



Detailed Full Report Actual and Potential Organ Donors 1 April 2015 - 31 March 2016

North West
Organ Donation Services Team



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- Appendix A.2 contains definitions of terms and abbreviations used throughout this report and summarises the main changes made to the PDA on 1 April 2013.
- The latest Organ Donation and Transplantation Activity Report is available at https://www.organdonation.nhs.uk/supporting-my-decision/statistics-about-organ-donation/transplant-activity-report/
- The latest PDA Annual Report is available at http://www.odt.nhs.uk/odt/potential-donor-audit/
- Please refer any queries or requests for further information to your local Specialist Nurse Organ Donation (SN-OD)

Source

NHS Blood and Transplant: UK Transplant Registry (UKTR), Potential Donor Audit (PDA) and Referral Record. Issued May 2016 based on data reported at 9 May 2016.



1. Donor Outcomes

A summary of the number of donors, patients transplanted, average number of organs donated per donor and organs donated, obtained from the UK Transplant Registry

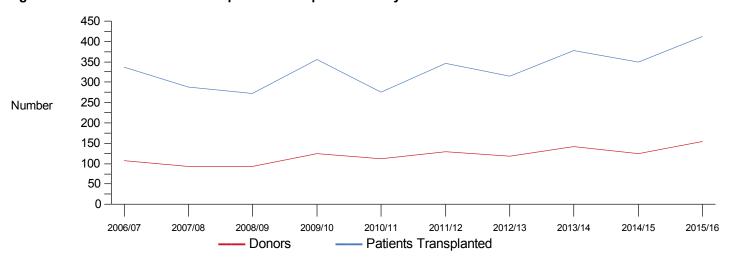
1.1 Donor outcomes

Between 1 April 2015 and 31 March 2016, the North West team had 155 deceased solid organ donors, resulting in 413 patients receiving a transplant. 507 organs were donated but 52 were not transplanted. Additional information is shown in Tables 1.1.1 and 1.1.2, along with comparison data for 2014/15. An additional chart showing figures for the previous ten periods has also been included for comparison. If you would like further information, please contact your local Specialist Nurse - Organ Donation (SN-OD).

Table 1.1.1 Donors, patients transplanted and organs per donor, 1 April 2015 - 31 March 2016 (1 April 2014 - 31 March 2015 for comparison)										
Donor type	Number of donors	Number of patients transplanted	Average number of organs donated per donor North West UK							
DBD DCD DBD and DCD	81 (77) 74 (48) 155 (125)	259 (245) 154 (105) 413 (350)	3.8 (4.1) 3.9 (3.8) 2.7 (2.8) 2.8 (2.7) 3.3 (3.6) 3.4 (3.4)							

Table 1.1.2 Organs transplanted by type, 1 April 2015 - 31 March 2016 (1 April 2014 - 31 March 2015 for comparison)											
Donor type	Kidney	Nu Pancreas	mber of organs Liver	transplanted b Heart	y type Lung	Small bowel					
DBD DCD DBD and DCD	148 (136) 123 (81) 271 (217)	23 (24) 7 (6) 30 (30)	70 (67) 35 (17) 105 (84)	25 (19) 0 (0) 25 (19)	22 (27) 2 (14) 24 (41)	0 (5) 0 (0) 0 (5)					

Figure 1.1.1 Number of donors and patients transplanted each year



Data in this section have been obtained from the UK Transplant Registry. Section 2 onwards reports on data obtained from the national Potential Donor Audit (PDA).



Key Rates onPotential for Organ Donation

A summary of the key rates on the potential for organ donation, obtained from the national Potential Donor Audit (PDA)

2.1 Key rates

Two radar charts are displayed in Figure 2.1.1 showing specific percentage measures of potential donation activity in 2015/16 for the North West Team compared with national data for the UK, and compared with 2014/15 activity. This information is displayed in an alternative format as bar charts in Appendix A.1. The colour of the rate label indicates the Team performance as shown in the appropriate funnel plot using the gold, silver, bronze, amber, and red (GoSBAR) scheme.

Figure 2.1.1 Key rates on the potential for organ donation, 1 April 2015 - 31 March 2016 (1 April 2014 - 31 March 2015 for comparison)

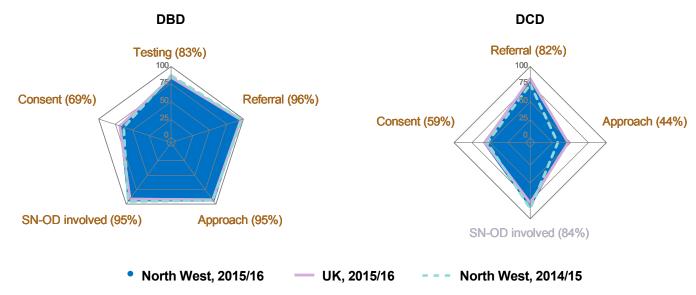
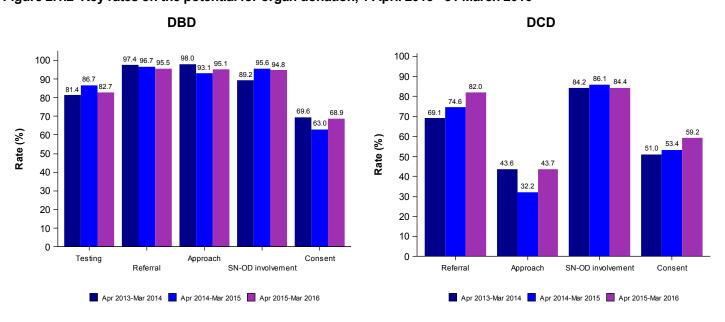


Figure 2.1.2 Key rates on the potential for organ donation, 1 April 2013 - 31 March 2016





2.2 Key numbers, rates and comparison with national targets

The percentages shown in Figure 2.1.1 are also shown in Table 2.2.1 along with the number of patients at each stage. A national comparison and a time period comparison are again provided. A comparison against national DBD and DCD targets has been applied by highlighting the key rates for your Team as gold, silver, bronze, amber, or red. See Appendix A.4 for ranges used. Note that caution should be applied when interpreting percentages based on small numbers.

