

Intestinal Activity

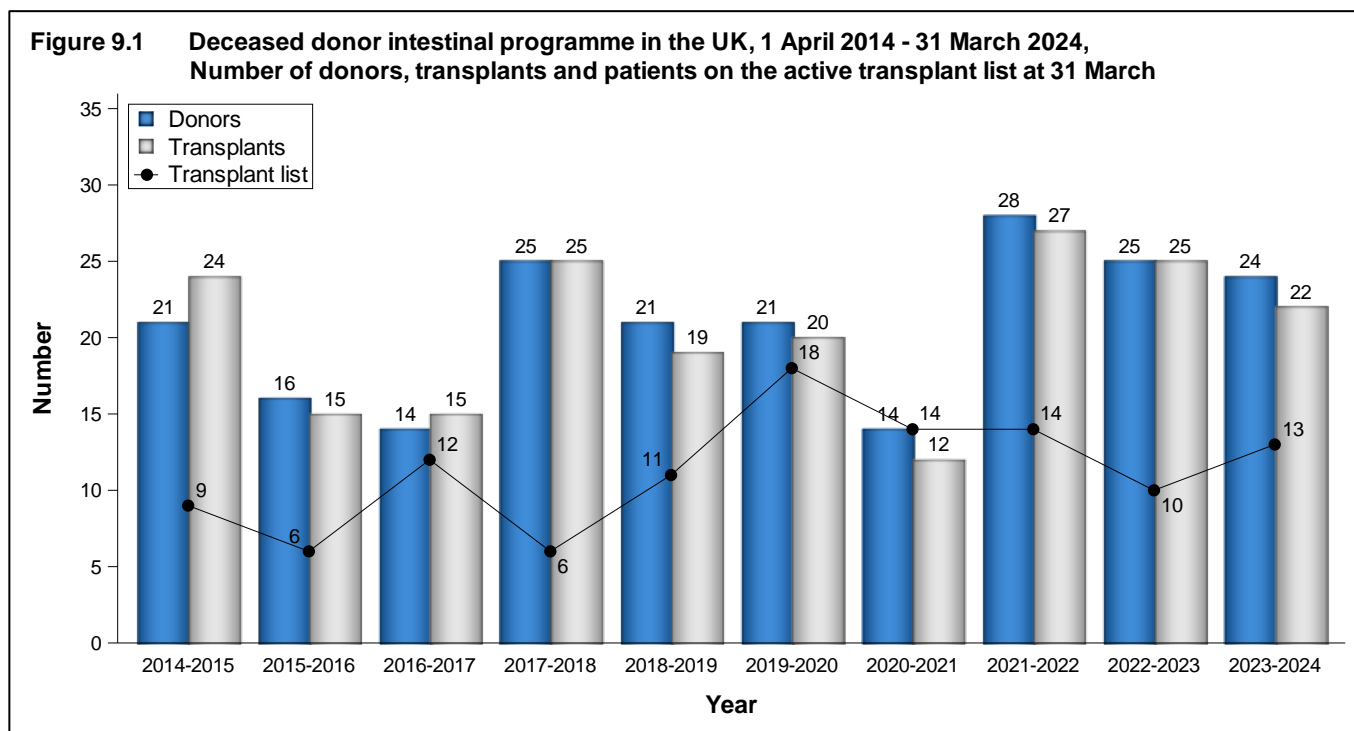
Key messages

- There were 13 patients on the active intestinal transplant list at 31 March 2024 in total
- There were 31 registrations for an intestinal transplant during 2023-2024
- 22 intestinal transplants were carried out in 2023-2024 (25 in the previous year)
- On average, patients wait 6 months for a transplant

9.1 Overview

Patients waiting for an intestinal transplant are prioritised according to a points system based on a range of clinical factors including donor-recipient age matching, loss of intravenous line access, liver failure, diagnosis of malignancy, in-hospital status, additional organs required, sensitisation and waiting time. A score is calculated for every potentially suitable patient on the national active transplant list and donor organs are allocated preferentially to the patient with the most points.

A summary of activity for deceased donor intestinal transplants and the transplant list at year end for the last ten years is shown in **Figure 9.1**. The number of patients registered on the active transplant list for an intestinal transplant has increased to 13. The number of donors and transplants has slightly decreased over the last three years.



