

## NHS BLOOD AND TRANSPLANT

### MULTI-VISCERAL AND COMPOSITE TISSUE ADVISORY GROUP

#### PERFORMANCE REPORT ON THE NATIONAL BOWEL ALLOCATION SCHEME: JANUARY 2021 – JUNE 2021

#### 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 January 2021 and 30 June 2021, a comparison of 1 year post-registration outcomes over time, median time to transplant, and prolonged registrations.
- 3 The COVID-19 pandemic has led to unprecedented challenges for UK transplantation. Concerns about the ability to care for transplant recipients, lack of access to resource because it is being used for patients in the pandemic, and the risk versus benefit for immunosuppressed transplant recipients, have resulted in a reduction in the number of organ transplants undertaken, with at least one intestinal transplant program having to stop for most of the period in this report.

#### DATA ANALYSIS

- 4 In the first half of 2021, there were a total of 33 patients on the active intestinal transplant list at any time, corresponding to 33 registrations; 23 were adult and 10 were paediatric. Details of these patients are shown in **Table 1 (removed as patient identifiable)**. Fifteen registrations had ended in a transplant by September 2021. Of the 16 patients who remained on the list at 24 September 2021, 13 are active on the list, 6 are blood group O, 4 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 ( $p=0.2$ ) 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**), for both adult and paediatric patients. However, in the most recent period, the number of deaths has increased (10 deaths on the list), but overall the proportion of deaths pre-NBAS compared to the whole period after is not significantly different ( $p=0.08$ ). 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, but this has increased in the more recent period (**Table 2**). **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.
- 6 Prolonged intestinal registrations are defined as active registrations for an intestinal transplant for longer than six months. Prolonged suspensions are defined as suspensions for longer than three months. **Table 4** presents the number of prolonged registrations and suspensions as at 1 September 2021. Across centres, nine patients have been active for more than six months (ranging from 0.7 years to 3.3 years) and one patient has been suspended for more than three months (0.6 years suspended).

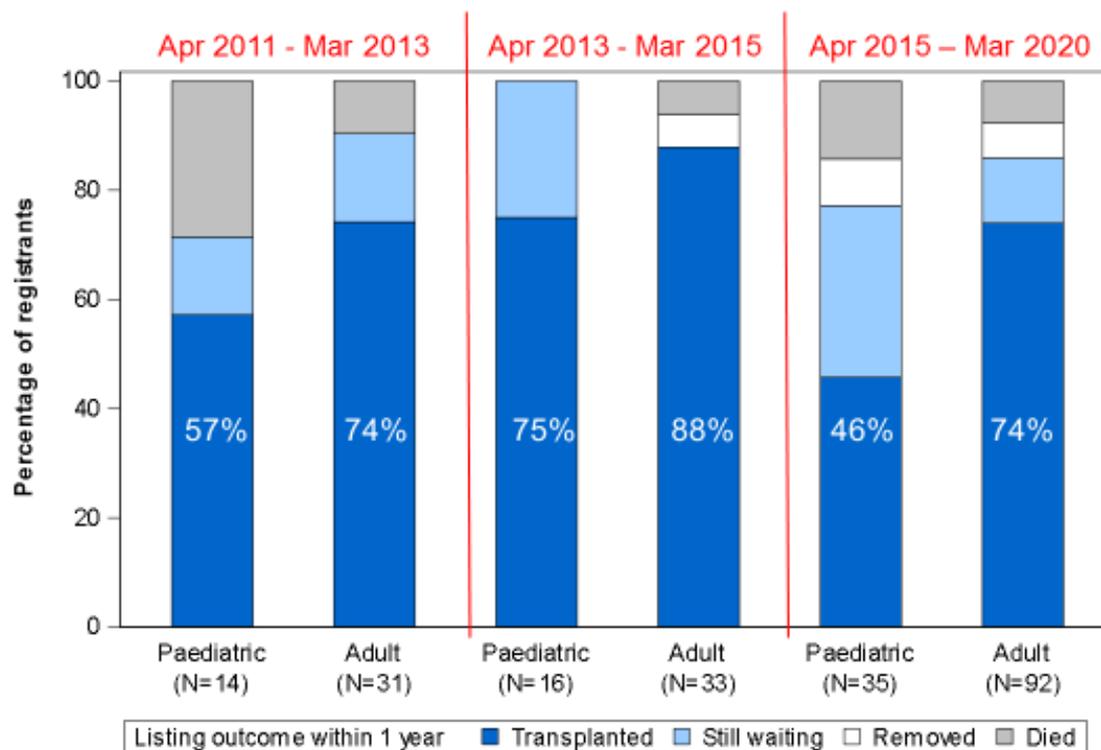
**ACTION**

- 7 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**



**Table 2 Median waiting time to elective intestine transplant in the UK, for first registrations between 1 April 2011 – 31 March 2020, 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
	<b>Total in era</b>	<b>43</b>	<b>168</b>	<b>84 – 252</b>
Apr 2013-Mar 2015	Liver required	27	85	50 – 120
	No liver required	19	65	28 – 102
	<b>Total in era</b>	<b>46</b>	<b>65</b>	<b>53 – 77</b>
Apr 2015-Mar 2020	Liver required	60	190	147 – 233
	No liver required	60	90	50 – 130
	<b>Total in era</b>	<b>120</b>	<b>119</b>	<b>62 – 176</b>

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
	<b>Total in era</b>	<b>43</b>	<b>168</b>	<b>84 – 252</b>
Apr 2013-Mar 2015	Paediatric	15	179	50 – 308
	Adult	31	49	24 – 74
	<b>Total in era</b>	<b>46</b>	<b>65</b>	<b>53 – 77</b>
Apr 2015-Mar 2020	Paediatric	30	333	192 – 474
	Adult	90	91	62 – 120
	<b>Total in era</b>	<b>120</b>	<b>119</b>	<b>62 – 176</b>

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
<b>Active</b>	Birmingham	2	1.9, 1.0
	Cambridge	5	2.4, 1.9, 1.5, 0.9, 0.8
	King's College	1	3.3
	Oxford	1	0.7
<b>Suspended</b>	Cambridge	1	0.6