

Policy For Organ / Tissue Donation

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1. INTRODUCTION

This document sets out University Hospitals of Derby and Burton NHS Foundation Trust's (UHDB's) Policy and guidelines for organ and tissue donation. The Policy will ensure that potential and actual organ donors are referred and managed in accordance with current legislation and that potential tissue donors are identified and referred to National Tissue Services. UHDB endorses the donation of organs / tissues to support the end of life (EoL) wishes of patients in our care.

2. POLICY AIMS / STATEMENT OF INTENT

The aim of this Policy is to ensure safe organ and tissue donation by outlining the responsibilities of key personnel and detailing the stages of the donation process. The Policy covers the three specific types of donation i.e. Donation after Brain Death (DBD), Donation after Circulatory Death (DCD) and Deceased Tissue Donation. Specific guidelines for these are attached as appendices to this Policy.

3. POLICY SCOPE

- This Policy applies to all in-patients who fulfil the criteria for organ / tissue donation and is to be used by Trust medical and nursing staff working within patient areas
- The Policy applies to all staff employed by the Trust including students, locum, bank and agency staff.

4. DEFINITIONS

Specialist Nurse for Organ Donation (SNOD): A senior Registered Nurse, usually with Critical Care (Intensive Care Unit - ICU) experience and trained in all aspects of Organ Donation. They are employed directly by National Health Service Blood and Transplant (NHSBT) as part of Midlands Organ Donation Services Team. There is one SNOD working at UHDB who is supported on-call by other SNODs whose base hospital or Trust is elsewhere within the Midlands Network. Embedded SNODs are accountable to Team and Regional Managers for Organ Donation.

Midlands Organ Donation Services Team: The regional team of SNODs and their managers.

Clinical Lead for Organ Donation (There are 2 CLODs, based at both the Royal Derby and at Queen's Hospital): A senior clinician within the Trust who leads organ donation practice and works alongside the SNODs and the Organ Donation Committee. Accountable to Medical Director and Regional CLOD. Deputy CLOD (if in post) is accountable to the CLOD.

Organ Donation Committee (ODC): The multidisciplinary committee responsible for leading on policies and practice relating to organ and tissue donation within the Trust.

Potential Donor after Brain Death (DBD): A patient in apnoeic coma requiring mechanical ventilation whose death has been or is likely to be confirmed by neurological criteria and with no absolute or relative contraindications to solid organ donation.

Potential Donor after Circulatory Death (DCD): A patient who does not fit the criteria for neurological testing, in whom imminent death is anticipated, and a decision has been made to withdraw treatment. Death will be diagnosed using circulatory criteria.

Potential Tissue Donor: A patient who does not fit the criteria for neurological testing and in whom organ donation is not possible; a patient that has already died or is likely to die despite maximum management; a patient who dies but without tracheal intubation and artificial ventilation and therefore does not meet the criteria for referral as a potential DCD.

Brain Stem Tests (BST): Tests for diagnosing death by neurological criteria as defined in the Academic of Medical Royal Colleges code of practice for the diagnosis and confirmation of death (2008). These tests lead to the legal definition of death by neurological criteria, or Brain Stem Death (BSD).

Link Nurses: Nurses, or others, working within specific units or areas (eg ED, Critical Care, Theatres) whose role is to disseminate information and raise awareness of organ and tissue donation within the Trust.

5. ROLES AND RESPONSIBILITIES

Specialist Nurse for Organ Donation

Responsible for:

- Ensuring that this Policy is disseminated to all appropriate staff and that education and regular updates are provided
- Conducting the Potential Donor Audit (PDA) within the Trust and ensuring that the data collected is accurate
- Presenting the Trust data on the potential and actual donors to the Organ Donation Committee (ODC) on a quarterly basis
- Highlighting any patients with missed potential for organ donation within the Trust to the CLOD
- Providing Trust-wide education and training on matters relating to organ and tissue donation

As members of the Midlands Organ Donation Services Team they have additional responsibilities as detailed below:

Midland Organ Donation Services Team (Specialist Nurses in Organ Donation)

Responsible for:

- Taking referrals in accordance with the National referral standards and practices
- Ascertaining if the patients referred are suitable for organ and / or tissue donation
- Checking the Organ Donor Register (ODR) to ascertain if patients have registered an agreement to use their organs for transplant in the event of their death
- Planning, with the appropriate medical staff, the approach to patient's relatives.
- In conjunction with the clinician caring for the patient, ensuring coronial consent for donation is gained when necessary and that any specific requests from the Coroner are honoured
- Gaining consent from the appropriate person closest to the patient within the legislation of the Human Tissue Act (2004) (HTA) and completing the relevant documentation.
- Ensuring accurate documentation in the patient's notes
- Ensuring that the theatre co-ordinator is fully informed at the earliest opportunity of a potential organ donor and that they are given an estimated time of retrieval

- Making the relevant anaesthetist, who will be caring for the donor in theatre (when appropriate), aware of the potential donor and what their role may be
- Informing the theatre co-ordinator and on-call anaesthetist of any changes and requirements of the organ retrieval team
- Act as a link to the transplant surgeons to facilitate retrieval

Clinical Lead for Organ Donation (CLOD)

Responsible for:

- Providing clinical leadership within the Trust on all matters pertinent to Organ Donation and to champion improvements in the way in which potential organ donors are identified and organs are donated. In particular to focus on implementing the recommendations of the Organ Donation Taskforce Report 2008 and the NSHBT strategy document 'Taking Organ Donation to 2020'
- Establishing successful working relationships with key stakeholders within and outside the Trust
- Ensuring that other Trust clinicians diagnose death by neurological criteria in all appropriate patients, and that all potential donors are identified and referred to the midlands organ donation team
- Ensuring that all activities related to the diagnosis of death and organ donation are implemented according to best practice and current national guidelines, including NICE clinical guideline 135, NHSBT, Academy of Medical Royal Colleges and GMC guidance.
- Monitoring performance in comparison to the National Potential Donor Audit
- Developing a close working relationship with the Specialist Nurses for Organ Donation within the Trust
- Identifying and contributing to the resolution of local barriers to donation in conjunction with the SNODs and ODC
- Ensuring that all areas of the Trust where potential organ donors are treated have appropriate policies in place that have been developed in line with national policy / guidelines
- Supporting the attending SNODs and other clinicians to ensure optimal donor management
- Providing oversight and guidance to the work of others in relation to the promotion of organ donation in the community
- Liaison with CLODs within the Midlands to ensure best practice within the Trust

Organ and Tissue Donation Committee Chair

Is responsible for:

- Ensuring committee meetings are planned and conducted effectively. Meetings should occur quarterly
- Ensuring that the committee has appropriate representation from relevant clinical areas (Critical Care, ED, Paediatrics) as well as non-clinical representatives from within and outside the Trust

- Ensuring the committee fulfils its responsibilities with regards to increasing organ donation awareness and rates within the Trust
- Ensuring full participation of committee members in committee meetings
- Ensuring that all relevant matters are discussed and effective decisions are made and actioned.

