

Collection, Labelling and Transport (Organs and Samples)

*This Management Process Description replaces
MPD886/7.1*

Copy Number

Effective

06/11/17

Summary of Significant Changes

Addition of INF1327 to applicable documents. Addition of 'pancreas for islets' in Section 6. Clarification of blood vessel labelling in Section 6.2. Note at Section 7 referencing INF1327. Instruction regarding extra cable tie in Section 8.3. Minor terminology change in Section 12.1

Policy

In order to safeguard potential transplant recipients, to ensure traceability, and to minimise any potential risk, it is vital that organs and their accompanying blood and tissue samples are collected, labelled and transported appropriately. It is a requirement under the HTA regulation 11 that the licence holders must ensure that a record of the transportation of organs arriving and/or leaving the establishment is kept as part of the traceability information including the consignment record documentation.

Purpose

The purpose of this MPD is to guide and inform those involved in the organ donation process on how to collect, label and facilitate the transportation of organs and their accompanying blood and tissue samples.

Responsibilities

Specialist Nurse – Organ Donation (SN-OD) - To work to this MPD, in collaboration with the NORS retrieval teams, donating hospital staff, and working under the advice and guidance of the Associate Medical Director – ODT or nominee.

To seek advice, where required, from the TMs/RMs/on call RMs for additional support and guidance.

National Transplant Liaison Coordinator (NTLC)/Duty Office Staff - To receive information communicated by the SN-OD in relation to box/tag numbers for transport. To arrange transport for kidneys and pancreas.

Definitions

Transport Personnel – take receipt of and transport the organ to the recipient centre, ensuring the required documentation is complete.

CHI Number – Community Health Index number (unique patient identifier used in NHS Scotland)

RCPOC – Recipient centre point of contact –a nominated nurse or surgeon who is contacted to discuss and consider an organ offer for their transplanting centre.

NTLC-National Transplant Liaison Coordinators

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Applicable Documents

[MPD884](#) – Organising Solid Organ Retrieval

[POL173](#) – Infection Prevention and Control in NHSBT

[MPD885](#) – In Theatre Support

[MPD880](#) – Pre Theatre DCD

[MPD1043](#) National Standards for Organ Retrieval from deceased donors

[SOP3925](#) - Manual Organ Donation Process for a Potential Organ and/or Tissue Donor in the event of DonorPath/IT network unavailability

[SOP5024](#) – Tissue Referral Process

[FRM4212](#) Organ Donation Pathway

[FRM4122](#) Deceased Donor Pancreas Information (P-DEC-DI-INTERIM)

[FRM4194](#) Cardiothoracic Donor Information (C-DI)

[FRM4147](#) Liver Donor Information (L4)

[FRM4121](#)- Kidney Donor Information (KP4)

[FRM4217](#) –Organ Handover Form

[FRM4318](#) – Organ Box Address Sticker

[INF1327](#) – Organ Packing Guide for SNODs

DonorPath - Secure electronic system that SNODs utilise to register potential organ donors and upload donor characteristics prior to organ offering using an iPad or pc. DonorPath also creates and stores an electronic donor record of the donation process.

Transplant Vessels and Tissue form – statutory form supplied by NORS teams

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1. INTRODUCTION

- 1.1. As part of the organ retrieval process, blood and tissue samples (i.e. lymph and spleen) must accompany an organ to allow the recipient centres to undertake any necessary tissue typing and additional microbiological testing. In addition, blood vessels may also be required to aid the implanting surgeon during the transplant operation.
- 1.2. As part of this process, there is a vital role in ensuring that the required blood, blood vessels and tissue samples are identified, retrieved, stored and labelled appropriately.
- 1.3. In addition there is a responsibility to facilitate the appropriate packaging of an organ, with the required blood, blood vessels, tissue samples and relevant paperwork, to ensure that any risk to the organ recipient is minimised.
- 1.4. When an organ is being received for transport, the identity of the transport personnel and the details of the organ/tissue being transported must be confirmed. The transport personnel will have the box/tag number of the organ transport box they should be uplifting and this must be verified prior to handover
- 1.5. Whilst DonorPath is the primary donor record, in the event of IT unavailability the SNOD should follow the manual process as described in [SOP3925](#) utilising [FRM4212](#) to document actions taken.

2. COMMUNICATION WITH NORS RETRIEVAL TEAM CONTACTS

The SN-OD must document all communication with the NORS retrieval team(s) and any other parties when arranging for the appropriate organ transport boxes and equipment to be brought to the donating centre; these entries must be documented in the 'Sequence of Events' section of DonorPath or in the Organ Donation Pathway [FRM4212](#)

- 2.1.1. The organ boxes must be checked as soon as possible, following arrival to ensure that:

1.	The organ box is structurally intact to maintain the integrity of the organs during transport.
2.	The organ box is able to be sealed securely (where possible) to prevent it from being opened without authorisation
3.	There is sufficient melting water ice available for the organ box to ensure that the temperature and position of the organ is maintained whilst in transit
4.	The organ box is able to be clearly labelled to show which organ is being transported, and an approved NHSBT organ transport label/sticker is available
5.	Sufficient plastic cable ties are available to seal the organ boxes (where applicable).