Table 2.2.1 Key numbers, rates and comparison with national targets, 1 April 2015 - 31 March 2016 (1 April 2014 - 31 March 2015 for comparison)

		2015/16	DBD	2014	/15		2015/16	DCD	2014/1	5
	Target	North West	UK	North West	UK	Target	North West	UK	North West	UK
Patients meeting organ donation referral criteria ¹		179	1,742	181	1,734		806	6,502	948	6,755
Referred to SN-OD Referral rate %	96%	171 B 96%	1,679 <i>96%</i>	175 97%	1,671 96%	79%	661 B 82%	5,399 83%	707 75%	5,154 76%
Neurological death tested Testing rate %	82%	148 B 83%	1,472 85%	157 87%	1,445 83%					
Eligible donors ²		142	1,399	145	1,373		499	4,204	645	4,284
Family approached Approach rate %	94%	135 B 95%	1,293 92%	135 93%	1,284 94%	47%	218 B 44%	1,941 <i>4</i> 6%	208 32%	2,018 <i>47</i> %
Family approached and SN-OD involved % of approaches where SN-OD involved	87%	128 B 95%	1,177 91%	129 96%	1,113 87%	75%	184 S 84%	1,511 78%	179 86%	1,459 72%
Consent given Consent rate %	73%	93 B 69%	888 69%	85 63%	859 67%	59%	129 B 59%	1,112 <i>57%</i>	111 53%	1,046 <i>52</i> %
Expected consents based on ethnic mix Expected consent rate based on ethnic mix %		93 70%		90 <i>67%</i>			121 59%		105 <i>54%</i>	
Actual donors from each pathway % of consented donors that became actual donors		78 84%	784 88%	79 93%	780 91%		72 56%	566 51%	46 <i>41</i> %	493 47%
Colour key - comparison with funnel plot confidence limits		G Gold A Amber		S Silver R Red			B Bronze			

¹ DBD - A patient with suspected neurological death

Note that from 1 April 2015 to 31 March 2016 there were 2 eligible DBD donors and 3 eligible DCD donors whose family consented to donation who are not included in this section because they were either over 80 years of age or did not die in a unit participating in the PDA.

DCD - A patient in whom imminent death is anticipated, ie a patient receiving assisted ventilation, a clinical decision to withdraw treatment has been made and death is anticipated within 4 hours

² DBD - Death confirmed by neurological tests and no absolute contraindications to solid organ donation

DCD - Imminent death anticipated and treatment withdrawn with no absolute contraindications to solid organ donation



3. Stages WhereOpportunities were Lost

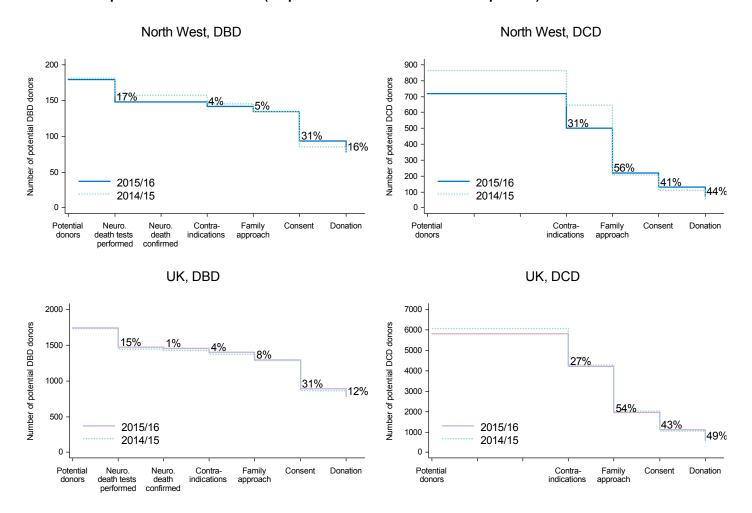
Stages at which potential donors lost the opportunity to become actual donors

3.1 Overview of lost opportunities

Of the 179 potential DBD donors with suspected neurological death, 78 proceeded to donation and 101 did not proceed. Of the 499 eligible DCD donors, 72 proceeded to donation and 427 did not proceed.

Figure 3.1.1 gives an overview of the various stages where opportunities were lost. There are four charts showing DBD and DCD stages separately for the North West team and the UK, all of which contain a comparison with 2014/15. The number of potential donors is shown on the vertical axis for each chart and at each 'step' the proportion of potential donors lost at that stage is displayed. Caution should be applied when interpreting percentages based on small numbers. Further information is available for individual Trust / Health Boards in Tables 4.1.1 and 4.1.2 in Section 4.

Figure 3.1.1 Stages at which potential donors lost the opportunity to become actual donors, 1 April 2015 - 31 March 2016 (1 April 2014 - 31 March 2015 for comparison)





3.2 Neurological death testing

A funnel plot of neurological death testing rates is displayed in Figure 3.2.1. The national target for 2015/16 of 82% is also shown on the funnel plot, for information, but the goal is to ensure that neurological death tests are performed wherever possible. For information about how to interpret the funnel plots, please see Appendix A.4.

Figure 3.2.1 Funnel plot of neurological death testing rates, 1 April 2015 - 31 March 2016

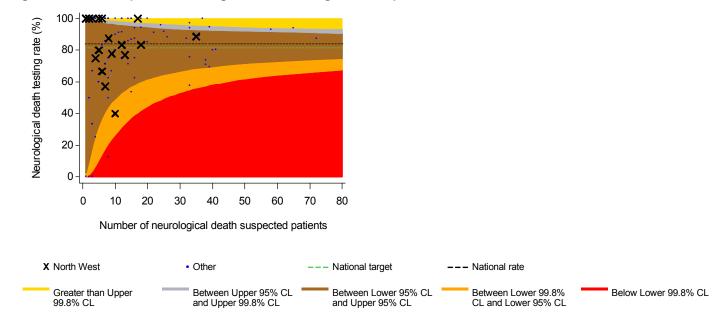


Table 3.2.1 shows the reasons why neurological death tests were not performed, if applicable, for your Team. Patients for whom the reason for not performing neurolgical tests is given as 'cardiac arrest despite resuscitation', 'brainstem reflexes returned', or 'neonates - less than 2 months post term' are now excluded from the calculation of the neurological death testing rate.

·		
	N	%
Family declined donation	2	6.5
Family pressure not to test	3	9.7
Treatment withdrawn	1	3.2
Patient haemodynamically unstable	8	25.8
Continuing effects of sedatives	3	9.7
Biochemical/endocrine abnormality	3	9.7
nability to test all reflexes	1	3.2
Clinical reason/Clinicians decision	4	12.9
SN-OD advised that donor not suitable	1	3.2
Patient had previously expressed a wish not to donate	1	3.2
Other	3	9.7
Unknown	1	3.2
Total	31	100.0



3.3 Referral to Specialist Nurse - Organ Donation (SN-OD)

Funnel plots of DBD and DCD referral rates are displayed in Figure 3.3.1. The 2015/16 national targets of 96% and 79% for DBD and DCD, respectively, are also shown on the funnel plots, for information. Every patient who meets the referral criteria should be identified and referred to the SN-OD, as per NICE CG135¹ and NHS Blood and Transplant (NHSBT) Best Practice Guidance on timely identification and referral of potential organ donors².

