

NHS BLOOD AND TRANSPLANT

MULTI-VISCERAL AND COMPOSITE TISSUE ADVISORY GROUP

PERFORMANCE REPORT ON THE NATIONAL BOWEL ALLOCATION SCHEME: JULY 2023 – DECEMBER 2023

INTRODUCTION

- 1 The National Bowel Allocation Scheme (NBAS) 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 NBAS, detailing patients active on the transplant list between 1 July 2023 and 31 December 2023, 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 second half of 2023, there were a total of 36 patients on the active intestinal transplant list at any time, corresponding to 37 registrations; 21 were adult and 15 were paediatric. Details of these patients are shown in **Table 1 (removed as patient identifiable)**. Twenty-three registrations had ended in a transplant by 27 May 2024. Of the 9 patients who remained on the list at 27 May 2024, 6 are active on the list, 5 are blood group O, none have sensitisation points and 1 has in-hospital urgency points.
- 5 Since the NBAS 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**). However, in the most recent period, the number of deaths has increased (14 deaths on the list); the proportion of deaths pre-NBAS compared to the whole period after is borderline significantly different ($p=0.06$). **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 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 but remains less than for registrations in the two years prior (**Table 2b**). **Table 2a** breaks down the registrations in each era by age group. **Table 3** shows both adult and paediatric waiting times initially reduced following the introduction of the NBAS but have increased in the most recent period.
- 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 28 May 2024. Across centres, six patients have been active for more than six months (ranging from 0.7 years to 3.8 years) and six patients have been suspended for more than three months (ranging from

1.3 years to 2.9 years). **Table 5 (removed as patient identifiable)** provides demographics, waiting time and offering data of these 12 prolonged registrations. One prolonged active registration and one prolonged suspension have received no named patient intestinal offers, as at 28 May 2024.

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.

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

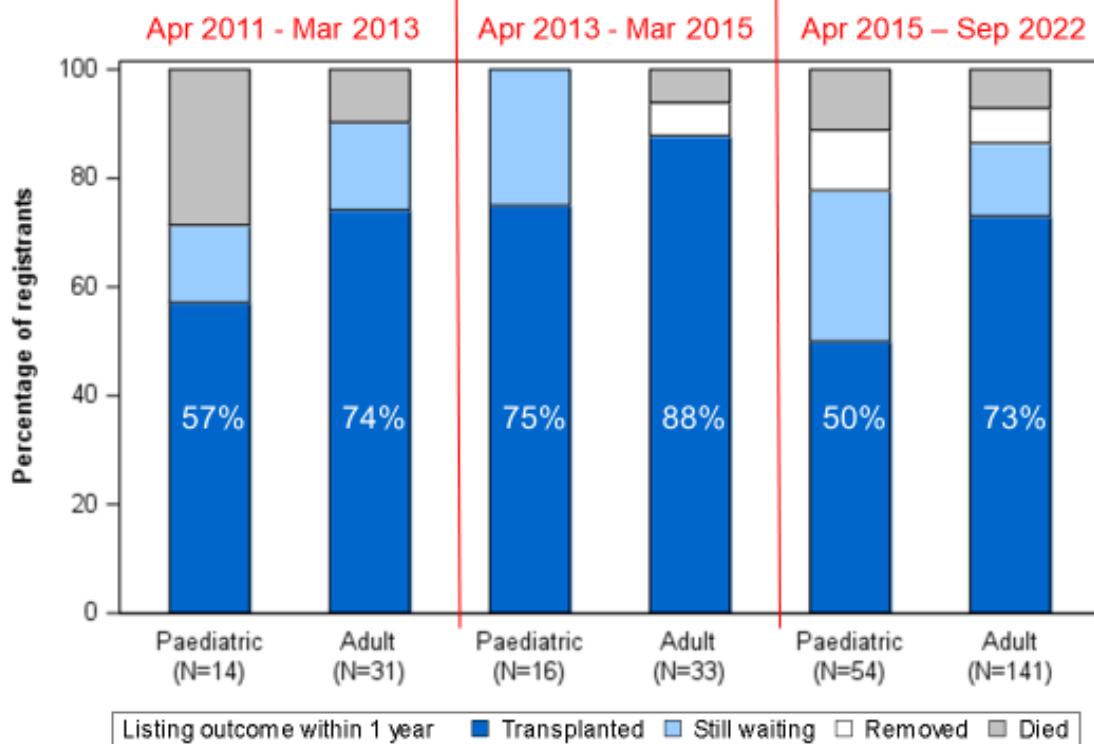


Figure 2 Comparison of 1,2 and 3 year registration outcomes for paediatric elective intestinal transplant registrations before and after the NBAS was implemented

