Transplant: Pan London Collaborative

Organ sharing protocol

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Background

Deceased donor transplants and organ offers have doubled over the last decade with a further increase in organ donation rate predicted after the enactment of presumed consent legislation. The unpredictable nature of deceased donor transplantation means that there may be occasions when one centre is faced with the need to perform multiple transplants, while a neighbouring centre has no emergency transplant work. The further burden of other emergency surgical work within a trust or a local major incident may add to the pressure within transplant units and limit access to resources required for rapid transplantation.

The uncertainty over timing of retrieval, successful procurement of DCD organs, organ transport, organ damage and recipient issues mean that it is difficult to accurately predict problems with capacity when accepting organ offers. The offer and arrival of a potential donor organ tends to arise at short notice while the need to transplant the organ within a limited time window is important to both short and long term transplant outcomes. Therefore, the ability to simply 'queue' recipients, so that the last organs have long cold ischaemic times, is not acceptable. Although some centres may consider declining an organ offer or returning the organ back to NHSBT, this situation would lead to prolonged iscahemic times for the eventual recipient of an organ and inequity of access to transplantation for the original planned recipient.

Previous experience from the major incidents of July 7th 2005 and the 2017 Wanacry cyber attack have shown that the sharing of resources between transplant units can facilitate safe transplantation at a time of acute resource limitation. The further example of the sharing scheme between Coventry and Oxford (COxNET), where Oxford have provided weekend cover for transplantation of Coventry patients, has proven the feasibility of such sharing schemes.

The initial Pan London Transplant Collaborative meeting in November 2018 opened discussion about establishing a system for the safe transfer and transplantation of a low risk patient and organ to another unit in London when the original unit is under acute limitation of the resources, through work volume, resource availability or major incident issues. This document lays out the recommended guidance and pathway for the agreed system.

Protocol for agreeing transfer

1. Recipient Centre (RC) identifies that they are unable to transplant kidney in a timely fashion.
2. RC achieves internal agreement amongst on-call clinicians and H&I staff to transfer a patient and organ to another unit for transplant
3. RC identifies low risk donor* and recipient# combination (high risk organ or recipient should not be transferred).
4. On call clinician in RC contacts on call surgeon in another Transplanting Centre (TC) to ask for transfer for transplantation. Choice of TC should take into account patients home address and personal choice.
5. If TC has capacity and accepts transfer of patient, initial period of information transfer begins.
6. Information is transferred via secure encrypted channel – (ie nhs.net email)
    a. Minimal pre-assessment information – outlined in appendix 1
    b. Minimal H&I risk assessment – outlined in appendix 2
    c. Relevant imaging
    d. Donor details (EOSWEB donor id and hospital code)
7. TC acknowledges receipt of information and confirms, within 60 minutes, that they are prepared to accept transfer of organ and recipient.
8. Once agreement to transfer has been reached, the TC should not subsequently decline transfer, unless there are extenuating circumstances (ie a major incident or multiple organ offers etc.)
9. RC arranges transfer of recipient to TC – see appendix 3
10. RC arranges transfer of donor organ to TC via NHS BT hub.
11. RC informs NHS BT hub that patient has been transferred to another unit

