

Detailed Report Actual and Potential Deceased Organ Donation 1 April 2022 - 31 March 2023

Scotland Organ Donation Services Team

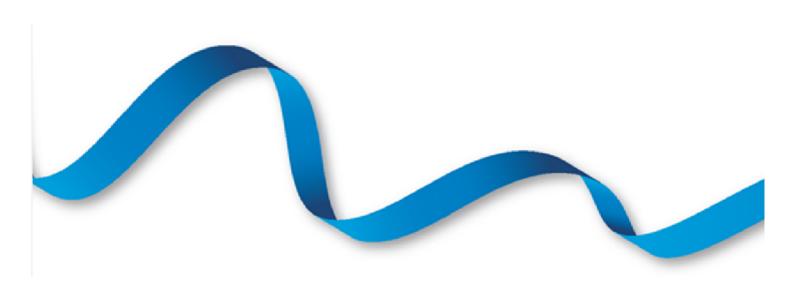




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Further Information

- Appendix A.1 contains definitions of terms and abbreviations used throughout this report and summarises the main changes made to the PDA over time.
- 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 and our Power BI reports with up to date metrics are available at https://www.odt.nhs.uk/statistics-and-reports/potential-donor-audit-report/.
- Please refer any queries or requests for further information to your local Specialist Nurse Organ Donation (SNOD)

Source

NHS Blood and Transplant: UK Transplant Registry (UKTR), Potential Donor Audit (PDA) and Referral Record. Issued May 2023 based on data meeting PDA criteria reported at 9 May 2023.



1. Donor Outcomes

A summary of the number of donors, patients transplanted, average number of organs donated per donor and organs donated.

Data in this section is obtained from the UK Transplant Registry

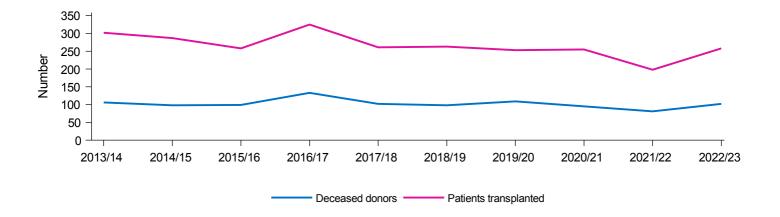
Between 1 April 2022 and 31 March 2023, the Scotland Organ Donation Services Team facilitated 102 deceased solid organ donors, resulting in 258 patients receiving a transplant. Additional information is shown in Tables 1.1 and 1.2, along with comparison data for 2021/22. Figure 1.1 shows the number of donors and patients transplanted for the previous ten periods for comparison.

Table 1.1 Donors, patients transplanted and organs per donor, 1 April 2022 - 31 March 2023 (1 April 2021 - 31 March 2022 for comparison)											
Donor type	Number of donors	Number of patients transplanted	Average number of organs donated per donor Scotland UK								
DBD DCD DBD and DCD	51 (47) 51 (34) 102 (81)	155 (137) 103 (61) 258 (198)	3.8 (3.4) 3.5 (3.4) 2.8 (2.6) 2.9 (2.7) 3.3 (3.1) 3.2 (3.1)								

In addition to the 102 proceeding donors there were 27 additional authorised donors that did not proceed, 3 where DBD organ donation was being facilitated and 24 where DCD organ donation was being facilitated.

Table 1.2 Organs transplanted by type, 1 April 2022 - 31 March 2023 (1 April 2021 - 31 March 2022 for comparison)												
Donor type	Kidney	Numl Pancreas	per of organs to Liver	ransplanted b Heart	y type Lung	Small bowel						
DBD DCD DBD and DCD	87 (84) 82 (47) 169 (131)	8 (1) 2 (0) 10 (1)	43 (38) 18 (13) 61 (51)	17 (9) 3 (1) 20 (10)	4 (7) 0 (2) 4 (9)	3 (0) 0 (0) 3 (0)						

Figure 1.1 Number of donors and patients transplanted, 1 April 2013 - 31 March 2023





2. Key Rates in

Potential for Organ Donation

A summary of the key rates on the potential for organ donation

Data in this section is obtained from the National Potential Donor Audit (PDA)

This section presents specific percentage measures of potential donation activity for the Scotland Organ Donation Services Team.

Performance in the team has been compared with UK performance in both Figure 2.1 and Table 2.1 using funnel plot boundaries and the Gold, Silver, Bronze, Amber, and Red (GoSBAR) colour scheme. When compared with UK performance, gold represents exceptional, silver represents good, bronze represents average, amber represents below average, and red represents poor performance. See Appendix A.3 for funnel plot ranges used.

It is acknowledged that the PDA does not capture all activity. There may be some patients referred in 2021/22 who are not included in this section onwards because they were either over 80 years of age or did not die in a unit participating in the PDA.

Figure 2.1 Key rates on the potential for organ donation including UK comparison, 1 April 2022 - 31 March 2023

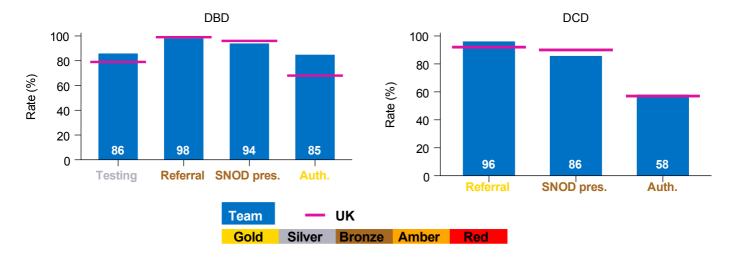


Figure 2.2 Trends in key rates on the potential for organ donation, 1 April 2018 - 31 March 2023

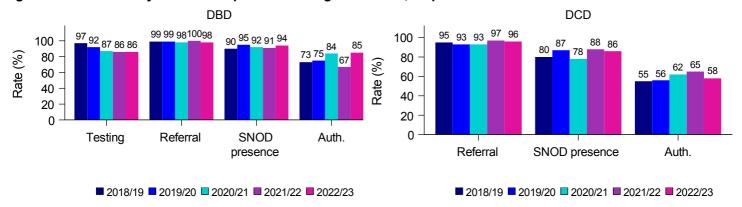




Table 2.1 Key numbers, rates and comparison with national rates, 1 April 2022 - 31 March 2023

	Sc	DBI otland) UK	Sco	DCI otland	O UK	_	eceased	donors UK
Patients meeting organ donation referral criteria ¹		99	1980		282	5307		366	6910
Referred to Organ Donation Service		97	1965		271	4886		355	6482
Referral rate %	В	98%	99%	G	96%	92%	G	97%	94%
Neurological death tested		85	1556						
Testing rate %	S	86%	79%						
Eligible donors ²		80	1439		214	3467		294	4906
Family approached		66	1244		112	1691		178	2935
Family approached and SNOD present		62	1190		96	1526		158	2716
% of approaches where SNOD present	В	94%	96%	В	86%	90%	В	89%	93%
Authorisation ascertained		56	846		65	959		121	1805
Authorisation rate %	G	85%	68%	В	58%	57%	В	68%	61%
- Expressed opt in		26	476		40	578		66	1054
- Expressed opt in %		93%	95%		78%	84%		84%	89%
- Deemed Authorisation		25	284		19	306		44	590
- Deemed Authorisation %		93%	63%		63%	52%		77%	57%
- Other*		5	86		6	74		11	160
- Other* %		100%	60%		55%	38%		69%	47%
Actual donors (PDA data)		55	783		46	636		101	1419
% of authorised donors that became actual donors		98%	93%		71%	66%		83%	79%

