



Overview of Organ Donation and Transplantation

A summary of organ donation and transplantation activity in the UK during the financial year from 1 April 2021 to 31 March 2022

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 2,013 more active patients at 31 March 2022 than at the end of the previous financial year. The change in donor and transplant numbers (1 April 2012 to 31 March 2022) and the number of patients registered on the transplant lists at 31 March each year are shown in **Figure 2.1**. There were 468 more deceased donor transplants in 2021-2022 than in the previous year, representing a 16% increase. There was an 18% increase in the number of deceased donors.

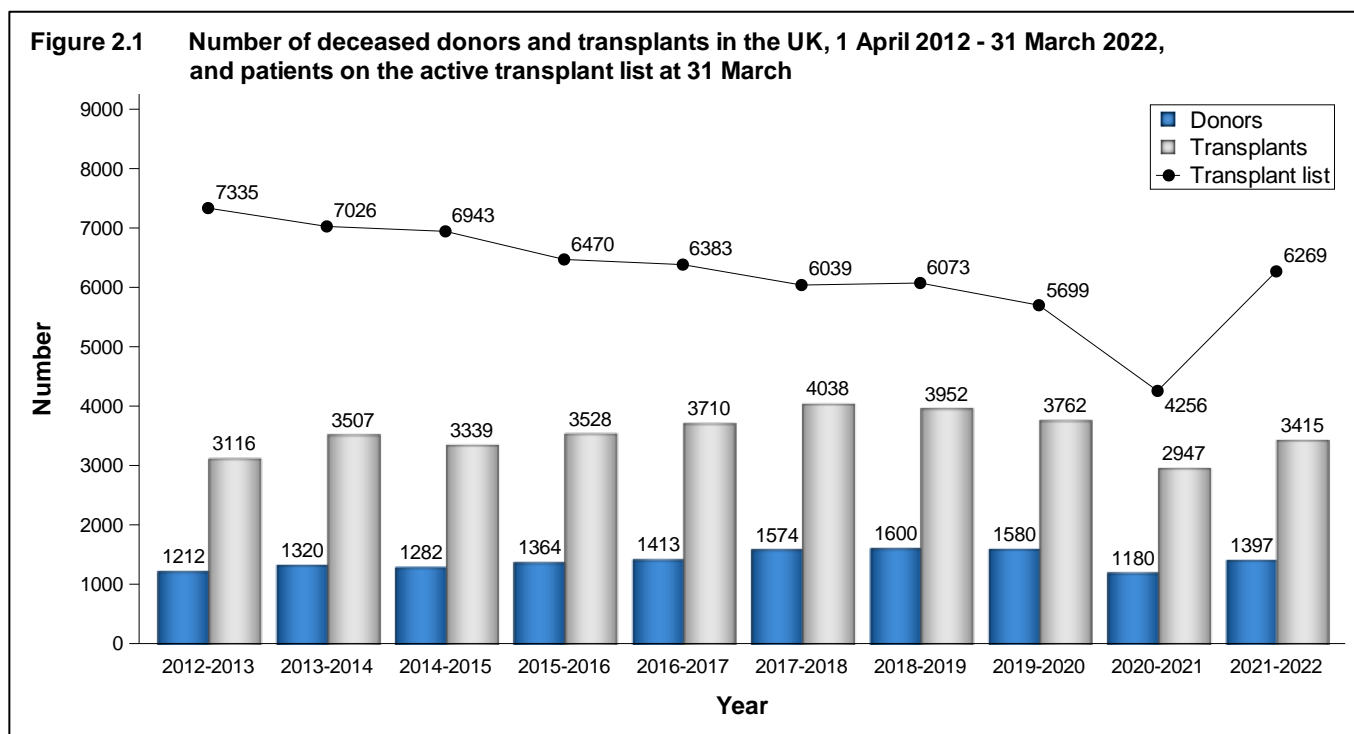


Figure 2.2 shows the number of deceased and living donors for 2012-2022. The numbers of deceased donors after brain death (DBD) and deceased donors after circulatory death (DCD) have both increased over the decade. In 2021-2022, the numbers of DBD and DCD donors increased compared to the previous year, to 785 and 612 respectively. The number of living donors has fallen, from a peak of 1,150 donors in 2013-2014 to 909 in 2021-2022, which nevertheless represents a 102% increase compared with 2020-2021.

