



Overview of Organ Donation and Transplantation

A summary of organ donation and transplantation activity in the UK during the financial year from 1 April 2022 to 31 March 2023

2.1 Summary of activity

Many patients became suspended from the active transplant list as transplant centres reacted to the COVID-19 pandemic in March 2020 and 2021. There were 690 more active patients at 31 March 2023 than at the end of the previous financial year. The change in donor and transplant numbers (1 April 2013 to 31 March 2023) and the number of patients registered on the transplant lists at 31 March each year are shown in **Figure 2.1**. There were 161 more deceased donor transplants in 2022-2023 than in the previous year, representing a 5% increase. There was a 2% increase in the number of deceased donors. Despite these increases, neither donor nor transplant numbers have recovered to pre-pandemic levels.

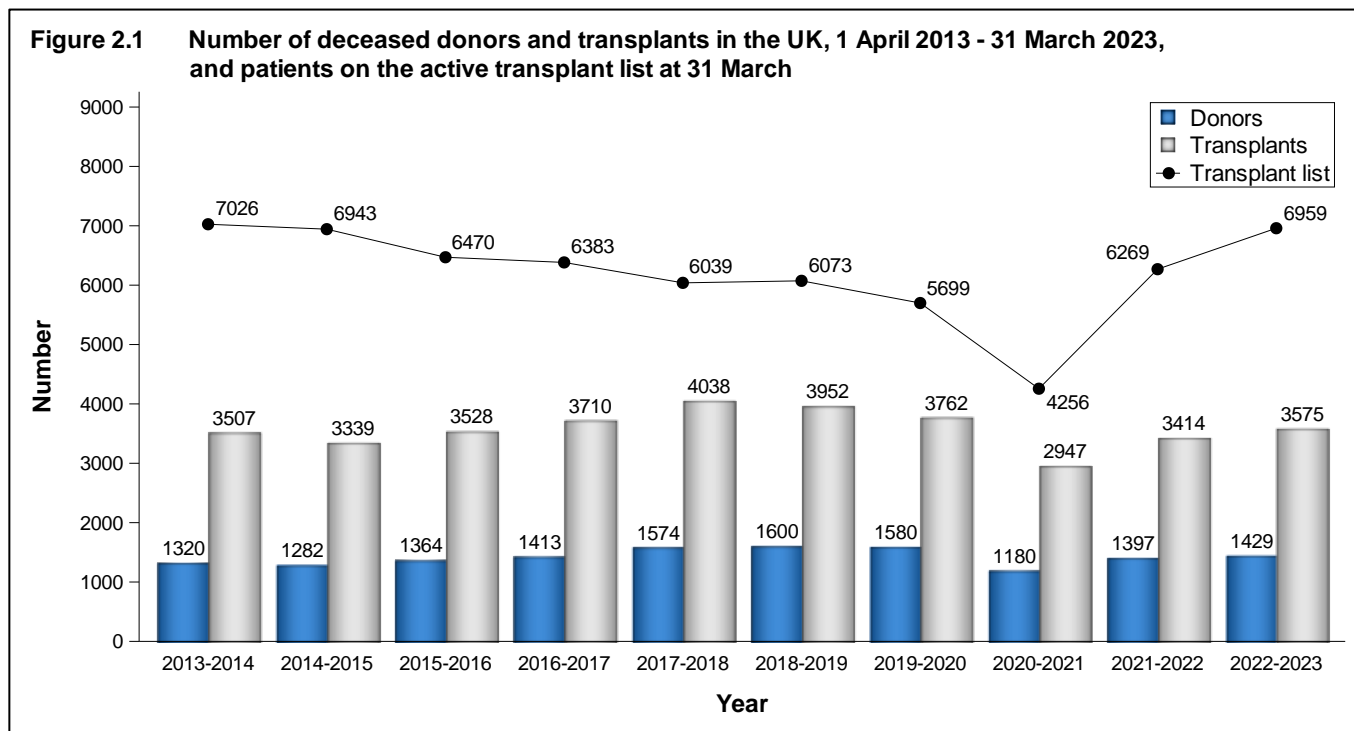


Figure 2.2 shows the number of deceased and living donors for 2013-2023. The number of deceased donors after circulatory death (DCD) have increased over the decade, with the proportion of donors which are DCD donors compared to deceased donors after brain death (DBD) the highest it has ever been. In 2022-2023, the numbers of DBD donors fell and DCD donors increased compared to the previous year, to 772 and 657 respectively. The number of living donors has fallen, from a peak of 1,150 donors in 2013-2014 to 958 in 2022-2023, which nevertheless represents a 2% increase compared with 2021-2022.