¹ DBD - A patient with suspected neurological death

Note that a patient that meets both the referral criteria for DBD and DCD organ donation is featured in both the DBD and DCD data but will only be counted once in the deceased donors total

Gold Silver Bronze Amber Red

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

^{*} Includes patients where nation specific deemed criteria are not met and the patient has not expressed a donation decision in accordance with relevant legislation



3. Best quality of care in organ donation

Key stages in best quality of care in organ donation

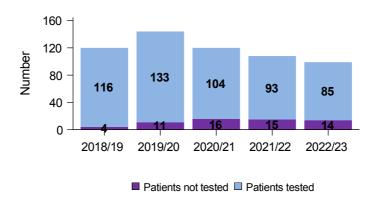
Data in this section is obtained from the National Potential Donor Audit (PDA)

This section provides information on the quality of care in the Scotland Organ Donation Services Team at the key stages of organ donation. The ambition is that the team misses no opportunity to make a transplant happen and that opportunities are maximised at every stage.

3.1 Neurological death testing

Goal: neurological death tests are performed wherever possible.

Figure 3.1 Number of patients with suspected neurological death, 1 April 2018 - 31 March 2023



	• 41 1	
	Scotland	UK
Biochemical/endocrine abnormality	-	29
Clinical reason/Clinician's decision	1	62
Continuing effects of sedatives	2	6
Family declined donation	2	28
Family pressure not to test	=	48
nability to test all reflexes	2	20
Medical contraindication to donation	1	5
Other	1	43
Patient had previously expressed a wish not to donate	į	2
	-	_
Patient haemodynamically unstable	4	151
Pressure of ICU beds	-	1
SN-OD advised that donor not suitable	-	8
Freatment withdrawn	1	18
Jnknown	-	3
Total	14	424

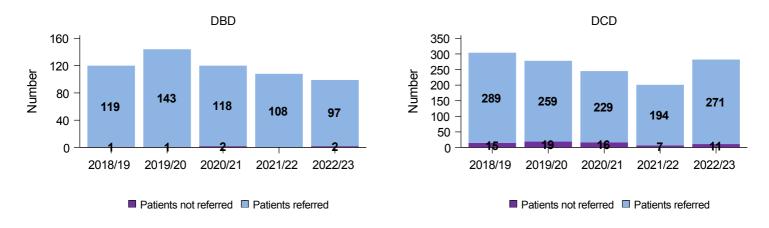


3.2 Referral to Organ Donation Service

Goal: Every patient who meets the referral criteria should be identified and referred to the Organ Donation Service, as per NHS Blood and Transplant (NHSBT) Best Practice Guidance on timely identification and referral of potential organ donors.¹

Aim: There should be no purple on the following charts.

Figure 3.2 Number of patients meeting referral criteria, 1 April 2018 - 31 March 2023



	DBD		DCE)
	Scotland	UK	Scotland	UK
Clinician assessed that patient was unlikely to become asystolic within 4 hours	-	-	-	2
Family declined donation following decision to remove treatment	-	1	1	15
Family declined donation prior to neurological testing	1	1	1	1
Medical contraindications	-	-	=	28
Not identified as potential donor/organ donation not considered	1	6	7	271
Other	-	-	2	27
Patient had previously expressed a wish not to donate	-	-	-	3
Pressure on ICU beds	-	-	-	3
Reluctance to approach family	-	1	-	2
Thought to be medically unsuitable	-	1	=	53
Uncontrolled death pre referral trigger	-	5	=	16
Total Total	2	15	11	421



3.3 Contraindications

In 2022/23 there were 34 potential donors in the Scotland Organ Donation Services team with an ACI reported, 5 DBD and 30 DCD donors. Please note, the number of potential DBD and DCD donors with an ACI reported may not equal the total stated as a patient can meet potential donor criteria for both DBD and DCD donation.



3.4 SNOD presence

Goal: A SNOD should be present during the formal family approach as per NHS Blood and Transplant (NHSBT) Best Practice Guidance.²

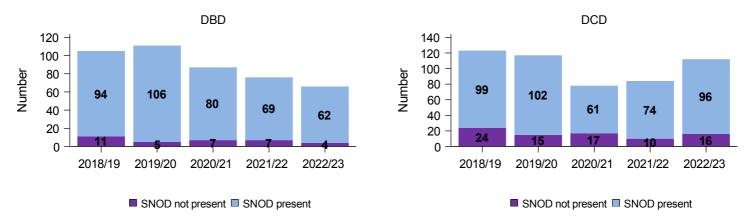
Aim: There should be no purple on the following charts.

In the UK, in 2022/23, when a SNOD was not present for the approach to the family to discuss organ donation, DBD and DCD authorisation rates were 31% and 19%, respectively, compared with DBD and DCD consent rates of 70% and 61%, respectively, when a SNOD was present.

Within the Boards in the team, when a SNOD was not present for the approach to the family to discuss organ donation, DBD and DCD authorisation rates were 25% and 6%, respectively, compared with DBD and DCD authorisation rates of 89% and 67%, respectively, when a SNOD was present.

Every approach to those close to the patient should be planned with the multidisciplinary team (MDT), should involve the SNOD and should be clearly planned taking into account the known wishes of the patient. The NHS 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.

Figure 3.3 Number of families approached by SNOD presence, 1 April 2018 - 31 March 2023



¹ NHS Blood and Transplant, 2012. Timely Identification and Referral of Potential Organ Donors - A Strategy for Implementation of Best Practice [accessed 9 May 2023]

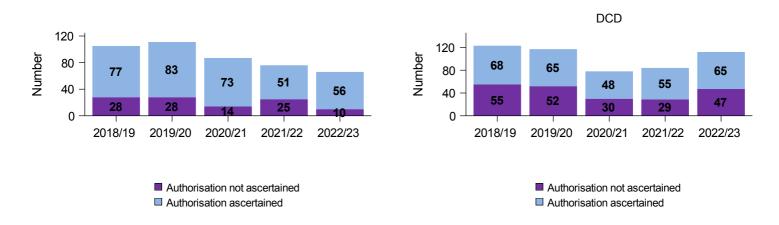
² NHS Blood and Transplant, 2013. Approaching the Families of Potential Organ Donors – Best Practice Guidance [accessed 9 May 2023]



3.5 Authorisation

In 2022/23 the DBD and DCD authorisation rates in the team were 85% and 58%, respectively.

