NHS BLOOD AND TRANSPLANT

MULTI-VISCERAL AND COMPOSITE TISSUE ADVISORY GROUP

PERFORMANCE REPORT ON THE NATIONAL
BOWEL OFFERING SCHEME: JANUARY 2024 – JUNE 2024

INTRODUCTION

1 The National Bowel Offering Scheme (NBOS) was introduced in 2013 with the agreement that it would be monitored regularly and reviewed if there were signs of inappropriate or unfair offering. Full details of the scheme are available online here: https://www.odt.nhs.uk/transplantation/tools-policies-and-guidance/policies-and-guidance/

2 This is a brief report showing the recent performance of the NBOS, detailing patients active on the transplant list between 1 January 2024 and 30 June 2024, a comparison of 1, 2 and 3 year post-registration outcomes over time, median time to transplant, and prolonged registrations.

3 The COVID-19 pandemic led to unprecedented challenges for UK transplantation. There were concerns about the ability to care for transplant recipients, lack of access to resource because it was being used for patients in the pandemic, and the risk versus benefit for immunosuppressed transplant recipients.

DATA ANALYSIS

4 In the first half of 2024, there were a total of 20 patients on the active intestinal transplant list at any time, corresponding to 20 registrations; 10 were adult and 10 were paediatric. Details of these patients are shown in **Table 1**. Eleven registrations had ended in a transplant by 24 November 2024. Of the nine patients who did not receive a transplant by 24 November 2024, five are active on the list, two suspended, one removed and one died on the list. Of the seven on the list, four are blood group O, none have sensitisation points and one has in-hospital urgency points.

5 Since the NBOS was implemented, in the first two years compared with the two years prior, we observed a non-significant increase in the proportion of patients transplanted within 1 year of listing (p=0.3) and a decrease in the number of deaths (including removals due to deteriorating condition) within 1 year of listing (7 compared with 2) (**Figure 1**). In the most recent period, 1 April 2020 – 31 March 2023, the number of deaths was 7 on the list, equivalent to the two years prior to the NBOS; the proportion of deaths pre-NBAS compared to the whole period after is significantly different (p=0.05) with a decrease from 16% to 8%. **Figures 2 and 3** show 1, 2 and 3 year outcomes by registration period for paediatric and adult patients, respectively.

6 When looking at median waiting time for first adult registrations in the period, we have seen an initial reduction in waiting time for both liver requiring patients and non-liver requiring patients. This has increased in the more recent period and is longer than for registrations in the two years prior (**Table 2**). For first paediatric registrations, again the waiting time initially decreased but has since increased to similar waiting times for registrations not requiring a liver and increased but less than two years prior for those requiring a liver (**Table 3**).

7 Prolonged intestinal registrations are defined as active registrations for an intestinal transplant, listed for longer than six months. Prolonged suspensions are defined as registrations currently suspended for longer than three months. **Table 4** summaries the number of prolonged registrations and suspensions as at 24 November 2024. Across

centres, seven patients have been active for more than six months (ranging from 0.6 years to 4.3 years) and eight patients have been suspended for more than three months (ranging from 0.3 years to 3.4 years). **Table 5** provides demographics, waiting time and offering data of these 15 prolonged registrations. Two prolonged active registrations and two prolonged suspensions have received no named patient intestinal offers, as at 24 November 2024. **Table 5a** shows the latest suspension period and reason for suspension for the prolonged suspensions.

ACTION

8 This report is presented for members' information. Members are asked to review it and comment. Members are also reminded to notify NHSBT (via ODT Online) of any data amendments, e.g. deaths, removals.

Maria Jacobs
Statistics and Clinical Research **November 2024**

Table 1 **Details of the 20 intestinal transplant registrations for 20 patients which were active on the UK elective intestinal transplant list at any time between 1 January 2024 and 30 June 2024**