Understanding of responsibilities of RC and TC

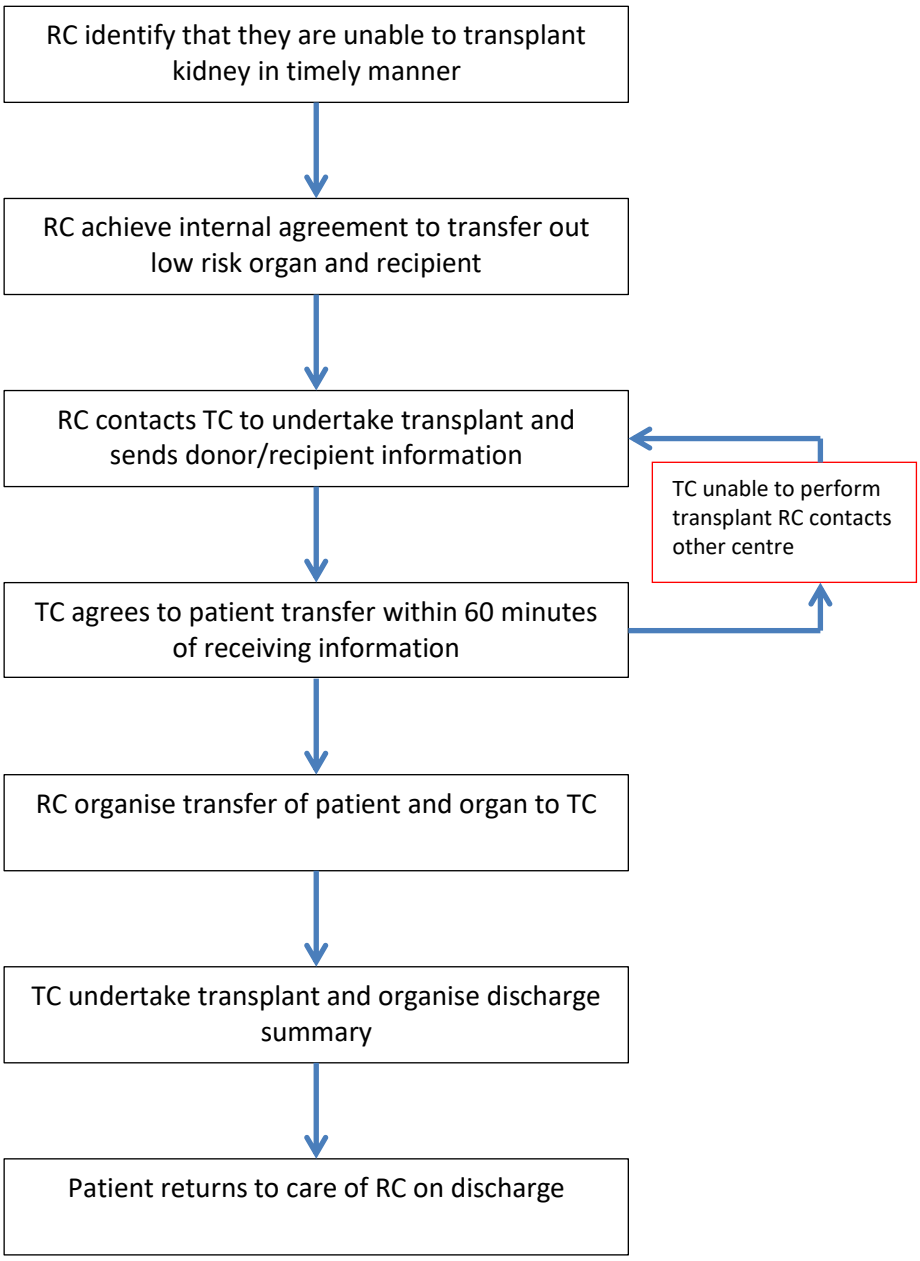
1. Patient and organ will be transplanted in accordance with local practice and governance arrangements at TC
2. Immunosuppression protocol may be discussed but will be at the discretion of and in accordance with the local practices of TC
3. The patient will remain within TC until discharge.
4. Transplant activity will be ascribed to TC
5. Long term outcome will be ascribed to RC
6. Upon discharge, TC will inform RC of progress whilst inpatient, discharge medication and any other relevant information; in the form of a comprehensive discharge summary.
7. RC will book patient to a local transplant clinic and accept transfer, whether with functioning graft or on renal replacement therapy.
8. Participating centres should make patients aware of the scheme through the patient information – Appendix 4
9. All participating centres should be in agreement with memorandum of understanding – Appendix 5

Governance and review

1. RC and TC should record details of transferred patients and the indication for transfer.
2. Transplant PLC should audit and review outcomes for transferred patients.

* Ideally an SCD but agreement should be sought between on call clinicians
# Ideally a recipient of their first kidney transplant with limited co-morbidity. Agreement should be reached between on call clinicians. See below.

Flow chart


RC identify that they are unable to transplant kidney in timely manner
RC achieve internal agreement to transfer out low risk organ and recipient
RC contacts TC to undertake transplant and sends donor/recipient information
TC unable to perform transplant RC contacts other centre
TC agrees to patient transfer within 60 minutes of receiving information
RC organise transfer of patient and organ to TC
TC undertake transplant and organise discharge summary
Patient returns to care of RC on discharge

Appendix 1 – Minimal pre assessment information

This section outlines the minimal information to transfer to the TC. The list is not exhaustive and all additional information available should be transferred. See attached suggested proforma.

- Pre-transplant assessment clinic letters by consultant transplant surgeon – initial assessment and most recent follow up.
- Most recent clinic letter from primary clinician (low clearance or dialysis doctor)
- Minimal blood work up – see below
- Local H&I risk assessment
- Cardiology assessment documentation – investigation reports. Clinic letters if there are specific cardiac issues.
- Imaging reports or images via IEP

<u>Minimal blood work up</u>

Haematology
- Full blood count
- Clotting screen
- Blood group and atypical antibodies

Biochemistry
- Admission (or post dialysis) U&E
- PTH

Virology
- HIV
- Hepatitis Bc Ab
- Hepatitis C IgG
- HIV
- HTLV
- EBV
- CMV
- VZV

Microbiology
- Syphilis serology

<u>Imaging</u>

Chest X ray – within last 3 years
Iliac artery or vein dopplers – as indicated – see below
Any abdominal cross sectional imaging performed to assess vascular calcification
Note: Patients with significant vascular disease/previous intervention should not be transferred.