Figure 3.3.1 Funnel plots of referral rates, 1 April 2015 - 31 March 2016

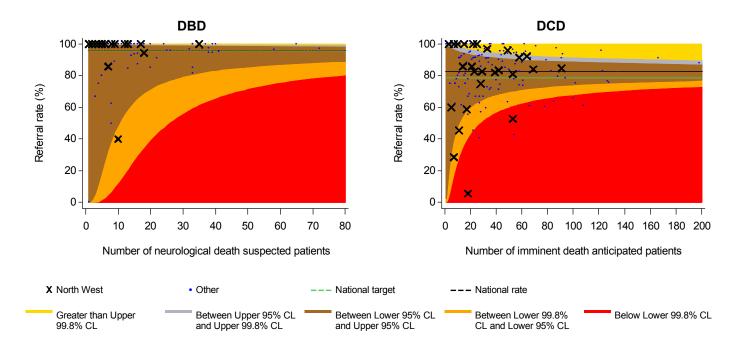


Table 3.3.1 shows the reasons why patients were not referred to a SN-OD, if applicable, for your Team.

Table 3.3.1 Reasons given why patient not referred, 1 April 2015 - 31 March 2016									
	ı	OCD							
	N	%	N	%					
Not identified as a potential donor/organ donation not considered	1	12.5	26	17.9					
Family declined donation prior to neurological testing	2	25.0	2	1.4					
Family declined donation following decision to withdraw treatment	-	-	6	4.1					
Reluctance to approach family	-	-	1	0.7					
Medical contraindications	1	12.5	24	16.6					
Thought to be medically unsuitable	-	-	60	41.4					
Clinician assessed that patient was unlikely to become asystolic within 4 hours	-	-	1	0.7					
Other	4	50.0	25	17.2					
Total	8	100.0	145	100.0					

If 'other' or 'medical contraindications', please contact your local SN-OD for more information, if required. Please note that patients may appear in this table more than once if they met the referral criteria for both DBD and DCD donation.



Early referral to the SN-OD is important to enable the opportunity for donation to be maximised. Early referral triggers should be in place to ensure all donors are identified to the SN-OD to allow the family the option of organ donation. For patients who were referred, Table 3.3.2 shows the timing of the first contact with the SN-OD by the clinical staff. All patients meeting the referral criteria should be referred as early as possible to enable attendance of the SN-OD to assess suitability for donation and ensure that a planned approach for consent to the family is made in line with NICE CG135¹ and NHSBT Best Practice Guidance on approaching the families of potential organ donors³.

Table 3.3.2 Timing of first contact with a SN-OD by clinical staff, for patients who were referred, 1 April 2015 - 31 March 2016

	N I	DBD %	DCD N %		
		,,		,,	
Before sedation stopped	14	7.9	13	2.0	
Absence of one or more cranial nerve reflexes and GCS of 4 or less not explained by sedation	62	35.0	20	3.0	
No sedation or after sedation stopped, decision made to carry out BSD tests, before 1st set of tests	75	42.4	8	1.2	
After 1st set and before 2nd set of BSD tests	2	1.1	-	0.0	
After neurological death confirmation	5	2.8	1	0.2	
Clinical decision to withdraw life-sustaining treatment has been made, before treatment withdrawn	19	10.7	601	90.9	
After treatment withdrawn	-	0.0	18	2.7	
Not reported	-	0.0	-	0.0	
Total	177	100.0	661	100.0	

NB, 19 patients with suspected neurological death also went on to meet the referral criteria for DCD donation, and are therefore included twice.

¹ NICE, 2011. *NICE Clinical Guidelines - CG135* [online]. Available at: http://publications.nice.org.uk/organ-donation-for-transplantation-improving-donor-identification-and-consent-rates-for-deceased-cg135/recommendations> [accessed 9 May 2016]

² NHS Blood and Transplant, 2012. *Timely Identification and Referral of Potential Organ Donors - A Strategy for Implementation of Best Practice* [online]. Available at: http://www.odt.nhs.uk/pdf/timely-identification-and-referral-potential-donors.pdf [accessed 9 May 2016]

³ NHS Blood and Transplant, 2013. *Approaching the Families of Potential Organ Donors – Best Practice Guidance* [online]. Available at:

- approach best practice guide.pdf> [accessed 9 May 2016]



3.4 Contraindications

Table 3.4.1 shows the primary absolute medical contraindications to solid organ donation, if applicable, for potential DBD donors confirmed dead by neurological death tests and potential DCD donors in your Team.

Table 3.4.1 Primary absolute medical contraindications to solid organ donation, 1 April 2015 - 31 March 2016									
	DBD	DCD							
Any cancer with evidence of spread outside affected organ (including lymph nodes) within 3 years	2	126							
Melanoma (except completely excised Stage 1 cancers)	_	3							
Active haematological malignancy (myeloma, lymphoma, leukaemia)	2	32							
TB: active and untreated	1	1							
HIV disease (but not HIV infection)	1	1							
No transplantable organ in accordance with organ specific contraindications	-	55							
Total	6	218							



3.5 Family approach

Funnel plots of DBD and DCD family approach rates are displayed in Figure 3.5.1. The 2015/16 national targets of 93.5% and 47% for DBD and DCD, respectively, are also shown on the plots, for information. All families of eligible donors should be formally approached for a decision about organ donation.

Figure 3.5.1 Funnel plots of approach rates, 1 April 2015 - 31 March 2016

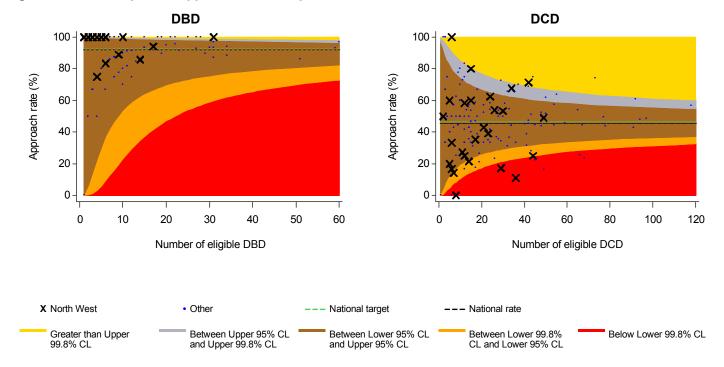


Table 3.5.1 shows the reasons why patients were not formally approached for a decision about organ donation, if applicable, for your Team.