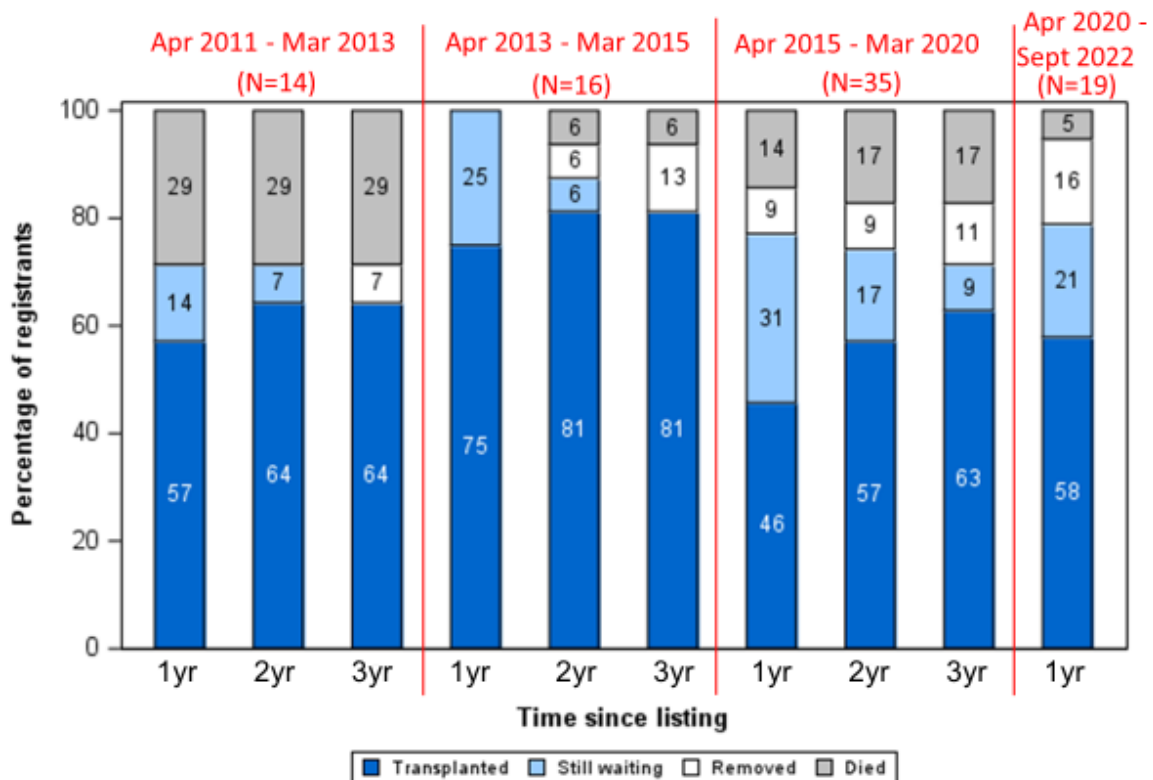


Figure 3 Comparison of 1,2 and 3 year registration outcomes for adult elective intestinal transplant registrations before and after the NBAS was implemented