Patient	Reg No	Transplant Unit	Patient Blood Group	Transplant Required	Outcome (as at 24 November 2024)	Waiting time as at outcome (days)	Loss of intravenous line access urgency points?	Liver failure urgency points?	Diagnosis of malignancy urgency points?	In-hospital status urgency points?	Sensiti-sation points?	Overall position if transpl-anted
Adult												
1	1	Cambridge	O	MV	Active	941	No	No	No	No	No	.
2	1	Cambridge	A	MV	Transplanted	658	No	No	No	No	No	3
3	1	Cambridge	O	MV	Suspended	716	Yes	No	No	No	No	.
4	1	Cambridge	A	MMV	Transplanted	465	No	No	No	No	Yes	13
5	1	Cambridge	AB	MMV	Active	522	No	No	No	Yes	No	.
6	1	Cambridge	O	MMV	Transplanted	146	No	No	No	No	No	8
7	1	Cambridge	O	MMV	Active	457	No	No	No	No	No	.
8	1	Cambridge	O	MMV	Suspended	430	No	No	No	No	No	.
9	1	Cambridge	B	MMV	Transplanted	136	No	No	No	No	Yes	7
10	1	Cambridge	A	MMV	Transplanted	82	No	No	No	No	No	2
Paediatric												
11	1	King's College	A	BO	Active	740	No	No	No	No	No	.
12	2	King's College	A	BO	Transplanted	113	No	No	No	Yes	No	172
13	1	King's College	O	LBP	Transplanted	946	No	No	No	No	No	2
14	2	King's College	O	MV	Transplanted	129	Yes	No	No	No	No	3
15	1	King's College	B	MV	Removed	592	No	Yes	No	No	No	.
16	1	King's College	B	MV	Died	781	No	Yes	No	No	No	.
17[1]	1	King's College	A	MV	Transplanted	238	No	No	No	No	No	.
18	1	Birmingham	O	LBP	Transplanted	327	No	No	No	No	No	3
19	1	Birmingham	A	MV	Active	1556	No	No	No	No	No	.
20	1	Birmingham	AB	MV	Transplanted	250	No	Yes	No	No	No	3

[1] Registered on liver-only list but received a multivisceral transplant. Waiting time reflect time on the liver transplant list.
BO = bowel only (may require stomach/colon/abdominal wall/spleen/kidney), BP= bowel, pancreas only, LBP = liver, bowel, pancreas only,
MV=multivisceral (liver, bowel, pancreas plus stomach/colon/abdominal wall/spleen/kidney), MMV = modified multivisceral (bowel, pancreas plus stomach/colon/abdominal wall/spleen/kidney)

Figure 1 **Comparison of 1 year registration outcomes for elective intestinal transplant registrations before and after the NBOS was implemented**

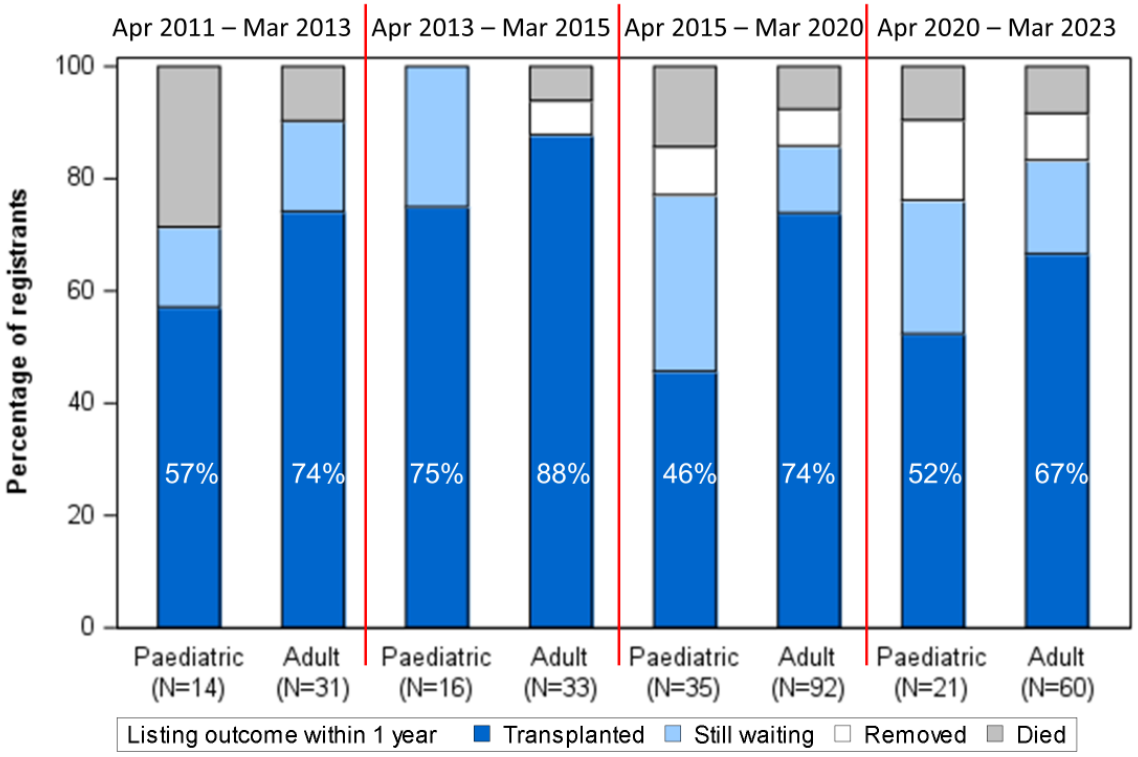

Figure 2 **Comparison of 1,2 and 3 year registration outcomes for paediatric elective intestinal transplant registrations before and after the NBOS was implemented**