		DBD	ı	DCD		
	N	%	N	%		
Family stated that they would not consent/authorise before they were formally approached	3	42.9	2	0.7		
Family untraceable	=	-	1	0.4		
Coroner/Procurator Fiscal refused permission	-	-	2	0.7		
Patient's general medical condition	2	28.6	163	58.0		
Other medical reason	1	14.3	19	6.8		
Other	1	14.3	60	21.4		
Not identified as a potential donor / organ donation not considered	=	-	33	11.7		
Patient had previously expressed a wish not to donate	-	-	1	0.4		
Total	7	100.0	281	100.0		

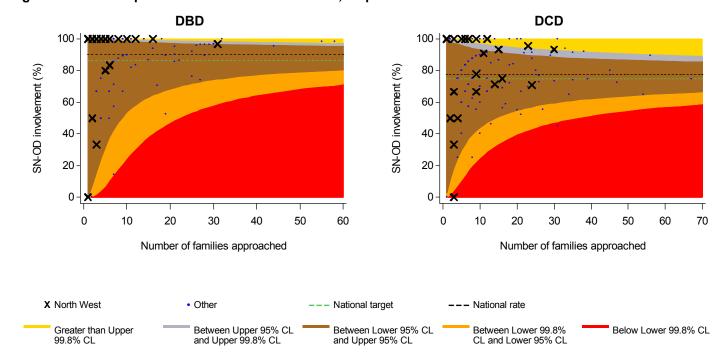


3.6 Proportion of approaches involving a SN-OD

In the UK, in 2015/16, when a SN-OD was not involved in the approach to the family for a decision about organ donation, DBD and DCD consent rates were 51% and 24%, respectively, compared with DBD and DCD consent rates of 70% and 67%, respectively, when a SN-OD was involved. NICE CG135¹ and NHSBT Best Practice Guidance on approaching the families of potential organ donors³ reinforces that every approach to those close to the patient should be planned with the multidisciplinary team (MDT), should involve the SN-OD and should be clearly planned taking into account the known wishes of the patient. The Organ Donor Register (ODR) should be checked in all cases of potential donation and this information must be discussed with the family as it represents the eligible donor's legal consent to donation.

Funnel plots of DBD and DCD SN-OD involvement rates are displayed in Figure 3.6.1. The 2015/16 national targets of 87% and 75% for DBD and DCD, respectively, are also shown, for information. A SN-OD should be actively involved in the formal approach to the family and an approach plan made and followed.

Figure 3.6.1 Funnel plots of SN-OD involvement rates, 1 April 2015 - 31 March 2016





3.7 Consent

Funnel plots of DBD and DCD consent rates are displayed in Figure 3.7.1. The 2015/16 national targets of 72.5% and 58.5% for DBD and DCD, respectively, are also shown, for information.

Figure 3.7.1 Funnel plot of consent rates, 1 April 2015 - 31 March 2016

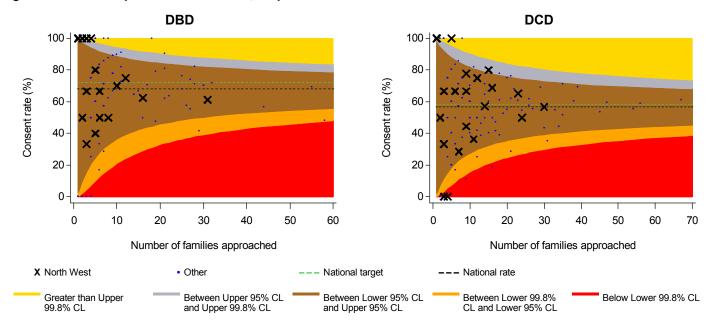


Table 3.7.1 shows the reasons why families did not give consent, if applicable, for your Team.

	ı	DBD	ı	DCD
	N	%	N	%
atient previously expressed a wish not to donate	9	21.4	15	16.9
amily were not sure whether the patient would have agreed to donation	7	16.7	16	18.0
amily did not believe in donation	3	7.1	4	4.5
amily felt it was against their religious/cultural beliefs	2	4.8	5	5.6
amily were divided over the decision	1	2.4	4	4.
amily felt the patient had suffered enough	5	11.9	9	10.
amily did not want surgery to the body	8	19.0	5	5.0
amily wanted to stay with the patient after death	1	2.4	2	2.:
amily had difficulty understanding/accepting neurological testing	1	2.4	_	
amily felt the length of time for donation process was too long	_	-	16	18.0
amily concerned that other people may disapprove/be offended	1	2.4	-	
amily felt the body needs to be buried whole (unrelated to religious or ultural reasons)	1	2.4	-	
amily concerned that organs may not be transplanted	_	_	2	2.:
rong refusal - probing not appropriate	1	2.4	2 2	2.:
ther	2	4.8	9	10.
otal	42	100.0	89	100.0



3.8 Reasons why solid organ donation did not occur

Table 3.8.1 shows the reasons why solid organ donation did not occur, if applicable, for your Team.

	DBD DCD								
	N	%	N	%					
Family changed mind	2	13.3	2	3.5					
Coroner/ Procurator Fiscal refusal	4	26.7	_	_					
Organs deemed medically unsuitable by recipient centres	5	33.3	19	33.3					
Prolonged time to asystole	_	_	22	38.6					
Cardiac arrest	-	_	1	1.8					
General instability	1	6.7	8	14.0					
Logistic reasons	-	_	1	1.8					
Positive virology	-	_	1	1.8					
Retrieval team not available	-	_	1	1.8					
Other	3	20.0	2	3.5					
Total	15	100.0	57	100.0					



4. PDA data by Trust / Health Board

A summary of key numbers and rates from the PDA by Trust / Health Board

4.1 Key numbers and rates by Trust / Health Board

Tables 4.1.1 and 4.1.2 show the key numbers and rates for patients who met the DBD and/or DCD referral criteria, respectively. Caution should be applied when interpreting percentages based on small numbers.

Table 4.1			met the D 31 March)		
Patients where neurological death was suspected	Patients that were tested	Neurological death testing rate (%)	Patients where neurological death was suspected that were referred to SN-OD	DBD referral rate (%)	Patients confirmed dead by neurological testing	Eligible DBD donors (Death confirmed by neurological tests and no absolute contra- indications)	Eligible DBD donors whose family were approached	DBD approach rate (%)	Families consenting donation	DBD consent rate (%)	Actual DBD and DCD donors from eligible DBD donors	DBD SN-OE involvement rate (%)
1 April 2015 to	o 31 March	2016										
Aintree Univer 6	rsity Hospita 4	ls NHS Found 67	lation Trust 6	100	4	4	3	75	3	100	3	100
Alder Hey Chi 10	ildren's NHS 4	Foundation T 40	rust 4	40	4	4	3	75	2	67	0	33
Betsi Cadwala 8	adr University 7	/ Health Board 88	8	100	7	6	6	100	4	67	4	100
Blackpool Tea 4	aching Hospi 3	tals NHS Foul 75	ndation Trust 4	100	3	3	3	100	2	67	2	100
Bolton NHS F 0	oundation Tr	rust -	0	-	0	0	0	-	0	-	0	-
Central Manch 18	hester Unive 15	rsity Hospitals 83	s NHS Foundati 17	on Trust 94	15	14	12	86	9	75	7	100
Countess Of 6	Chester Hos 4	pital NHS Fou 80	indation Trust 5	100	4	4	4	100	4	100	4	100
East Cheshire 1	NHS Trust 1	100	1	100	1	1	1	100	1	100	0	100
East Lancash 5	ire Hospitals 5	NHS Trust 100	5	100	5	5	5	100	2	40	1	100
Isle of Man 1	1	100	1	100	1	1	1	100	1	100	1	100
Lancashire Te 12	eaching Hosp 10	oitals NHS Fo 83	undation Trust 12	100	10	9	8	89	4	50	4	100
Liverpool Hea 1	rt and Chest 1	Hospital NHS 100	S Foundation Tro 1	ust 100	1	1	1	100	1	100	0	0
Mid Cheshire 2	Hospitals Ni 2	HS Foundation 100	n Trust 2	100	2	2	2	100	2	100	2	100
Pennine Acute 13	e Hospitals I [†] 10	NHS Trust 77	13	100	10	10	10	100	7	70	5	100
Royal Liverpo 7	ol and Broad 4	lgreen Univers 57	sity Hospitals N 6	HS Trust 86	4	3	3	100	3	100	3	100
Salford Royal 35	NHS Found 31	ation Trust 89	35	100	31	31	31	100	19	61	14	97
Southport and	l Ormskirk H	lospital NHS 1	rust									