Figure 3.4 Number of families approached, 1 April 2018 - 31 March 2023



	DBD)	DCD		
	Scotland	UK	Scotland	UK	
Family believe patient's treatment may have been limited to	=	1	-	-	
acilitate organ donation					
Family concerned donation may delay the funeral	-	2	-	1	
Family concerned other people may disapprove/be offended	=	1	-	2 7	
amily concerned that organs may not be transplantable	=	1	-		
amily did not believe in donation	=	4	1	12	
amily did not want surgery to the body	-	38	2	51	
amily divided over the decision	=	21	-	18	
amily felt it was against their religious/cultural beliefs	-	40	-	24	
amily felt patient had suffered enough	2	22	5	62	
amily felt that the body should be buried whole (unrelated to eligious/cultural reasons)	1	20	1	13	
amily felt the length of time for the donation process was too	-	17	12	12	
amily had difficulty understanding/accepting neurological testing	-	3	-	_	
amily wanted to stay with the patient after death	-	3 2	-	16	
amily were not sure whether the patient would have agreed to onation	-	44	1	90	
other the state of	=	22	4	73	
atient had previously expressed a wish not to donate	5	121	16	17:	
atient had registered a decision to Opt Out	1	22	3	31	
trong refusal - probing not appropriate	1	17	3 2	31	
otal	10	398	47	73	



3.6 Solid organ donation

Goal: NHSBT is committed to supporting transplant units to ensure as many organs as possible are safely transplanted.

Table 3.4	Reasons why solid organ donation did not occur,
	1 April 2022 - 31 March 2023

	DBD)	DCE)
	Scotland	UK	Scotland	UK
Clinical - Absolute contraindication to organ donation	-	10	-	8
Clinical - Cardiac arrest during referral	-	2	-	-
Clinical - Considered high risk donor	-	7	1	8
Clinical - DCD clinical exclusion	-	-	-	1
Clinical - No transplantable organ	-	6	1	12
Clinical - Organs deemed medically unsuitable by recipient	-	10	3	51
centres				
Clinical - Organs deemed medically unsuitable on surgical	=	7	1	3
inspection				
Clinical - Other	1	3	1	10
Clinical - PTA post WLST	-	_	8	165
Clinical - Patient actively dying	=	4	=	19
Clinical - Patient asystolic	-	1	-	-
Clinical - Patient's general medical condition	-	2	-	3
Clinical - Positive virology	-	1	-	3 3
Clinical - Predicted PTA therefore not attended	-	-	-	3
Consent / Auth - Coroner/Procurator fiscal refusal	-	5	3	10
Consent / Auth - NOK withdraw consent / authorisation	-	5	1	24
Logistical - Other	-	-	-	3
Total	1	63	19	323

If 'other', please contact your local SNOD or CLOD for more information, if required.



4. Comparative Data

A comparison of performance in your team with national data

Data in this section is obtained from the National Potential Donor Audit (PDA)

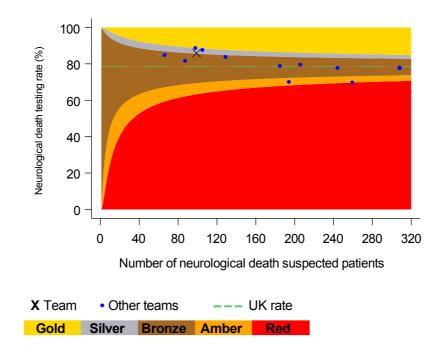
This section compares the quality of care in the key areas of organ donation in the Scotland Organ Donation Services team with the UK rate using funnel plots. The UK rate is shown as a green dashed line and the funnel shape is formed by the 95% and 99.8% confidence limits around the UK rate. The confidence limits reflect the level of precision of the UK rate relative to the number of observations. Performance in the team is indicated by a black cross. The Gold, Silver, Bronze, Amber, and Red colour scheme is used to indicate whether performance in the team, when compared to UK performance, is exceptional (gold), good (silver), average (bronze), below average (amber) or poor (red).

It is important to note that the differences in patient mix have not been accounted for in these plots. Further to these, separate funnel plots for DBD and DCD rates are presented in Section 8.

4.1 Neurological death testing

Goal: neurological death tests are performed wherever possible.

Figure 4.1 Funnel plot of neurological death testing rate, 1 April 2022 - 31 March 2023



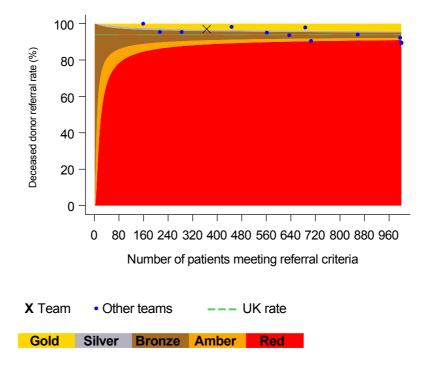
When compared with UK performance, the performance within the Boards in the team was good (silver) for neurological death testing.



4.2 Referral to Organ Donation Service

Goal: Every patient who meets the referral criteria should be identified and referred to NHSBT's Organ Donation Service, as per NHS Blood and Transplant (NHSBT) Best Practice Guidance on timely identification and referral of potential organ donors.¹

Figure 4.2 Funnel plot of deceased donor referral rate, 1 April 2022 - 31 March 2023



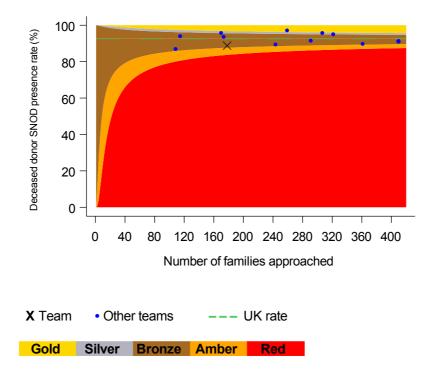
When compared with UK performance, the performance within the Boards in the team was exceptional (gold) for referral of potential organ donors to NHS Blood and Transplant's Organ Donation Service.



4.3 SNOD presence

Goal: A SNOD should be present during the formal family approach as per NHS Blood and Transplant (NHSBT) Best Practice Guidance.²

Figure 4.3 Funnel plot of SNOD presence rate, 1 April 2022 - 31 March 2023

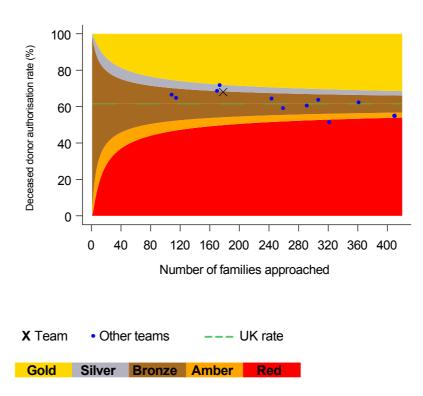


When compared with UK performance, the performance within the Boards in the team was average (bronze) for Specialist Nurse presence when approaching families to discuss organ donation.



4.4 Authorisation

Figure 4.4 Funnel plot of authorisation rate, 1 April 2022 - 31 March 2023



When compared with UK performance, the authorisation rate within the Boards in the team was average (bronze).



5. PDA data by hospital and unit

A summary of key numbers and rates from the PDA by hospital and unit where patient died

Data in this section is obtained from the National Potential Donor Audit (PDA)

Tables 5.1 and 5.2 show the key numbers and rates for patients who met the DBD and/or DCD referral criteria, respectively. Percentages have been excluded where numbers are less than 10.