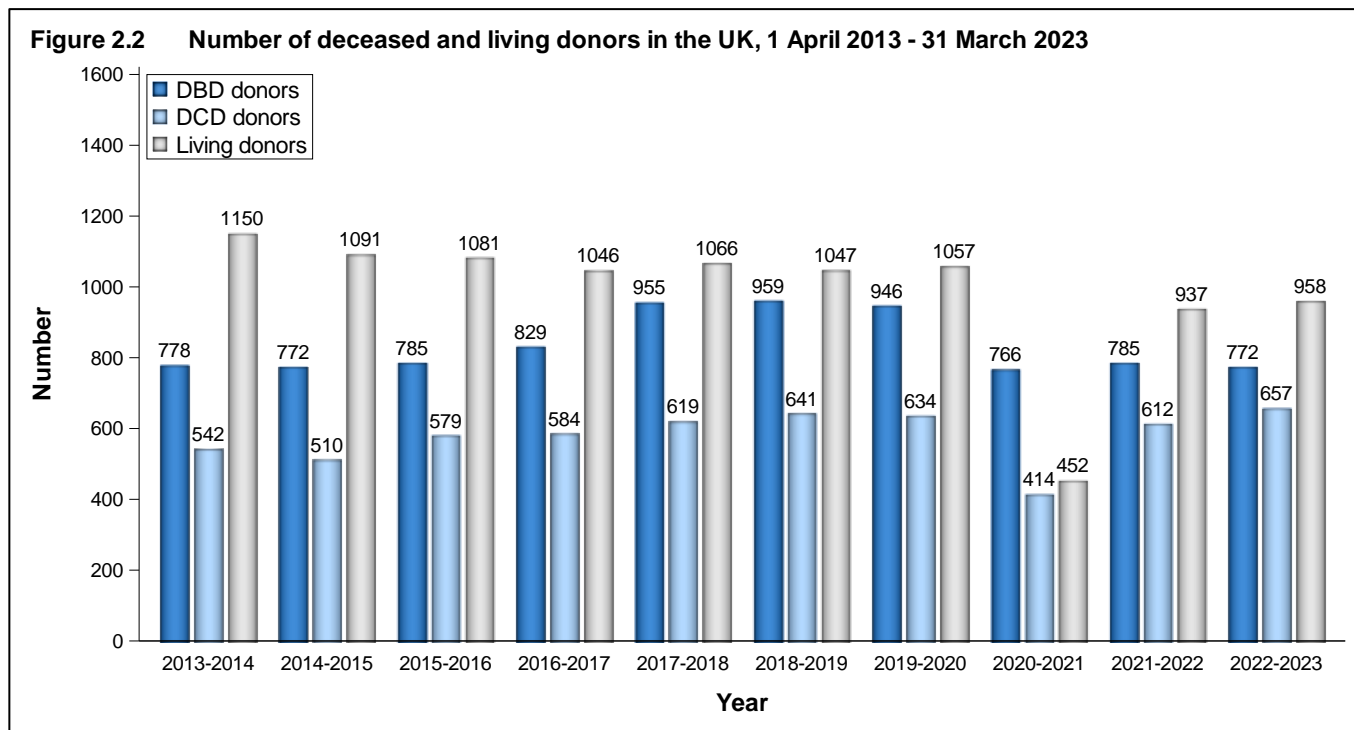
