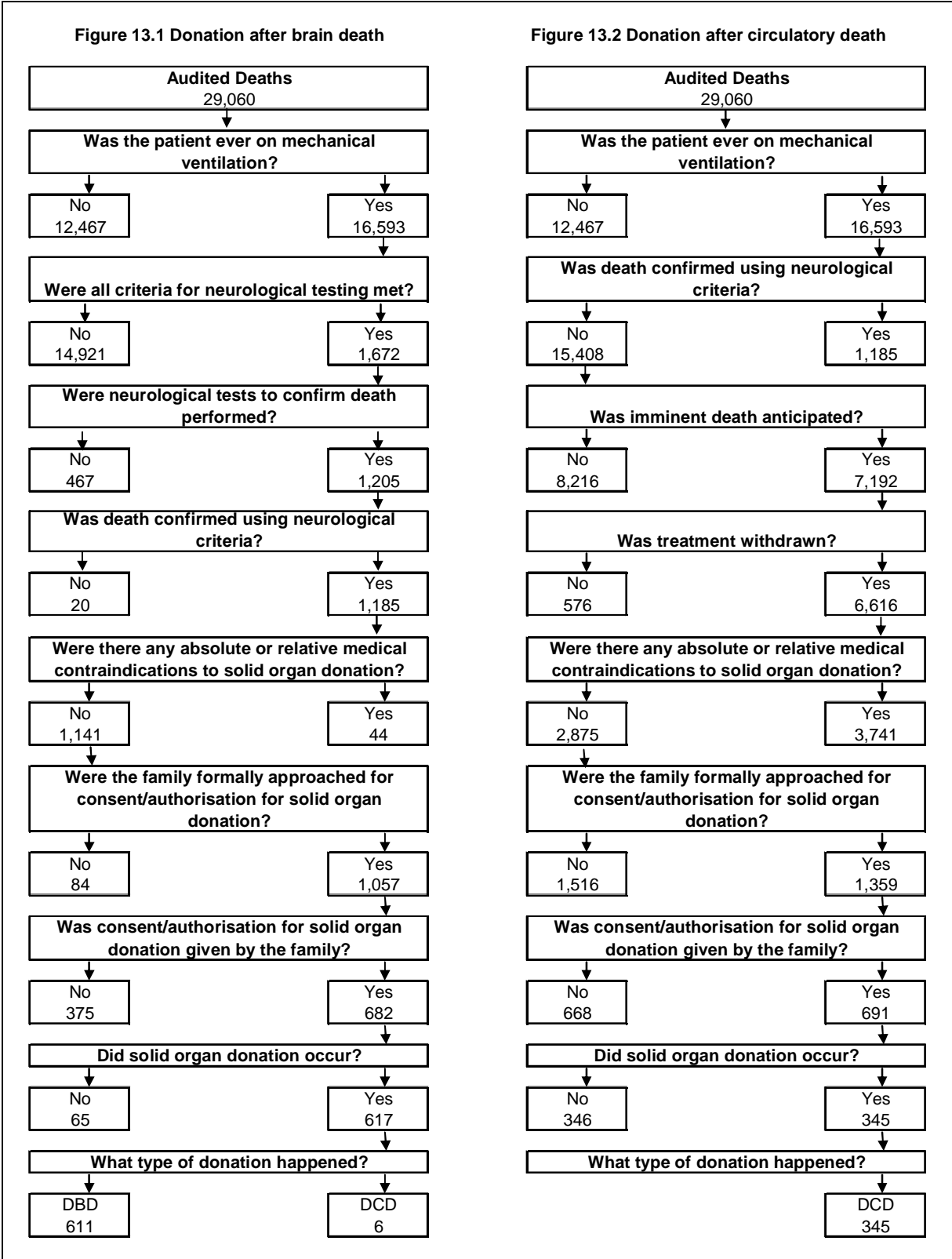


Table 13.1 Summary of key percentages

	DBD	DCD
Neurological death testing rate	72.1%	
Referral rate	84.6%	44.3%
Approach rate	92.6%	47.3%
Consent/authorisation rate	64.5%	50.8%
Conversion rate	54.1%	12.0%

13.4 Potential donors

The number of potential donors (as defined earlier) and rates per million population (pmp) are shown in **Table 13.2**, by country and English Strategic Health Authority (SHA). Potential DBD ranged from 9.9 pmp in East Midlands SHA to 30.5 pmp in London SHA. Potential DCD ranged from 32.7 pmp in South East Coast SHA to 81.0 pmp in North East SHA. Across the countries, there was a range of 38.9 potential donors pmp in Scotland to 76.0 potential donors pmp in Wales. Overall, there were 1,141 potential DBD (18.4 pmp) and 2,875 potential DCD (46.4 pmp) in the UK.