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The boxes should be prepared for placement of the organ/tissue as soon as is reasonably practicable after commencement of the retrieval operation. Coloured organ identification labels must be attached to the boxes prior to accepting the organ from the NORS team. En-bloc kidneys must have a **Red** and a **Yellow** label attached to the organ box. Where labels are not used, a generic organ sticker supplied in the donor pack must be applied to the organ box ([FRM4318](#)).

RED LABEL – RIGHT KIDNEY
YELLOW LABEL – LEFT KIDNEY
BLUE LABEL – PANCREAS / PANCREAS FOR ISLETS
WHITE LABEL – HEART FOR VALVES

Note:

The SN-OD must ensure that they utilise Universal Precautions when handling blood, blood vessels, organs and tissue samples. Refer to [POL173](#) Infection Prevention and Control in NHSBT for details of Universal Precautions

3. PRE THEATRE COLLECTION OF BLOOD SAMPLES

- 3.1. In the event of DCD, the SN-OD should make all attempts to obtain relevant blood samples pre theatre, and ensure that sufficient blood samples are available to accompany all of the organs, tissue and blood vessels as guided by [MPD880](#) (consider specific requests from recipient centres). The SN-OD must document all relevant communication with the recipient centres in the 'Sequence of Events' section of DonorPath or in the Organ Donation Pathway [FRM4212](#)
- 3.2. In the cases of a non-proceeding DCD, should dispose of any blood samples as per local hospital policy and in line with [SOP5024](#).

4. COLLECTION AND LABELLING OF BLOOD SAMPLES IN THEATRE

- 4.1. In the event of DBD, the SN-OD should facilitate conversations between the relevant RCPOC and NORS retrieval team staff to confirm the volume and types of blood samples required to accompany the organ / tissue for transplantation, considering any specific requests from recipient centres.
- 4.2. Agreement must be reached between the SN-OD and the attending NORS staff in theatre, as to who will take responsibility for which organ specific blood samples and for the packaging of the organs and relevant blood/tissue samples. Refer to [MPD1043](#). The agreed responsibility should be recorded in the 'Organ Packaging' section of DonorPath or in [FRM4212](#)
- 4.3. The SN-OD will take responsibility for all blood samples relating to tissue donation.
- 4.4. After this information has been confirmed, the SN-OD should then request that the required volume of blood is retrieved from the patient. This request is made to the local anaesthetist or donor care practitioner who is maintaining ventilation.

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4.5. The sample(s) must include the patient's name plus 3 points of Identification:

- ODT/Donor Number
- Date of Birth
- Hospital Number/CHI Number (Scotland)

Additionally, the date and time the sample was taken must be clearly written on the label of each tube.

4.6. Once all of the blood samples have been appropriately labelled, the SN-OD should then place the blood samples in a sealable sample pouch and store in the relevant organ box in preparation for organ handover.

5. COLLECTION AND LABELLING OF TISSUE SAMPLES IN THEATRE

5.1. The SN-OD should facilitate a conversation with the attending NORS staff in theatre and agree who will take responsibility for the organ specific tissue samples i.e. lymph nodes and spleen. This is usually the abdominal team but in the event of cardiothoracic only organs, these tissue samples are still required to accompany the organ. The agreed responsibility should be recorded in the 'Organ Packaging' section of DonorPath or in [FRM4212](#)

5.2. The sample(s) must include the patient's name plus 3 points of Identification:

- ODT/Donor Number
- Date of Birth
- Hospital Number/CHI Number (Scotland)

5.3. The SN-OD/NORS Perfusionist should also ensure that each container:

- seals appropriately and has no faults (for example - cracks, faulty lid)
- is labelled clearly and legibly
- has the correct labelling of the specific tissue that will be contained in it

5.4. The SN-OD/NORS Perfusionist should request that the tissue sample containers are filled with sterile saline prior to the tissue samples being placed in the containers. This request can be made to the NORS scrub practitioner, as appropriate.

5.5. At the appropriate time during the organ retrieval operation, the SN-OD/NORS Perfusionist should confirm with the retrieval surgeon and scrub practitioner directly the quantity of tissue samples required. The SN-OD/NORS Perfusionist must ensure that there are sufficient samples of lymph nodes and spleen to accompany each organ to the recipient centres. Refer to [MPD1043](#)

5.6. When directed by the scrub practitioner/retrieval surgeon, the SN-OD/NORS Perfusionist should facilitate the receipt of the tissue samples into the containers, confirming verbally the specific tissue received and checked against the completed label on the tissue sample specimen container.