Consultant Intensivists caring for the patient

Are responsible for:

- Ensuring that all patients meeting the Minimum Notification Criteria for Organ Donation (Appendix A) are referred to the Midlands Organ Donation Services Team in a timely manner. This responsibility may be delegated to another member of the medical/ nursing team who is identified as competent to refer, as set out in the guidelines on DBD / DCD donation
- Discussing the clinical case with the Coroner and/or pathologist when appropriate. These may need to be undertaken in the presence of the attending SNOD who may need to discuss aspects of the case separately with the Coroner. The consultant may delegate this responsibility to a suitably qualified trainee clinician. Any discussions with the Coroner must be recorded accurately in the patient's notes
- Ensuring that their practice, and that of junior medical staff under their supervision, is consistent with local and national policies and procedures for the withdrawal of life support, the diagnosis of death and for organ donation.

Nursing Staff within Critical Care Areas and the ED

Are responsible for:

- Discussing any patient who they are caring for, who meets the Minimum Notification Criteria (MNC) for Organ Donation, with the Consultant responsible for the patient's care
- Making a referral to the midlands Organ Donation Team when asked to do so by, or with the knowledge of, the clinician responsible for the patients care
- Assisting the attending SNOD to gather all the necessary patient information

Emergency Department Consultants

Are responsible for:

- Ensuring that all patients meeting the MNC for organ donation are referred to the Midlands Organ Donation Team in a timely manner. This responsibility may be delegated to another member of the medical / nursing team who is identified as competent to refer. Referrals must be made according to the Trigger pathway for ED (Appendix B).
- Discussing the clinical case with the Coroner when appropriate. This may need to be undertaken in the presence of the attending SNOD who may need to discuss aspects of the case separately with the Coroner. The Consultant may delegate this responsibility to a suitably qualified trainee clinician. Any discussions with the Coroner must be recorded accurately in the patient's medical notes.
- Ensuring that their practice, and that of junior medical staff under their supervision, is consistent with local and national policies and procedures for the withdrawal of life support, the diagnosis of death and for organ donation.

Junior Doctors in Critical Care / ED

Are responsible for:

- Ensuring that all patients meeting the MNC for organ donation are discussed with their supervising clinician
- Making direct referrals to the midlands Organ Donation Team when instructed to do so by their supervising clinician
- Ensuring the Consultant responsible for the patient's care is aware of the referral

Ward Nursing / Medical Staff

Are responsible for referring any potential tissue donors to Tissue Services according to guidelines.

Trust Organ Donation Committee

The ODC reports into Trust Board on an annual basis with a 6 monthly assurance interim report to QPC.

Is responsible for:

- Leading on organ / tissue donation Policy and practice across the Trust
- Raising awareness to ensure that donation is accepted and viewed as a usual, not unusual part of end of life care. A discussion about donation should feature in all end of life care, wherever located and wherever appropriate, recognising and respecting the wishes of individuals
- Directing local policies and practice in order to ensure that organ and tissue donation is considered in all appropriate situations
- Reviewing all operational aspects of donation to ensure that they are developed and implemented in line with current and future national guidelines and policies, identifying and resolving any obstacles to this
- Maximising the overall number of tissues and organs donated through support to the clinical teams, SNODs, potential donors and their families
- Monitoring tissue and organ donation actively from all areas of the hospital primarily from critical care and the ED. Rates of donor identification, referral, and approach to the family and consent to donation will be collected through the NHSBT Potential Donor Audit (PDA)
- Ensuring submission of the data to NHSBT on an agreed basis and to receive and analyse comparative data from other hospitals
- The ODC reports into QPC on a bi-annual basis with the NHSBT performance report being presented annually to Trust Board.
- Participating in all relevant national audit processes. Reviewing audit data on donation activity, to monitor standards, test adherence to local Policy and instigate any required actions
- Promoting communication about tissue and organ donation activity to all appropriate areas of the Trust and confirming that the information is received and understood
- To ensure that a discussion about tissue and organ donation features in all end of life care

wherever appropriate and to ensure that this is reflected in the local end of life policies, procedures and pathways.

- Supporting the Clinical Lead for Organ Donation and Specialist Nurses for Organ Donation
- Assisting in the identification of training needs for all staff and ensuring delivery of educational and training programmes as required

6. POLICY STATEMENTS AND PROCEDURES

The following sections describe the key elements of the donation process. Supporting information regarding these processes is available from the SNOD (please note that, in the case of potential tissue only referral, this process will be managed by the Specialist Nurse in Tissue Donation from the National Referral Centre in Liverpool using national policies for tissue donation).

Organ or Tissue Donation after death is possible in three types of circumstances:

1. Patients who have had a catastrophic brain injury where there is or may be a plan to perform brain stem death testing.
2. Any patient requiring artificial ventilation (usually in critical care or the ED) where no further treatment options are available and there is a plan to withdraw life sustaining treatment.
3. A patient that has already died or is likely to die despite maximum management; a patient who dies but without tracheal intubation and artificial ventilation and therefore does not meet the criteria for referral as a potential DCD (potential tissue donation only).

Referral for potential Organ Donation

This applies to all patients in whom neurological death is suspected, or withdrawal of treatment is planned. Such patients should be identified and discussed with a Specialist Nurse for Organ Donation via the National Referral Line (**03000 203040**). This notification should take place even if the attending clinical staff believe that donation (after death has been confirmed) might be contra-indicated or inappropriate.

PLEASE REFER THE PATIENT (VIA THE NATIONAL REFERRAL CENTRE ON 03000 203040) TO THE ON-CALL SNOD BEFORE APPROACHING THE NEXT OF KIN ABOUT ORGAN DONATION.

Timely Notification

- The Specialist Nurse for Organ Donation (Midlands Organ Donation Services team) must be notified in the following circumstances:
- Either: a patient has the absence of one or more cranial nerve reflexes (e.g. one fixed pupil) and has a Glasgow coma score of 4 or less, not explained by sedative drugs and there is or may be a decision to perform brain stem death tests
- Or: a mechanically ventilated patient with a life-threatening or life-limiting condition that will, or is expected to result in circulatory death, in whom the decision has been made to withdraw life-sustaining treatment.
- Early notification indicators are shown in the Minimum Notification Criteria. Notification should occur at the time that the above criteria are met i.e. before any withdrawal of treatment, and the discussion should be documented in the patient's notes

- Notification to the SNOD can be made by nursing or medical staff, but the responsible ICU consultant should be made aware before notification occurs. For referrals made from ED, the doctor in charge should be informed
- There should be no discussions with the family about potential organ donation until the SNOD has been notified
- Early referral to the SNOD allows a planned and collaborative approach to be made when offering organ donation. It allows suitability to be ascertained, prevents inappropriate approaches to a family, allows accurate information to be given and ensures families are not kept waiting unnecessarily.

Organ Donation Register (ODR)

New legislation was introduced in England in May of 2020 whereby any patient is deemed to have agreed to be an organ donor after their death unless they have recorded their decision (which includes having discussed their decision with their next of kin or advocate) not to donate or who belong to one of the following exclusion groups:

1: Those under 18 years of age.

2: Those who cannot understand the legislation or how to take actions required of it.

3: Those not normally resident in England, who are not resident in England voluntarily (e.g. prisoners) or those who have lived in England less than 12 months prior to their death.

Please note that families or the patients' nominated next of kin or their advocates are still involved in all discussions, decisions and the consent process of organ and tissue donation as intricately they were previously.

