

KIDNEY ADVISORY GROUP
JULY 2023
LIVING DONOR KIDNEY TRANSPLANTATION: UPDATE

1. BACKGROUND

This paper provides an update on activities related to living donor kidney transplantation (LDKT), including:

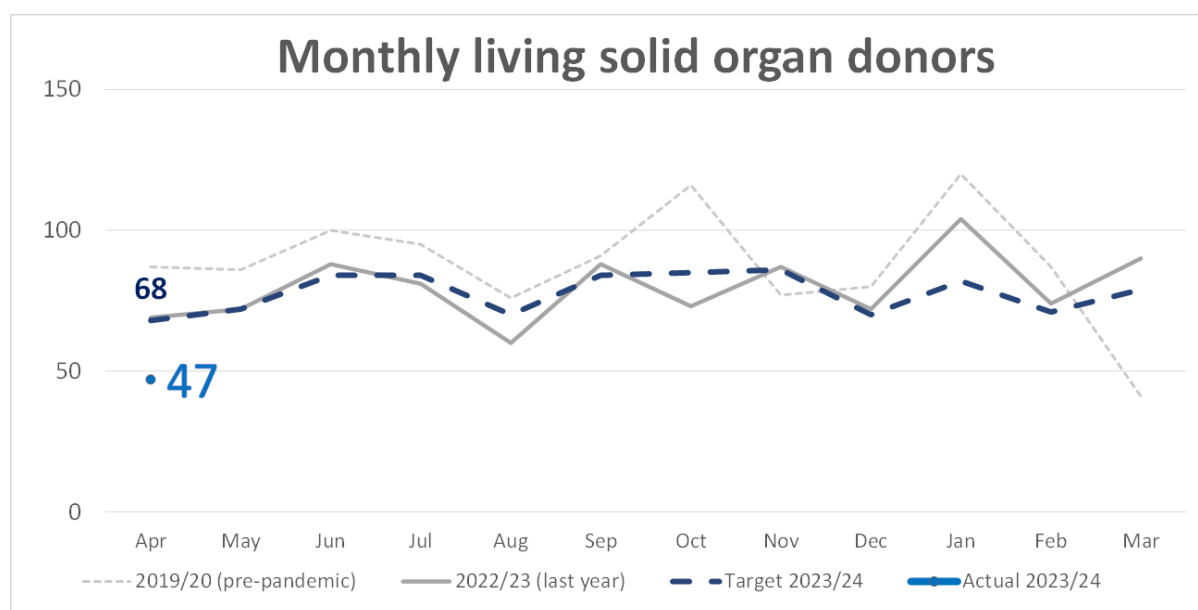
- Activity and reporting
- UK Living Kidney Sharing Schemes (UKLKSS) activity and monitoring
- Offering of unmatched non-directed altruistic donors to paediatric recipients
- Living donor digital transformation programme
- Travel for transplantation and National Focal Point work

2. ACTIVITY AND REPORTING

Overall living donor transplantation (LDT) activity (reported to date) increased to 960 in 2022/23 (vs. 938 in 2021/22) of which 925 were kidney transplants (vs. 912 in 2021/22). This is equivalent to 90% of pre-pandemic activity. Donations from non-directed altruistic donors (NDADs) increased by 15% in year (83 vs.72 2021/22).

Figure 2.1 shows the trend in overall LDT activity in 2022/23 with quarterly variations due to UK Living Kidney Sharing Scheme activity.

Figure 2.1: All Living Donor Transplant Activity by month, 2022/23



End of year activity may increase due to late confirmation of transplants. New processes introduced to address this have improved the accuracy of data available 1 month in arrears but it is still incomplete and remains a priority for improvement. (See Table 2.1).

Table 2.1: LDT by Month and Month of Reporting to NHSBT

Tx month	Reporting Month									
	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
Jul-22	41	74	79	80	80	80	80	80	80	80
Aug-22		19	37	56	57	58	58	58	58	58
Sep-22			35	84	84	84	84	84	85	85
Oct-22				37	66	69	70	70	70	70
Nov-22					35	77	80	84	84	84
Dec-22						64	67	69	69	69
Jan-23							89	99	99	100
Feb-23								63	71	72
Mar-23									65	89
Apr-23										47

ACTION 1: All centres are asked to continue to submit living donor and recipient paperwork to ODT Hub information services within 7 days of LDKT surgery to support accurate data capture.

