



Overview of Organ Donation and Transplantation

A summary of organ donation and transplantation activity in the UK during the financial year from 1 April 2017 to 31 March 2018

2.1 Summary of activity

As the total number of deceased donors and transplants continued to increase this year, the number of patients on the active transplant list at 31 March 2018 is 344 fewer than on the same date last year. This drop reflects an increasing number of transplants performed over the last ten years and a reasonably steady number of patients joining the transplant list each year. The increase in donor and transplant numbers (1 April 2008 to 31 March 2018) and the number of patients registered on the transplant lists at 31 March each year are shown in **Figure 2.1**. There were 329 more deceased donor transplants in 2017-2018 than in the previous year, representing a 9% increase. The corresponding increase in the number of deceased donors was 11%.

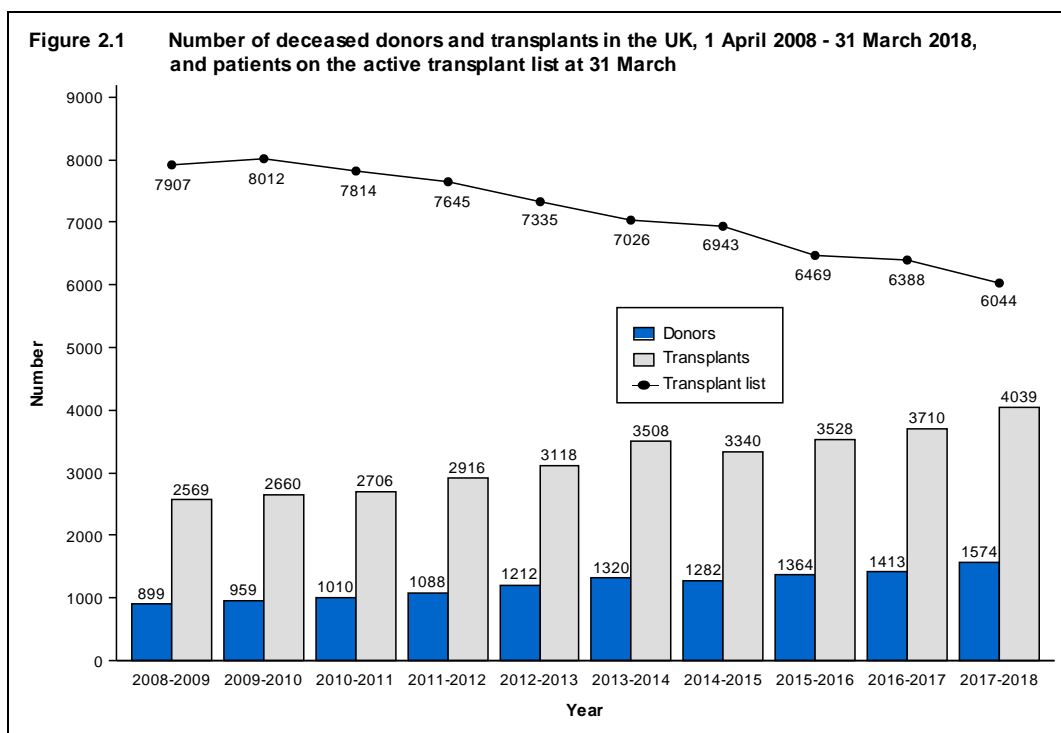


Figure 2.2 shows the number of deceased and living donors for 2008-2018. The numbers of deceased donors after brain death (DBD) and deceased donors after circulatory death (DCD) have both increased year on year, with the exception of 2014-2015. In 2017-2018 the numbers of DBD and DCD donors reached their highest ever, 955 and 619, respectively. The number of living donors has fallen, in the last 5 years, from a peak of 1,148 donors in 2013-2014 to 1,051 in 2017-2018. Compared with last year there was a 1% increase in living donors in 2017-2018.