Table 4.1.1 Patients who met the DBD referral criteria - key numbers and rates, 1 April 2015 - 31 March 2016 (1 April 2014 - 31 March 2015 for comparison)

Patients where neurologica death was suspected 2		neu neu dea sus Neurological tha death testing refe	atients vhere rological ath was spected at were erred to iN-OD	DBD referral rate (%) 100	Patients confirmed dead by neurological testing 2	Eligible DBD donors (Death confirmed by neurological tests and no absolute contraindications)	Eligible DBD donors whose family were approached 2	DBD approach rate (%) 100	Families consenting donation	DBD consent rate (%) 50	Actual DBD and DCD donors from eligible DBD donors 1	DBD SN-OD involvement rate (%) 100
St Helens a	nd Knowsley H 4	ospitals NHS Trus 80	t 5	100	4	3	3	100	1	33	1	100
Stockport N	IHS Foundation 0	Trust -	0	-	0	0	0	-	0	-	0	-
Tameside F	Hospital NHS Fo	oundation Trust 100	1	100	1	1	1	100	1	100	1	100
The Walton 17	Centre NHS Fo	oundation Trust 100	17	100	17	17	16	94	10	63	10	100
University F	Hospital of Sout 7	h Manchester NH 78	S Foundation	on Trust 100	7	6	6	100	3	50	3	83
University F	Hospitals of Mor 2	recambe Bay NHS 100	S Foundation 2	on Trust 100	2	2	2	100	2	100	2	50
Warrington 6	and Halton Hos 6	pitals NHS Found 100	lation Trust 6	100	6	6	5	83	4	80	3	80
Wirral Unive	ersity Teaching 4	Hospital NHS Foเ 67	undation Tri 6	ust 100	4	4	4	100	4	100	4	100
Wrightington 3	n, Wigan and Lo 3	eigh NHS Foundat 100	ion Trust 3	100	3	3	3	100	3	100	3	100
1 April 2014	to 31 March 2	2015 (for compari	son purpo	ses)								
Aintree Univ	ersity Hospital: 4	s NHS Foundation 57	Trust 6	86	4	4	3	75	2	67	1	100
Alder Hey C	Children's NHS 5	Foundation Trust 83	4	67	5	5	5	100	3	60	2	80
Betsi Cadwa	aladr University 10	Health Board 91	11	100	10	9	8	89	5	63	5	100
Blackpool T 8	eaching Hospit 8	als NHS Foundation	on Trust 8	100	8	6	6	100	2	33	2	100
Bolton NHS 1	Foundation Tru 1	ust 100	1	100	1	1	1	100	1	100	1	100
Central Mar 18	nchester Univer 12	sity Hospitals NH 67	S Foundation	on Trust 94	12	11	7	64	2	29	2	86
Countess C	of Chester Hosp 3	oital NHS Foundati 100	on Trust 3	100	3	2	2	100	2	100	2	100
East Chesh	ire NHS Trust 0	0	1	100	0	0	0	-	0	-	0	-
East Lancas	shire Hospitals 9	NHS Trust 100	9	100	9	7	6	86	5	83	4	83
Isle of Man 6	6	100	6	100	6	6	6	100	5	83	4	83
Lancashire 17	Teaching Hosp 15	itals NHS Founda 88	tion Trust 17	100	15	12	12	100	7	58	7	100
Liverpool Ho	eart and Chest 1	Hospital NHS Fou 100	ndation Tru 1	ust 100	1	1	1	100	1	100	1	100
Mid Cheshii 1	re Hospitals NH 1	IS Foundation True	st 1	100	1	1	1	100	1	100	1	100



Table 4.1.1 Patients who met the DBD referral criteria - key numbers and rates, 1 April 2015 - 31 March 2016 (1 April 2014 - 31 March 2015 for comparison)

Patients where neurological death was suspected	Patients that were tested	Neurological death testing rate (%)	Patients where neurological death was suspected that were referred to SN-OD	DBD referral rate (%)	Patients confirmed dead by neurological testing	Eligible DBD donors (Death confirmed by neurological tests and no absolute contra- indications)	Eligible DBD donors whose family were approached	DBD approach rate (%)	Families consenting donation	DBD consent rate (%)	Actual DBD and DCD donors from eligible DBD donors	DBD SN-OD involvement rate (%)
Pennine Acute	Hospitals I 8	NHS Trust 100	8	100	8	7	7	100	3	43	2	86
Royal Liverpoo	ol and Broad 2	dgreen Univers 50	sity Hospitals N 3	IHS Trust 75	2	2	1	50	1	100	1	100
Salford Royal 25	NHS Found 19	lation Trust 76	24	96	19	18	17	94	10	59	10	94
Southport and 2	Ormskirk F 2	Hospital NHS 7 100	rust 2	100	2	2	2	100	1	50	1	100
St Helens and	Knowsley F 0	Hospitals NHS 0	Trust 1	100	0	0	0	-	0	-	0	-
Stockport NHS	S Foundation	n Trust 100	1	100	1	1	1	100	1	100	1	100
Tameside Hos	pital NHS F 2	Foundation True 100	st 2	100	2	2	2	100	2	100	2	100
The Walton Ce	entre NHS F 24	Foundation Tru 100	st 24	100	24	24	24	100	16	67	15	100
University Hos	spital of Sou 9	th Manchester 100	NHS Foundati 9	ion Trust 100	9	9	9	100	5	56	5	100
University Hos	spitals of Mo 8	orecambe Bay 89	NHS Foundati	on Trust 100	8	8	7	88	5	71	5	100
Warrington and 5	d Halton Ho 5	spitals NHS F 100	oundation Trus 5	t 100	5	5	5	100	4	80	4	100
Wirral Univers	ity Teaching 1	g Hospital NHS 100	S Foundation Ti 1	rust 100	1	1	1	100	1	100	1	100
Wrightington, 1	Wigan and L	Leigh NHS Fou 100	undation Trust 1	100	1	1	. 1	100	. 0	0	0	100