5.7. The SN-OD should then place the tissue sample containers into the sealable sample pouch containing the blood sample taken earlier and store this in the relevant organ box in preparation for organ handover.

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6. COLLECTION AND LABELLING OF BLOOD VESSELS

Blood vessels should accompany the liver and pancreas/pancreas for islets.

- 6.1. If the SN-OD/NORS Perfusionist is informed by the lead abdominal retrieval surgeon that it is not possible to fulfil these requirements then the SN-OD should contact the RCPOC as a matter of urgency to ensure that the implanting surgeon is aware and a decision can be made on whether to continue to accept the organ for transplant. The SN-OD should document any relevant communication with RCPOC in the donor file (DonorPath/[FRM4212](#))
- 6.2. The blood vessel containers should be labelled with the vessel type (artery or vein) and the patient's name plus 3 points of Identification:
 - ODT/Donor Number
 - Date of Birth
 - Hospital Number/CHI Number (Scotland)
- 6.3. The SN-OD/NORS Perfusionist should request that the blood vessel containers are filled with the preservation / perfusion fluid being used during the retrieval operation prior to the vessels being placed inside. This request can be made to the NORS scrub practitioner, as appropriate.
- 6.4. The blood vessel container(s) must remain sterile at all times. The SN-OD/ Perfusionist should ensure that the blood vessels are secured inside a sterile container before accepting them from the scrub practitioner.
- 6.5. When receiving the blood vessel samples, the SN-OD/NORS Perfusionist must confirm which specific blood vessels are being received and which organ they are to accompany.
- 6.6. The Transplant Vessels and Tissue form must be completed by the SN-OD/NORS Perfusionist and a member of the NORS retrieval team. The blood vessels should be placed inside the specimen bag. The required accompanying blood samples should also be placed inside the specimen bag within the appropriate section.
- 6.7. The completed Transplant Vessels and Tissue form with the relevant vessels and blood samples inserted should be sealed within a new sample pouch and placed within the organ box, in readiness for organ handover.

7. PACKAGING OF AN ORGAN FOR HANDOVER

Note:

[INF1327](#) should be used to guide the SNOD when packing kidneys, Pancreas/pancreas islets and heart for valves.

- 7.1. When cardiothoracic organs and/or multi-visceral organs/novel organs/tissue are being retrieved, the responsibility for safely packaging the organ, blood and tissue samples lies with the NORS cardiothoracic and/or multi-visceral/specialist surgical team.

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- 7.2. For abdominal organ retrieval, agreement must be reached between the SN-OD and the NORS perfusionist regarding who will take responsibility for packaging the organ and associated samples in readiness for handover. The agreed responsibility should be recorded in the 'Organ Packaging' section of DonorPath or in [FRM4212](#)
- 7.3. If there are no perfusionists in the NORS team(s), the SN-OD is responsible for packaging the liver in addition to the kidneys and pancreas.
- 7.4. Heart for tissue donation - to be packaged by the SNOD/NORS Practitioner in accordance with NRC/SNBTS requirement

8. PACKAGING THE ORGAN/TISSUE IN READINESS FOR HANDOVER

- 8.1. When an organ is ready to be packed in the organ box the SN-OD must undertake the following actions:
 - 8.1.1. Prior to receiving the organ from the NORS team member, the SN-OD/NORS Perfusionist should confirm that the organ has been prepared for packing as per [MPD1043](#)
 - 8.1.2. The NORS team member must verbally state the organ they are handing over and where appropriate whether this is the left or right organ at the point of handover. The prepared organ must also have a colour coded tie on the outer packaging, where appropriate, which verifies the identity of the organ. The SNOD must verbally confirm with the NORS team member that they have received the organ stated.
- 8.2. Once this confirmation has taken place, the packaged organ must be placed without delay inside the corresponding organ box with the coloured label that matches the tie, where appropriate, on the packaged organ ensuring that it is adequately covered by the melting water ice.
- 8.3. An extra cable tie should be placed in a sample pouch at this stage to facilitate re-sealing the box where this is necessary. This pouch should be placed above the ice inside the box.
- 8.4. The organ box should be closed but not sealed until all samples and documentation have been placed inside and are ready for handover.