Coroner

- The Coroner should be informed of all potential donors in most situations and clear guidance is given in the 'Guidance for Coroner and Donor Coordinators working with Coroners' (Department Of Health and Ministry Of Justice 2010)
- Although the consultant in charge of the patient's care is responsible for contacting the Coroner, the Coroner may also need to discuss the case with the attending SNOD
- Staffordshire Coroners are supportive of donation and will work with the police and pathologists to support the process. They may place restrictions on what may be donated to facilitate all parties' needs
- The need for a Coroner's inquest or the requirement for a post mortem does not preclude donation and therefore should not prevent referral of all suitable patients.

Location and stabilisation of the potential donor

- Solid organ donors, both DBD and DCD, will usually be patients receiving mechanical ventilation in the Intensive Care Unit (ICU) or, more rarely, in the Emergency Department (ED)
- If a patient is referred from the ED the attending SNOD must liaise with the ICU consultant to provide a suitable location from which the donation can be facilitated. In most cases this will entail admission to ICU, but if ICU bed availability is limited, the ICU consultant should attempt to make donation possible either in ICU or an alternative location such as the operating theatres

- The potential donor will be cared for by an appropriately skilled nurse with support from the SNOD
- It is vital that the patient's condition is stabilised as far as possible to maintain normal homeostasis until neurological death testing is appropriate.

Documentation

- UHDB uses the Midlands Integrated Care Guide for Deceased Organ and Tissue Donation for documentation of care for all potential organ donors. This contains details of donor management goals and therapies, and the forms for diagnosis of death using neurological and circulatory criteria. It should be used in all cases where organ donation is considered.

Neurological testing (Brain Stem Death Testing)

- Brain Stem Death Testing is expected to be undertaken in all cases where neurological death is suspected and is recommended by the Organ Donation Taskforce (DOH, 2008). The tests will be carried out in accordance with the Diagnosis of Death guidelines (Academy of Medical Royal Colleges, 2008). It is expected that this should be the method of diagnosis of death in such situations regardless of whether donation is being considered
- The doctors undertaking the tests will complete the BSD testing form (Midlands Integrated Care Guide Appendix 2, pp. 27-28 in association with the guidance on pp 29-30 or the ITU stand-alone BSD testing form) and file it in the medical notes.

Donation after Circulatory Death

- The decision to withdraw life sustaining treatment should be made in accordance with national guidelines as published by the General Medical Council (Guidance on Withholding and Withdrawing Life Prolonging Treatments (2002)) and the Intensive Care Society (Guidelines for Limitation of treatments for Adults requiring Intensive Care (2003))
- In addition, the decision to withdraw treatment should be independent of and uninfluenced by any consideration regarding organ donation
- If the patient has expressed a wish to donate after their death then continued care and intervention will be deemed as best interests in a broader sense. Guidance can be found in 'Legal issues relevant to non-heart beating organ donation' (DOH 2009) and the UK Donor Ethics Committee document 'An ethical framework for controlled donation after circulatory death (2011)'
- No procedures will be undertaken to facilitate donation that may be deemed as harmful or distressing. Any additional tests / interventions will be discussed with the next of kin to ascertain consent.

Approach and Gaining Consent

- A collaborative planned approach involving the clinician, SNOD and bedside nurse should be made as this has shown to be most effective in the ability for the family to understand the request, deal with their grief and facilitate the process of organ donation. Please refer the patient before approaching the next of kin about organ donation
- The staff involved should have had prior discussions with the family and be assured that the next of kin are fully aware of the poor prognosis
- The request for donation should not be made until the family are aware and understand that death has occurred or is imminent

- The request should be made by a suitable experienced and specially trained member of staff. The person leading the approach will usually be either the SNOD or Clinician and will be decided on an individual case basis. The approach should be planned and agreed between the SNOD and the Consultant before speaking to the family
- All conversations regarding organ donation must be clearly documented in the patient's notes and in the SNOD referral paperwork.

Donor family

- The attending SNOD will complete the consent paperwork in accordance with the HTA and all required information will be discussed with the family
- The potential donor family will be offered recipient information and keepsakes (hair locks and handprints) by the attending SNOD in accordance with NHSBT's Donor Family Care Policy
- Keepsakes will be offered to every family regardless of consent to donate or not
- The SNOD and bedside nurse will ensure that the family has contact information and bereavement follow up details
- They will also be made aware that, if appropriate, they may be contacted by the Coroner's office.

Donor assessment

- The referring unit must give a comprehensive history to the SNOD in order that patients may be excluded as unsuitable donors at an early stage
- The referring unit must give the attending SNOD full access to all medical notes, charts and blood results
- Information must be communicated by the SNOD to recipient teams for them to fully assess suitability for donation
- The decision to proceed with donation will be made by the transplant centre
- After gaining consent from the family the SNOD will ensure blood samples are sent for screening for virology and other infectious disease (including COVID)
- A patient assessment using NHSBT's assessment form will be completed by the attending SNOD and a copy filed in the patient's notes
- The SNOD assessment will be ongoing from referral until transfer to theatre.

7. FURTHER ADVICE AND ENQUIRES

Please refer to the appropriate Trust guidelines on DBD, DCD or Tissue donation attached to this Policy.

All discussions relating to a potential donor referral should be directed via the National Referral Line on **03000 203040**. Other enquires during working weekday hours may be directed (via switchboard) to:

- The Specialist Nurse in Organ Donation
- The Clinical Leads for Organ Donation

8. EDUCATION AND TRAINING REQUIREMENTS

Training and awareness of this policy will be provided by the SNOD and the CLOD on request.

9. EQUALITY IMPACT ASSESSMENT

The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs.

Faiths and beliefs. NHSBT's Specialist Nurses always explore a potential donor and their family's faith or beliefs as a matter of routine. The Organ Donation Register has a system which enables the recording of any wishes in this respect and seeks to reassure people that their wishes will be abided by at all times during the donation process.

NHSBT also supports any request from a patient or a from patient's family or next of kin to speak to someone about any concerns they may have regarding faith or beliefs with respect to organ or tissue donation.

This policy and its impact on equality have been reviewed and no detriment was identified.

10. PROCESS FOR MONITORING COMPLIANCE

The Trust will be issued with an Annual Report on trust donation activity by NHSBT which is presented each year to the Trust Board. Specific Key Performance Indicators (KPI's) have been developed by NHSBT and will be used in conjunction with PDA to benchmark trust performance against national data.

The data produced from PDA and KPI monitoring will be analysed by the SNOD and CLOD on an ongoing basis and reported to the Organ Donation Committee as well as being presented to the Quality and Performance Committee on a bi-annual basis.

Key performance indicators / audit standards

The data produced from PDA and KPI monitoring will be analysed by the SNOD and CLOD on an ongoing basis and reported to the Organ Donation Committee as well as being presented to the Quality and Performance Committee on a bi-annual basis. The NHSBT Annual Report is presented each year to the Trust Board; this outlines current performance and remedial measures taken to improve performance.

11. LEGAL LIABILITY

The Trust will generally assume vicarious liability for the actions of its staff, including those on an honorary contract. However, it is incumbent on staff to ensure that they:

- Have undergone any suitable training identified as necessary under the terms of this Policy or otherwise
- Have been fully authorised by their line manager and their Directorate to undertake the activity
- Are fully compliant with the terms of any relevant Trust policies and / or procedures at all times
- Only depart from any relevant Trust guidelines in situations dictated by specific individual circumstances. In healthcare delivery such departure shall only be undertaken where, in the judgement of the responsible clinician, it is fully appropriate and justifiable - such decisions must be recorded in detail in the patient's notes.