3. UK LIVING KIDNEY SHARING SCHEME (UKLKSS)

3.1 Matching Runs and Activity

Overall performance in the UKLKSS has remained stable throughout 2022/23 (see Figure 3.1). The impact of COVID-19 infection and centre-specific constraints contributed to a fall in conversion rates of identified to actual transplants during the winter (66% in October 2022 and 65% in January 2023) in comparison with previous matching runs (MRs) in 2022 (85% in January and April and 74% in July).

Figures 3.2-3.5 show centre-specific, self-reported data for matches and reasons for non-proceeding transplants from April 2022 to January 2023 MRs. Of 39 survey requests (sent between January 2022 and January 2023), 28 (72%) centres responded. 24 centres reported that the reason for the exchange not proceeding could not have been foreseen, whilst 4 centres reported that the reason could have been foreseen and identified remedial actions. Of note, these four exchanges were all associated with donor suitability/complexity and two

centres cited communication with their non-transplant/referring centre as a contributing factor. (see Table 3.1).

Figure 3.1 Activity in the UKLKSS (up to January 2023 MR)

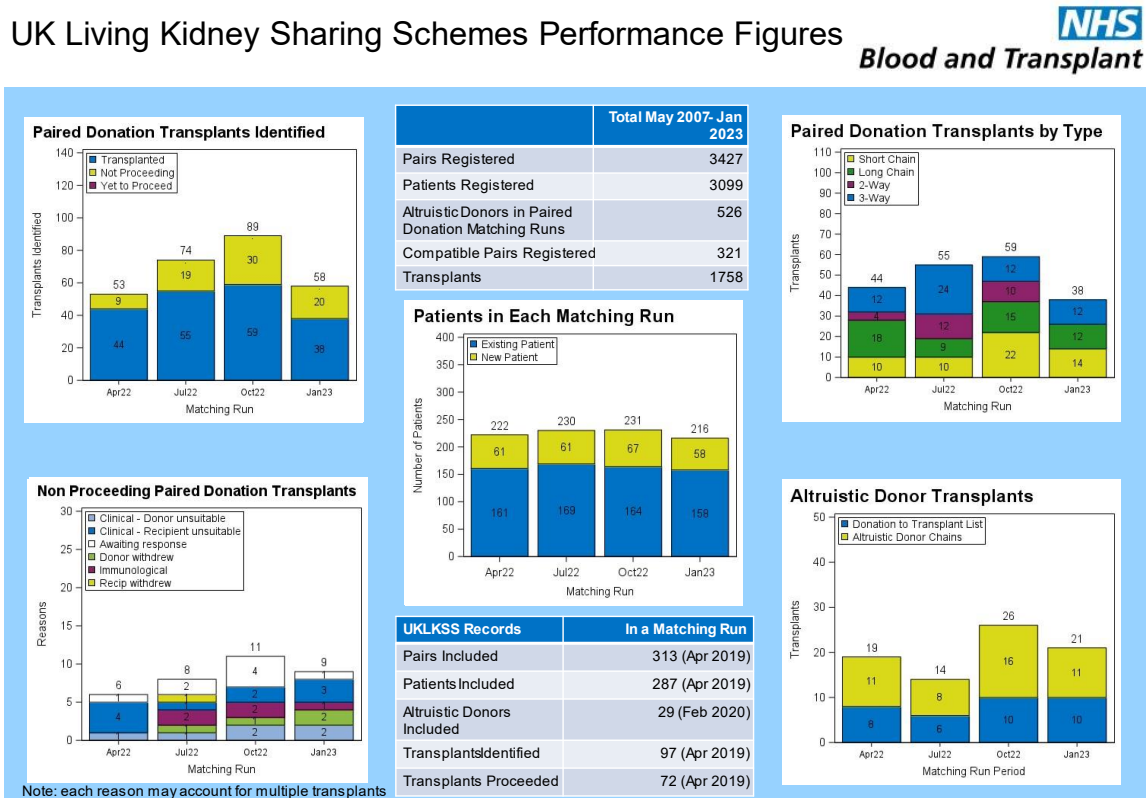


Figure 3.2: Number of matches in which each centre is involved

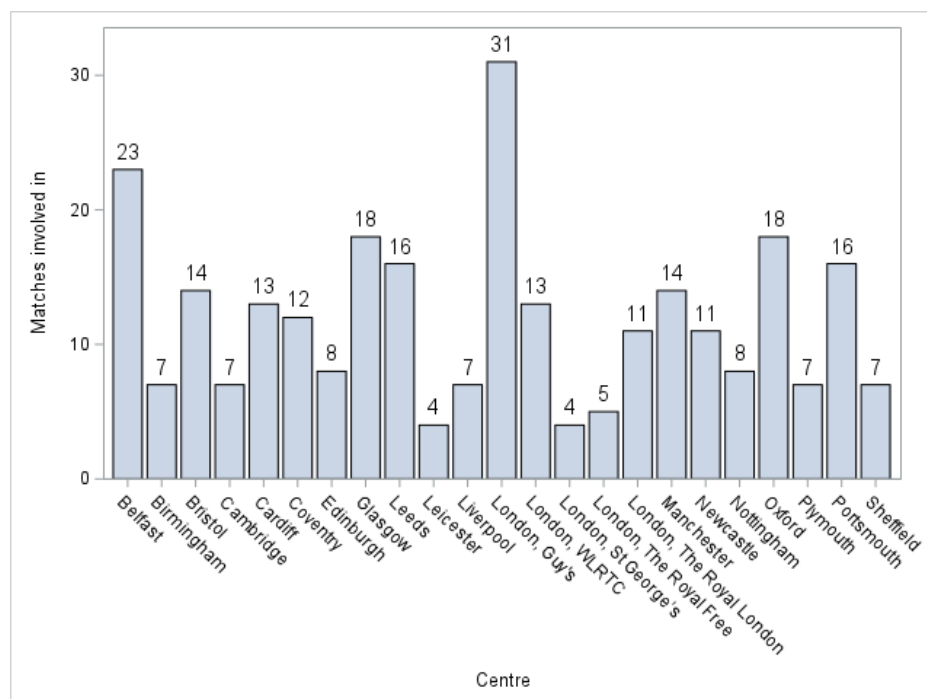


Figure 3.3: Number of non-proceeding transplants by centre, with classification

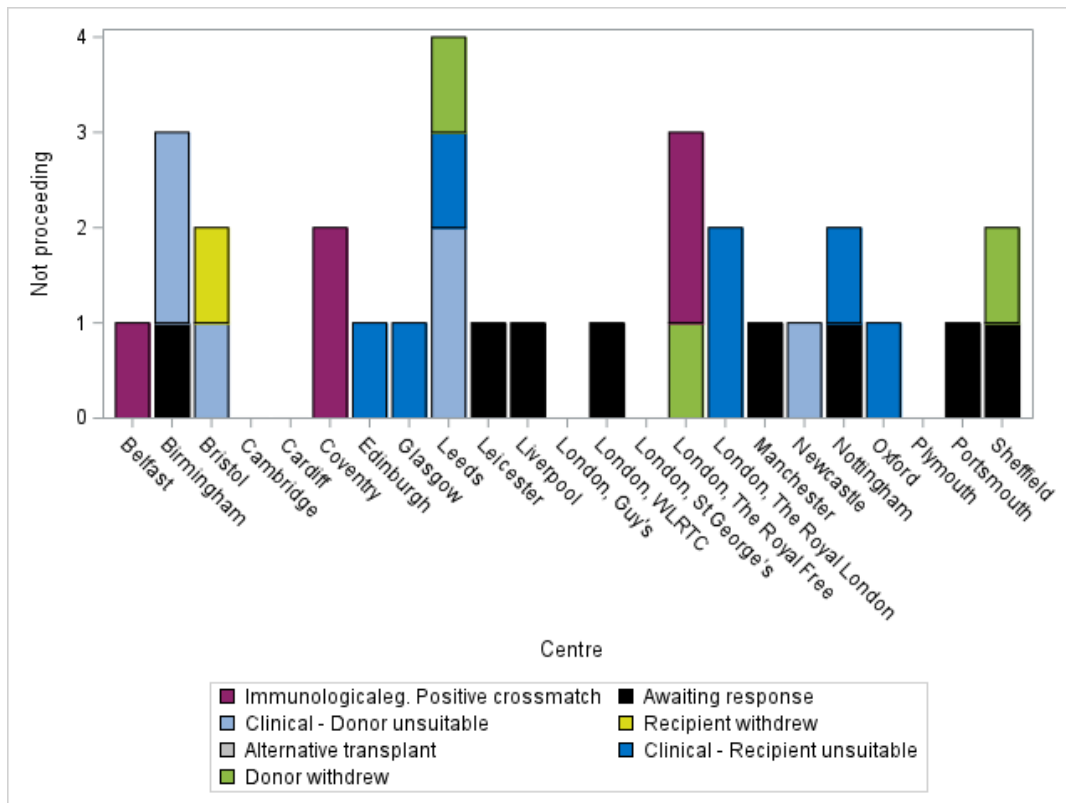


Figure 3.4: Proportion of non-proceeding transplants by centre, with classification