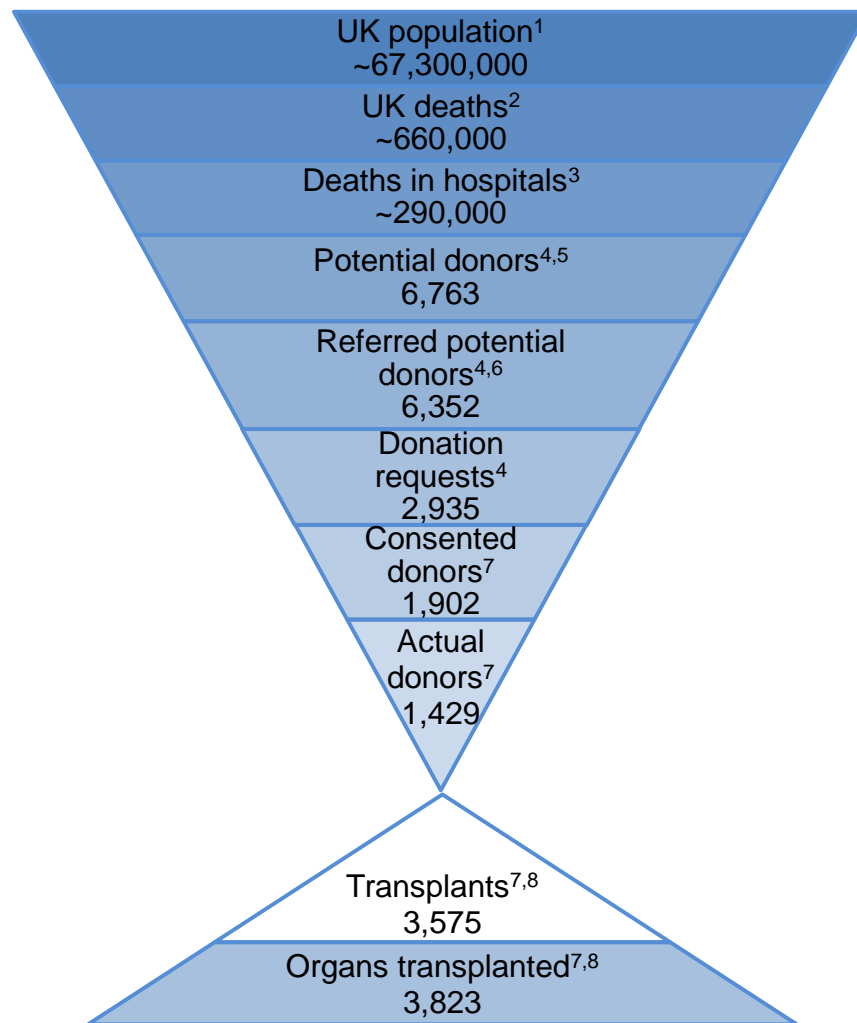