Tabl	e 5.1		nts who m il 2022 - 3			erral crite	ria - ke	y numbers	and rate	s,			
Patients neurolo death suspe	ogical was	Patients tested	Neurological death testing rate (%)	Patients referred	DBD referral rate (%)	Patients confirmed dead by neurological testing	Eligible DBD donors	Eligible DBD donors whose family were approached	Approaches where SNOD involved	SNOD presence rate (%)	Authorisation ascertained	Authorisation rate (%)	Actual DBD and DCD donors from eligible DBD donors
Golden		National F	Hospital	0		0	0	0	0		0		0
i		-	-	O	-	U	U	U	U	-	U	-	, i
NHS A	yrshire ai	nd Arran 2	-	3	-	2	2	2	2	-	2	-	2
NHS B		1	-	1	-	1	1	1	0	-	1	-	1
NHS D		and Gallo	way -	3	_	1	1	1	1		1	_	1
į į		'		3			'	ı	'		'		' İ
NHS Fi		5	-	5	-	5	5	4	4	-	4	-	3
NHS Fo	orth Valle	ey 6	-	7	-	6	5	5	5	-	4	-	4
NHS G	rampian	6	-	6	-	6	6	5	5	-	5	-	5
NHS G		lasgow & 35	Clyde 85	40	98	35	32	26	24	92	20	77	20
NHS H		5	_	5	_	5	4	4	4	_	4	_	4
NHS Lá	anarkshir	e											
8		8	-	8	-	8	8	6	6	-	6	-	6
NHS Lo		11	79	13	93	11	11	7	6	-	5	-	5
NHS Ta		5	-	6		5	5	5	5	-	4	-	4

Table 5.2		s who met 2022 - 31			riteria - key	numbers	and rates,			
Patients for whom imminent death was anticipated	Patients referred	DCD referral rate (%)	Patients for whom treatment was withdrawn	Eligible DCD donors	Eligible DCD donors whose family were approached	Approaches where SNOD involved	SNOD presence rate (%)	Authorisation ascertained	Authorisation rate (%)	Actual DCD donors from eligible DCD donors
Golden Jubilee		spital	•	-	,					
6	5	-	6	5	4	2	-	1	-	1
NHS Ayrshire a	and Arran									
9	9	_	. 8	4	2	2	-	1	_	1



Table 5.2 Patients who met the DCD referral criteria - key numbers and rates, 1 April 2022 - 31 March 2023

imn deat	ents for hom ninent th was cipated	Patients referred	DCD referral rate (%)	Patients for whom treatment was withdrawn	Eligible DCD donors	Eligible DCD donors whose family were approached	Approaches where SNOD involved	SNOD presence rate (%)	Authorisation ascertained	Authorisation rate (%)	Actual DCD donors from eligible DCD donors
	Borders				•	0	•		•		_
ŀ	4	4	-	4	3	2	2	-	2	-	1
NHS I	Dumfries a	nd Galloway	/								
	4	3	-	4	4	2	2	-	2	-	2
NHS I	Fife										
	23	23	100	23	22	12	11	92	9	75	7
NHS I	Forth Valle	v									
	19	18	95	19	15	5	4	-	3	-	1
NHS	Grampian										
	21	20	95	19	15	10	9	90	4	40	3
	O	0 Ch									
	Greater Gia 69	asgow & Cly 66	<i>'ae</i> 96	63	53	27	21	78	12	44	9
İ.											
	<i>Highland</i> 15	15	100	15	12	5	4	_	1	_	1
i	13	15	100	15	12	3	7	_	'	_	'
	Lanarkshire		00		40	_	_		•		•
	14	12	86	14	10	5	5	-	3	-	2
NHS I	Lothian										
	87	85	98	84	62	33	30	91	24	73	16
NHS	Tayside										
	11	11	100	11	9	5	4	<u> </u>	3	_	2

Tables 5.1 and 5.2 show the hospital 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 team in 2022/23 there were 1 such patients. For more information regarding the Emergency Department please see Section 7.



6. Paediatric ICU data

A summary of key numbers for paediatric ICUs

Data in this section is obtained from the National Potential Donor Audit (PDA)

End of life care guidance and practice for paediatric patients does differ and care of the family unit as a whole is a core key principle. Paediatric Intensive Care Units (PICU) systems should never prevent families being offered the opportunity to donate if this is a possibility.

This section provides information on the quality of care for patients that died in PICUs in the Scotland Organ Donation Services team at the key stages of organ donation. The ambition is that your PICU misses no opportunity to make a transplant happen and that opportunities are maximised at every stage.

6.1 Key numbers for PICUs

Table 6.1 PICU key numbers comparison with national rates, 1 April 2022 - 31 March 2023

	DBD)	DCE)	Deceased donors		
	Scotland	UK	Scotland	ÚK	Scotland	UK	
Patients meeting organ donation referral criteria ¹	3	88	11	219	13	270	
Referred to Organ Donation Service	2	86	9	192	11	243	
Referral rate %		98%		88%		90%	
Neurological death tested	2	50					
Testing rate %		57%					
Eligible donors ²	2	46	9	173	11	219	
Family approached	2	35	1	54	3	89	
Family approached and SNOD present	2	27	1	44	3	71	
% of approaches where SNOD present		77%		81%		80%	
Authorisation ascertained	2	20	1	17	3	37	
Authorisation rate %		57%		31%		42%	
Actual donors (PDA data)	2	19	1	13	3	32	
% of authorised donors that became actual donors		95%		76%		86%	

¹ DBD - A patient with suspected neurological death

Note that a patient that meets both the referral criteria for DBD and DCD organ donation is featured in both the DBD and DCD data but will only be counted once in the deceased donors total

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

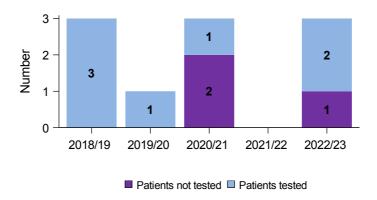


6.2 Neurological death testing in PICUs

Total

Goal: neurological death tests are performed wherever possible.

Figure 6.1 Number of patients with suspected neurological death in PICUs, 1 April 2018 - 31 March 2023



1

38

Table 6.2 Reasons given for neurological death tests not being performed in PICUs, 1 April 2022 - 31 March 2023 **Scotland** UK Biochemical/endocrine abnormality 3 Clinical reason/Clinician's decision 1 5 Family declined donation 4 11 2 Family pressure not to test Inability to test all reflexes 4 Patient haemodynamically unstable 5 Treatment withdrawn 4

If 'other', please contact your local SNOD or CLOD for more information, if required.

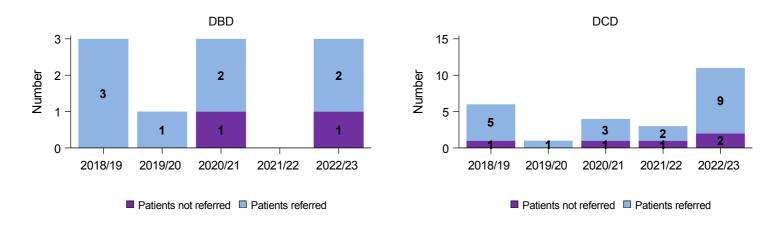


6.3 Referral to Organ Donation Service in PICUs

Goal: Every patient who meets the referral criteria should be identified and referred to the Organ Donation Service, as per NHS Blood and Transplant (NHSBT) Best Practice Guidance on timely identification and referral of potential organ donors.¹

Aim: There should be no purple on the following charts.