It is recommended that staff have Professional Indemnity Insurance cover in place for their own protection in respect of those circumstances where the Trust does not automatically assume vicarious liability and where Trust support is not generally available. Such circumstances will include Samaritan acts and criminal investigations against the staff member concerned. Suitable Professional Indemnity Insurance Cover is generally available from the various Royal Colleges and Professional Institutions and Bodies.

12. EVIDENCE BASE AND RELATED POLICIES

1. Intensive Care Society, UK (2004) "Guidelines for Adult Organ and Tissue Donation". [http://www.organdonation.nhs.uk/ukt/about_transplants/donor_care/policy_documents/ICS_guidelines_for_adult_organ_and_tissue_donation_chapter_5\(nov2004\).PDF](http://www.organdonation.nhs.uk/ukt/about_transplants/donor_care/policy_documents/ICS_guidelines_for_adult_organ_and_tissue_donation_chapter_5(nov2004).PDF)
2. NHBST-MED/CM/032/04 (Version 01/09/10) Consent For Organ Donation
3. Donor Family Care Policy (2011) NHSBT- MPD845
4. Donor Assessment Form – NHSBT PA1 (Version 3)
5. Academy of Medical Royal Colleges (2008) "A Code of Practice for the Diagnosis and Confirmation of Death" <http://www.aomrc.org.uk/aomrc/admin/reports/docs/DofD-final.pdf>
6. Department of Health (2006) "Human Tissue Authority – Codes of Practice" www.hta.gov.uk

7. Sque M. Long T and Payne S. (2003) "Organ and Tissue Donation: Exploring the Needs of Families." Final report of a study commissioned by the British Organ Donor Society and funded by the Community Fund
8. GMC (2002) "Guideline on Withholding and Withdrawing Life-prolonging Treatments; Good Practice in decision-making"
9. http://www.gmc-uk.org/guidance/current/library/withholding_lifeprolonging_guidance.asp
10. Intensive Care Society (2003) "Guidelines For Limitation Of treatment For Adults Requiring Intensive Care"
<http://www.ics.ac.uk/icmprof/downloads/Limitation%20of%20treatment%20guidelines%20PN%2013-2-03.pdf>
11. NICE (2011) Organ Donation For Transplantation 2011 CG135
12. Department of Health (2009) "Legal issues relevant to non-heart beating organ donation"
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_108825
13. General Medical Council (2010) Treatment and care towards the end of life.
14. Department of Health (2009) Legal Issues Relevant to Non-heartbeating Organ Donation.
15. National Institute for Health and Clinical Excellence (2011) Organ Donation for Transplantation.
16. UK Donation Ethics Committee (2011). An Ethical Framework for Controlled Donation after Circulatory Death.
17. Intensive Care Society and British Transplantation Society (2010) Report of a Donation after Circulatory Death Consensus meeting.
18. College of Emergency Medicine and British Transplantation Society (2011) Report of a Workshop on The Role of Emergency Medicine in Organ Donation.www.odt.nhs.uk
19. NHS Blood and Transplant (2012) Timely Identification and Referral of Potential Organ Donors: A Strategy for Implementation of Best Practice.
20. Academy of Medical Royal Colleges (2008) A Code of Practice for the Diagnosis and Confirmation of Death.
21. NHS Blood and Transplant (2013) Approaching the Families of Potential Organ Donors: Best Practice Guidance.
22. NHS Blood and Transplant (2013) Donor Optimisation Guideline for the Management of the Brain-stem Dead Donor (Adult).
23. Human Tissue Authority (2009) Code of Practice 2: Donation of Solid Organs for Transplantation
24. Taking Organ Donation to 2020: a detailed strategy. www.nhsbt.nhs.uk/to2020
25. Max and Keira's Law 2020. <https://www.organdonation.nhs.uk/uk-laws/organ-donation-law-in-england/>

APPENDIX A

MINIMUM NOTIFICATION CRITERIA FOR REFERRAL TO THE ORGAN DONATION SERVICES TEAM

Clinicians are also encouraged to refer other patients who they consider to be potential organ donors, where no further treatment options are available or appropriate, and the decision has been made to withdraw active treatment. These patients will normally be undergoing mechanical ventilation

Please call the Specialist Nurse for Organ Donation (SN-OD) for **ALL** patients meeting the following criteria:

- **Brain Stem Death (BSD) testing is planned**

(BSD testing must be carried out on any patient where brain stem death is suspected – DOH Organ Donation Taskforce Recommendation)

OR

- **Patients with a catastrophic neurological condition (GCS < 5) who are intubated (+/- ventilated) where withdrawal of life sustaining treatment is planned**

Provided that delay is in the patient's overall best interests, life-sustaining treatments should not be withdrawn or limited until the patient's wishes around organ donation have been explored and the clinical potential for the patient to donate has been assessed in accordance with legal and professional guidance..

Doctor/Nurse contacts a Specialist Nurse in Organ Donation (SN-OD) on call to discuss suitability for Organ Donation:

National Referral Centre: 03000 20 30 40
(will take your details and call you back)

If suitable for organ donation the SN-OD will discuss attending the hospital and their estimated time of arrival

SN-OD will take patient details, access Organ Donor Register (ODR), confirm suitability and then call the referrer back

If medically unsuitable for organ donation the SN-OD will document the referral

Approach to the family by clinician or ideally by clinician and the SN-OD to discuss possible organ donation