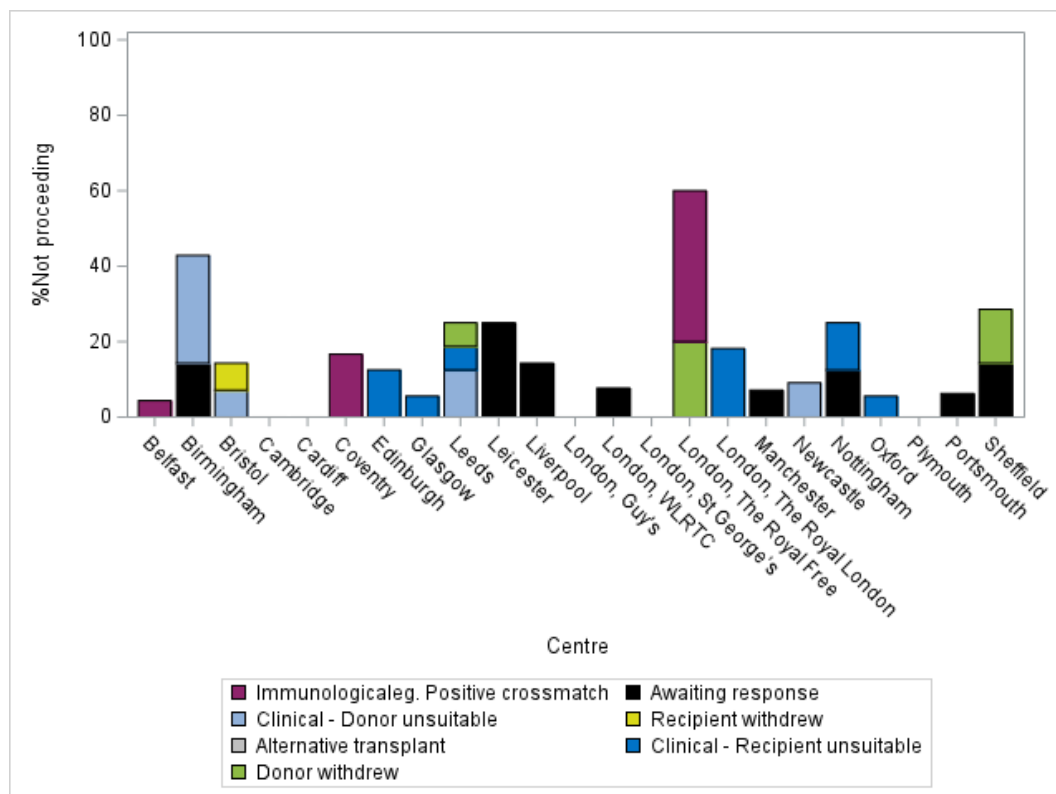


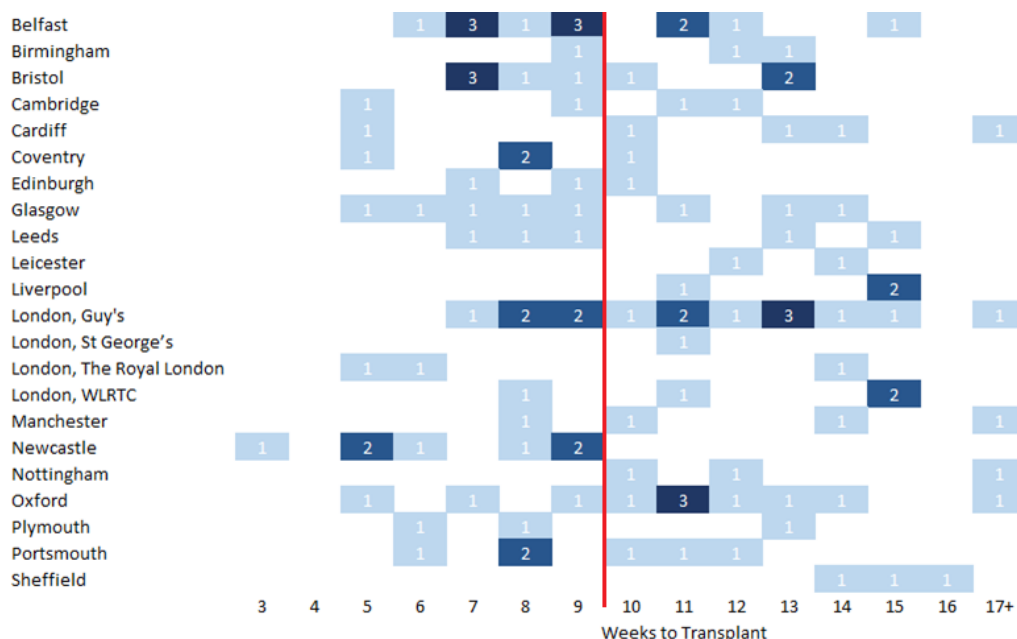
Table 3.1 Late Declines Identified as Avoidable (Centre Self-Reporting n=4)

Reason	Detail	Action
Clinical- donor unsuitable	Donor vascular anatomy- number and length of vessels	Local discussion with radiologist at pre-run stage if complex donor vascular anatomy registered Detailed donor complexity information available at registration (LivingPath will address some requirements) Donor imaging available for pre-run (in progress)
Clinical- donor unsuitable	Non-visible haematuria (NVH). Cystoscopy NAD, biopsy performed but ?? result not available at inclusion (limited detail provided)	Earlier kidney biopsy/clarity about result before inclusion of donor in MR
Clinical- donor unsuitable	Donor increased BMI since assessment; transplant centre unaware of weight gain Donor assessment between non-transplant and transplant centre	Agreement between transplant and non-transplant/referring unit for review of donor assessment prior to confirming inclusion in the MR
Recipient withdrew	Recipient preferences for age and HLA mm not registered by transplant centre in this run due to long-waiting time in UKLKSS Recipient in a non-transplant, referring unit Other donors (younger and ? better MM) presented interim; transplant centre not aware prior to confirming inclusion in matching run	Communicate with referring unit before confirming inclusion of pairs in the UKLKSS/acceptance of potential offers in the pre-run