Figure 6.2 Number of patients meeting referral criteria in PICUs, 1 April 2018 - 31 March 2023



1 April 2022 - 31 March 2023				
	DBD)	DCD)
	Scotland	UK	Scotland	UK
Family declined donation following decision to remove treatment	-	1	-	1
Medical contraindications	-	-	-	1
lot identified as potential donor/organ donation not considered	1	1	2	17
Other	-	-	-	2
hought to be medically unsuitable	-	-	-	4
Incontrolled death pre referral trigger	-	-	_	2
「otal	1	2	2	27



6.4 Contraindications in PICUs

In 2022/23 there was 1 potential donor in the Scotland Organ Donation Services team with an ACI reported, 0 DBD and 1 DCD donor. Please note, the number of potential DBD and DCD donors with an ACI reported may not equal the total stated as a patient can meet potential donor criteria for both DBD and DCD donation.

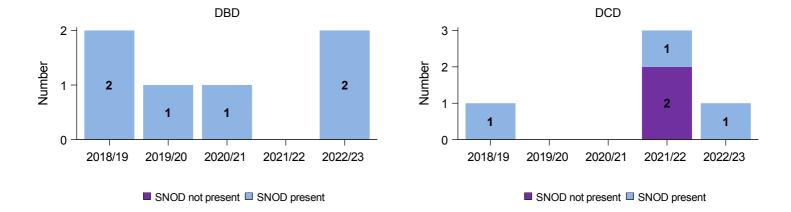


6.5 SNOD presence for patients in PICUs

Goal: A SNOD should be present during the formal family approach as per NHS Blood and Transplant (NHSBT) Best Practice Guidance.²

Aim: There should be no purple on the following charts.

Figure 6.3 Number of families of PICU patients approached by SNOD presence, 1 April 2018 - 31 March 2023

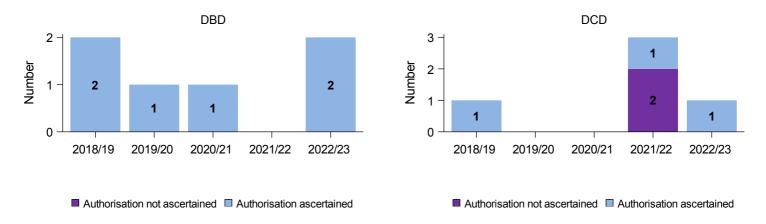




6.6 Authorisation for patients in PICUs

In 2022/23 less than 10 families of eligible donors, facilitated in the PICU, were approached to discuss organ donation in the team therefore authorisation rates are not presented.

Figure 6.4 Number of families of PICU patients approached, 1 April 2018 - 31 March 2023



	DBC)	DCD	ļ
	Scotland	UK	Scotland	UK
Family believe patient's treatment may have been limited to acilitate organ donation	-	1	-	-
Family did not believe in donation	-	2	-	2
Family did not want surgery to the body	-	-	-	3
Family felt it was against their religious/cultural beliefs	=	-	-	4
Family felt patient had suffered enough	-	2	-	5
Family felt that the body should be buried whole (unrelated to eligious/cultural reasons)	-	2	-	1
amily felt the length of time for the donation process was too	-	-	-	4
amily had difficulty understanding/accepting neurological testing	-	1	-	_
amily wanted to stay with the patient after death	-	-	-	5
amily were not sure whether the patient would have agreed to lonation	-	-	-	1
Other	=	3	-	6
Patient had previously expressed a wish not to donate	-	2	-	-
Patient had registered a decision to Opt Out	-	_	-	1
Strong refusal - probing not appropriate	-	2	-	5
Total Total	-	15	-	37



6.7 Solid organ donation in PICUs

Goal: NHSBT is committed to supporting transplant units to ensure as many organs as possible are safely transplanted.

Table 6.6 Reasons why solid organ donation did not occur in PICUs, 1 April 2022 - 31 March 2023						
	DBD		DCD			
	Scotland	UK	Scotland	UK		
Clinical - Organs deemed medically unsuitable by recipient centres	-	-	-	1		
Clinical - PTA post WLST	-	-	-	2		
Consent / Auth - NOK withdraw consent / authorisation	=	1	=	1		
Total	-	1	-	4		
If 'other', please contact your local SNOD or CLOD for more info	rmation, if requi	ired.				



7. Emergency Department data

A summary of key numbers for Emergency Departments

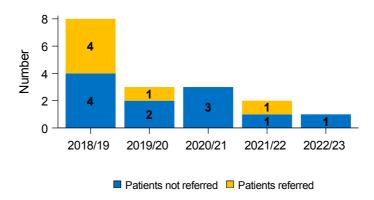
Data in this section is obtained from the National Potential Donor Audit (PDA)

Most patients who go on to become organ donors start their journey in the emergency department (ED). Deceased donation is important, not just for those people waiting on the transplant list, but also because many people in the UK have expressed a wish in life to become organ donors after their death. The overarching principle of the NHSBT Organ donation and Emergency Department strategy is that best quality of care in organ donation should be followed irrespective of the location of the patient within the hospital at the time of death.

7.1 Referral to Organ Donation Service

Goal: No one dies in your ED meeting referral criteria and is not referred to NHSBT's Organ Donation Service. Aim: There should be no blue on the following chart.

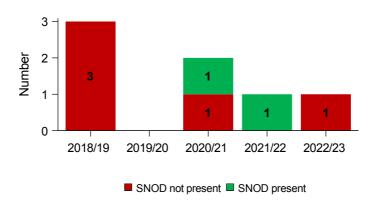
Figure 7.1 Number of patients meeting referral criteria that died in the ED, 1 April 2018 - 31 March 2023



7.2 Organ donation discussions

Goal: No family is approached in ED regarding organ donation without a SNOD present. Aim: There should be no red on the following chart.

Figure 7.2 Number of families approached in ED by SNOD presence, 1 April 2018 - 31 March 2023



³ NHS Blood and Transplant, 2016. Organ Donation and the Emergency Department [accessed 9 May 2023]



8. Additional data and figures

Key numbers and rates on the potential for organ donation

Data in this section is obtained from the National Potential Donor Audit (PDA)

8.1 Trust/Board Level Benchmarking

Trust/Board levels were reallocated in July 2018 using the average number of donors in 2016/17 and 2017/18, Table 8.1 shows the criteria used and how many Trusts/Boards belong to each level.

_	
	Number of Trusts Boards in each level
12 or more (\geq 12) proceeding donors per year	35
6 or more but less than 12 (\geq 6 to <12) proceeding donors per year	45
More than 3 but less than 6 (>3 to <6) proceeding donors per year	47
3 or less (\leq 3) proceeding donors per year	41
	6 or more but less than 12 (\geq 6 to <12) proceeding donors per year More than 3 but less than 6 (>3 to <6) proceeding donors per year

Tables 8.2 and 8.3 show the national DBD and DCD key numbers and rates for the UK by Trust/Board level, to aid in comparison with equivalent Trusts/Boards. Note that percentages have been excluded where numbers are less than 10.