Figure 2.3 shows the potential deceased organ donor population in the UK. Not everyone can be a deceased organ donor and this figure highlights the small proportion of deaths in the UK that represent potential donors. *Please note that the information presented comes from several different sources. The 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 2022 – 31 March 2023



¹ Mid 2021 estimates: www.ons.gov.uk

² 2022 data: England & Wales www.ons.gov.uk; Scotland www.gro-scotland.gov.uk; Northern Ireland www.nisra.gov.uk

³ 2022 data: England & Wales www.ons.gov.uk; Scotland www.isdscotland.org; Northern Ireland www.nisra.gov.uk

⁴ 2022/2023 data, NHSBT, Potential Donor Audit as at 9 May 2023

⁵ Potential donor - patients for whom death was confirmed following neurological tests or patients who had treatment withdrawn and death was anticipated within a time frame to allow donation to occur

⁶ Referred potential donor – Potential donor who was discussed with a Specialist Nurse – Organ Donation

⁷ 2022/2023 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 2022-2023 and patients on the transplant list at 31 March 2023 for each country in the UK and overall.

Table 2.1 Deceased donors and transplants 1 April 2022 - 31 March 2023, and transplant lists as at 31 March 2023, by Country of residence										
Organ	Country of residence¹								TOTAL²	
	England		Wales		Scotland		Northern Ireland		N	(pmp)
	N	(pmp)	N	(pmp)	N	(pmp)	N	(pmp)	N	(pmp)
Kidney										
Deceased donors	1071	(18.9)	72	(23.2)	97	(17.7)	53	(27.9)	1360	(20.3)
Transplants	2018	(35.7)	99	(31.8)	159	(29.0)	63	(33.2)	2349	(35.0)
Transplant list	4945	(87.5)	185	(59.5)	422	(77.0)	76	(40.0)	5655	(84.4)
Pancreas										
Deceased donors	276	(4.9)	18	(5.8)	28	(5.1)	14	(7.4)	357	(5.3)
Transplants	110	(1.9)	12	(3.9)	25	(4.6)	0	(0.0)	147	(2.2)
Transplant list	239	(4.2)	14	(4.5)	32	(5.8)	3	(1.6)	290	(4.3)
Heart										
Deceased donors	159	(2.8)	12	(3.9)	19	(3.5)	7	(3.7)	211	(3.1)
Transplants ³	155	(2.7)	5	(1.6)	44	(8.0)	8	(4.2)	214	(3.2)
Transplant list ³	250	(4.4)	14	(4.5)	29	(5.3)	17	(8.9)	312	(4.7)
Lung										
Deceased donors	96	(1.7)	3	(1.0)	3	(0.5)	4	(2.1)	112	(1.7)
Transplants	85	(1.5)	6	(1.9)	7	(1.3)	2	(1.1)	101	(1.5)
Transplant list	248	(4.4)	12	(3.9)	29	(5.3)	12	(6.3)	302	(4.5)
Liver										
Deceased donors	834	(14.8)	60	(19.3)	85	(15.5)	35	(18.4)	1074	(16.0)
Transplants	726	(12.8)	42	(13.5)	75	(13.7)	21	(11.1)	876	(13.1)
Transplant list	563	(10.0)	32	(10.3)	55	(10.0)	38	(20.0)	697	(10.4)
Intestinal										
Deceased donors	20	(0.4)	1	(0.3)	3	(0.5)	1	(0.5)	25	(0.4)
Transplants	19	(0.3)	0	(0.0)	3	(0.5)	2	(1.1)	25	(0.4)
Transplant list	8	(0.1)	0	(0.0)	2	(0.4)	0	(0.0)	10	(0.1)
Total⁴										
Deceased donors	1121	(19.8)	78	(25.1)	100	(18.2)	57	(30.0)	1429	(21.3)
Transplants	3003	(53.1)	155	(49.8)	295	(53.8)	96	(50.5)	3575	(53.3)
Transplant list	5995	(106.0)	243	(78.1)	539	(98.4)	143	(75.3)	6959	(103.8)

¹ Country of residence of donor given for deceased donor numbers, and residence of recipient given for transplant and waiting list numbers
² Includes patients resident in Channel Islands, Isle of Man, overseas and in the Republic of Ireland
³ Excludes heart-lung recipients
⁴ 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 2023, 6,959 patients were registered for an organ transplant in the UK on the active transplant list. A further 3,822 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 2022 and 2023. Between these dates the total number increased by 690 (11%). This is mostly due to increases in the kidney, liver and lung transplant lists, where patients have built up due to a reduction in transplant numbers due to the COVID-19 pandemic.

Table 2.2 Active transplant lists in the UK at 31 March 2022 and 2023			
	2022	2023	% Change
Kidney & pancreas patients	5022	5643	+12
Kidney	4744	5353	+13
Kidney & pancreas	243	258	+6
Kidney & pancreas islets	8	13	-
Pancreas	9	7	-
Pancreas islets	18	12	-33
Cardiothoracic patients	587	607	+3
Heart	320	305	-5
Heart-lung	9	12	-
Lung(s)	258	290	+12
Liver patients	612	663	+8
Intestinal patients	14	10	-29
Other multi-organ patients¹	34	36	+6
ALL PATIENTS	6269	6959	+11