If family consent to organ donation, SN-OD will co-ordinate process

If family decline the option of donation, SN-OD will document the referral

Withdrawal of treatment continues as planned

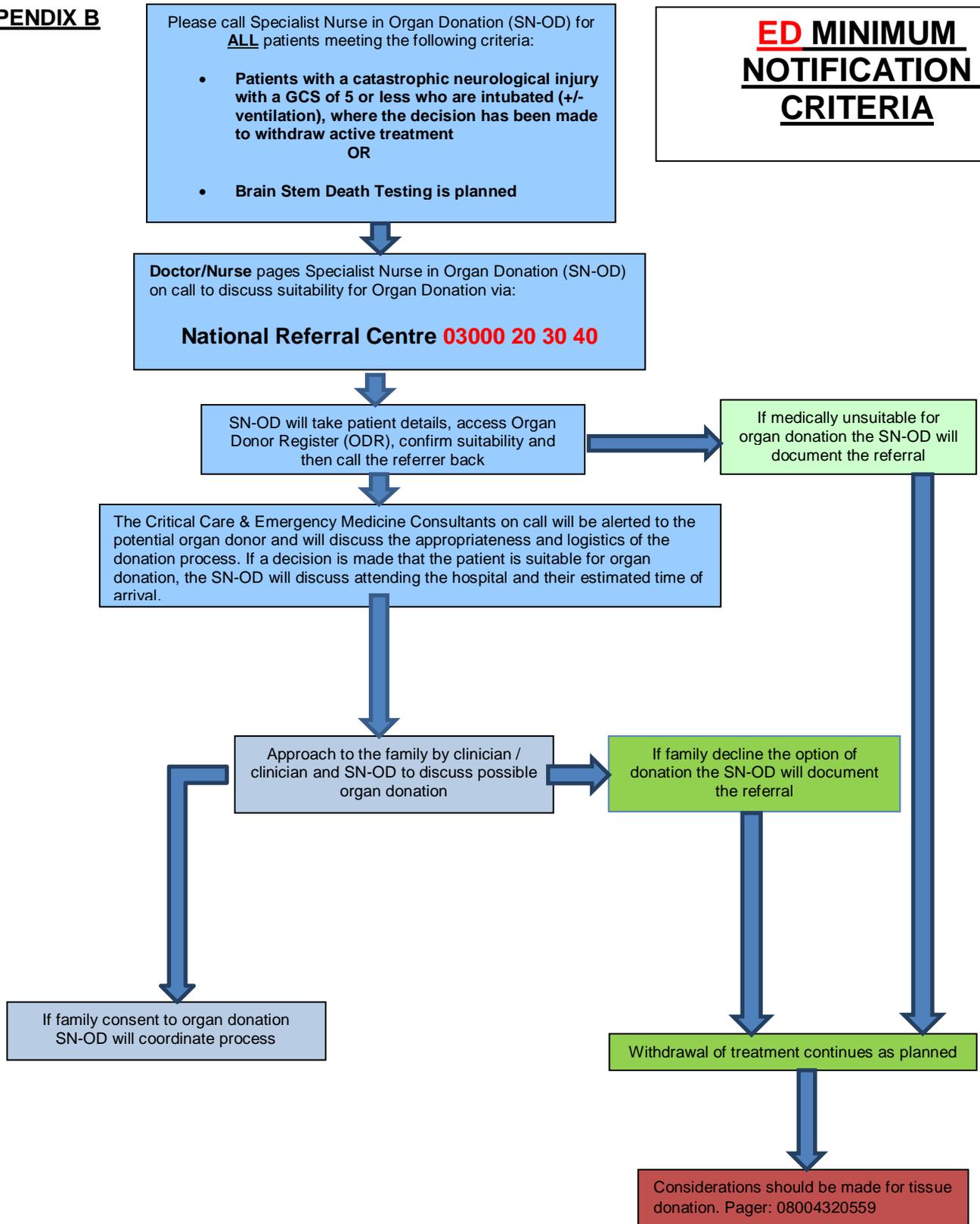
Withdrawal of treatment continues as planned

Consider tissue donation:
Page 0800 432 0559

NICE (2011) "Organ Donation for Transplantation"
GMC (2010) "Treatment and care towards the end of life."
UK DoH (2014) "An Ethical Framework for Controlled Donation after Circulatory Death"
NHS Blood and Transplant (2012) *Timely Identification and Referral of Potential Organ Donors: A Strategy for Implementation of Best Practice*
Department of Health (2009) "Legal Issues Relevant to Non-heartbeating Organ Donation."

APPENDIX B

ED MINIMUM NOTIFICATION CRITERIA



NICE (2011) "Organ Donation for Transplantation"
GMC (2010) "Treatment and care towards the end of life."
UK DEC (2011) "An Ethical Framework for Controlled Donation after Circulatory Death"
NHS Blood and Transplant (2012) *Timely Identification and Referral of Potential Organ Donors: A Strategy for Implementation of Best Practice*
Department of Health (2009) "Legal Issues Relevant to Non-heartbeating Organ Donation."

APPENDIX C

Referral of Potential Tissue Donors

Applicable to all patients who die within UHDB and do not meet the criteria for referral for organ donation

Tissue donation may be possible for all patients aged from birth up – for some tissues there is no upper age limit.



Good practice is to offer tissue donation to all families where it is a possible end of life option regardless of whether they are registered on the ODR.

Once the patient is certified dead please offer each family the option to discuss tissue donation as part of routine bereavement information. If family would like to discuss donation then please contact National **Tissues** Referral Centre on: **08004320559**

Calls will be answered between 08:00 – 20:45 seven days a week. Outside of these hours there is an answer phone service and messages will be actioned at 08:00 the next day.

If patient meets the minimum referral criteria for **organ** donation (i.e. ventilated with either a plan to perform brain stem tests or plan to withdraw life sustaining treatment) or if there is **any confusion or doubt about which pathway to follow**, please contact the on call a Specialist Nurse – **Organ** Donation for advice on:

03000 20 30 40

who will be able to advise you on the best course of action to take.

1. Introduction

This Guideline advises on best practice in the care of potential organ donors following suspected brain death. It seeks to allow organ donation to proceed in those patients who would have wished to be solid organ donors following death and satisfy criteria for Donation after Brain Death (DBD), having been confirmed brain dead following neurological testing.

The Academy of Medical Royal Colleges 'A Code of Practice for the Diagnosis and Confirmation of Death' (2008) document provides full guidance on the process of BST of all patients, and should be the standard method of diagnosis of death in such situations regardless of whether donation is probable or possible. Testing of paediatric patients is also covered in this document.

2. Scope

Minimal Notification Criteria reflects the current NICE guidelines (2011) on early referral. It is recognised, however, that a proportion of patients identified by these criteria will not progress to brain stem death.

This guideline applies to all patients in critical care areas (including ED) who fulfil the criteria for **donation after brain death** and formal BST is planned, and is to be used by all medical staff employed by the trust including locum and agency staff working within those patient areas

3. Eligibility For DBD Donation

Patients who have had a catastrophic brain injury with:

- GCS = 3 (not explained by sedation)
- Apnoeic
- Fixed Dilated Pupils
- Brain Stem Death testing is planned

The actual pathological diagnosis leading to death in DBDs is commonly the result of subarachnoid haemorrhage, head trauma or hypoxic brain injury.

4. Absolute contraindications include:

- HIV disease (but **not** HIV infection)
- CJD (Creutzfeldt-Jakob Disease)
- Active invasive cancer in the last 3 years (excluding non- melanoma skin cancer and primary brain cancer)
- Haematological malignancy- myeloma, lymphoma or leukaemia
- TB: active or within the start of 6 months of treatment
- Malaria- if not fully treated
- Meningoencephalitis for which no infection has been identified
- Choriocarcinoma
- Aged over 85 years

As with all guidelines, these should be used with clinical judgement and if a clinician feels that a person excluded by this list should be offered the opportunity to donate this should be discussed with the SNOD.

The final decision for eligibility for Donation after Brain Death rests with the Transplant surgeons.

5. Referral

A referral must be made to the National Referral Line (03000 203040 – any time of day or night) when brain stem death is considered to be a likely diagnosis in accordance with the Policy for Organ / Tissue Donation. Referral should be made prior to testing to allow the SNOD to attend the Unit in order to offer support and guidance to staff and to the family.

a) The following information should be provided to the paging service:

- Referring Hospital and Unit
- Your name and number (full external number)

b) Information for the SNOD should include:

- Patient name , DOB, NHS number and postcode (this is necessary for the ODR check)
- Name of Consultant
- Date of admission
- Diagnosis
- Course of illness to date
- Past medical history
- Current therapies
- Latest bloods if available

6. Approach and Consent

- a) Before a family is approached about organ donation it is essential the family accept and understand the concept of brain death. This conversation should be undertaken following the 1st set of tests confirming BSD in collaboration with the clinician, SNOD and bedside nurse. This is to ensure understanding the concept of brain death **before** the subject of organ donation is introduced. It is important to remember that if the family do not accept that continuing treatment is not in the patient's best interests then organ donation cannot be offered, as detailed in the main policy.
- b) If verbal consent is gained for organ donation to proceed, a full explanation of the process to the family and formal written consent will be obtained by the SNOD. The SNOD will then manage the rest of the process, supported by the clinician and unit staff. Management of the potential donor is further described below.
- c) If consent is not given for organ donation by the family, withdrawal of treatment and end of life care will be carried out in accordance with normal practice.