Tab	Table 8.2 National DBD key numbers and rate by Trust/Board level, 1 April 2022 - 31 March 2023												
	Patients where neurological death was suspected	Patients tested	Neurological death testing rate (%)	Patients referred	DBD referral rate (%)	Patients confirmed dead by neurological testing	Eligible DBD donors	Eligible DBD donors whose family were approached	Approaches where SNOD present	SNOD presence rate (%)	Authorisation ascertained	Authorisation rate (%)	Actual DBD and DCD donors from eligible DBD donors
Level 1	1133	896	79	1124	99	879	831	714	677	95	474	66	438
Level 2	441	340	77	439	100	331	307	267	259	97	182	68	171
Level 3	287	229	80	283	99	224	216	188	184	98	135	72	124
Level 4	119	91	76	119	100	90	85	75	70	93	55	73	50

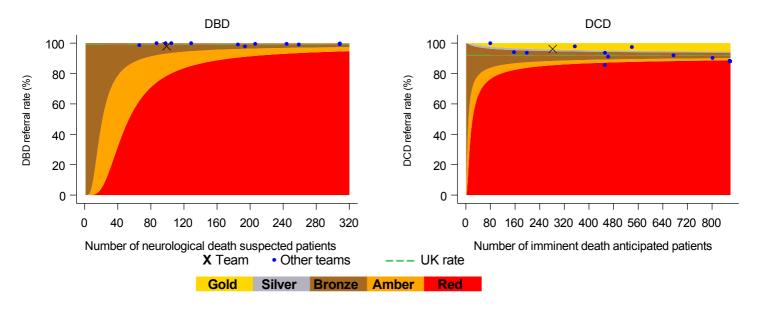
Table	8.3 Nationa 1 April		key num 31 March		I rate by	y Trust/Boar	d level,				
	Patients for whom imminent death was anticipated	Patients referred	DCD referral rate (%)	Patients for whom treatment was withdrawn	Eligible DCD donors	Eligible DCD donors whose family were approached	Approaches where SNOD present	SNOD presence rate (%)	Authorisation ascertained	Authorisation rate (%)	Actual DCD donors from eligible DCD donors
Level 1	2564	2370	92	2464	1772	941	856	91	537	57	369
Level 2	1346	1239	92	1313	841	373	333	89	209	56	132
Level 3	979	910	93	944	571	269	241	90	155	58	97
Level 4	418	367	88	408	283	108	96	89	58	54	38



8.2 Comparative data for DBD and DCD deceased donors

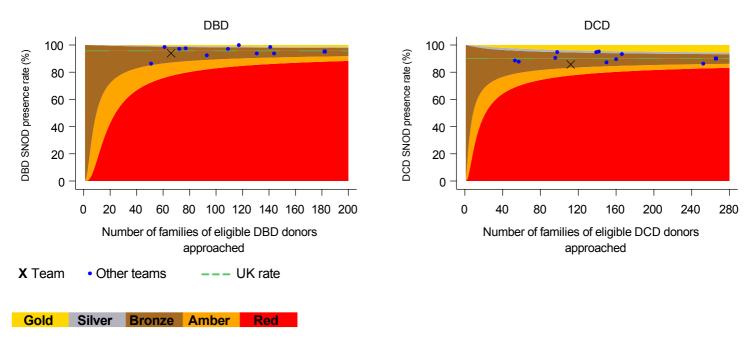
Funnel plots are presented in Section 4 showing performance in the team against the UK rate for deceased organ donation. The following funnel plots present data for DBD and DCD donors separately.

Figure 8.1 Funnel plots of referral rates, 1 April 2022 - 31 March 2023



When compared with UK performance, the performance within the Boards in the team was average (bronze) for referral of potential DBD organ donors and exceptional (gold) for referral of potential DCD organ donors to NHS Blood and Transplant's Organ Donation Service.

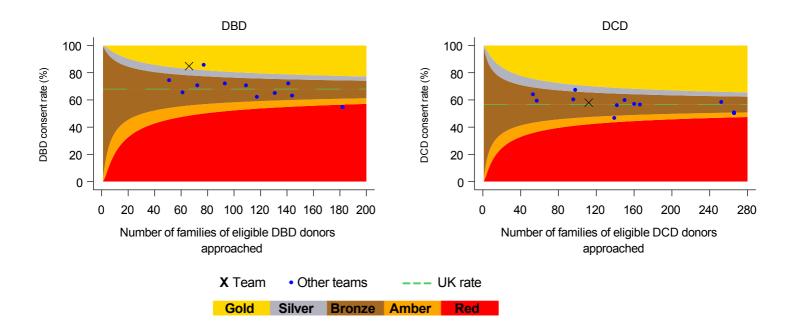
Figure 8.2 Funnel plots of SNOD presence rates, 1 April 2022 - 31 March 2023



When compared with UK performance, the performance within the Boards in the team was average (bronze) and average (bronze) for Specialist Nurse presence in approaches to families of eligible DBD and DCD donors, respectively.



Figure 8.3 Funnel plots of authorisation rates, 1 April 2022 - 31 March 2023



When compared with UK performance, the authorisation rate within the Boards in the team was exceptional (gold) and average (bronze) for DBD and DCD donors, respectively.



Appendices

Appendix A.1 Definitions

Potential Donor Audit Definitions

Potential Donor Audit inclusion criteria 1 October 2009 - 31 March 2010

All deaths in critical care in patients aged 75 and under, excluding

cardiothoracic intensive care units 1 April 2010 - 31 March 2013

All deaths in critical and emergency care in patients aged 75 and under,

excluding cardiothoracic intensive care units

1 April 2013 onwards

All deaths in critical and emergency care in patients aged 80 and under

(prior to 81st birthday)

Donors after brain death (DBD) definitions

Suspected Neurological Death

Neurological death tested

DBD referral criteria

Specialist Nurse Organ Donation or Organ Donation

Services Team Member (SNOD)

Referred to Specialist Nurse - Organ Donation

Potential DBD donor

Absolute contraindications

Eligible DBD donor

Donation decision conversation

Consent/Authorisation ascertained

Actual donors: DBD

Actual donors: DCD

A patient who meets all of the following criteria: invasive ventilation, Glasgow Coma Scale 3 not explained by sedation, no respiratory effort, fixed pupils, no cough or gag reflex. Excluding those not tested due to reasons 'cardiac arrest despite resuscitation', 'brainstem reflexes returned', 'neonates – below 37 weeks corrected gestational age'. Previously referred to as brain death

Neurological death tests performed to confirm and diagnose death

A patient with suspected neurological death

A member of Organ Donation Services Team including: Team Manager, Specialist Nurse Organ Donation, Specialist Requester, Donor Family Care

Nurse

A patient with suspected neurological death referred to a SNOD. A referral is the provision of information to determine organ donation suitability. NICE CG135 (England): Triggers for clinicians to refer a potential donor are a plan to withdraw life sustaining treatment or a plan to perform neurological

death tests

A patient with suspected neurological death

Absolute medical contraindications identified in assessment which clinically preclude organ donation as per NHSBT criteria (POL188) Absolute

medical contraindications to donation are listed here:

https://nhsbtdbe.blob.core.windows.net/umbraco-assets-corp/17160/ clinical-contraindications-to-approaching-families-for-possible-organ-donati on-pol188.pdf

A patient confirmed dead by neurological death tests, with no absolute medical contraindications to solid organ donation

Family of eligible DBD asked to make or support patient's organ donation

decision - This includes clarifying an opt out decision

Family supported opt in decision, deemed consent/authorisation, or where

applicable the family or nominated/appointed representative gave

consent/authorisation for organ donation

Patients who became actual DBD donors following confirmation of neurological death, as reported through the PDA (80 years and below). At least one organ donated for the purpose of transplantation (includes

organs retrieved for transplant however used for research)