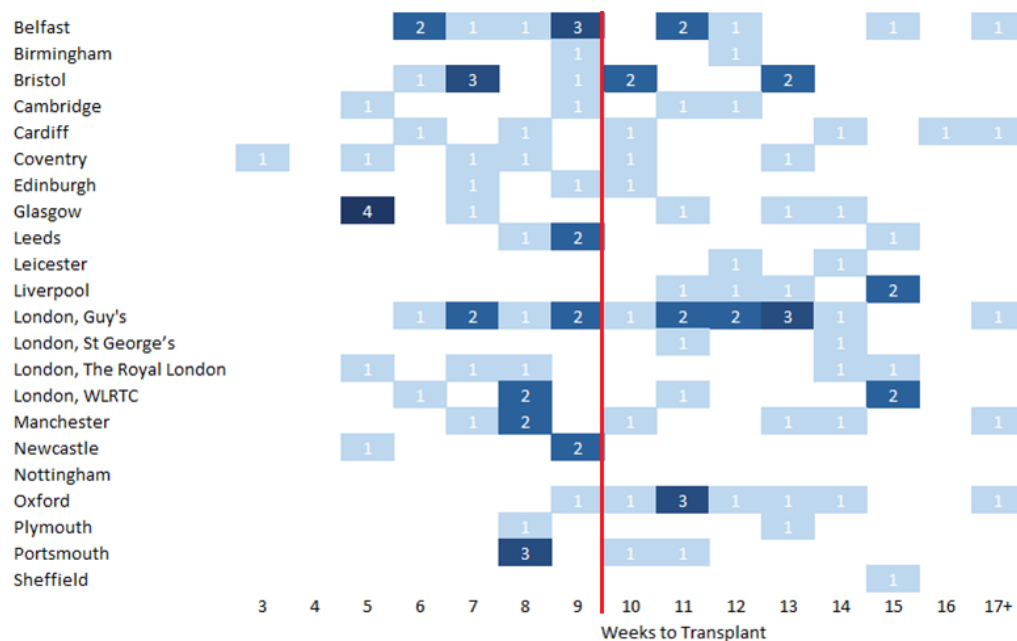
Figure 3.6 shows delayed transplants by centre and by recipient and donor surgery. A significant number of transplants take place outside the optimal timeframe, prior to the option for pairs to be included in the next MR if an exchange cannot proceed. The response from centres about reasons for delay is low so data are limited but variable access to theatre across centres, prevalence of COVID 19 and industrial action are contributing factors.

Figure 3.6 Heat-Map Time to Donor and Recipient Surgery by Centre

Donor



Recipient



* red line = last date of transplant to ensure inclusion in the next MR if exchange does not proceed

ACTION 2: KAG is asked to note:

- a) Thanks to all living donor coordinator and H&I leads for responding to surveys and continue to encourage this to improve completeness of data

- b) The importance of this data to evidence local, regional and UK- wide constraints in delivering the UKLKSS so that these can be addressed
- c) Factors that contribute to late and potentially avoidable decline and consider how these risks can be minimised in your centres

4. OFFERING OF UNMATCHED NON-DIRECTED ALTRUISTIC KIDNEY DONORS (NDADs) TO PAEDIATRIC RECIPIENTS

As per previous agreement by KAG (See section 2.2.2 of the LDKT Policy at: <https://nhsbtdbe.blob.core.windows.net/umbraco-assets-corp/29558/pol274.pdf> preference has been given to paediatric recipients in offering non-directed donors (NDADs) unmatched in the UKLKSS since July 2021. This was initially agreed for 1 year (4 MRs) to help address the increase in children on dialysis and extended for a further year by KAG in July 2022. It is now up for review. A very low proportion of these kidneys (1 in first year, 0 in second year) are suitable for/matched to paediatric recipients, mostly due to donor age mismatch (>60 years) (see Table 4.1)

Table 4.1: Offers of unmatched NDAD kidneys in the UKLKSS to paediatric recipients

Matching run	No. of unmatched NDADs	No. of matches to paediatric recipient	No. of offers accepted
July 2021	4	1	1
October 2021	2	1	0
January 2022	2	0	-
April 2022	3	0	-
July 2022	3	0	-
October 2022	2	0	-
January 2023	6	0	-
May 2023	1	0	-
Total	16	2	1

July 2022 and October 2022 MRs - all unmatched NDADs were > 60 years and therefore would not be matched with a paediatric recipient

January 2023 MR - there were 3 unmatched donors <60 years

May 2023 MR - no unmatched NDAD < 60 years

ACTION 3: KAG is asked to consider if this policy change should continue given the minimal impact that it has had on children waiting for a kidney transplant over the 2 year period

5. LIVING DONATION DIGITAL TRANSFORMATION PROGRAMME: THE UKLKSS (TRANSITION STATE 1)

The first release of 'Transition state 1' (TS1) of LivingPath, the digital platform to support the UKLKSS, went live for the April matching run enabling all centres to register donor-recipient pairs and NDADs via the new application. Until TS1 is completed later this year, the reporting and scheduling functions for each matching run remain manual and paper-based. To manage the interface between digital (LivingPath) and existing manual processes, the April MR was delayed by a week to ensure safety. The MR went ahead successfully on 8th May and additional checks are in place for the July MR to minimise disruption to the scheduled timetable. Regular engagement with LivingPath account holders (living donor coordinators and histocompatibility & immunogenetics colleagues) has continued throughout this period and we are grateful to everyone for their support as we develop and facilitate implementation of the platform.