Table 4.1.2 Patients who met the DCD referral criteria - key numbers and rates, 1 April 2015 - 31 March 2016 (1 April 2014 - 31 March 2015 for comparison)

Eligible DCD donors (Imminent death Patients for anticipated and whom imminent treatment withdrawn with Eligible DCD Actual DCD Patients for Patients for death was whom imminent anticipated that whom no absolute donors whose Families donors from DCD SN-OD DCD referral DCD approach DCD consent death was were referred treatment was contrafamily were consenting eligible DCD involvement to SN-OD donation rate (%) anticipated rate (%) withdrawn indications) approached rate (%) rate (%) donors 1 April 2015 to 31 March 2016 Aintree University Hospitals NHS Foundation Trust Alder Hey Children's NHS Foundation Trust Betsi Cadwaladr University Health Board Blackpool Teaching Hospitals NHS Foundation Trust Bolton NHS Foundation Trust Central Manchester University Hospitals NHS Foundation Trust Countess Of Chester Hospital NHS Foundation Trust East Cheshire NHS Trust East Lancashire Hospitals NHS Trust Isle of Man Lancashire Teaching Hospitals NHS Foundation Trust Liverpool Heart and Chest Hospital NHS Foundation Trust Mid Cheshire Hospitals NHS Foundation Trust Pennine Acute Hospitals NHS Trust Royal Liverpool and Broadgreen University Hospitals NHS Trust Salford Royal NHS Foundation Trust Southport and Ormskirk Hospital NHS Trust St Helens and Knowsley Hospitals NHS Trust Stockport NHS Foundation Trust Tameside Hospital NHS Foundation Trust The Walton Centre NHS Foundation Trust University Hospital of South Manchester NHS Foundation Trust



Table 4.1.2 Patients who met the DCD referral criteria - key numbers and rates, 1 April 2015 - 31 March 2016 (1 April 2014 - 31 March 2015 for comparison)

Eligible DCD donors (Imminent death Patients for anticipated and whom imminent treatment withdrawn with Eligible DCD Actual DCD Patients for Patients for death was whom imminent anticipated that whom no absolute donors whose Families donors from DCD SN-OD DCD referral DCD approach DCD consent death was were referred treatment was contrafamily were consenting eligible DCD involvement donation rate (%) anticipated to SN-OD rate (%) withdrawn indications) approached rate (%) rate (%) donors University Hospitals of Morecambe Bay NHS Foundation Trust Warrington and Halton Hospitals NHS Foundation Trust Wirral University Teaching Hospital NHS Foundation Trust Wrightington, Wigan and Leigh NHS Foundation Trust 1 April 2014 to 31 March 2015 (for comparison purposes) Aintree University Hospitals NHS Foundation Trust Alder Hey Children's NHS Foundation Trust Betsi Cadwaladr University Health Board Blackpool Teaching Hospitals NHS Foundation Trust Bolton NHS Foundation Trust Central Manchester University Hospitals NHS Foundation Trust Countess Of Chester Hospital NHS Foundation Trust East Cheshire NHS Trust East Lancashire Hospitals NHS Trust Isle of Man Lancashire Teaching Hospitals NHS Foundation Trust Liverpool Heart and Chest Hospital NHS Foundation Trust Mid Cheshire Hospitals NHS Foundation Trust Pennine Acute Hospitals NHS Trust Royal Liverpool and Broadgreen University Hospitals NHS Trust Salford Royal NHS Foundation Trust Southport and Ormskirk Hospital NHS Trust St Helens and Knowsley Hospitals NHS Trust



Table 4.1.2 Patients who met the DCD referral criteria - key numbers and rates, 1 April 2015 - 31 March 2016 (1 April 2014 - 31 March 2015 for comparison)

Patients for whom immine death was anticipated	Patients for whom imminent death was ent anticipated that were referred to SN-OD	DCD referral rate (%)	Patients for whom treatment was withdrawn	Eligible DCD donors (Imminent death anticipated and treatment withdrawn with no absolute contra- indications)	Eligible DCD donors whose family were approached	DCD approach rate (%)	Families consenting donation	DCD consent rate (%)	Actual DCD donors from eligible DCD donors	DCD SN-OD involvement rate (%)		
Stockport NHS Foundation Trust												
15	7	47	15	12	4	33	1	25	1	75		
Tameside H	Tameside Hospital NHS Foundation Trust											
20	18	90	16	12	3	25	2	67	0	100		
The Walton	The Walton Centre NHS Foundation Trust											
33	33	100	31	28	24	86	14	58	6	100		
University H 31	ospital of South Ma 20	anchester NHS 65	Foundation Tru 28	nst 11	7	64	6	86	4	100		
University H	ospitals of Moreca	mbe Bay NHS	Foundation Trus	st								
44	. 29	66	37	33	7	21	7	100	1	100		
Warrington a	Warrington and Halton Hospitals NHS Foundation Trust											
33	30	91	28	24	2	8	1	50	0	100		
Wirral University Teaching Hospital NHS Foundation Trust												
20	13	65	19	7	6	86	5	83	3	67		
Wrightington, Wigan and Leigh NHS Foundation Trust												
40	23	58	38	31	4	13	2	50	1	75		

Tables 4.1.1 and 4.1.2 show the unit where the patient died. However, it is acknowledged that there are some occasions where a patient is referred in an Emergency Department but moves to a critical care unit. In total, for the North West team in 2015/16 there were 92 such patients.

It is acknowledged that the PDA does not capture all activity. In total there were 165 patients referred in 2015/16 who are not included in Section 2 onwards because they were either over 80 years of age or did not die in a unit participating in the PDA. 4 of these are included in Section 1 because they became a solid organ donor.

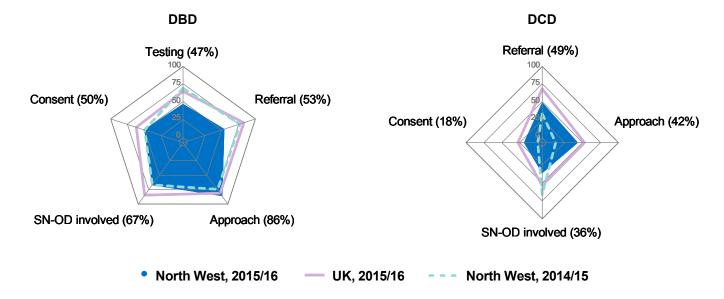


5. Paediatric ICU data

A summary of key rates from the PDA for Paediatric ICUs

5.1 PICU data

The UK average rates for paediatric ICUs are displayed on the radar charts along with the rates achieved by the paediatric ICUs covered by your Team. A comparison is also provided for the equivalent period last year. Caution should be applied when interpreting percentages based on small numbers. Note that neonatal ICUs have not been included.