Tables 13.3 and **13.4** show more detailed information by country and English SHA for DBD and DCD data, respectively.

Table 13.2 Potential donor rates per million population (pmp), in the UK, 1 April 2010 to 31 March 2011, by country and English Strategic Health Authority

Country/ Strategic Health Authority of donation	Potential DBD		Potential DCD		TOTAL	
	N	(pmp)	N	(pmp)	N	(pmp)
North East	73	(28.3)	209	(81.0)	282	(109.3)
North West	116	(16.8)	402	(58.3)	518	(75.1)
Yorkshire and the Humber	89	(16.9)	352	(66.9)	441	(83.8)
East Midlands	44	(9.9)	150	(33.7)	194	(43.6)
West Midlands	92	(16.9)	255	(47.0)	347	(63.9)
East of England	83	(14.4)	260	(45.1)	343	(59.4)
London	236	(30.5)	309	(39.9)	545	(70.3)
South East Coast	60	(13.8)	142	(32.7)	202	(46.5)
South Central	84	(20.5)	173	(42.2)	257	(62.7)
South West	53	(10.1)	270	(51.6)	323	(61.8)
England	930	(18.0)	2522	(48.7)	3452	(66.6)
Isle of Man	1	(12.5)	2	(25.0)	3	(37.5)
Channel Islands	7	(46.7)	2	(13.3)	9	(60.0)
Wales	59	(19.7)	169	(56.3)	228	(76.0)
Scotland	76	(14.6)	126	(24.3)	202	(38.9)
Northern Ireland	68	(38.0)	54	(30.2)	122	(68.2)
TOTAL	1141	(18.4)	2875	(46.4)	4016	(64.8)

Table 13.3 DBD key metrics from the Potential Donor Audit, 1 April 2010 to 31 March 2011, by country and English Strategic Health Authority

Country/ Strategic Health Authority of donation	Number of patients where neurological death was suspected	Neurological death testing rate (%)	DBD referral rate (%)	Number of potential DBD donors	Number of potential DBD donors whose family were approached	DBD approach rate (%)	DBD consent/ authorisation rate (%)	Conversion rate of potential DBD donors (%)
North East	90	83.3	94.4	73	69	94.5	55.1	46.6
North West	182	70.9	81.3	116	104	89.7	67.3	56.9
Yorkshire and the Humber	129	72.1	88.4	89	78	87.6	62.8	48.3
East Midlands	87	50.6	77.0	44	43	97.7	81.4	72.7
West Midlands	155	63.2	78.7	92	89	96.7	64.0	58.7
East of England	108	80.6	87.0	83	79	95.2	70.9	57.8
London	337	74.5	92.3	236	211	89.4	54.5	43.2
South East Coast	84	77.4	89.3	60	57	95.0	68.4	53.3
South Central	116	73.3	84.5	84	75	89.3	66.7	53.6
South West	81	70.4	77.8	53	52	98.1	76.9	73.6
England	1369	71.9	86.0	930	857	92.2	64.1	53.2
Isle of Man	1	100	100	1	1	100	0.0	0.0
Channel Islands	7	100	100	7	7	100	42.9	28.6
Wales	94	63.8	75.5	59	56	94.9	66.1	57.6
Scotland	108	78.7	76.9	76	72	94.7	70.8	63.2
Northern Ireland	93	73.1	80.6	68	64	94.1	65.6	55.9
TOTAL	1672	72.1	84.6	1141	1057	92.6	64.5	54.1

Table 13.4 DCD key metrics from the Potential Donor Audit, 1 April 2010 to 31 March 2011, by country and English Strategic Health Authority