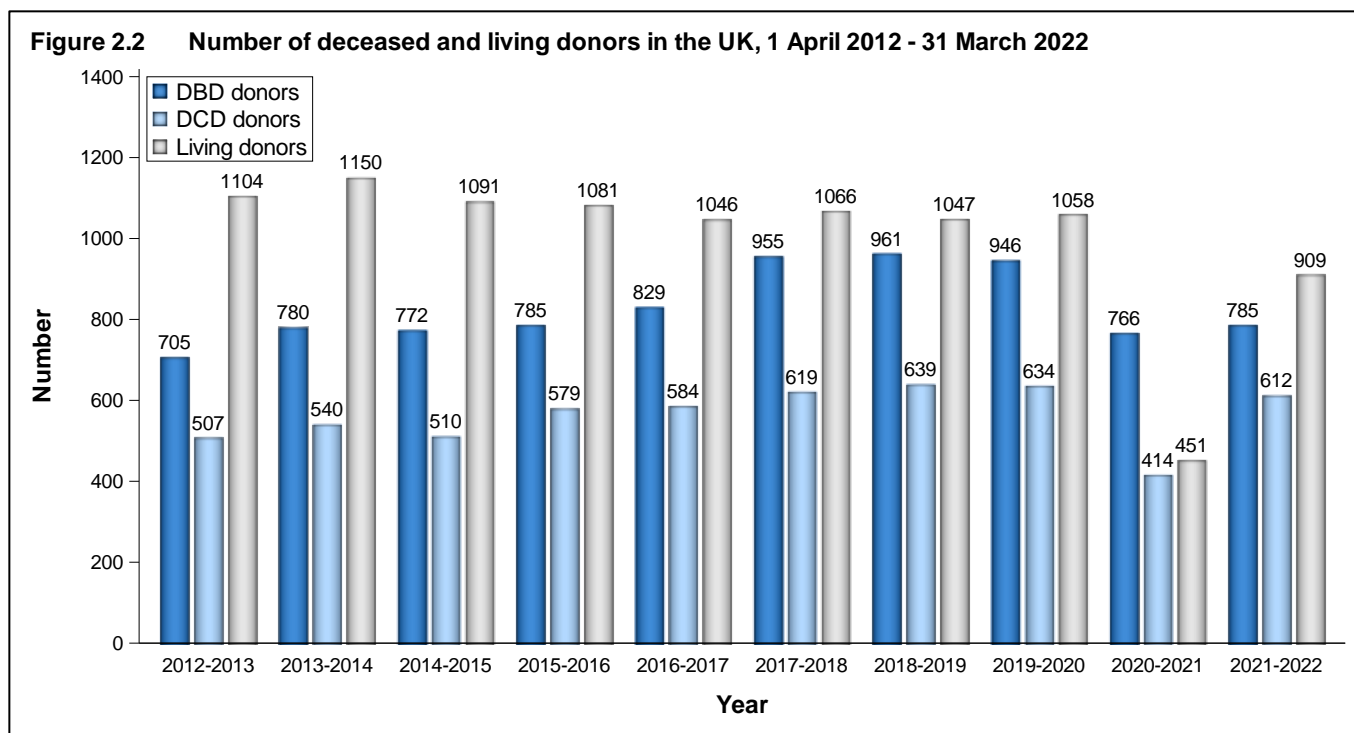
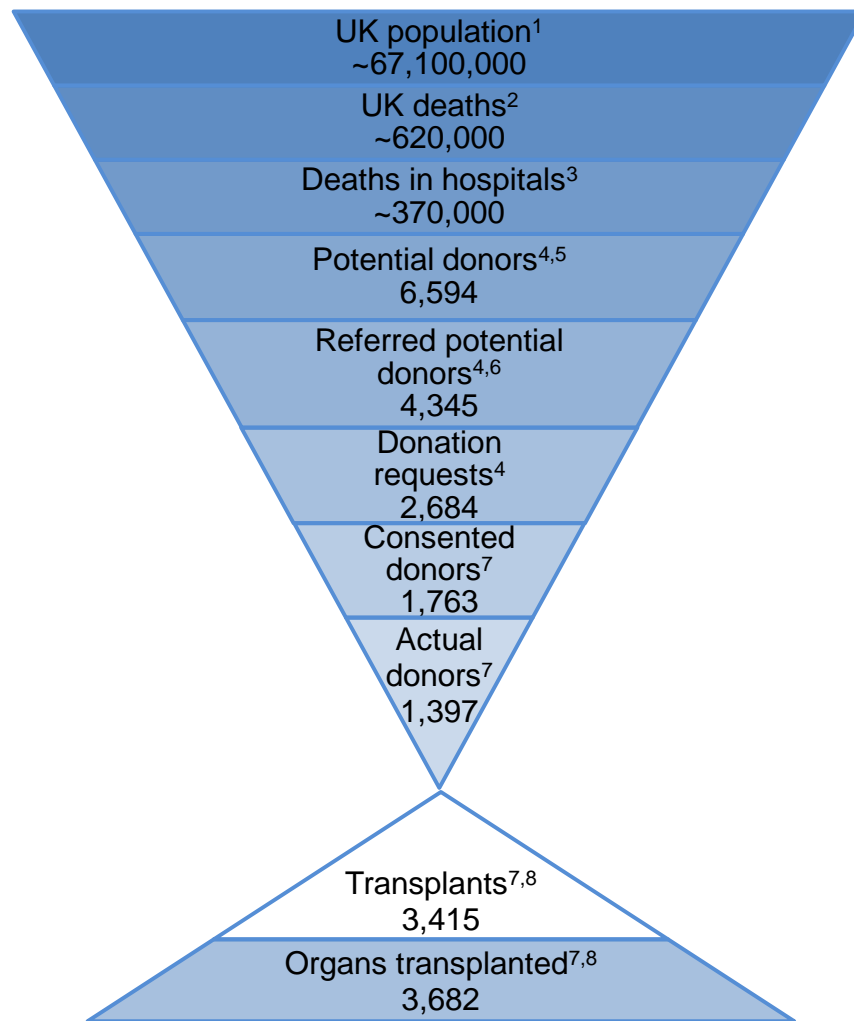