To support direct image sharing between transplant centres, a letter will go to Medical Directors in Transplant Centres w/c 26th June requesting the option for living donor teams to request access to images directly from the PACS system in one centre to another without making individual requests via PACS managers. If agreed, this will support requests to view donor imaging earlier in the decision-making process in the lead up to MRs with the aim to reduce late declines. All imaging reports will be available through LivingPath.

6. TRAVEL FOR TRANSPLANTATION

We are in the process of collecting data for the 2023 National Focal Point (NFP) audit (2 years in arrears to allow for 1 year follow-up post transplantation) to submit anonymised data to the European Registry for transplants that took place in 2021. If you receive a survey request, we would be grateful if you could complete and return it to us.

The recent high profile organ trafficking case that was prosecuted earlier in the year, together with an increase in the numbers of patients seeking a transplant outside the UK, has caused understandable concern within clinical and patient communities. NHSBT is working with the Human Tissue Authority (HTA), as the regulator, and others (Department of Health, Visas and Immigration, Police, National Crime Agency) to consider any additional safeguards that could be put in place to ensure safe and legitimate living donation is not compromised and to support

clinicians and patients with updated guidance. In the meantime, any matters of concern related to travel to transplantation, within the UK or outside the UK, we have agreed with the HTA that they will be the initial point of contact for advice and guidance at transplants@hta.gov.uk.

Interim, the following resources may be helpful to you:

- Recent presentations (Matthew Robb, Lisa Burnapp, Jess Porter) from the 'Travel for Transplantation@' session at UK LKD Network Meeting, May 2023 available at this link <https://www.odt.nhs.uk/living-donation/uk-living-kidney-donation-network/> soon
- Human Tissue Authority Professional Guidance on Travelling for Illicit Organ Transplantation [Professional guidance on travelling for illicit organ transplantation | Human Tissue Authority \(hta.gov.uk\)](https://www.hta.gov.uk/professional-guidance-on-travelling-for-illicit-organ-transplantation/)
- Declaration of Istanbul Patient Information and other Resources <https://www.declarationofistanbul.org/resources>
- Critical Incident Reporting in Living Donation (updated criteria) <https://www.odt.nhs.uk/living-donation/critical-incident-reporting/>

ACTION 4: KAG is asked to note the work in progress in this area and to ensure that clinical colleagues are aware of how to seek early advice about matters of concern from the HTA, reporting requirements associated with travel for transplantation and to continue to contribute to the annual NFP data collection.

7. SUMMARY OF ACTIONS FOR CONSIDERATION

KAG members are asked to note the content of this paper and to consider the actions. This paper and the outcomes of KAG discussion will be shared with the UK LKD Network.

ACTION 1: All centres are asked to continue to submit living donor and recipient paperwork to ODT Hub information services within 7 days of LDKT surgery to support accurate data capture.

ACTION 2: KAG is asked to note:

- a) Thanks to all living donor coordinator and H&I leads for responding to surveys and continue to encourage this to improve completeness of data
- b) The importance of this data to evidence local, regional and UK- wide constraints in delivering the UKLKSS so that these can be addressed
- c) Factors that contribute to late and potentially avoidable decline and consider how these risks can be minimised in your centres

ACTION 3: KAG is asked to consider if the policy change to offer unmatched NDAD kidneys to paediatric recipients should continue given the minimal impact that it has had on children waiting for a kidney transplant over the 2-year period

ACTION 4: KAG is asked to note the work in progress in the area of Travel for Transplantation and to ensure that clinical colleagues are aware of how to seek early advice about matters of concern from the HTA, reporting requirements associated with travel for transplantation and to continue to contribute to the annual NFP data collection.

Lisa Burnapp, AMD for Living Donation and Transplantation

Data provided by Matthew Robb, Principal Statistician, Statistics and Clinical Research