



Overview of Organ Donation and Transplantation

A summary of organ donation and transplantation activity in the UK during the financial year from 1 April 2016 to 31 March 2017

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 2017 is 81 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 2007 to 31 March 2017) and the number of patients registered on the transplant lists at 31 March each year are shown in **Figure 2.1**. There were 182 more deceased donor transplants in 2016-2017 than in the previous year, representing a 5% increase. The corresponding increase in the number of deceased donors was 4%.

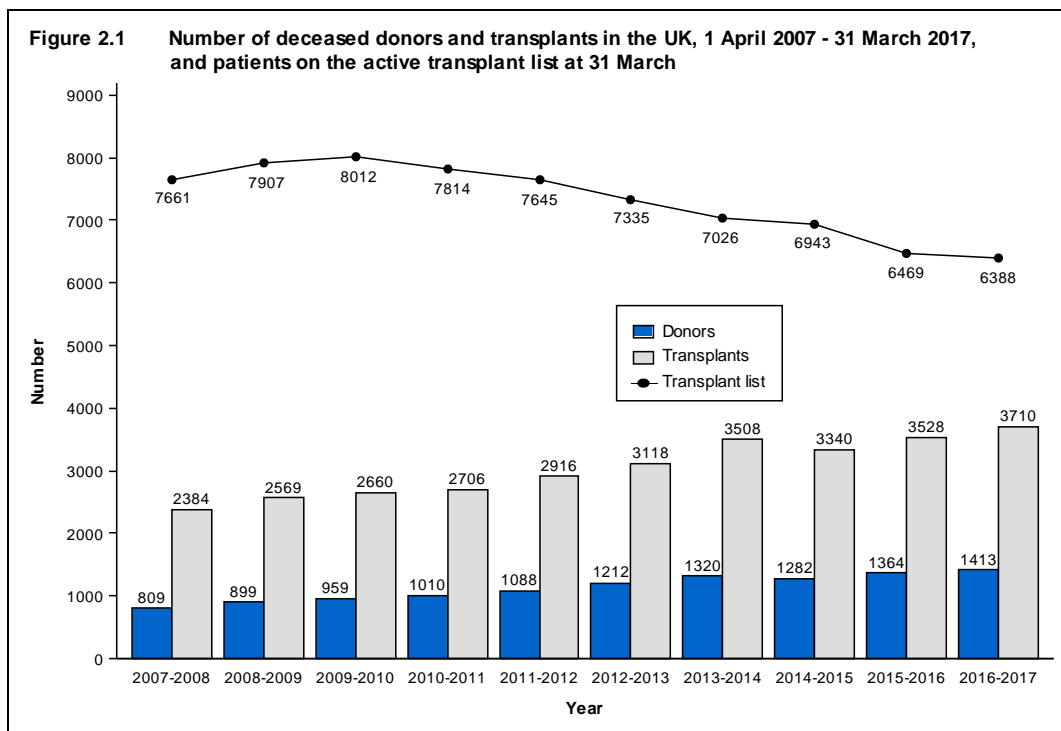


Figure 2.2 shows the number of deceased and living donors for 2007-2017. The numbers of deceased donors after brain death (DBD) and deceased donors after circulatory death (DCD) have both increased year on year, with the exception of 2014-2015. In 2016-2017 the numbers of DBD and DCD donors reached their highest ever, 829 and 584, respectively. The number of living donors has fallen, in the last 4 years, from a peak of 1,148 donors in 2013-2014 to 1,043 in 2016-2017. Compared with last year there was a 3% fall in living donors in 2016-2017.