Country/ Strategic Health Authority of donation	Number of patients for whom imminent death was anticipated	DCD referral rate (%)	Number of potential DCD donors	Number of potential DCD donors whose family were approached	DCD approach rate (%)	DCD consent/ authorisation rate (%)	Conversion rate of potential DCD donors (%)
North East	467	63.4	209	87	41.6	55.2	10.0
North West	1059	55.7	402	190	47.3	41.1	9.0
Yorkshire and the Humber	771	48.8	352	126	35.8	50.8	8.5
East Midlands	494	26.3	150	53	35.3	52.8	10.0
West Midlands	609	41.5	255	128	50.2	46.1	12.9
East of England	462	57.6	260	121	46.5	57.0	15.0
London	732	51.9	309	184	59.5	48.4	13.6
South East Coast	412	25.7	142	62	43.7	56.5	9.9
South Central	383	34.5	173	76	43.9	44.7	11.6
South West	631	45.8	270	168	62.2	60.7	17.4
England	6020	46.8	2522	1195	47.4	50.7	11.8
Isle of Man	12	25.0	2	0	0.0		0.0
Channel Islands	3	0.0	2	0	0.0		0.0
Wales	454	43.4	169	81	47.9	61.7	16.6
Scotland	467	21.2	126	68	54.0	42.6	14.3
Northern Ireland	236	30.1	54	15	27.8	40.0	3.7
TOTAL	7192	44.3	2875	1359	47.3	50.8	12.0

Tables 13.5 and **13.6** show more detailed information on the key metrics by Organ Donation Services Team (ODST) for DBD and DCD data, respectively. Specialist Nurses – Organ Donation work within an ODST, which covers an area of the UK. As seen in **Table 13.5**, the neurological death testing rate was highest for the Northern team, the DBD referral rate was highest for the Northern team, the DBD approach rate was highest for the South West team and the DBD conversion rate was highest for the South West team. **Table 13.6** indicates that for DCD patients, the highest referral rate was for the Northern team, the highest approach rate was for the South West team and the highest conversion rate was for the South West team. No account has been taken of the demographics of the populations within the teams which may impact on the rates presented.

Table 13.5 DBD key metrics from the Potential Donor Audit, 1 April 2010 to 31 March 2011, by Organ Donation Services Team

Team	Number of patients where neurological death was suspected	Neurological death testing rate (%)	DBD referral rate (%)	Number of potential DBD donors	Number of potential DBD donors whose family were approached	DBD approach rate (%)	DBD consent/authorisation rate (%)	Conversion rate of potential DBD donors (%)
Eastern	115	81.7	87.8	90	86	95.6	72.1	58.9
London	320	74.7	92.5	225	203	90.2	53.2	42.2
Midlands	203	57.1	77.3	110	107	97.3	68.2	63.6
North West	191	72.8	81.2	126	114	90.5	64.9	55.6
Northern	93	82.8	94.6	75	71	94.7	56.3	48.0
Northern Ireland	93	73.1	80.6	68	64	94.1	65.6	55.9
Scotland	108	78.7	76.9	76	72	94.7	70.8	63.2
South Central	141	70.9	82.3	99	89	89.9	64.0	51.5
South East	108	77.8	89.8	78	72	92.3	68.1	52.6
South Wales	89	58.4	75.3	51	48	94.1	70.8	60.8
South West	67	70.1	79.1	43	42	97.7	83.3	79.1
Yorkshire	144	72.2	87.5	100	89	89.0	64.0	50.0
TOTAL	1672	72.1	84.6	1141	1057	92.6	64.5	54.1

Table 13.6 DCD key metrics from the Potential Donor Audit, 1 April 2010 to 31 March 2011, by Organ Donation Services Team