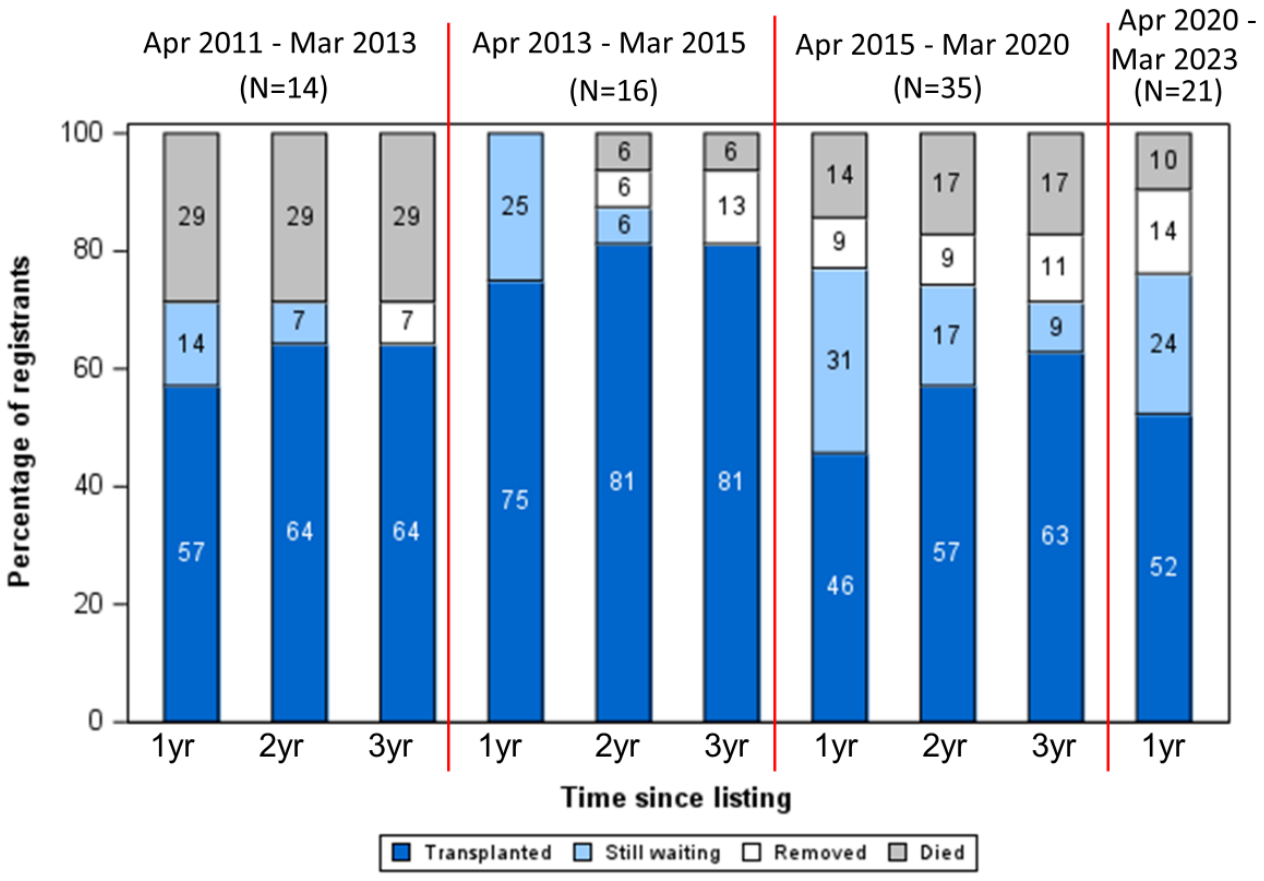

Figure 3 **Comparison of 1,2 and 3 year registration outcomes for adult elective intestinal transplant registrations before and after the NBOS was implemented**