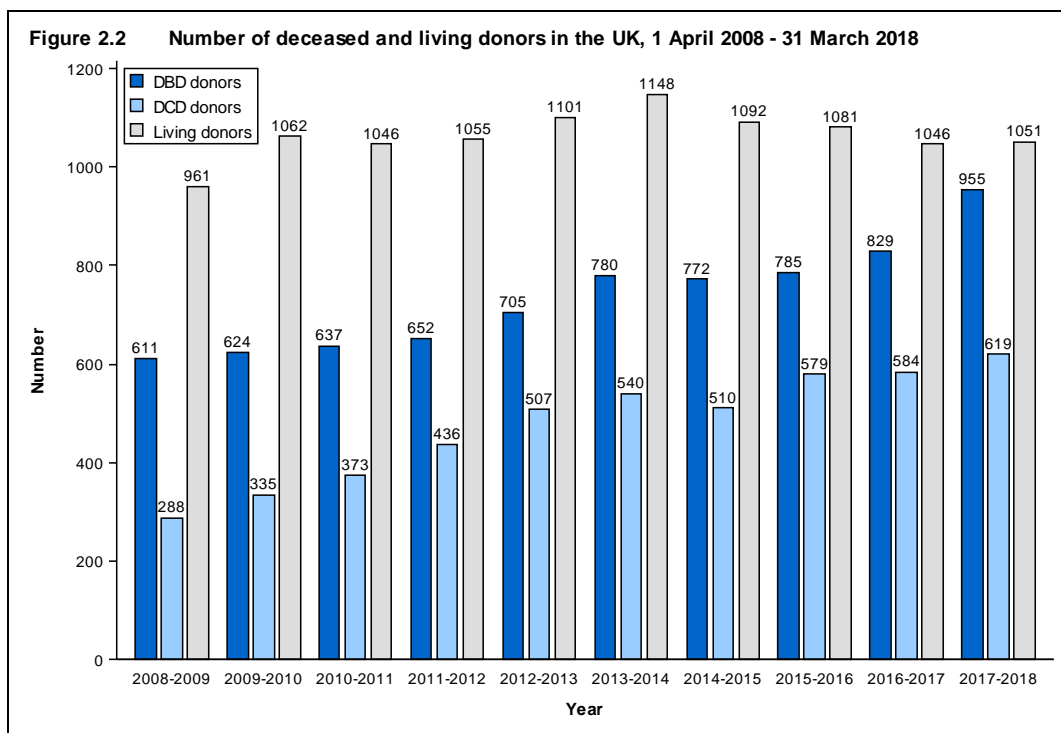
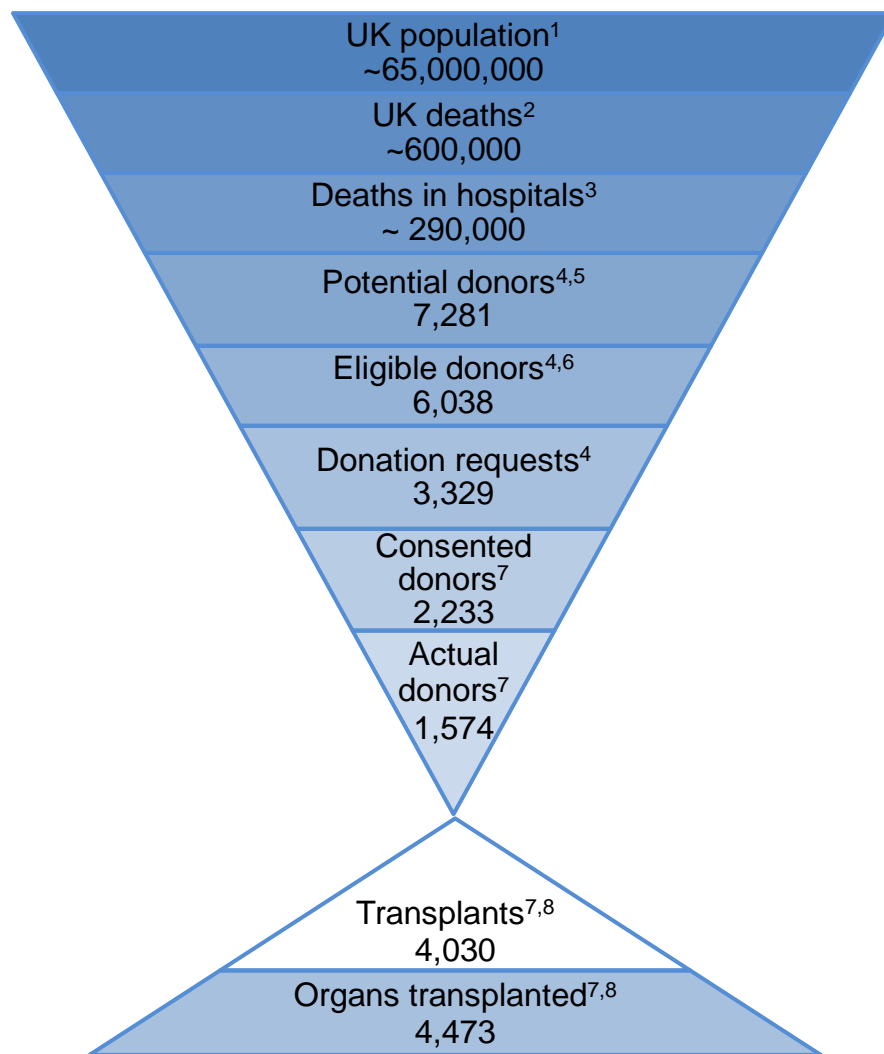