Team	Number of patients for whom imminent death was anticipated	DCD referral rate (%)	Number of potential DCD donors	Number of potential DCD donors whose family were approached	DCD approach rate (%)	DCD consent/authorisation rate (%)	Conversion rate of potential DCD donors (%)
Eastern	472	56.8	261	121	46.4	57.0	14.9
London	622	54.5	274	169	61.7	47.3	13.9
Midlands	943	34.7	355	165	46.5	48.5	12.4
North West	1090	55.7	398	198	49.7	42.4	9.8
Northern	521	60.5	235	91	38.7	53.8	9.4
Northern Ireland	236	30.1	54	15	27.8	40.0	3.7
Scotland	467	21.2	126	68	54.0	42.6	14.3
South Central	513	34.5	226	104	46.0	46.2	12.4
South East	525	28.0	179	77	43.0	57.1	10.1
South Wales	395	43.5	160	74	46.3	60.8	15.6
South West	527	47.6	221	142	64.3	62.0	17.6
Yorkshire	881	47.1	386	135	35.0	51.1	8.5
TOTAL	7192	44.3	2875	1359	47.3	50.8	12.0

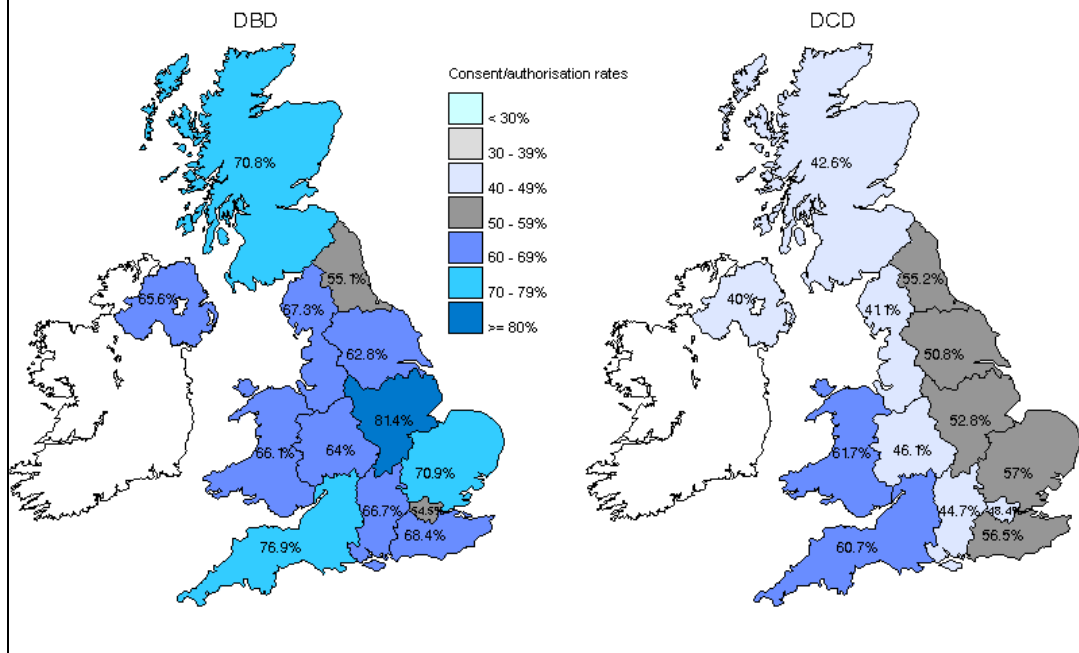
13.5 Consent/authorisation rates

The overall DBD consent/authorisation rate was 64.5% and the 95% confidence limits for this percentage are 61.6% - 67.4%. For DCD, the overall rate was 50.8% and the 95% confidence limits are 48.1% - 53.5%.

Consent/authorisation rates by English SHA or country are illustrated in **Figure 13.3** and by Organ Donation Services Team in **Figure 13.4** for both DBD and DCD. Caution should be applied when interpreting these consent/authorisation rates as no adjustment has been made for the mix of patients in terms of age, sex and ethnicity.

Across the English SHA and countries, the DBD consent/authorisation rates range from 54.5% in London to 81.4% in East Midlands. DCD consent/authorisation rates range from 40% in Northern Ireland to 61.7% in Wales.

Figure 13.3 Consent/authorisation rates by English SHA/country



Across the Organ Donation Services Teams, the DBD consent/ authorisation rates range from 53.2% in London team to 83.3% in South West team. DCD consent/ authorisation rates range from 40% in Northern Ireland team to 62% in South West team.

Figure 13.4 Consent/authorisation rates by Organ Donation Services Team