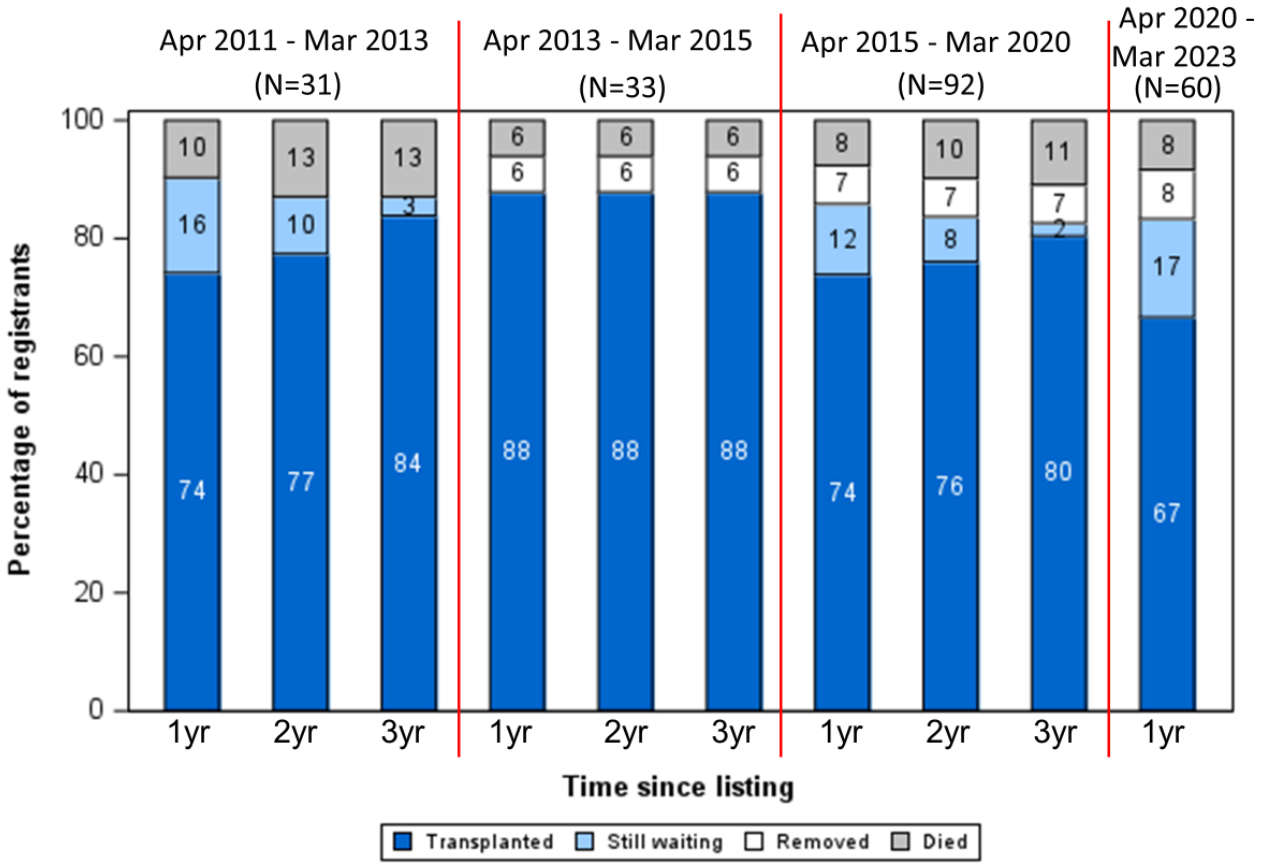

Table 2 **Median waiting time to elective intestine transplant in the UK, for first adult registrations between 1 April 2011 – 31 March 2023, by era and registration type**

Registration era	Registration type	Number of patients registered	Total waiting time (days)		Active waiting time (days)	
			Median	95% Confidence interval	Median	95% Confidence interval
Apr 2011-Mar 2013	Liver required	13	80	0 – 161	73	3 – 143
	No liver required	16	66	13 – 119	66	13 - 119
	Total in era	**29**	**66**	**0 - 133**	**66**	**10 – 122**
Apr 2013-Mar 2015	Liver required	16	46	19 – 73	46	18 – 74
	No liver required	16	66	15 – 117	65	116 – 114
	Total in era	**32**	**49**	**17 - 81**	**49**	**25 -73**
Apr 2015-Mar 2023	Liver required	46	146	72 – 220	137	88 – 186
	No liver required	69	99	59 – 139	98	51 - 145
	Total in era	**115**	**113**	**80 - 146**	**106**	**84 - 128**

Note: any periods of suspension from the list are included in the calculation of median waiting times

Table 3 **Median waiting time to elective intestine transplant in the UK, for first paediatric registrations between 1 April 2011 – 31 March 2023, by era and registration type**