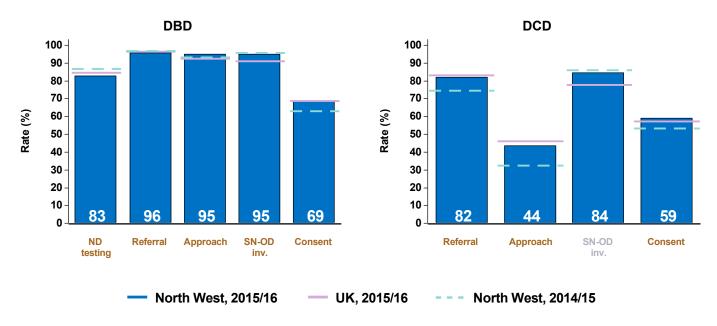


Appendices

Appendix A.1 Bar charts of key rates

Figure A.1.1 shows the same information as the radar charts in Section 2 but in an alternative format. The bars show the latest rates for your Team. Purple lines have been superimposed to provide a comparison with the UK and turquoise dashed lines show the rates achieved by your Team in the equivalent period last year. The colour of the rate label indicates the Team performance as shown in the appropriate funnel plot using the gold, silver, bronze, amber, and red (GoSBAR) scheme.

Figure A.1.1 DBD and DCD key rates





Appendix A.2 Definitions

POTENTIAL DONOR AUDIT / REFERRAL RECORD

Data excluded Patients who did not die on a critical care unit or an emergency department and

patients aged over 80 years are excluded.

Donors after brain death (DBD)

Suspected Neurological Death A patient who meets all of the following criteria: Apnoea, coma from known aetiology

and unresponsive, ventilated, fixed pupils. Excluding those not tested due to reasons 'cardiac arrest despite resuscitation', 'brainstem reflexes returned', 'neonates - less

than 2 months post term'.

Potential DBD donor A patient who meets all four criteria for neurological death testing excluding those not

tested due to reasons 'cardiac arrest despite resuscitation', 'brainstem reflexes returned', 'neonates – less than 2 months post term' (ie suspected neurological death,

as defined above).

DBD referral criteria A patient with suspected neurological death

Discussed with Specialist A patient with suspected neurological death discussed with the Specialist

Nurse – Organ Donation Nurse – Organ Donation (SN-OD)

Neurological death tested Neurological death tests were performed

Eligible DBD donor A patient confirmed dead by neurological death tests, with no absolute medical

contraindications to solid organ donation

Absolute contraindications Absolute medical contraindications to organ donation are listed here:

http://www.odt.nhs.uk/pdf/contraindications_to_organ_donation.pdf

Family approached for consent / authorisation

Family of eligible DBD asked to make a decision on donation

Family consented / authorised Family consented to / authorised donation

Actual donors: DBD Neurological death confirmed patients who became actual DBD as reported through

the PDA

Actual donors: DCD Neurological death confirmed patients who became actual DCD as reported through

the PDA

Neurological death testing rate Percentage of patients for whom neurological death was suspected who were tested

Referral rate Percentage of patients for whom neurological death was suspected who were

discussed with the SN-OD

Approach rate Percentage of eligible DBD families approached for consent /authorisation for

donation

Consent / authorisation rate Percentage of families approached about donation that consented to / authorised

donation

(black, asian and minority ethnic)), based on those patients whose family were

approached for consent /authorisation and patient ethnicity was known

SN-OD involvement rate Percentage of family approaches where a SN-OD was involved

to / authorised donation



Donors after circulatory death (DCD)

Imminent death anticipated A patient, not confirmed dead using neurological criteria, receiving assisted ventilation,

a clinical decision to withdraw treatment has been made and death is anticipated

DCD referral criteria A patient in whom imminent death is anticipated (as defined above)

Discussed with Specialist Patients for whom imminent death was anticipated who were discussed with the

Nurse – Organ Donation SN-OD

Potential DCD donor A patient who had treatment withdrawn and death was anticipated within four hours Eligible DCD donor

A patient who had treatment withdrawn and death was anticipated within four hours,

with no absolute medical contraindications to solid organ donation

Absolute contraindications Absolute medical contraindications to organ donation are listed here:

http://www.odt.nhs.uk/pdf/contraindications to organ donation.pdf

Family approached for

consent / authorisation

Family of eligible DCD asked to make a decision on donation

Family consented / authorised Family consented to / authorised donation

Actual DCD DCD patients who became actual DCD as reported through the PDA

Referral rate Percentage of patients for whom imminent death was anticipated who were discussed

with the SN-OD

Percentage of eligible DCD families approached for consent /authorisation for Approach rate

donation

Consent / authorisation rate Percentage of families approached about donation that consented to / authorised

donation

Expected consent / authorisation rate The expected consent / authorisation rate given the ethnicity case mix (white or BAME

(black, asian and minority ethnic)), based on those patients whose family were

approached for consent /authorisation and patient ethnicity was known

SN-OD involvement rate Percentage of family approaches where a SN-OD was involved

SN-OD consent / authorisation rate Percentage of families approached about donation by a SN-OD that consented

to / authorised donation

UK Transplant Registry (UKTR)

Donor type Type of donor: Donation after brain death (DBD) or donation after circulatory death

(DCD)

Number of actual donors Total number of donors reported to the UKTR

Number of patients transplanted Total number of patients transplanted from these donors

Number of organs donated divided by number of donors. The maximum number of Organs per donor

solid organs that can be donated are 7 for a DBD and 6 for a DCD.

Number of organs transplanted Total number of organs transplanted by organ type

On 1 April 2013 significant changes were made to the PDA. The main changes that should be borne in mind, especially when making comparisons across time periods, are as follows:

- Upper age limit increased from 75 to 80 years.
- Cardiothoracic ICUs included.
- Changes to imminent death definition to be clear that death was anticipated within four hours.
- Contraindications brought in line with current practice.
- Terminology changes, eg 'potential donor' changed to 'eligible donor', for consistency with World Health Organisation definitions.



Appendix A.3 Data description

This report provides a summary of data relating to potential and actual organ donors as recorded by NHS Blood and Transplant via the Potential Donor Audit (PDA), the accompanying Referral Record and the UK Transplant Registry for the North West Team. The report covers the time period 1 April 2015 to 31 March 2016 and data from 1 April 2014 to 31 March 2015 are also provided in certain sections for comparison purposes.

As part of the PDA, patients aged over 80 years of age and those who did not die on a critical care unit or an emergency department are not audited nationally and are therefore excluded from the majority of this report. In addition, some information from this time period may be outstanding due to late reporting and difficulties obtaining patient notes. Donations not captured by the PDA will still be included in the data supplied from the accompanying Referral Record or from the UK Transplant Registry, as appropriate.

Some percentages in this report were calculated using small numbers and should therefore be interpreted with caution.

Please refer any queries or requests for further information to your local Specialist Nurse - Organ Donation (SN-OD)



Appendix A.4 Table and figure description

Each table and figure displayed throughout the report is described below to aid interpretation.