9.2 Transplant list

In 2023-2024, there were 31 registrations for an intestinal transplant corresponding to 31 patients. The outcome of these registrations for paediatric (aged <18 years) and adult patients, as at 31 March 2024, broken down by transplant centre, can be found in **Table 9.1**. Overall, 8 (26%) were active/suspended on 31 March 2024, 20 (65%) resulted in a transplant, and 3 (10%) died or were removed. Note that removals due to condition deterioration are included in the removal group.

Table 9.1 Outcome of intestinal registrations in the UK, 1 April 2023 and 31 March 2024									
Transplant centre	Outcome of registrations as at 31 March 2024								TOTAL
	Transplanted		Died		Removed¹		Active/Susp		
	N	%	N	%	N	%	N	%	
Adult									
Cambridge	10	71	0	0	0	0	4	29	14
Oxford	5	100	0	0	0	0	0	0	5
TOTAL	15	79	0	0	0	0	4	21	19
Paediatric									
Birmingham	2	40	0	0	1	20	2	40	5
King's College	3	43	1	14	1	14	2	29	7
TOTAL	5	42	1	8	2	17	4	33	12

¹ Includes removals due to condition deteriorated

Table 9.2 shows the active intestinal transplant list in the UK at 31 March 2024 and 2023 by country/NHS region of patient's residence. At 31 March 2024, the overall transplant list rate was 0.2 pmp and ranged from 0.0 to 0.6 pmp across NHS regions, although these numbers are very small, so these are not meaningful differences.

Table 9.2 Active intestinal transplant list at 31 March by Country/NHS region of patient residence				
Country/ NHS region of residence	Intestinal transplant list (pmp)			
	2024		2023	
North East and Yorkshire	2	(0.2)	3	(0.4)
North West	2	(0.3)	0	(0.0)
Midlands	0	(0.0)	1	(0.1)
East of England	4	(0.6)	1	(0.2)
London	0	(0.0)	1	(0.1)
South East	2	(0.2)	2	(0.2)
South West	0		0	
England	10	(0.2)	8	(0.1)
Isle of Man	0	(0.0)	0	(0.0)
Channel Islands	0	(0.0)	0	(0.0)
Wales	0	(0.0)	0	(0.0)
Scotland	1	(0.2)	2	(0.4)
Northern Ireland	0	(0.0)	0	(0.0)
TOTAL¹	13	(0.2)	10	(0.1)

¹ Includes 2 patients in 2024 residing overseas

Table 9.3 shows median waiting time to elective intestinal transplant by registration type. On average, patients wait 175 days for a transplant with patients requiring a liver on the transplant list for slightly longer than patients who do not require a liver. Note that these waiting times are not adjusted for other relevant factors which may be influential.

Table 9.3 Median waiting time to intestinal transplant in the UK, for patients registered 1 April 2019 - 31 March 2023, by registration type			
Registration type	Number of patients registered	Waiting time (days)	
		Median	95% Confidence interval
Bowel only ¹	15	176	33 - 319
Liver, bowel and pancreas ¹	56	179	74 - 284
Bowel and pancreas ¹	41	160	92 - 228
TOTAL	112	175	140 - 210

¹ May also include any of: stomach, spleen, abdominal wall, kidney

9.3 Donor and organ supply

The rates per million population (pmp) for intestinal donors are shown in **Table 9.4** by donor country/NHS region of residence. The overall DBD intestinal donor rate was 0.4 pmp and ranged from 0.1 to 0.9 pmp across NHS regions. Of the 772 DBD solid organ donors, 24 (3%) donated their small bowel. The majority of DBD solid organ donors are not offered to intestinal patients because they are outside of the age and weight criteria for bowel donation. The next most common reason for non-offering is lack of consent for bowel donation. Of those donors with consent for bowel donation, the most common reason for non-offering is no suitable recipient on the transplant list followed by donor history. Of those donors that are offered, a large number are not accepted, most commonly, due to donor virology, donor history and unsuitable size.