Patients who became actual DCD donors following confirmation of

neurological death, as reported through the PDA (80 years and below). At least one organ donated for the purpose of transplantation (includes

organs retrieved for transplant however used for research)



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 referred to the SNOD

Donation decision conversation rate Percentage of eligible DBD families or nominated/appointed

representatives who were asked to make or support an organ donation

decision - This includes clarifying an opt out decision

Consent/Authorisation rate Percentage of donation decision conversations where

consent/authorisation was ascertained

SNOD presence rate Percentage of donation decision conversations where a SNOD was

present (includes telephone and video call conversations)

Consent/Authorisation rate where SNOD was present Percentage of donation decision conversations where a SNOD was

present and consent/authorisation for organ donation was ascertained (as

above)

Donors after circulatory death (DCD) definitions

Services Team Member (SNOD)

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

ventilation, in whom a clinical decision to withdraw treatment has been made and a controlled death is anticipated within a time frame to allow

donation to occur (as determined at time of assessment)

DCD referral criteria

A patient for whom imminent (controlled) death is anticipated following

withdrawal of life sustaining treatment (as defined above)

Specialist Nurse Organ Donation or Organ Donation A member of Organ Donation Services Team including: Team Manager,

Specialist Nurse Organ Donation, Specialist Requester, Donor Family Care

Nurse

Referred to SNOD A patient for whom imminent death is anticipated who was referred to a

SNOD. A referral is the provision of information to determine organ donation suitability NICE CG135 (England): Triggers for clinicians to refer a potential donor are a plan to withdraw life sustaining treatment or a plan

to perform neurological death tests

Potential DCD donor A patient who had treatment withdrawn and imminent death was

anticipated within a time frame to allow donation to occur.

Absolute contraindications Absolute medical contraindications identified in assessment which clinically

preclude organ donation as per NHSBT criteria (POL188). Absolute

medical contraindications to donation are listed here:

https://nhsbtdbe.blob.core.windows.net/umbraco-assets-corp/17160/clinical-contraindications-to-approaching-families-for-possible-organ-donati

on-pol188.pdf

Eligible DCD donor to be assessed A patient who had treatment withdrawn and imminent (controlled) death

was anticipated, with no absolute medical contraindications to solid organ

donation.

DCD exclusion criteria DCD specific criteria determine a patient's suitability to donation when

there are no absolute medical contraindications (see absolute

contraindications documentation above)

DCD screening process Process by which an organ may be screened with a local and national

transplant centre to determine suitability of organs for transplantation

Medically suitable eligible DCD donor An eligible DCD donor to be assessed considered to be medically suitable

for donation (i.e. no DCD exclusions and not deemed unsuitable by the

screening process)

Donation decision conversation Family of medically suitable eligible DCD donor who were asked to make

or support patient's organ donation decision - This includes clarifying an

opt out decision.

Consent/Authorisation ascertained Family supported opt in decision, deemed consent/authorisation, or where

applicable the family or nominated/appointed representative gave

consent/authorisation for organ donation



Actual DCD DCD patients who became actual DCD as reported through the PDA (80

years and below). At least one organ donated for the purpose of

transplantation (includes organs retrieved for transplant however used for

research)

Referral rate Percentage of patients for whom imminent (controlled) death was

anticipated who were referred to the SNOD

Donation decision conversation rate Percentage of medically suitable eligible DCD families or

nominated/appointed representatives who were asked to make or support an organ donation decision - This includes clarifying an opt out decision

Consent/Authorisation rate Percentage of donation decision conversations where

consent/authorisation was ascertained.

SNOD presence rate Percentage of donation decision conversations where a SNOD was

present (includes telephone and video call conversations).

Consent/Authorisation rate where SNOD was present Percentage of donation decision conversations where a SNOD was

present and consent/authorisation for organ donation was ascertained (as

above).

Deemed Consent/Authorisation

Deemed consent applies if a person who died in Wales, Jersey or England has not expressed an organ donation decision either to opt in or opt out or nominate/appoint a representative, is aged 18 or over, has lived in the country in which they died for longer than 12 months and is ordinarily resident there, and had the capacity to understand the notion of deemed consent for a significant period before their death.

Deemed authorisation applies if a person who died in Scotland has not expressed, in writing, an organ donation decision either to opt in or opt out, is aged 16 or over, has lived in Scotland for longer than 12 months and is ordinarily resident there, and had the capacity to understand the notion of deemed authorisation for a significant period before their death. Note that, in Scotland, a patient who has verbally expressed an opt in decision is included as a deemed authorisation, whereas a patient who has verbally expressed an opt out decision is not included.

Consent/Authorisation groups

Expressed opt in Patient had expressed an opt in decision. Opt in decisions can be

expressed in writing or via the ODR in all nations and verbal opt in decisions are also included in Wales, England and Jersey. Verbally

expressed opt in decisions are not included in Scotland

Deemed consent/authorisation Patient meets deemed criteria specific to each nation as described above.

In Scotland, this includes patients who have verbally expressed a decision

to opt ir

Expressed opt out Patient had expressed an opt out decision. Opt out decisions can be

expressed verbally, in writing or via the ODR in all nations

Other Patient has expressed no decision or deemed criteria are not met.

Paediatric patients are included in this group

UK Transplant Registry (UKTR) definitions

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

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

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



Appendix A.2 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 (UKTR) for the specified Trust, Board, Organ Donation Services Team, or nation.

This report is provided for information and to facilitate case based discussion about organ donation by the Organ Donation Committees and Trusts/Boards.

As part of the PDA, patients over 80 years of age and those who did not die on a critical care unit or emergency department are not audited nationally and are therefore excluded from the majority of this report. Data from neonatal intensive care units (ICU) have also been excluded from this report. In addition, some information 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 UKTR, as appropriate.



Appendix A.3 Table and Figure Description

For the purposes of this report please note that Trust/Board is equivalent to team.

1 Donor outcomes	
Table 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 (UKTR) for your Trust/Board. Results have been displayed separately for donors after brain death (DBD) and donors after circulatory death (DCD).
Table 1.2	The number of organs transplanted by type from donors at your Trust/Board has been obtained from the UKTR. Further information can be obtained from your local Specialist Nurse – Organ Donation (SNOD), specifically regarding organs that were not transplanted. Results have been displayed separately for DBD and DCD.

Figure 1.1 The number of actual donors and the resulting from the UKTR for your Trust/Board for the part on a line chart.	
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2 Key rates in potential for orgar	n donation
Figure 2.1	Key percentage measures of DBD and DCD potential donation activity for your Trust/Board are presented in a bar chart, using data from the Potential Donor Audit (PDA). The comparative UK rate, for the same time period, is illustrated by the pink line. The key rates labels are coloured using the gold, silver, bronze, amber, and red (GoSBAR) colour scheme to show the performance of your Trust/Board, relative to the UK rate, as reflected in the funnel plots (see description for Figure 4.1 below.
Figure 2.2	Trends in the key percentage measures of DBD and DCD potential donation activity for your Trust/Board are presented for the past five equivalent time periods, using data from the PDA.
Table 2.1	A summary of DBD, DCD and deceased donor data and key numbers have been obtained from the PDA. A UK comparison is also provided. Note that caution should be applied when interpreting percentages based on small numbers. Appendix A.1 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 your Trust/Board, relative to the UK rate, as reflected in the funnel plots (see description for Figure 4.1 below).