Figure 2.3 shows the potential deceased organ donor population in the UK. Not everyone can be a deceased organ donor and this figure highlights the small proportion of deaths in the UK that represent potential donors. *Please note that the information presented comes from several different sources. The NHSBT Potential Donor Audit collects information on most, but not all, actual donors and the potential for donation could therefore be slightly underestimated. The quoted numbers of transplants and organs transplanted are those achieved using organs from deceased actual donors in the UK, some of which may have been performed overseas, and does not reflect the number of deceased donor transplants in the UK, which may have used organs from overseas donors.*

Figure 2.3 UK potential deceased organ donor population, 1 April 2017 – 31 March 2018



¹ Mid 2016 estimates: www.ons.gov.uk

² 2016 data: England & Wales www.ons.gov.uk; Scotland www.gro-scotland.gov.uk; Northern Ireland www.nisra.gov.uk

³ 2016 data: England & Wales www.ons.gov.uk; Scotland www.isdscotland.org; Northern Ireland www.nisra.gov.uk

⁴ 2017/2018 data: NHSBT, Potential Donor Audit

⁵ Potential donor - patients for whom death was confirmed following neurological tests or patients who had treatment withdrawn and death was anticipated within four hours

⁶ Eligible donor - Potential donor with no absolute medical contraindications to solid organ donation

⁷ 2017/2018 deceased donor data: NHSBT, UK Transplant Registry

⁸ Using organs from actual donors in the UK

Table 2.1 shows the number of deceased donors and transplants in 2017-2018 and patients on the transplant list at 31 March 2018 for each country in the UK.

Table 2.1 Deceased donors and transplants 1 April 2017 - 31 March 2018, and transplant lists as at 31 March 2018, by country of residence

Organ	Country of residence ^{1,2}							
	England		Wales		Scotland		Northern Ireland	
	N	(pmp)	N	(pmp)	N	(pmp)	N	(pmp)
Kidney								
Deceased donors	1269	(23.0)	74	(23.8)	97	(18.0)	37	(19.9)
Transplants ³	2020	(36.5)	69	(22.2)	208	(38.5)	67	(36.0)
Transplant list	4298	(77.8)	189	(60.8)	430	(79.6)	93	(50.0)
Pancreas								
Deceased donors	406	(7.3)	25	(8.0)	36	(6.7)	16	(8.6)
Transplants	172	(3.1)	9	(2.9)	26	(4.8)	3	(1.6)
Transplant list	169	(3.1)	16	(5.1)	30	(5.6)	3	(1.6)
Heart								
Deceased donors	194	(3.5)	11	(3.5)	9	(1.7)	6	(3.2)
Transplants ⁴	164	(3.0)	3	(1.0)	16	(3.0)	8	(4.3)
Transplant list	228	(4.1)	10	(3.2)	30	(5.6)	9	(4.8)
Lung								
Deceased donors	202	(3.7)	8	(2.6)	22	(4.1)	6	(3.2)
Transplants	176	(3.2)	13	(4.2)	16	(3.0)	7	(3.8)
Transplant list	293	(5.3)	19	(6.1)	33	(6.1)	11	(5.9)
Liver								
Deceased donors	989	(17.9)	59	(19.0)	73	(13.5)	26	(14.0)
Transplants	807	(14.6)	45	(14.5)	107	(19.8)	29	(15.6)
Transplant list	279	(5.0)	14	(4.5)	36	(6.7)	23	(12.4)
Intestinal								
Deceased donors	22	(0.4)	1	(0.3)	2	(0.4)	0	(0.0)
Transplants	16	(0.3)	0	(0.0)	2	(0.4)	1	(0.5)
Transplant list	5	(0.1)	0	(0.0)	0	(0.0)	0	(0.0)
Total⁵								
Deceased donors	1349	(24.4)	79	(25.4)	104	(19.3)	39	(21.0)
Transplants	3353	(60.7)	139	(44.7)	375	(69.4)	115	(61.8)
Transplant list	5101	(92.3)	233	(74.9)	534	(98.9)	137	(73.7)

¹ Country of residence of donor given for deceased donor numbers, and residence of recipient given for transplant and waiting list numbers

² Excludes patients resident in Channel Islands, Isle of Man, overseas and in the Republic of Ireland

³ Kidney only transplants

⁴ Excludes heart-lung transplants

⁵ Organ numbers do not add up to total due to multi-organ donors and patients waiting for a multi-organ transplant

2.2 Transplant list

At 31 March 2018, 6,044 patients were registered for an organ transplant in the UK on the active transplant list. A further 3,404 patients were temporarily suspended from the active national transplant list because they were unfit or otherwise unavailable for transplant. Details of numbers of patients on each of the organ transplant lists are given in **Table 2.2** for 31 March 2017 and 2018. Between these dates the total number fell by 344 (5%) due to decreases in the number of patients on the kidney, liver and lung transplant lists.