Table 9.4 Intestinal donation rates for deceased donors after brain death, in the UK, 1 April 2023 - 31 March 2024, by Country/ NHS region

Country/ NHS region of residence	Solid organ donors (pmp)		Intestinal donors (pmp)		% of solid organ donors	Organs used
North East and Yorkshire	112	(13.6)	4	(0.5)	3.6	4
North West	70	(9.3)	1	(0.1)	1.4	0
Midlands	92	(8.4)	5	(0.5)	5.4	5
East of England	66	(10.3)	6	(0.9)	9.1	5
London	70	(7.9)	2	(0.2)	2.9	2
South East	115	(12.3)	4	(0.4)	3.5	4
South West	72	(12.5)	2	(0.3)	2.8	2
England	597	(10.5)	24	(0.4)	4	22
Isle of Man	1	(12.5)	0	(0.0)	0	0
Channel Islands	0	(0.0)	0	(0.0)	0	0
Wales	38	(12.1)	0	(0.0)	0	0
Scotland	60	(11.0)	0	(0.0)	0	0
Northern Ireland	34	(17.8)	0	(0.0)	0	0
TOTAL¹	772	(11.4)	24	(0.4)	3.1	22

¹ Includes 42 donors with unknown UK postcode

9.4 Transplants

Table 9.5 shows intestinal transplant activity by transplant centre and transplant type for financial years 2022-2023 and 2023-2024. In 2023-2024, there were a total of 22 transplants, 17 adult and 5 paediatric transplants.

At 31 March 2024 there were approximately 180 recipients with a functioning intestinal transplant (or multi-organ including intestine) being followed-up as reported to the UK Transplant Registry.

Table 9.5 Intestinal transplants in the UK, by age group, centre and type, 1 April 2023 - 31 March 2024 (2022 - 2023)												
Transplant centre	BO		LBP		Transplant type				LB		TOTAL	
					MV	MMV						
Adult												
Cambridge	0	(1)	0	(1)	3	(9)	9	(7)	0	(0)	12	(18)
Oxford	3	(3)	0	(0)	0	(0)	2	(0)	0	(0)	5	(3)
TOTAL	3	(4)	0	(1)	3	(9)	11	(7)	0	(0)	17	(21)
Paediatric												
Birmingham	0	(0)	0	(0)	1	(2)	1	(0)	0	(0)	2	(2)
King's College	1	(1)	0	(0)	2	(1)	0	(0)	0	(0)	3	(2)
TOTAL	1	(1)	0	(0)	3	(3)	1	(0)	0	(0)	5	(4)
BO = Bowel only (may also include stomach/spleen/abdominal wall/kidney/colon) LBP = Liver, bowel and pancreas MV = Multivisceral – liver, bowel and pancreas plus stomach/spleen/abdominal wall/kidney/colon MMV = Modified multivisceral – bowel and pancreas plus stomach/spleen/abdominal wall/kidney/colon LB = Liver and bowel												

9.5 Demographic characteristics

The age group, sex, ethnicity and blood group of intestinal donors, transplant recipients and transplant list patients are shown in **Table 9.6**.

		Donors		Transplant recipients		Active transplant list patients	
		N	(%)	N	(%)	N	(%)
Age (years)	0-17	11	(46)	5	(23)	8	(62)
	18-34	4	(17)	5	(23)	3	(23)
	35-49	7	(29)	4	(18)	0	(0)
	50-59	2	(8)	5	(23)	2	(15)
	60-69	0	(0)	3	(14)	0	(0)
	mean (SD)	27	(17)	37	(21)	18	(19)
Sex	Male	4	(17)	14	(64)	3	(23)
	Female	20	(83)	8	(36)	10	(77)
Ethnicity	White	21	(91)	19	(86)	12	(92)
	Asian	1	(4)	1	(5)	0	(0)
	Black	1	(4)	0	(0)	1	(8)
	Other	0	(0)	2	(9)	0	(0)
	Unknown	1	-	0	-	0	-
Blood group	O	18	(75)	9	(41)	7	(54)
	A	4	(17)	10	(45)	4	(31)
	B	2	(8)	3	(14)	1	(8)
	AB	0	(0)	0	(0)	1	(8)
Graft number	First graft	-	-	20	(91)	11	(85)
	Re-graft	-	-	2	(9)	2	(15)
TOTAL		24	(100)	22	(100)	13	(100)