7. Donor Management

Any Member of staff who has an ethical objection to DBD donation should hand over the patient's care to a fellow clinician or nurse colleague where feasible.

- a) The potential donor will have received the highest standard of treatment throughout their time within Critical Care. This high standard of care will be maintained following their death: the aim of donor management is to maintain organ viability and optimise organ function to ensure the patient's and family's wishes are fulfilled. The attending SNOD may request further management measures to be undertaken following consultation with the recipient centres. Appendix E is a Flowchart of the DBD Process

- b) It is important to remember that the facilitation of organ donation is a lengthy process often taking up to 24 hours to complete. The SNOD will endeavour to keep the unit staff updated.
- c) Appendix 2 gives current drug and fluid management guidelines advocated by the Midlands Organ Donation Services. These may be subject to future changes, so please speak to the attending SNOD.
- d) Please inform the attending SNOD if parameters not being met despite appropriate management.
- e) Appendix 3 gives a list of investigations that may be requested
- f) Additional management requests may be made by transplant surgeons (eg the administration of steroids, N-acetyl cysteine or Vitamin K). The SNOD will communicate any such request to the responsible clinicians.

8. Transfer to Theatre / Preparation for Theatre

- a) Once the retrieval teams are present, and ready to proceed, the potential donor will be transferred to theatre. An anaesthetist is required for this and to manage the potential donor in theatre until the aorta is cross clamped. Families may wish to accompany their relative to theatre and some consideration must be given to ensure this is possible.
- b) Before the potential donor is transferred to theatre the following preparation will take place:
 - Transfer to portable ventilator and monitor
 - Disconnection of any infusions no longer required (e.g. insulin)
 - Adequate supplies of essential infusions (e.g. inotropes)
 - All paperwork and medical notes
 - Adequate staff for transfer
- c) The anaesthetist will be required to manage the ventilation and haemodynamic stability of the potential donor until cross clamp. Heparin and antibiotics are required to be given at certain times- instruction and support for this will be given by the retrieving surgeon.
- d) The role of the anaesthetist is complete after cross clamp. The bedside nurse may stay in theatre if resources allow. Alternatively, they may return to theatre to help with last offices once the retrieval operation is complete.

9. Ongoing Care

- a) Following the retrieval process the SNOD will carry out last offices and arrange for transfer to the mortuary. The family will be given the opportunity to see their relative once the operation has been completed. The SNOD will liaise with ITU and theatre to provide the most appropriate setting for this.
- b) Follow up of family and staff involved in the donation will be carried out as detailed in the main policy.
- c) Any queries regarding the donation process should be referred to the embedded SNOD or CLOD.

10. Monitoring and Audit Criteria

This guideline will be audited in line with the Organ and Tissue Donation Policy

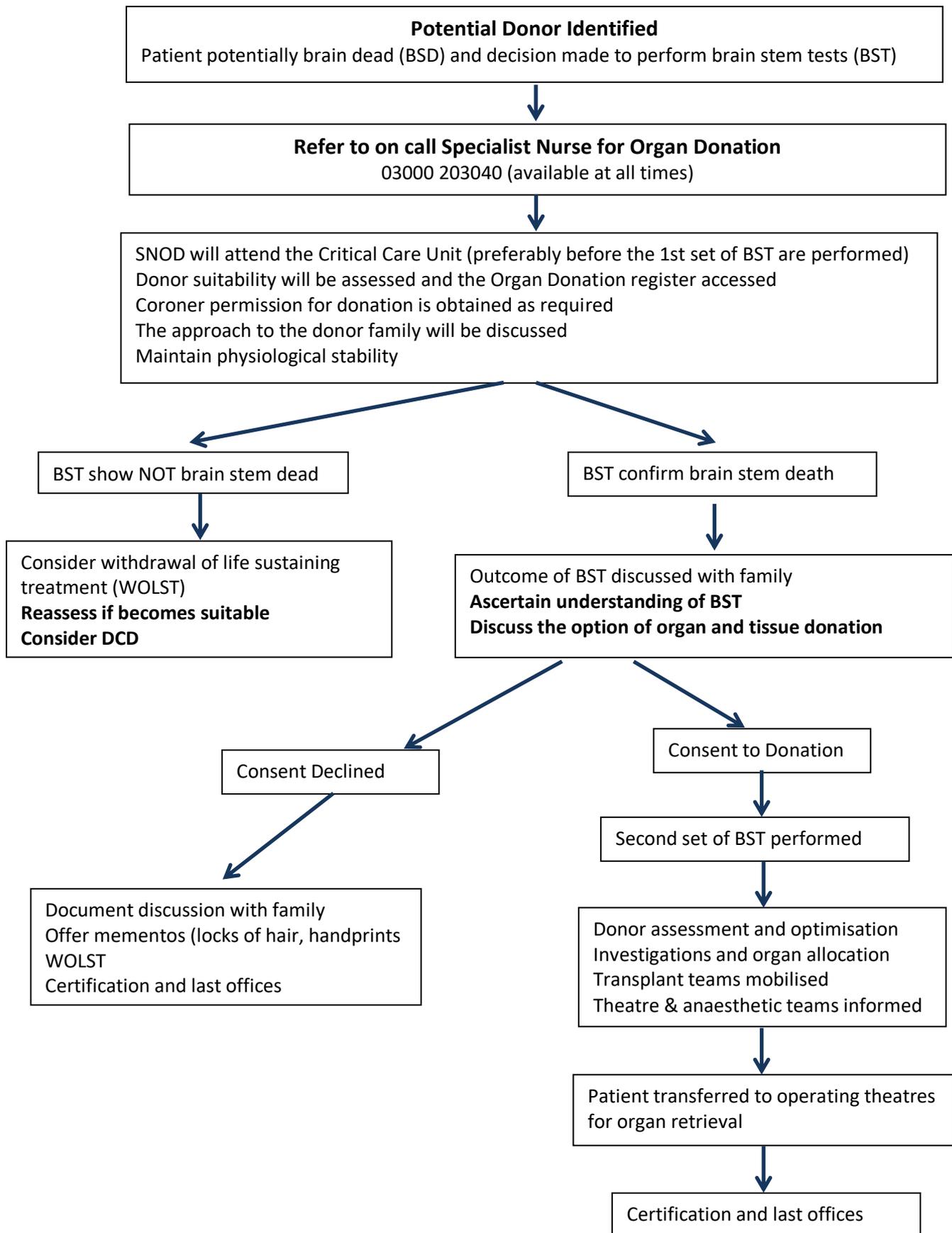
11. Further information / References

Policy for Organ and Tissue Donation

12. Legal Liability Guideline Statement

Guidelines or Procedures issued and approved by the Trust are considered to represent best practice. Staff may only exceptionally depart from any relevant Trust guidelines or Procedures and always only providing that such departure is confined to the specific needs of individual circumstances. In healthcare delivery such departure shall only be undertaken where, in the judgement of the responsible healthcare professional, it is fully appropriate and justifiable - such decisions are to be fully recorded in the patient's notes