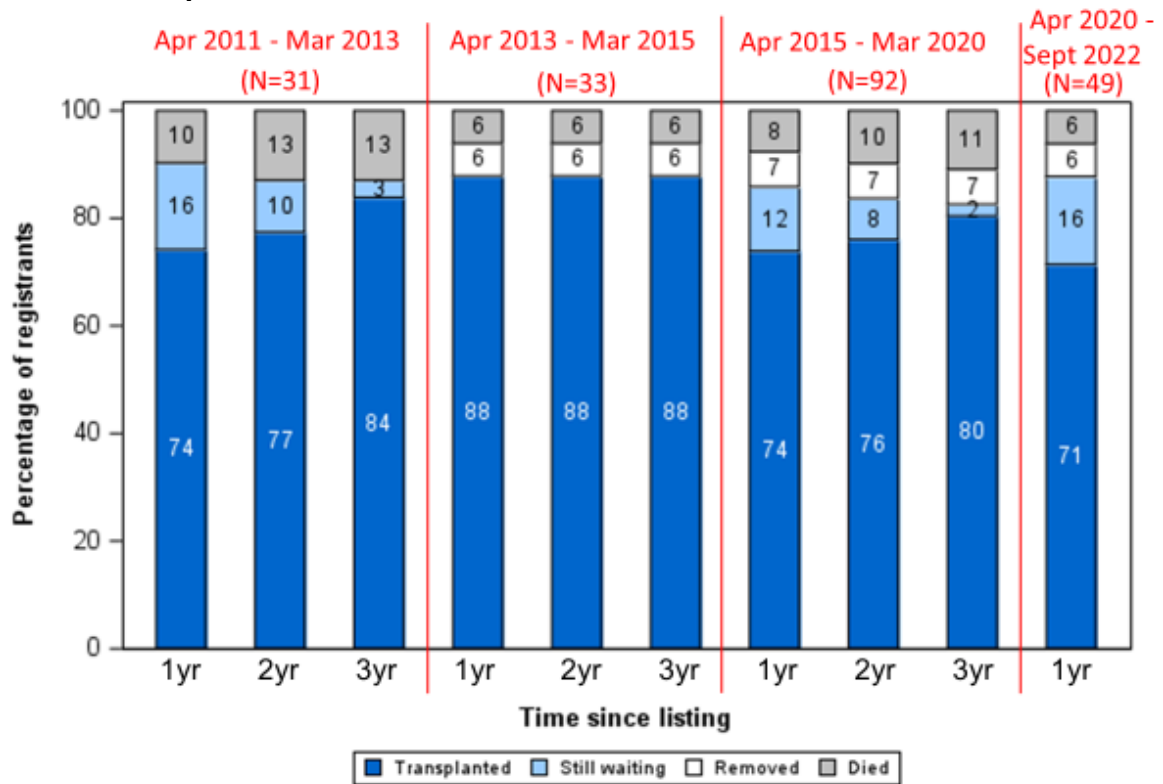


Table 2a Age group of elective intestine transplant in the UK, for first registrations between 1 April 2011 – 31 September 2022, by era and registration type

Registration era	Registration type	Age group		Total
		Paediatric	Adult	
Apr 2011-Mar 2013	Liver required	8	13	21
	No liver required	6	16	22
	Total in era	14	29	43
Apr 2013-Mar 2015	Liver required	11	16	27
	No liver required	4	15	19
	Total in era	15	31	46
Apr 2015-Sep 2022	Liver required	38	58	96
	No liver required	10	81	91
	Total in era	48	139	187

Table 2b Median waiting time to elective intestine transplant in the UK, for first registrations between 1 April 2011 – 31 September 2022, by era and registration type

Registration era	Registration type	Number of patients registered	Waiting time (days)	
			Median	95% Confidence interval
Apr 2011-Mar 2013	Liver required	21	272	105 – 439
	No liver required	22	154	18 – 290
	Total in era	43	168	84 – 252
Apr 2013-Mar 2015	Liver required	27	85	50 – 120
	No liver required	19	65	28 – 102
	Total in era	46	65	53 – 77
Apr 2015-Sep 2022	Liver required	96	190	145 – 235
	No liver required	91	98	59 – 137
	Total in era	187	139	90 – 188

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

Registration era	Age group	Number of patients registered	Waiting time (days)	
			Median	95% Confidence interval
Apr 2011-Mar 2013	Paediatric	14	188	129 – 247
	Adult	29	66	0 – 133
	Total in era	43	168	84 – 252
Apr 2013-Mar 2015	Paediatric	15	179	50 – 308
	Adult	31	49	24 – 74
	Total in era	46	65	53 – 77
Apr 2015-Sep 2022	Paediatric	48	260	113 – 407
	Adult	139	105	83 – 127
	Total in era	187	139	90 – 188

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

Listing status	Transplant centre	Number of patients	Number of years
Active	Birmingham	1	3.8
	Cambridge	2	2.1, 0.7
	King's College	3	2.5, 1.7, 1.5
Suspended	Cambridge	4	1.4, 2.9, 1.3, 1.3
	Oxford	2	2.1, 2.2