<u>Cardiological investigation</u>

ECG
Echo
Any exercise capacity/stress cardiac scans – see below
Copies of any cardiology investigations
Cardiology letters – it is recommended that complex cardiac disease patients are not transferred.
Patients with valves requiring anticoagulation should not be transferred.
Patients who have required revascularisation should not be transferred unless specifically agreed.

<u>Thrombophilia investigations</u>

It is recommended not to transfer patients with complex thrombophilia requirements.
Any assessment of thrombophilia risk or letters containing thrombotic prophylaxis should be transferred.

Appendix 2 – minimal H&I risk assessment

Only standard immunological risk patients should be transferred.
A full H&I risk assessment should be undertaken at the RC and a formal written report forwarded to the TC.
A TC may undertake further assessment or re-evaluation of H&I risk assessment.
In the unlikely event of a disagreement about the risk assessment, the senior clinician scientists of the RC and TC should consult to achieve consensus.
If the TC believe that there is a significant immunological risk that would preclude transplantation, the decision lies with the RC as to whether the patient should be declined or transferred back/to another TC.

The minimal H&I data transfer should be a written report, dated and signed, containing the below information. Suggested transfer form is attached.

<u>Recipient Details</u>
Name
Date of Birth
NHS Number
ODT Number
Originating Hospital
Blood Group
Recipient HLA Type (A,B,Cw,DRB,DQB minimum)
Mismatch Grade
Match Points

<u>Antibody screening</u>
Date of Last Serum Tested
Latest cRF
Have any potential DSA been detected? (+MFI)
Screening Methods Used
Current Registered Unacceptable Antigens
If sensitised, screenshots of latest luminex SAB for class I and class II

<u>Donor Details</u>
ODT Number
Donor Hospital
Donor Hospital Centre Code (EOS)
Blood Group
Age
Donor HLA Type (A,B,Cw,DRB,DQB minimum)

<u>Testing Details</u>
Crossmatching
Prospective XM performed? (Y/N)
Type of XM
T & B Cell XM result
Does RC require solid organ donor XM material post transplant?

Laboratory and scientist details

Any further Comments/Relevant Information

Name of Laboratory Contact

Phone number of and nhs.net email of Laboratory Contact

Out of hours contact number of laboratory

Patient Transfer Form

Recipient Details

Name	Date of Birth	NHS Number
Originating Hospital	**Originating Hospital Number**	**ODT Number**
Registered Blood Group	**Date of Last Serum Tested**	**Mismatch Grade**
Latest cRF	**Peak cRF**	**Match Points**

Donor Details

ODT Number	Blood Group	Age
Donor Hospital	**Donor Hospital Number**	**Donor Hospital Centre Code (EOS)**

HLA Mismatches Presented

Testing Details

Crossmatching

Prospective XM performed? (Y/N)	Type of XM (CDC/Flow/Virtual)

Crossmatch Result

	Allo	Auto	Overall Interpretation
CDC XM T cell/PBL			
CDC XM B cell			
Flow XM T cell			
Flow B cell			
Virtual Crossmatch			

Will you require solid organ donor XM material post transplant?

Originating Centre Immunological Risk Stratification

Antibody Screening History

Date last sample screened	Screening Methods Used	Have any potential DSA been detected? (+MFI)

Any further Comments/Relevant Information

Please attach copy of Patient HLA typing report (Y/N)	

Appendix 3 – contact details

Guys Hospital
On call surgeon – (Guys Switchboard 02071887188)
Mon to Sat 9am – 9pm Recipient transplant co-ordinator (via switchboard)
Consultant transplant surgeon- ask for 1st on surgeon via Guys switchboard, if no response ask for second on.
On call H&I - 07850814971

Location for patient transfer: Richard Bright Ward, Borough Wing
Location for organ transfer: Richard Bright Ward, Borough Wing

Address: Great Maze Pond, London SE1 9RT

Royal Free
On call surgeon – through switchboard – 0207 794 0500
On call nephrologist – 07769 645154
On call nephrology registrar – Bleep 2608 via switchboard
On call H&I – 07786 278788

Location for patient transfer: Ward 10 South
Location for organ transfer: Level 3 theatres

Address: Royal Free Hospital, Pond Street, London, NW3 2QG

Royal London Hospital
On call surgeon – through switchboard – 020 7377 7000
On call surgical registrar - 07595471517
On call nephrologist – through switchboard – 020 7377 7000
On call nephrology registrar – Deck-phone 45626 via switchboard
On call H&I - 07880500885

Location for patient transfer: Ward 9 F, North Tower via renal and urology entrance during working hours or A&E out of hours
Location for organ transfer: Ward 9 F, North Tower

