NHS BLOOD AND TRANSPLANT

PAEDIATRIC SUB GROUP OF THE KIDNEY ADVISORY GROUP

2019 NATIONAL KIDNEY OFFERING SCHEME: REVIEW OF PAEDIATRIC DATA

INTRODUCTION

1 On 11th September 2019 a new kidney offering scheme was introduced in the UK to reflect the changing donor pool which has led to a higher rate of offer declines and an increasing use of DCD donors. The scheme was designed to meet several key objectives identified through reviewing the previous Kidney Allocation Scheme introduced in April 2006, comparing alternative schemes across the world and looking at the philosophies in allocation, and understanding whether improvements can be made in histocompatibility and immunogenetics. Input was received from clinicians, patient groups and lay members across the UK.

2 All deceased donors are now offered using national rules through a new two-tier offering sequence

Tier A – Patients with a matchability score = 10, 100% cRF or ≥7 years waiting time
Tier B – All other patients

Tier A patients are prioritised by matchability score and waiting time and Tier B patients are prioritised by a point score including:

- donor-recipient risk index combinations
- Waiting time from earliest of dialysis or activation on the list
- tissue match and age combined
- location
- matchability score
- total mismatch
- blood-group match
- donor-recipient age match

3 This paper provides a summary of paediatric kidney transplantation since the scheme's introduction.

DATA

4 Data on all deceased donor paediatric kidney offers and transplants between 11th September 2019 – 11th June 2022 were extracted from the UK Transplant Registry. The data were split into 6-month periods to compare activity over time and to present data prior to the COVID-19 pandemic separately, except for the most recent 3-month period. To note, centre-based offering in Tier B occurred between 30th March 2020 and 16th June 2020.

RESULTS

5 **Table 1** shows detail on offers made to paediatric patients and any subsequent transplant through the scheme since it's introduction.

Table 1 - Number of deceased donor paediatric kidney offers and transplants, 11th September 2019 – 11th June 2022

Time period	Number of donors from which offers have been made	Number of offers to paediatric patients	Number of patients receiving these offers	Number of paediatric transplants
11th September 2019 – 11th March 2020	33	34	26	12
12th March 2020 – 11th September 2020*	36	45	27	21
12th September 2020 – 11th March 2021	58	69	48	24
12th March 2021 – 11th September 2021	46	54	46	24
12th September 2021 – 11th March 2022	47	54	45	30
12th March 2022 – 11th June 2022	17	18	17	9
Overall	**237**	**274**	**162**	**120**

*Note, centre-based offering in Tier B occurred between 30 March – 16 June 2020

6 Since the introduction of the scheme, there have been 274 offers to paediatric patients, resulting in 120 transplants (**Table 1**).

7 Of the 120 transplants from the new scheme, 7 patients were in Tier A and 113 were Tier B patients.

8 As at 31st May 2022, there were a total of 108 paediatric patients active on the kidney transplant waiting list, 4 in Tier A and 104 in Tier B. For comparison, in September 2019 there were 100 paediatric patients active on the kidney transplant waiting list, 7 Tier A and 93 Tier B.

9 On 16th September 2021 the deceased donor maximum age criteria for paediatrics was increased from 50 to 60 years old. Since this change there have been 7 donors over 50 years of age from which kidneys were offered to paediatric patients. Data in Table 2 show the results of offers from these donors to paediatric recipients.

Table 2 – Results of offers for donors aged over 50

Donor age	Result of offer			
	Offer accepted and used	Offer accepted, not used	Offer declined	Total
51	2	-	1	**3**
52	-	-	1	**1**
53	1	-	-	**1**
54	-	1	-	**1**
58	-	-	1	**1**
Total	**3**	**1**	**3**	**7**

SUMMARY

10 Since the introduction of the new kidney offering scheme there have been 274 offers to paediatric patients, resulting in 120 transplants. Paediatric activity in the new scheme will continue to be monitored closely.

Maria Jacobs **July 2022**
Statistics and Clinical Research