Figure 2.3 shows the potential deceased organ donor population in the UK. Not everyone can be a deceased organ donor and this figure highlights the small proportion of deaths in the UK that represent potential donors. *Please note that the information presented comes from several different sources. The 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 2021 – 31 March 2022**



¹ Mid 2020 estimates: www.ons.gov.uk

² 2021 data: England & Wales www.ons.gov.uk; Scotland www.gro-scotland.gov.uk; Northern Ireland www.nisra.gov.uk

³ 2021 data: England & Wales www.ons.gov.uk; Scotland www.isdscotland.org; Northern Ireland www.nisra.gov.uk

⁴ 2021/2022 data, NHSBT, Potential Donor Audit as at 9 May 2022

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 2021/2022 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 2021-2022 and patients on the transplant list at 31 March 2022 for each country in the UK and overall.

Table 2.1 Deceased donors and transplants 1 April 2021 - 31 March 2022, and transplant lists as at 31 March 2022, 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	1089	(19.3)	53	(16.7)	76	(13.9)	51	(26.8)	1331	(19.8)
Transplants	1958	(34.6)	91	(28.7)	146	(26.7)	59	(31.1)	2263	(33.7)
Transplant list	4360	(77.1)	163	(51.4)	413	(75.5)	70	(36.8)	5023	(74.9)
Pancreas										
Deceased donors	278	(4.9)	15	(4.7)	12	(2.2)	10	(5.3)	334	(5.0)
Transplants	122	(2.2)	10	(3.2)	17	(3.1)	4	(2.1)	153	(2.3)
Transplant list	224	(4.0)	11	(3.5)	38	(6.9)	2	(1.1)	278	(4.1)
Heart										
Deceased donors	156	(2.8)	6	(1.9)	10	(1.8)	3	(1.6)	185	(2.8)
Transplants ³	137	(2.4)	5	(1.6)	25	(4.6)	9	(4.7)	179	(2.7)
Transplant list ³	275	(4.9)	11	(3.5)	24	(4.4)	16	(8.4)	328	(4.9)
Lung										
Deceased donors	106	(1.9)	4	(1.3)	7	(1.3)	1	(0.5)	125	(1.9)
Transplants	97	(1.7)	3	(0.9)	4	(0.7)	4	(2.1)	109	(1.6)
Transplant list	218	(3.9)	14	(4.4)	26	(4.8)	8	(4.2)	267	(4.0)
Liver										
Deceased donors	822	(14.5)	45	(14.2)	63	(11.5)	39	(20.5)	1017	(15.2)
Transplants	688	(12.2)	28	(8.8)	69	(12.6)	24	(12.6)	823	(12.3)
Transplant list	531	(9.4)	37	(11.7)	39	(7.1)	28	(14.7)	644	(9.6)
Intestinal										
Deceased donors	23	(0.4)	5	(1.6)	0	(0.0)	0	(0.0)	28	(0.4)
Transplants	21	(0.4)	0	(0.0)	4	(0.7)	2	(1.1)	27	(0.4)
Transplant list	11	(0.2)	0	(0.0)	3	(0.5)	0	(0.0)	14	(0.2)
Total⁴										
Deceased donors	1138	(20.1)	57	(18.0)	81	(14.8)	54	(28.4)	1397	(20.8)
Transplants	2903	(51.3)	129	(40.7)	256	(46.8)	100	(52.6)	3415	(50.9)
Transplant list	5384	(95.2)	226	(71.3)	508	(92.9)	122	(64.2)	6269	(93.5)

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 2022, 6,269 patients were registered for an organ transplant in the UK on the active transplant list. A further 3,990 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 2021 and 2022. Between these dates the total number increased by 2013 (47%). This is mostly due to increases in the kidney and liver transplant lists, where non-urgent patients have been reactivated after being suspended during the height of the pandemic.