Address: Royal London Hospital, Stepney Way, London, E1 1BB

St George's
On call transplant surgeon – through switchboard – 020 86721255
On call transplant surgical registrar – through switchboard – 020 86721255
On call nephrologist – through switchboard – 020 86721255
On call nephrology registrar – Bleep 6415 (9.00-5.00pm) other times via switchboard
On call H&I - 07711447013
Location for patient transfer: Champney's Ward, 4th Floor Lanesborough Wing
Location for organ transfer: Theatres, 1st Floor St Jame's Wing

Address: St George's University Hospitals NHS Foundation Trust, Blackshaw Road, SW17 0QT

West London

On call consultant transplant surgeon – (Hammersmith switchboard: 020 3313 1000
On call transplant surgical fellow- De Wardener Unit: 020 3313 6695 or 020 3313 6690)
On call nephrology registrar – Bleep 9983 via switchboard 020 3313 1000

On call H&I: via switchboard 020 3313 1000

Location for patient transfer: De Wardener Unit, Second floor, F block, renal building
Location for organ transfer: De Wardener Unit, Second floor, F block, renal building

Address: Hammersmith Hospital (Imperial College Healthcare NHS Trust), Du Cane Road, London, W12 0HS

Appendix 4 – patient information leaflet.

London Transplant Collaborative

What is the London Transplant Collaborative?
There are five kidney transplant centres across London (Guy's, Hammersmith, the Royal Free, the Royal London, and St George's Hospitals). These centres have agreed to form a collaborative in order to deal with situations where individual centres have more transplants than they can manage themselves. The centres will, therefore, collaborate between themselves to ensure that the maximum possible number of transplants is done. The model already exists between Oxford and Coventry hospitals and has resulted in the transfer of patients for a successful transplant between the two centres when necessary.

Why is it needed?
Over the last few years we have been very successful in the UK at dramatically increasing the number of deceased donor kidney transplants, with an increase of over 50% in the numbers of transplants done. However, this has meant that there are occasions when several transplants are due to be done at the same time in the same centre. It is not feasible to postpone a transplant, as the longer the wait, the more detrimental effects there are on the kidney. So, on very rare occasions, deceased donor kidneys could not be used for the benefit of our patients and they have, therefore, missed out on a transplant. In order to avoid this situation occuring in the future, all London centres have agreed that when a kidney is available for a particular patient, and their own transplant centre is unable to perform the transplant quickly enough, the kidney and the patient will be transferred to one of the other centres in London where there is available capacity, in order to ensure that the transplant takes place. We anticipate that this will be an uncommon event.

Who will be transferred?
With the exception of patients who are expected to have a difficult or complex operation, any patient who is willing to be transferred to a different centre can expect to be asked whether they are happy to be transferred at the appropriate time. We should emphasise, however, that this will be a rare occurrence.

Will I have a choice?
Yes. You do not have to agree to be transferred. The doctor at your hospital will discuss these issues with you at the time if a transfer is being offered to you.

What are the risks of being transferred?
It is possible that the centre you are being transferred to may suddenly lose access to emergency theatres and that you may not be able to receive the kidney transplant.
Additionally the new team looking after you will be less familiar with your medical issues but we will ensure that your medical records are transferred and fully available to the transplant centre. We also understand that transferring to a hospital that you have never been to before is stressful and may be upsetting. However, it is important to understand that transplant centres have large numbers of staff and it is unlikely that you would have met the surgeon or anaesthetist that might have been looking after you if you'd stayed in your original centre.

What are the benefits of being transferred?
The main benefit of collaboration between centres is that it will reduce the likelihood of a transplant being delayed or cancelled and will lead to more transplants being completed, which is a benefit for all patients and their families. It is also likely, in the event that you agree to being transferred, that the operation will take place more quickly than if you'd stayed in your original hospital. This makes it more likely that your new kidney will function more quickly after your transplant and it will also increase the chances that it will function in the longterm.

Will my follow-up be at my original or new centre?
The transfer is only for your transplant operation and your inpatient stay. Once you are discharged from hospital, you will return to the clinic at your original centre and any issues will be managed there.

Will the centre I am transferred to have access to my records?
Yes. We will transfer medical letters, the tests you have had for your assessment for transplant and any relevant x-rays, to the hospital where you will have your transplant. A consultant surgeon at your original centre will discuss your case directly with a consultant surgeon at the centre to which you are being transferred.

Who can I discuss this with?
If you have any questions, you can talk to your consultant nephrologist (kidney doctor) or surgeon, or your co-ordinator, listed below. Most patients will be asked for their views on possible transfer in advance, but if this has not been possible we may ask you on admission to hospital at the time of your transplant, if it is necessary.

Contact details
Co-ordinator
Nephrologist