= 0.4	
Figure 3.1	A stacked bar chart displays the number of patients with suspected neurological death who were tested and the number who were not tested in your Trust/Board for the past five equivalent time periods.
Table 3.1	The reasons given for neurological death tests not being performed in your Trust/Board, have been obtained from the PDA, if applicable. A UK comparison is also provided.
Figure 3.2	Stacked bar charts display the number of DBD and DCD patients meeting referral criteria who were referred to the Organ Donation Service and the number who were not referred in your Trust/Board for the past five equivalent time periods.
Table 3.2	The reasons given for not referring patients to the Organ Donation Service in your Trust/Board, have been obtained from the PDA, if applicable. A UK comparison is also provided.
Table 3.3	The primary absolute medical contraindications to solid organ donation for DBD and DCD patients have been obtained from the PDA, if applicable. A UK comparison is also provided.
Figure 3.3	Stacked bar charts display the number of families of DBD and DCD patients approached where a SNOD was present and the number approached where a SNOD was not present in your Trust/Board for the past five equivalent time periods.



Figure 3.4

Stacked bar charts display the number of families of DBD and DCD patients approached where consent/authorisation for organ donation was ascertained and the number approached where consent/authorisation was not ascertained in your Trust/Board for the past five equivalent time periods.

Table 3.4

The reasons why consent/authorisation was not ascertained for solid organ donation in your Trust/Board, have been obtained from the PDA, if applicable. A UK comparison is also provided.

Table 3.5

The reasons why solid organ donation did not occur in your Trust/Board, have been obtained from the PDA, if applicable. A UK comparison is also provided.

4 Comparative data	mparative data
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Figure 4.1

A funnel plot of the neurological death testing rate is displayed using data obtained from the PDA. Each Trust/Board, of the same level, is represented on the plot as a blue dot, although one dot may represent more than one Trust/Board. The UK rate is shown on the plot as a green horizontal dashed line, together with 95% and 99.8% confidence limits for this rate. These limits form a 'funnel', which is shaded using the 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 UK rate (average performance). If a Trust/Board lies outside the 95% confidence limits, shaded silver (good performance) or amber (below average performance), this serves as an alert that the Trust/Board may have a rate that is significantly different from the UK rate. When a Trust/Board lies above the upper 99.8% limit, shaded gold, this indicates a rate that is significantly higher than the UK rate (exceptional performance), while a Trust/Board that lies below the lower limit, shaded red, has a rate that is significantly lower than the UK rate (poor performance). It is important to note that differences in patient mix have not been accounted for in these plots. Your Trust/Board is shown on the plot as the large black cross. If there is no large black cross on the plot, your Trust/Board did not report any patients of the type presented. The funnel plots can also be used to identify the maximum rates currently being achieved by Trusts/Boards with similar donor potential.

Figure 4.2

Figure 4.3

Figure 4.4

A funnel plot of the deceased donor referral rate is displayed using data obtained from the

PDA. See description for Figure 4.1 above.

A funnel plot of the deceased donor SNOD presence rate is displayed using data

obtained from the PDA. See description for Figure 4.1 above.

A funnel plot of the deceased donor consent/authorisation rate is displayed using data

obtained from the PDA. See description for Figure 4.1 above.

5 PDA data by hospital and unit

Table 5.1

DBD key numbers and rates by unit where the patient died have been obtained from the

PDA. Percentages have been excluded where numbers are less than 10.

Table 5.2

DCD key numbers and rates by unit where the patient died have been obtained from the

PDA. Percentages have been excluded where numbers are less than 10.



6 Paediatric ICU data Table 6.1 A summary of DBD, DCD and deceased donor data and key numbers for paediatric ICUs have been obtained from the PDA. A UK comparison is also provided. Note that caution should be applied when interpreting percentages based on small numbers. Appendix A.1 gives a fuller explanation of terms used. Figure 6.1 A stacked bar chart displays the number of paediatric ICU patients with suspected neurological death who were tested and the number who were not tested in your Trust/Board for the past five equivalent time periods. Table 6.2 The reasons given for neurological death tests not being performed for paediatric ICU patients in your Trust/Board, have been obtained from the PDA, if applicable. A UK comparison is also provided. Figure 6.2 Stacked bar charts display the number of DBD and DCD paediatric ICU patients meeting referral criteria who were referred to the Organ Donation Service and the number who were not referred in your Trust/Board for the past five equivalent time periods. The reasons given for not referring paediatric ICU patients to the Organ Donation Service Table 6.3 in your Trust/Board, have been obtained from the PDA, if applicable. A UK comparison is also provided. The primary absolute medical contraindications to solid organ donation for DBD and DCD Table 6.4 paediatric ICU patients have been obtained from the PDA, if applicable. A UK comparison is also provided. Stacked bar charts display the number of families of DBD and DCD paediatric ICU Figure 6.3 patients approached where a SNOD was present and the number approached where a SNOD was not present in your Trust/Board for the past five equivalent time periods. Stacked bar charts display the number of families of DBD and DCD paediatric ICU Figure 6.4 patients approached where consent/authorisation for organ donation was ascertained and the number approached where consent/authorisation was not ascertained in your Trust/Board for the past five equivalent time periods. The reasons why consent/authorisation was not ascertained for solid organ donation in Table 6.5 paediatric ICU patients in your Trust/Board, have been obtained from the PDA, if

applicable. A UK comparison is also provided.

Table 6.6

The reasons why solid organ donation did not occur in paediatric ICU patients in your Trust/Board, have been obtained from the PDA, if applicable. A UK comparison is also provided.

7 Emergency department data

Figure 7.1 Stacked bar charts display the number of patients that died in the emergency department

(ED) who met the referral criteria and were referred to the Organ Donation Service and the number who were not referred in your Trust/Board for the past five equivalent time

periods.

Figure 7.2 Stacked bar charts display the number of families of patients in ED approached where a

SNOD was present and the number approached where a SNOD was not present in your

Trust/Board for the past five equivalent time periods.

8 Additional data and figures

Table 8.1 A summary of deceased donor, transplant, transplant list and ODR opt-in registration data

for your region have been obtained from the UKTR. Your region has been defined as per

former Strategic Health Authority. A UK comparison is also provided.

Table 8.2 Trust/board level categories and the relevant expected number of proceeding donors per

year are provided for information.

Table 8.3 National DBD key numbers and rates for level 1, 2, 3 and 4 Trusts/Boards are displayed

alongside your local data to aid comparison with equivalent Trusts/Boards. Percentages

have been excluded where numbers are less than 10.



Table 8.4	National DCD key numbers and rates for level 1, 2, 3 and 4 Trusts/Boards are displayed alongside your local data to aid comparison with equivalent Trusts/Boards. Percentages have been excluded where numbers are less than 10.
Figure 8.1	A funnel plot of the DBD and DCD referral rates are displayed using data obtained from the PDA. See description for Figure 4.1 above.
Figure 8.2	A funnel plot of the DBD and DCD SNOD presence rates are displayed using data obtained from the PDA. See description for Figure 4.1 above.
Figure 8.3	A funnel plot of the DBD and DCD consent/authorisation rates are displayed using data obtained from the PDA. See description for Figure 4.1 above.