9. DOCUMENTATION TO ACCOMPANY AN ORGAN

- 9.1. The following documentation must be sealed inside the document holder within the organ box. If a document holder is not available, the documents must be sealed in a waterproof bag and placed in the box alongside the organ and associated samples
 - Organ Specific Form (HTA form) completed by the retrieval surgeon
 - Photocopy of witnessed blood group form
- 9.2. Box/tag numbers should be documented on the organ handover sheet ([FRM4217](#)). A record of these box/tag numbers should be kept by the SN-OD and recorded in the 'Organ Packaging' section of DonorPath or in the Clinical Pathway ([FRM4212](#)) for the donor record. Where an organ is being transported using machine perfusion, such as the LifePort or Transmedics systems, the number recorded should be from the attached security tag or the unique machine ID or 'asset' number.

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9.3. The SN-OD must ensure that all blood and tissue samples are in situ and the accompanying paperwork has been completed before sealing the organ box

9.4. Documentation to accompany heart for tissue donation should in accordance with NRC/SNBTS requirements

10. SEALING THE ORGAN BOX

10.1. The organ box must be sealed utilising the appropriate security tag/cable tie. The box/tag number for the organ must be relayed to the NTLC/NRC/SNBTS to assist with identification and organising transport from the donating hospital to the recipient centre.

11. ARRANGING TRANSPORT OF AN ORGAN

The table below outlines responsibilities for those involved in the organ retrieval process; (some recipient centres arrange their own kidney/pancreas transport, the NTLC will advise if this is the case). Please refer to [MPD884](#) –for further guidance on organ acceptance.

11.1. In all cases where an organ is not being transported by the NORS retrieval teams, the SN-OD must identify from the RCPOC/NTLC which transport company will be arriving to collect the organ for transport and if they have arranged the transport for the organ. Information regarding the transport company will be provided to the SN-OD by the RCPOC/NTLC prior to the organ being released for transport.

Mode of Transport	Responsibility to arrange transport
Accompanied – Organ accepted by recipient centre that supplied NORS retrieval team.	NORS retrieval team have responsibility to accompany the organ back to the recipient centre with them.
Unaccompanied - Heart , Lungs, Liver, multi-visceral organs	RCPOC has responsibility to arrange additional transport.
Unaccompanied – Kidney or Pancreas	NTLC has responsibility to arrange transport.
Unaccompanied – Heart donated for heart tissue donation.	NRC/SNBTS contact has responsibility to arrange transport.

11.2. If heart for tissue is being donated, the SN-OD should ensure the National Referral Centre (NRC) / Scottish National Blood Transfusion (SNBTS) contact arranges transport for collection of the heart at the end of the retrieval operation

11.3. The SN-OD should confirm an estimated time for organ handover with the retrieval surgeons during the organ retrieval operation. The SN-OD should communicate with the relevant RCPOCs, NRC/SNBTS staff and NTLC to ensure that transport arrangements are made in a timely manner. The SN-OD should document any relevant communication with RCPOCs for the donor file (DonorPath/[FRM4212](#)).

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12. HANDOVER OF AN ORGAN TO TRANSPORT PERSONNEL

- 12.1. The SN-OD must confirm the identity of the **transport personnel** for each organ being transported utilising photo ID.
- 12.2. The SN-OD must also confirm with the transport personnel their understanding of which organ they are collecting, the box/tag number and its correct destination.
- 12.3. The SN-OD will have completed the organ box label (or sticker [FRM4318](#)) with the full address and description of the organ.
- 12.4. Transport personnel (including NORS staff or implanting theatre staff at donating centre) must enter their details onto the relevant section of the organ box label (or sticker [FRM4318](#)) thereby documenting custody of the organ box from the SNOD.
- 12.5. The SN-OD must complete the relevant sections of [FRM4217](#) for each organ/tissue box handed over and document their actions in the 'Sequence of Events' section of DonorPath or in [FRM4212](#).

NOTE:

The purpose of the [FRM4217](#) and the organ box label or sticker ([FRM4318](#)) is for traceability of organs and supporting material such as tissue and blood samples where these are contained in a separate organ box.

13. DELAYS IN PLACING ORGANS FOR TRANSPLANT

- 13.1. Where the NORS team are ready to leave theatre and an organ is still to be handed over for onward transport, the SN-OD must speak directly with the NTLC to establish the potential for further delay. If the delay is longer than the anticipated SNOD presence in theatre then the SN-OD must speak with the NORS retrieval team and request that the organ accompany them back to their transplant centre. The SN-OD must confirm the location where the organ will be stored at the NORS transplant centre, and identify a member of staff (e.g. RCPOC/NORS contact) who the NTLC can communicate with to arrange subsequent transport arrangements for the organ, or to arrange its disposal as per hospital policy.
- 13.2. An organ must never be left unaccompanied in the donating hospital for collection by transport personnel unless the donating hospital is a transplant centre, and a healthcare professional acting in the role of RCPOC, is willing to accept receipt of the organ and be available for contact by the NTLC. If this is not the case, escalation to the TM/RM on call may be required.