Table 2.2 Active transplant lists in the UK at 31 March 2017 and 2018			
	2017	2018	% Change
Kidney & pancreas patients	5220	5038	-3
Kidney	4996	4820	-4
Kidney & pancreas	193	175	-9
Kidney & pancreas islets	2	10	-
Pancreas	10	14	+40
Pancreas islets	19	19	0
Cardiothoracic patients	624	639	+2
Heart	246	282	+15
Heart/lung	18	13	-28
Lung(s)	360	344	-4
Liver patients	489	333	-32
Intestinal patients	12	6	-
Other multi-organ patients¹	43	28	-35
ALL PATIENTS	6388	6044	-5

Percentages not reported when fewer than 10 in either year
¹ Includes patients waiting for kidney and liver transplants (40 in 2017, 26 in 2018), kidney and heart transplants (2 in 2017, 2 in 2018), liver and heart transplants (1 in 2017)

During 2017-2018, 426 patients died whilst active/suspended on the transplant list or within one year of removal from the list. This information is shown by organ and age group in **Table 2.3**.

Table 2.3 Number of patient deaths on transplant lists in the UK, 1 April 2017 – 31 March 2018

	Total	Adult	Paediatric
Kidney & pancreas patients	270	266	4
Kidney	247	243	4
Kidney & pancreas	20	20	0
Pancreas	3	3	0
Cardiothoracic patients	92	83	9
Heart	23	16	7
Heart/lung	4	4	0
Lung(s)	65	63	2
Liver patients	59	56	3
Intestinal patients	2	1	1
Other multi-organ patients¹	3	3	0
ALL PATIENTS	426	409	17

¹ Includes patients waiting for kidney and liver transplants (3 adults)

2.3 Transplants

There was a 7% increase in the total number of organ transplants (from deceased and living donors) last year: 5,090 transplants were performed in 2017-2018 compared with 4,756 in 2016-2017 (**Table 2.4**). All multi-organ transplants are identified separately as are transplants from living donors.

The total number of kidney transplants increased by 7% in 2017-2018; kidney transplants from donors after circulatory death increased by 6%, while the number of living donor kidney transplants increased by 1%. The total number of cardiothoracic organ transplants rose by 10%, the number of liver transplants (including liver only, intestinal and other multi-organ transplants) rose by 8% and the number of pancreas transplants (including pancreas only, intestinal, kidney/pancreas and pancreas islets) increased by 3%.

Table 2.4 Transplants performed in the UK, 1 April 2016 - 31 March 2018

Transplant	2016-2017	2017-2018	% Change
DBD kidney	1270	1436	+13
DCD kidney	890	943	+6
Living donor kidney	1012	1020	+1
DBD Kidney & pancreas	119	120	+1
DCD Kidney & pancreas	43	48	+12
Kidney & Pancreas islets	1	4	-
DBD Pancreas	14	13	-7
DCD Pancreas	3	4	-
Pancreas islets	33	22	-33
DBD heart	184	172	-7
DCD heart	13	25	+92
Heart/lung	2	12	-
DBD Single lung	20	21	+5
DCD Single lung	2	2	-
DBD Double lung	127	142	+12
DCD Double lung	27	36	+33
DBD liver	596	692	+16
DCD liver	208	200	-4
Domino liver	3	1	-
DBD liver lobe	127	98	-23
DCD liver lobe	1	0	-
Living donor liver lobe	31	29	-6
Bowel only	4	6	-
Liver, bowel & pancreas	1	2	-
Multivisceral ¹	4	12	-
Modified multivisceral	6	5	-
Living liver & bowel	0	1	-
Kidney & heart	1	0	-
Kidney & liver	14	22	+57
Heart & liver	0	1	-
Liver & lung	0	1	-
TOTAL ORGAN TRANSPLANTS	4756	5090	+7
Total kidney transplants²	3351	3597	+7
Total pancreas transplants²	224	230	+3
Total cardiothoracic transplants	376	412	+10
Total liver transplants²	985	1059	+8
Total intestinal transplants	15	26	+73

Percentage not reported when fewer than 10 in either year

¹ Including a kidney (1 in 2016-2017, 4 in 2017-2018)

² Includes intestinal transplants

The total approximate number of patients with a functioning transplant on 31 March 2018 is 52,200 (**Table 2.5**). This reflects information held on the UK transplant registry database and excludes those patients who are known to be lost to follow-up.

Table 2.5 Number of transplants reported as functioning at 31 March 2018	
	Functioning transplants¹
Kidney	37900
Pancreas	1900
Cardiothoracic	4000
Liver	10100
Intestinal	100
ALL PATIENTS²	52200
¹ Approximate number being followed up ² Number of patients with a functioning transplant Multi-organ transplants (excluding intestinal transplants) are counted in each organ Excludes those patients known to be lost to follow-up	