Appendix E:
DBD Guideline Flowchart of DBD Process



DBD Guideline Appendix F:

Drug and Fluid management before Brain Stem testing

The principles of patient management before brain stem testing are:

- a. to prevent or treat hypothermia, metabolic or endocrine abnormalities that would otherwise preclude brain stem testing
- b. to maintain physiological stability, in particular oxygen delivery to the brain, so that testing can occur
- c. to avoid the potential for any drugs (especially sedatives or neuromuscular blockers) that could contribute to coma, apnoea or loss of brain stem reflexes

The aims are to:

- Maintain protective ventilation strategies (Tidal Volume (VT) 6- 8mls/kg), aiming for relatively normal cardiovascular and respiratory conditions: PaCO₂ < 6.0 kPa, pH 7.35 –7.45 or [H⁺] 45-35 nmols/L, and PaO₂ >10 kPa or SaO₂ >95% on minimal FiO₂.
- Maintain Mean Arterial Pressure (MAP) 60-80mmHg. Insert central line if not already *in situ* and prescribe inotropes/vasoconstrictors. If central access is deemed inappropriate, start peripheral inotrope infusion.
- Aim Na 130-155mmol/L and monitor for signs of Diabetes Insipidus (DI). If DI administer DDAVP (1-4 micrograms) and consider iv fluids (eg Compound Sodium Lactate (Hartmann's) solution, 5% glucose, balanced crystalloid solution).
- If there are any plans to carry out ancillary investigations or drug levels, explore these early

DBD Guideline Appendix G: **Donor optimisation before donation**

The priorities of donor optimisation are to:

- Assess fluid status and correct hypovolaemia with fluid boluses
- Introduce vasopressin infusion; where required introduce flow monitoring
- Perform lung recruitment manoeuvres (e.g. following apnoea tests, disconnections, deterioration in oxygenation or suctioning)
- Identify, arrest and reverse effects of diabetes insipidus
- Administer methylprednisolone 15mg/kg (all donors)

Specific targets are:

- PaO₂ ≥ 10 kPa (FiO₂ < 0.4 as able)
- PaCO₂ 5.0-6.5 kPa (or higher as long as pH > 7.25)
- MAP 60-80 mmHg
- CVP 4-10 mmHg
- Urine output 0.5-2.0 mls/kg/hr
- BM 4-10 mmols/L
- Temperature 36-37.5 °C

Cardiovascular (primary target MAP 60-80 mmHg)

- Review intravascular fluid status and correct hypovolaemia with fluid boluses
- Commence cardiac output / flow monitoring
- Commence vasopressin (0.5 – 4 units/hour) where vasopressor required, wean or stop catecholamine pressors as able
- Introduce dopamine (preferred inotrope) or dobutamine if required
- Commence Liothyronine at 3 mcg/hour (+/- 4 mcg bolus) (in cases of high vaso-active drug requirements or as directed by the cardiothoracic retrieval team)

Respiratory (primary target PaO₂ ≥10 kPa, pH > 7.25)

- Perform lung recruitment manoeuvres
- Review ventilation, ensure lung protective strategy (Tidal volumes 4 – 8ml/kg ideal body weight and optimum PEEP (5 – 10 cm H₂O))
- Maintain regular chest physio including suctioning as per unit protocol
- Maintain 30 – 45 degrees head of bed elevation
- Ensure cuff of endotracheal tube is appropriately inflated
- Patient positioning (side, back, side) as per unit protocol
- Where available, and in the context of lung donation, perform bronchoscopy, bronchial lavage and - toilet for therapeutic purposes

Fluids and metabolic management

- Administer methylprednisolone (dose 15 mg/kg, max 1 g)
- Review fluid administration. IV crystalloid maintenance fluid (or NG water where appropriate) to maintain Na⁺ < 150 mmol/l

Maintain urine output between 0.5 – 2.0 ml/kg/hour

(If > 4ml/kg/hr, consider *Diabetes insipidus* and treat promptly with vasopressin and/or DDAVP. Dose of DDAVP 1-4 micrograms, i.v. titrated to effect)

- Start insulin infusion to keep blood sugar at 4-10 mmol/l (minimum 1 unit/hr; add a glucose containing fluid if required to maintain blood sugar)
- Continue NG feeding (unless SNOD advises otherwise)

Thrombo-embolic prevention (as per usual age appropriate standard)

- Ensure anti-embolic stockings are in place (as applicable)

- Ensure sequential compression devices are in place (as applicable)
- Continue, or prescribe low molecular weight heparin (as applicable)

Lines, Monitoring and Investigations (if not already done)

- Insert arterial line: left side preferable (radial or brachial)
- Insert CVC: right side preferable (internal jugular or subclavian)
- Continue hourly observations as per critical care Policy Maintain normothermia using active warming where required
- Perform a 12-lead ECG (to exclude Q-waves)
- Perform CXR (post recruitment procedure where possible)
- Send Troponin level in all cardiac arrest cases (and follow-up sample where patient in ICU > 24 hours)
- Where available, perform an Echocardiogram
- Review and stop all unnecessary medications

ADDITIONAL NOTES

Cardiovascular: The focus of these therapies is to maintain general organ perfusion, rather than a high MAP and cerebral perfusion pressure required for the treatment of brain injury. This change of goal often results in a rapid reduction in cardiovascular support.

- High dose catecholamine infusions (particularly noradrenaline) are associated with poor organ function post-transplant. Wean noradrenaline / other inotropes to achieve MAP 60- 80mmHg. If unable to reduce, commence vasopressin. If no response on vasopressin at 4 units/hour, speak to SNOD.
- If MAP > 90 mmHg prescribe and titrate Glyceryl Trinitrate infusion.
- Swan-Ganz (Pulmonary Artery Flotation) catheter and cardiac output measurements only if monitoring already in situ or unless instituted by SCOUT team.
- *If cardiothoracic organs are being donated*, to improve cardiac stability commence T3 (L-Tri-iodothyronine) at 3 mcg/hour as directed by the cardiothoracic transplant team.

Respiratory: The focus of these therapies is to prevent aspiration and maintain respiratory function.

- Nurse in semi-recumbent position with regular turning (minimum 4 hourly).
- Continue with chest physiotherapy and regular suction (if purulent secretions send sample)
- Protective lung ventilation (VT 6-8mls/kg)
- Continue DVT prophylaxis, if appropriate

Renal, Fluid, Endocrine and Electrolytes:

- Diabetes Insipidus (DI) occurs commonly resulting in polyuria, electrolyte disturbances and hypovolemia. If showing signs of DI (polyuria) treat with DDAVP 1 - 4 microgram bolus (repeated as required). Monitor and correct Na, consider 5% glucose.
- Fluid overload makes lung transplantation unlikely – careful fluid balance is required.
- *Electrolyte goals*
 - Na 135-150 mmols/L (Na >150mmols/l can cause hepatic graft dysfunction)
 - K 4.0 – 5.0 mmols/L
 - Mg > 0.8 mmols/L
 - Ionised Ca²⁺ on ABG 0.9 – 1.1 mmol/L or corrected Ca²⁺ 2.0-2.6 mmol/L
 - Phosphate >0.8 mmol/L
- *Temperature goal* 36-37.5 °C (actively cool or warm as appropriate)

DBD Guideline Appendix H:

Additional investigations that may be requested on the potential organ donor

Initial investigations

Laboratory samples – SNOD will advise on the quantity and blood bottles required.