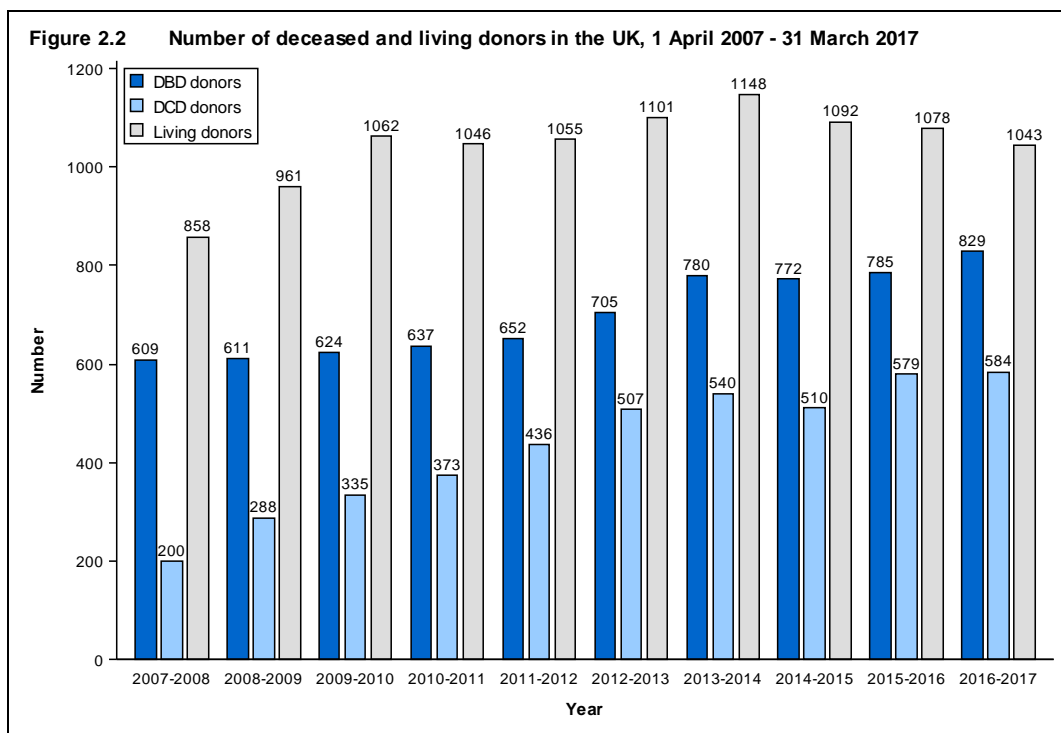
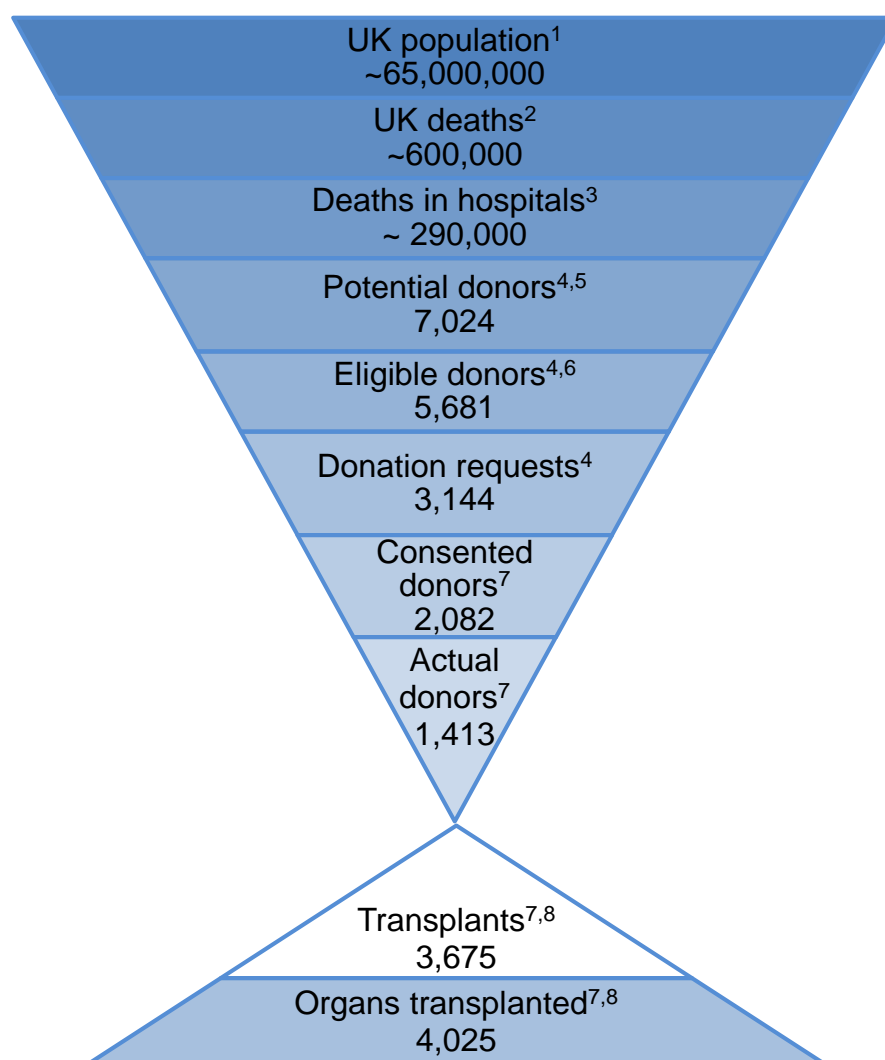