Registration era	Registration type	Number of patients registered	Total waiting time (days)		Active waiting time (days)	
			Median	95% Confidence interval	Median	95% Confidence interval
Apr 2011-Mar 2013	Liver required	8	550	233 - 867	550	233 - 867
	No liver required	6	183	150 – 216	183	150 – 216
	Total in era	**14**	**188**	**129 – 247**	**188**	**129 – 247**
Apr 2013-Mar 2015	Liver required	11	295	84 – 506	295	84 – 506
	No liver required	4	134	36 – 232	134	36 – 232
	Total in era	**15**	**179**	**50 - 308**	**178**	**49 - 307**
Apr 2015-Mar 2023	Liver required	39	333	192 – 474	333	171 – 495
	No liver required	11	188	43 – 333	188	43 – 333
	Total in era	**50**	**260**	**101 - 419**	**252**	**94 - 410**

Note: any periods of suspension from the list are included in the calculation of median waiting times

Table 4	Prolonged registrations on the UK intestinal transplant list, as at 24 November 2024		
Listing status	**Transplant centre**	**Number of patients**	**Number of years**
Active	Birmingham	1	4.3
	Cambridge	3	2, 0.8, 0.6
	King's College	3	2.6, 1.4, 1.3
Suspended	Cambridge	6	1.9, 3.4, 1.8, 1.8, 0.7, 0.3
	Oxford	2	2.6, 2.7

Table 5 **Details of the 15 prolonged registrations on the UK intestinal transplant list, as at 24 November 2024**

Patient	Reg No	Transplant Unit	Blood Group	Age at registration	Weight (kg)	Transplant Required	Total waiting time (days)	Days active	Days suspended	Number of matching runs appeared on	Number of named patient offers (N where mandatory organs ultimately transplanted)	Reasons for intestinal offer decline, where mandatory organs transplanted elsewhere
Active												
1	1	Cambridge	O	54	54.8	MV	941	941	0	80	26 (7)	Donor size Liver unavailable – accepted elsewhere Donor past history Positive crossmatch (4)
2	1	Cambridge	AB	47	47	MMV	522	354	168	55	24 (3)	Donor virology Donor size Other recipient more poorly than this recipient
3	1	Cambridge	O	34	48.9	MMV	457	344	113	25	5 (3)	HLA/ABO type Recipient travel time too long Donor virology
4	1	King's College	A	2	12.8	BO	740	689	51	8	2 (0)	
5	1	King's College	O	3	14.1	LBP	293	290	3	0	0 (0)	
6	1	King's College	O	7	15.9	MV	234	217	17	0	0 (0)	
7	1	Birmingham	A	3	14.6	MV	1556	1556	0	21	3 (0)	
Suspended												
8	1	Cambridge	O	43	50.3	MMV	1886	841	1045	44	22 (1)	Donor size
9	1	Cambridge	O	27	71	MMV	1259	25	1234	5	0 (0)	
10	1	Cambridge	B	30	82.5	MMV	901	258	643	115	75 (4)	EBV mismatch Donor virology Donor size Better match required
11	1	Cambridge	A	34	61	MMV	899	244	655	89	27 (0)	
12	1	Cambridge	O	51	58	MV	716	135	581	16	7 (1)	Donor size
13	1	Cambridge	B	26	54	MV	122	4	118	1	0 (0)	
14	1	Oxford	A	31	47	BO	1283	159	1124	42	18 (0)	
15	1	Oxford	A	54	59.2	BO	1124	114	1010	4	2 (0)	

BO = bowel only (may require stomach/colon/abdominal wall/spleen/kidney), LBP = liver, bowel, pancreas only,
MV = multivisceral (liver, bowel, pancreas plus stomach/colon/abdominal wall/spleen/kidney), MMV = modified multivisceral (bowel, pancreas plus stomach/colon/abdominal wall/spleen/kidney)

Table 5A **Reasons for latest suspension where currently suspended for a prolonged period**

Patient number	Transplant centre	Year of latest suspension	Suspension days of latest suspension	Reason for suspension
8	Cambridge	2022	709	Unknown
9	Cambridge	2021	1234	Pregnant
10	Cambridge	2023	643	Unknown
11	Cambridge	2023	655	Admitted with fungal line infection. Need to suspend with on AN treatment
12	Cambridge	2024	268	Condition deteriorated/patient unfit/medical contra-indication
13	Cambridge	2024	118	Condition deteriorated/patient unfit/medical contra-indication
14	Oxford	2022	956	Condition deteriorated/patient unfit/medical contra-indication
15	Oxford	2022	983	Condition deteriorated/patient unfit/medical contra-indication