Percentages not reported when fewer than 10 in either year
¹ Includes patients waiting for kidney and liver transplants (26 in 2022, 29 in 2023), kidney and heart transplants (2 in 2022, 2 in 2023), liver and heart transplants (6 in 2022, 5 in 2023)

During 2022-2023, 439 patients died whilst active/suspended on the transplant list or within one year of removal from the list. For comparison, in 2021-2022, 429 patients died. This information for 2022-2023 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 2021 and 31 March 2023

	2021-2022	Total	2022-2023	
	Total		Adult	Paediatric
Kidney & pancreas patients	287	313	310	3
Kidney	268	281	278	3
Kidney & pancreas	16	26	26	0
Kidney & pancreas islets	0	0	0	0
Pancreas	1	1	1	0
Pancreas islets	2	5	5	0
Cardiothoracic patients	67	57	51	6
Heart	22	21	15	6
Heart-lung	1	0	0	0
Lung(s)	44	36	36	0
Liver patients	67	67	63	4
Intestinal patients	2	0	0	0
Other multi-organ patients¹	6	2	2	0
ALL PATIENTS	429	439	426	13

¹ Includes patients waiting for kidney and liver transplants (2 in 2021/22, 1 adult in 2022/23), liver and heart transplants (1 in 2021/22) and liver and lung transplant (3 in 2021/22, 1 adult in 2022/23)

2.3 Transplants

As services started to return to more normal levels there was a 4% increase in the total number of organ transplants (from deceased and living donors) last year: 4,533 transplants were performed in 2022-2023 compared with 4,351 in 2021-2022 (**Table 2.4**). All multi-organ transplants are identified separately as are transplants from living donors.

The total number of kidney transplants increased in 2022-2023; kidney only transplants from donors after circulatory death increased by 8%, while the number of DBD and living donor kidney transplants increased by 1%. The number of heart transplants increased by 20%, the number of lung and heart-lung transplants decreased by 7%, the number of liver transplants increased by 8%, and the number of pancreas transplants (including pancreas only, intestinal, kidney/pancreas and pancreas islets) decreased by 2%.

Table 2.4 Transplants performed in the UK, 1 April 2022 - 31 March 2023

Transplant	2021-2022	2022-2023	% Change
DBD kidney	1190	1203	+1
DCD kidney	936	1011	+8
Living donor kidney	912	923	+1
DBD kidney and pancreas	85	81	-5
DCD kidney and pancreas	35	40	+14
Kidney and pancreas islets	7	5	-
DBD pancreas	9	5	-
DCD pancreas	2	3	-
Pancreas Islets	15	13	-13
DBD heart	131	158	+21
DCD heart	44	54	+23
Heart-lung	3	1	-
DBD single lung	12	7	-
DCD single lung	2	1	-
DBD bilateral lung	69	55	-20
DCD bilateral lung	22	37	+68
DBD liver	529	523	-1
DCD liver	194	249	+28
DBD liver lobe	90	93	+3
Living donor liver lobe	25	35	+40
Bowel only ¹	9	5	-
Liver, bowel & pancreas	1	1	-
Multivisceral	10	12	+20
Modified multivisceral	7	7	-
Kidney & liver	7	9	-
Heart & kidney	2	0	-
Heart & liver	2	2	-
Lung & liver	1	0	-
TOTAL ORGAN TRANSPLANTS	4351	4533	+4
Total kidney transplants²	3176	3272	+3
Total pancreas transplants²	171	167	-2
Total cardiothoracic transplants	288	315	+9
Total liver transplants²	859	924	+8
Total intestinal transplants	27	25	-7

Percentage not reported when fewer than 10 in either year

¹ Including a kidney (2 in 2021-22)

² Includes intestinal transplants

The total approximate number of patients with a functioning transplant on 31 March 2023 is 60,400 (**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 2023	
	Functioning transplants¹
Kidney	44200
Pancreas	2200
Cardiothoracic	4100
Liver	11700
Intestinal	170
ALL PATIENTS	60400

¹ Approximate number of patients with a functioning transplant being followed up. Multi-organ transplants (excluding intestinal transplants) are counted in each organ. Excludes those patients known to be lost to follow-up