Figure 2.3 shows the potential deceased organ donor population in the UK. Not everyone can be a deceased organ donor and this figure highlights the small proportion of deaths in the UK that represent potential donors. *Please note that the information presented comes from several different sources. The 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 2016 – 31 March 2017



¹ Mid 2015 estimates: www.ons.gov.uk

² 2015 data: England & Wales www.ons.gov.uk; Scotland www.gro-scotland.gov.uk; Northern Ireland www.nisra.gov.uk

³ 2015 data: England & Wales www.ons.gov.uk; Scotland www.isdscotland.org; Northern Ireland www.nisra.gov.uk

⁴ 2016/2017 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 2016/2017 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 2016-2017 and patients on the transplant list at 31 March 2017 for each country in the UK.

Table 2.1 Deceased donors and transplants 1 April 2016 - 31 March 2017, and transplant lists as at 31 March 2017, 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	1094	(20.0)	63	(20.3)	129	(24.0)	41	(22.2)
Transplants ³	1871	(34.1)	74	(23.9)	164	(30.5)	45	(24.3)
Transplant list	4463	(81.5)	185	(59.7)	437	(81.4)	125	(67.6)
Pancreas								
Deceased donors	394	(7.2)	22	(7.1)	40	(7.4)	17	(9.2)
Transplants	172	(3.1)	4	(1.3)	34	(6.3)	3	(1.6)
Transplant list	174	(3.2)	15	(4.8)	32	(6.0)	3	(1.6)
Heart								
Deceased donors	173	(3.2)	6	(1.9)	11	(2.0)	9	(4.9)
Transplants ⁴	161	(2.9)	12	(3.9)	16	(3.0)	6	(3.2)
Transplant list	204	(3.7)	7	(2.3)	24	(4.5)	8	(4.3)
Lung								
Deceased donors	153	(2.8)	4	(1.3)	16	(3.0)	10	(5.4)
Transplants	151	(2.8)	9	(2.9)	16	(3.0)	1	(0.5)
Transplant list	301	(5.5)	25	(8.1)	34	(6.3)	14	(7.6)
Liver								
Deceased donors	866	(15.8)	53	(17.1)	85	(15.8)	30	(16.2)
Transplants	750	(13.7)	36	(11.6)	117	(21.8)	19	(10.3)
Transplant list	423	(7.7)	25	(8.1)	37	(6.9)	30	(16.2)
Intestinal								
Deceased donors	11	(0.2)	0	(0.0)	1	(0.2)	2	(1.1)
Transplants ⁵	13	(0.2)	0	(0.0)	1	(0.2)	1	(0.5)
Transplant list	5	(0.1)	0	(0.0)	1	(0.2)	0	(0.0)
Total⁶								
Deceased donors	1157	(21.1)	68	(21.9)	137	(25.5)	42	(22.7)
Transplants	3118	(56.9)	135	(43.5)	348	(64.8)	75	(40.5)
Transplant list	5376	(98.1)	242	(78.1)	540	(100.6)	177	(95.7)

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 Excludes one abdominal wall only transplant

⁶ 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 2017, 6,388 patients were registered for an organ transplant in the UK on the active transplant list. A further 3,357 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 2016 and 2017. Between these dates the total number fell by 81 (1%) due to decreases in the number of patients on the kidney, pancreas and liver transplant lists.