Table 2.2 Active transplant lists in the UK at 31 March 2021 and 2022			
	2021²	2022	% Change
Kidney & pancreas patients	3537	5022	+42
Kidney	3365	4744	+41
Kidney & pancreas	143	243	+70
Kidney & pancreas islets	11	8	-
Pancreas	10	9	-
Pancreas islets	8	18	-
Cardiothoracic patients	582	587	+1
Heart	312	320	+3
Heart-lung	10	9	-
Lung(s)	260	258	-1
Liver patients	115	612	+432
Intestinal patients	14	14	0
Other multi-organ patients¹	8	34	-
ALL PATIENTS	4256	6269	+47

Percentages not reported when fewer than 10 in either year

¹ Includes patients waiting for kidney and liver transplants (6 in 2021, 26 in 2022), kidney and heart transplants (2 in 2022), liver and heart transplants (1 in 2021, 6 in 2022), liver and lung transplants (1 in 2021)

² Numbers on the waiting list do not accurately reflect the need for an organ transplant due to the pandemic

During 2021-2022, 429 patients died whilst active/suspended on the transplant list or within one year of removal from the list. For comparison, in 2020-2021, 525 patients died. This information for 2021-2022 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 2020 and 31 March 2022

	2020-2021	Total	2021-2022	
	Total		Adult	Paediatric
Kidney & pancreas patients	363	287	286	1
Kidney	337	268	267	1
Kidney & pancreas	24	16	16	0
Kidney & pancreas islets	0	0	0	0
Pancreas	2	1	1	0
Pancreas islets	0	2	2	0
Cardiothoracic patients	79	67	61	6
Heart	28	22	17	5
Heart-lung	2	1	0	1
Lung(s)	49	44	44	0
Liver patients	70	67	65	2
Intestinal patients	3	2	2	0
Other multi-organ patients¹	10	6	5	1
ALL PATIENTS	525	429	419	10

¹ Includes patients waiting for kidney and heart transplants (1 in 2020/21), kidney and liver transplants (1 in 2020/21, 2 adult in 2021/22), liver and heart transplants (1 in 2020/21, 1 paediatric in 2021/22) and liver and lung transplant (7 in 2020/21, 3 adult in 2021/22)

2.3 Transplants

As services started to return to more normal levels there was a 27% increase in the total number of organ transplants (from deceased and living donors) last year: 4,324 transplants were performed in 2021-2022 compared with 3,398 in 2020-2021 (**Table 2.4**). All multi-organ transplants are identified separately as are transplants from living donors.

The total number of kidney transplants increased in 2021-2022; kidney only transplants from donors after circulatory death increased by 41%, while the number of living donor kidney transplants increased by 106%. The number of heart transplants increased by 11%, the number of lung and heart-lung transplants increased by 20%, the number of liver transplants increased by 11%, and the number of pancreas transplants (including pancreas only, intestinal, kidney/pancreas and pancreas islets) increased by 54%.

Table 2.4 Transplants performed in the UK, 1 April 2021 - 31 March 2022

Transplant	2020-2021	2021-2022	% Change
DBD kidney	1171	1191	+2
DCD kidney	665	936	+41
Living donor kidney	429	884	+106
DBD kidney and pancreas	62	85	+37
DCD kidney and pancreas	21	35	+67
Kidney and pancreas islets	5	7	-
DBD pancreas	3	9	-
DCD pancreas	0	2	-
Pancreas Islets	10	15	+50
DBD heart	137	131	-4
DCD heart	22	44	+100
Heart-lung	2	3	-
DBD single lung	4	12	-
DCD single lung	3	2	-
DBD bilateral lung	65	69	+6
DCD bilateral lung	16	22	+38
DBD liver	518	529	+2
DCD liver	120	194	+62
DBD liver lobe	100	90	-10
DCD liver lobe	1	0	-
Living donor liver lobe	22	25	+14
Bowel only ¹	2	9	-
Liver, bowel & pancreas	0	1	-
Multivisceral	5	10	-
Modified multivisceral	5	7	-
Kidney & liver	7	7	-
Heart & kidney	0	2	-
Heart & liver	2	2	-
Lung & liver	1	1	-
TOTAL ORGAN TRANSPLANTS	3398	4324	+27
Total kidney transplants²	2360	3149	+33
Total pancreas transplants²	111	171	+54
Total cardiothoracic transplants	252	288	+14
Total liver transplants²	776	859	+11
Total intestinal transplants	12	27	+125

Percentage not reported when fewer than 10 in either year

¹ Including a kidney (2 in 2021-2022)

² Includes intestinal transplants

The total approximate number of patients with a functioning transplant on 31 March 2022 is 58,900 (**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 2022	
	Functioning transplants¹
Kidney	43100
Pancreas	2200
Cardiothoracic	4100
Liver	11400
Intestinal	170
ALL PATIENTS	58900

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