1.1 Donor outcomes

Table 1.1.1

The number of actual donors, the resulting number of patients transplanted and the average number of organs donated per donor have been obtained from the UK Transplant Registry for your Team. Results have been displayed separately for donors after brain death (DBD) and donors after circulatory death (DCD).

Table 1.1.2

The number of organs transplanted by type from donors within your Team has been obtained from the UK Transplant Registry. Further information can be obtained from your local Specialist Nurse – Organ Donation (SN-OD), specifically regarding organs that were not transplanted. Results have been displayed separately for DBD and DCD.

2.1 Key rates Figure 2.1.1

Radar charts are displayed showing specific percentage measures of potential donation activity for your Team compared with national data for the UK, and compared with an equivalent time period from the previous financial year, using data from the Potential Donor Audit (PDA). The DBD charts show the percentage of patients tested for neurological death, and all four charts also show the referral rates, approach rates, proportion of approaches involving a SN-OD and observed consent/authorisation rates. Appendix A.2 gives a fuller explanation of terms used.

The blue shaded area represents your Team, and the national rates are superimposed as a solid purple line for comparison. The equivalent period from the previous year is superimposed as a dashed turquoise line. The fuller the blue shaded area the better. Note that 0% and 'not applicable (N/A)' rates appear the same. The rates have therefore been displayed on the spokes of the radar charts. The rates are coloured using the gold, silver, bronze, amber, and red (GoSBAR) colour scheme to show the performance of one Trust/Board as reflected in the plots (see description in figure 3.2.1 below)

Note that caution should be applied when interpreting percentages based on small numbers and when comparing time periods.

2.2 Key numbers, rates and comparison with national targetsTable 2.2.1 A summary of DBD and DCD data and key rates have been obtained from the PDA. A national comparison and a time period comparison are provided. Note that caution should be applied when interpreting percentages based on small numbers and comparing time periods. Appendix A.2 gives a fuller explanation of terms used.

The key rates are highlighted using the gold, silver, bronze, amber, and red (GoSBAR) colour scheme to show the performance of the Trust/Board as reflected in the funnel plots (see description for figure 3.2.1 below)

National targets specific to the financial year are displayed throughout Section 3.

3.1 Overview of lost opportunities

Figure 3.1.1

The stages at which potential donors lose the opportunity to become actual donors have been obtained from the PDA. There are four charts showing the DBD and DCD stages separately for your Team and the UK, all of which contain a comparison against an equivalent period from the previous financial year. The number of potential donors is shown on the vertical axis for each chart and at each 'step' the proportion of potential donors lost at that stage is displayed. Caution should be applied when interpreting percentages based on small numbers and comparing time periods.

3.2 Neurological death testing

Figure 3.2.1

A funnel plot of the neurological death testing rate is displayed using data obtained from the PDA. Each Trust/Board is represented on the plot as a blue dot, although one dot may represent more than one Trust/Board. Trusts/Boards within your Team are shown on the plot as large black crosses. The national target is shown on the plot as a green horizontal dashed line. The national rate is shown on the plot as a black horizontal dashed line, together with 95% and 99.8% confidence limits for this rate. These limits form a 'funnel', shaded using a gold, silver, bronze, amber, and red (GoSBAR) colour scheme. Graphs obtained in this way are known as funnel plots.

If a Trust/Board lies within the 95% limits, shaded bronze, then that Trust/Board has a rate that is statistically consistent with the national rate. If a Trust/Board lies outside the 95% confidence limits, shaded silver or amber, this serves as an alert that the Trust/Board may have a rate that is significantly different from the national rate. When a Trust/Board lies above the upper 99.8% limit, shaded gold, this indicates a rate that is significantly higher than the national rate, while a Trust/Board that lies below the lower limit, shaded red, has a rate that is significantly lower than the national rate. It is important to note that differences in patient mix have not been accounted for in these plots.

The funnel plots can also be used to identify the maximum rates currently being achieved by Trusts/Boards with similar donor potential.

Table 3.2.1

The reasons given for neurological death tests not being performed have been obtained from the PDA, if applicable.



3.3 Referral to Specialist Nurse - Organ Donation

Funnel plots of DBD and DCD referral rates are displayed using data obtained from the PDA. See Figure 3.3.1

description for Figure 3.2.1 above.

The reasons for not referring the patient to the SN-OD have been obtained from the PDA, if applicable. Table 3.3.1

Table 3.3.2 For patients who were referred, the timings of the first contact with the SN-OD by clinical staff have been

obtained from the PDA.

3.4 Contraindications

Table 3.4.1 The primary absolute medical contraindications to solid organ donation have been obtained from the PDA, if

applicable.

3.5 Family approach

Funnel plots of DBD and DCD approach rates are displayed using data obtained from the PDA. See Figure 3.5.1

description for Figure 3.2.1 above.

Table 3.5.1 The reasons why families were not formally approached for a decision about solid organ donation have been obtained from the PDA, if applicable.

3.6 Proportion of approaches involving a SN-OD Figure 3.6.1 Funnel plots of DBD and DCD SN-OD involvement rates are displayed using data obtained from the PDA.

See description for Figure 3.2.1 above.

3.7 Consent

Figure 3.7.1 Funnel plots of DBD and DCD consent/authorisation rates are displayed using data obtained from the PDA.

See description for Figure 3.2.1 above.

Table 3.7.1 The reasons why families did not give consent/authorisation for solid organ donation have been obtained

from the PDA, if applicable.

3.8 Reasons why solid organ donation did not occur

Table 3.8.1 The reasons why solid organ donation did not occur have been obtained from the PDA, if applicable.

4.1 Key numbers and rates by Trusts/Boards within your Team

Table 4.1.1 DBD key numbers and rates by Trusts/Boards covered by your Team have been obtained from the PDA.

Data for the current time period are included, along with an equivalent comparison period from the previous

year. If the Trusts/Boards are not equivalent for the two time periods, this is due to Trust/Board changes, and/or there were no patients for whom neurological death was suspected or imminent death was anticipated in one

of the time periods.

Caution should be applied when interpreting percentages based on small numbers and comparing time

periods.

Table 4.1.2 DCD key numbers and rates by unit where the patient died have been obtained from the PDA. See

description for Table 4.1.1 above.

5.1 PICU data

Radar charts have been used to display the DBD and DCD key rates from the PDA for paediatric ICUs. The Figure 5.1.1 UK average rates for paediatric ICUs are displayed along with the rates achieved by paediatric ICUs covered

by your Team. A comparison is also provided for the equivalent period from the previous year. See

description for Figure 2.1.1 above.

Caution should be applied when interpreting percentages based on small numbers and comparing time

periods.

Appendix A.1 Bar charts of key rates

Figure A.1.1 Bar charts have been used to display the DBD and DCD key rates from the PDA. This is an alternative way

of displaying the information in Figure 2.1.1.

The percentages for your Team in the latest time period are displayed on each bar. Note that caution should

be applied when interpreting percentages based on small numbers and comparing time periods.