Table 2.2 Active transplant lists in the UK at 31 March 2016 and 2017			
	2016	2017	% Change
Kidney & pancreas patients	5308	5220	-2
Kidney	5081	4996	-2
Kidney & pancreas	184	193	+5
Kidney & pancreas islets	0	2	-
Pancreas	15	10	-33
Pancreas islets	28	19	-32
Cardiothoracic patients	574	624	+9
Heart	244	246	+1
Heart-lung	14	18	+29
Lung(s)	316	360	+14
Liver patients	533	489	-8
Intestinal patients	6	12	-
Other multi-organ patients¹	48	43	-10
ALL PATIENTS	6469	6388	-1

Percentages not reported when fewer than 10 in either year
¹ Includes patients waiting for kidney and liver transplants (44 in 2016, 40 in 2017), kidney and heart transplants (4 in 2016, 2 in 2017), and liver and heart transplants (1 in 2017)

During 2016-2017, 470 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 2016 - 31 March 2017

	Total	Adult	Paediatric
Kidney & pancreas patients	281	281	0
Kidney	261	261	0
Kidney & pancreas	19	19	0
Pancreas	1	1	0
Cardiothoracic patients	104	93	11
Heart	32	22	10
Heart-lung	7	7	0
Lung(s)	65	64	1
Liver patients	74	72	2
Intestinal patients	4	3	1
Other multi-organ patients¹	7	7	0
ALL PATIENTS	470	456	14

¹ Includes patients waiting for kidney and liver transplants (6 adults), kidney and heart transplants (1 adult)

2.3 Transplants

There was a 3% increase in the total number of organ transplants (from deceased and living donors) last year: 4,753 transplants were performed in 2016-2017 compared with 4,605 in 2015-2016 (**Table 2.4**). All multi-organ transplants are identified separately as are transplants from living donors.

The total number of kidney transplants increased by 2% in 2016-2017; kidney transplants from donors after circulatory death increased by 4%, while the number of living donor kidney transplants fell by 3%. The total number of cardiothoracic organ transplants fell by 2%, the number of liver transplants rose by 6% and the number of pancreas transplants (including pancreas only, intestinal, kidney/pancreas and pancreas islets) fell by 3%.

Table 2.4 Transplants performed in the UK, 1 April 2015 - 31 March 2017

Transplant	2015-2016	2016-2017	% Change
DBD kidney	1181	1270	+8
DCD kidney	855	890	+4
Living donor kidney	1038	1009	-3
DBD Kidney & pancreas	123	120	-2
DCD Kidney & pancreas	44	42	-5
Kidney & Pancreas islets	0	1	-
DBD Pancreas	13	14	+8
DCD Pancreas	5	3	-
Pancreas islets	31	33	+6
DBD heart	175	184	+5
DCD heart	19	13	-32
Heart-lung	6	2	-
DBD Single lung	14	20	+43
DCD Single lung	2	2	-
DBD Double lung	133	127	-5
DCD Double lung	33	27	-18
DBD liver	553	597	+8
DCD liver	206	207	0
Domino liver	3	3	-
DBD liver lobe	95	127	+34
DCD liver lobe	0	1	-
Living donor liver lobe	36	31	-14
Bowel only	1	4	-
Liver, bowel & pancreas	1	1	-
Multivisceral ¹	7	4	-
Modified multivisceral ²	6	6	-
Kidney & heart	0	1	-
Kidney & liver	24	14	-42
Heart & liver	1	0	-
TOTAL ORGAN TRANSPLANTS	4605	4753	+3
Total kidney transplants³	3267	3348	+2
Total pancreas transplants³	230	224	-3
Total cardiothoracic organ transplants	383	376	-2
Total liver transplants³	926	985	+6
Total intestinal transplants⁴	15	15	0

Percentage not reported when fewer than 10 in either year

¹ Including a kidney (1 in 2016-2017)

² Including a kidney (2 in 2015-2016)

³ Includes intestinal transplants

⁴ Excludes abdominal wall only transplant (1 in 2016-2017)

The total approximate number of patients with a functioning transplant on 31 March 2017 is 49,600 (**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 2017	
	Functioning transplants¹
Kidney	35800
Pancreas	1800
Cardiothoracic	3800
Liver	9700
Intestinal	100
ALL PATIENTS²	49600

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