To assess organ function

- Send bloods for biochemistry (add amylase, magnesium, Gamma GT, AST and glucose), FBC, clotting, CRP and lactate (if not available on ABG)
- Perform arterial blood gas (ABG). Firstly on current FiO₂, then preoxygenate with 100% O₂ for 20 minutes and repeat ABG. Repeat 2- hourly and give results to SNOD. ABG should be performed with 5cm H₂O PEEP (if tolerated).
- Perform urinalysis.

To identify suitable recipients

- Request a Group and Save (if not already available). Ask SNOD if cross match is required. (Hard copy will be required)
- Additional blood samples will be required as advised by SNOD.
- SNOD will advise on quantity and will request and arrange transport to send to tissue typing and virology, (if not already taken)

To assess cardiac and/or respiratory function (SNOD will advise if not required)

- Request CXR and the doctor must document findings in the medical notes.
- ECG performed post death confirmation and reported by the doctor.
- ECHO performed post death confirmation and findings documented. Cardiologist or Echo technician to clarify with SNOD which measurements are required.
- SNOD will mobilise SCOUT team if appropriate.

1. Introduction

This Guideline advises on best practice in the care of potential organ donors following an earlier, unrelated decision to withdraw life-sustaining care, and in whom imminent circulatory cessation is predicted. It seeks to allow organ donation to proceed in those patients who would have wished to be solid organ donors following death and satisfy criteria for Donation after Circulatory Death (DCD), having been confirmed dead following five minutes of observed asystole and apnoea. The decision to withdraw treatment is to be made by two doctors who have been registered for over five years, one of whom must be a Consultant. Consensus agreement should be obtained for withdrawal of treatment by appropriate healthcare providers.

2. Scope

This guideline applies to all patients in critical care areas (including ED) who fulfil the criteria for **donation after circulatory death** according to the UHL Minimum Notification Criteria (2016) and is to be used by the nursing and medical staff employed by the Trust including locum and agency staff working within those patient areas.

3. Eligibility for DCD Donation

The potential for DCD donation should be considered in the following cases:

- An independent decision to withdraw treatment has been made
- The patient is intubated
- GCS \leq 4 (not explained by sedation)

The actual pathological diagnoses leading to death in controlled DCDs are commonly neurological ones, similar to those found in heart beating donors (DBD or brain stem dead donors), such as subarachnoid haemorrhage, head trauma or hypoxic brain injury. There is no requirement for there to be solely a neurological component to determine that ongoing therapy is futile and justify the withdrawal of life-sustaining treatment. However, systemic illnesses such as sepsis and multi-trauma are likely to have resulted in multi-organ failure so that solid organs may not be suitable for donation. It is expected therefore that nearly all DCD donors will have a neurological component to their diagnosis

4. Absolute contraindications include:

- HIV disease (but **not** HIV infection)
- CJD (Creutzfeldt-Jakob Disease)
- Active invasive cancer in the last 3 years (excluding non- melanoma skin cancer and primary brain cancer)
- Haematological malignancy- myeloma, lymphoma or leukaemia
- TB: active or within the start of 6 months of treatment
- Malaria - if not fully treated
- Meningoencephalitis for which no infection has been identified
- Choriocarcinoma
- Aged over 80years

As with all guidelines, these should be used with clinical judgement and if a clinician feels that a person excluded by this list should be offered the opportunity to donate this should be discussed with the SNOD.

The final decision for eligibility for Donation after Circulatory Death rests with the Transplant surgeons.

5. Lack of Objections

- a) It is essential that at least two senior doctors (of more than 5 years standing, one of whom must be a Consultant) have concluded that there is no objection to DCD donation proceeding.
- b) Explicit lack of objection by the patient's parent team Consultant (or the on call Consultant for that specialty) to DCD donation proceeding must be sought if there is an obvious parent team. In patients without an obvious parent team a second Consultant must agree that there is no reason to object to DCD donation proceeding.
- c) Any member of staff who has an ethical objection to DCD donation should hand over the patient's care to a fellow clinician or nurse colleague where feasible.

6. Referral

- a) A referral must be made to the National Referral Centre (03000 203040 – at any time of day or night) when a decision to withdraw treatment has been made in accordance with the Policy for Organ / Tissue Donation. Referral should be made prior to withdrawal of treatment to allow the SNOD to attend the unit in order to offer support and guidance to staff and to the family
- b) The following information should be provided to the paging service:
 - Referring Hospital and Unit
 - Your name and number (full external number)
- c) Information for the SNOD should include:
 - Patient name , DOB, NHS number and postcode (this is necessary for the ODR check)
 - Name of Consultant
 - Date of admission
 - Confirmation that the decision to withdraw treatment has been made and is documented
 - Diagnosis
 - Course of illness to date
 - Past medical history
 - Current therapies
 - Latest bloods if available

7. Approach and Consent

- a) Before a family is approached about organ donation it is essential that an independent decision has been made to withdraw life-sustaining treatment.
- b) Before a family is approached about organ donation it is essential the family accept and understand the concept of circulatory death. This is to ensure their understanding **before** the subject of organ donation is introduced. It is important to remember that if the family do not

accept the futility of continuing treatment, despite continuous efforts to explain this, organ donation cannot be offered. Please refer to Organ and Tissue Donation Policy.

- c) If verbal consent is gained for organ donation to proceed, full explanation of the process to the family and formal written consent will be done by the SNOD. The SNOD will then manage the rest of the process, supported by the clinician and ITU staff. Management of the potential donor is further described below.
- d) If consent is not given for organ donation by the family, withdrawal of treatment and end of life care will be carried out in accordance with normal practice.

8. Additional investigation requests may be made

- a) The SNOD will discuss the process with the staff involved.
- b) Stop the NG feed, aspirate the NG tube and leave on free drainage
- c) If you have any questions, or there are any changes from the parameters, speak to the SNOD immediately
- d) Additional investigations that may be requested are given in Appendix 3

9. Donor Management.

until the point of death the main focus is on providing EOL care

- a) For DCD donation some care and treatment relating to organ donation may be necessary prior to the death of the patient
- b) Further guidance can be found in 'Legal Issues relevant to non-heart beating donation' (DoH 2009)

10. Withdrawal of Treatment

- a) Once the retrieval teams are present, and ready to proceed, treatment of the potential donor will be withdrawn. The withdrawal of life sustaining treatment will take place in the clinical area where the patient has been cared for, unless it is deemed more appropriate to do this in the anaesthetic room of the operating theatre. (This may be appropriate in hospitals where there is significant distance between the clinical area and the operating theatre.)
- b) No member of the transplant team will attend the patient prior to withdrawal or give advice on the withdrawal method. The method of treatment withdrawal is up to the discretion of the treating Consultant or medical team.
- c) Upon withdrawal of life sustaining treatment the patient should continue to have their blood pressure, ECG and oxygenation monitored. This can be done at a different bed space to ensure the least intrusion to the family. Frequent observations will be documented by the SNOD.
- d) All medications or interventions administered to the patient after life sustaining treatment has been withdrawn should have the intention of relieving pain or distress and **under no circumstances** should any medications be administered or procedures performed prior to death, with the intention of hastening death. The continuation of good end of life care, including measures to maintain comfort and dignity should **never** be compromised for the purposes of donation.

11. Determination of Death

- a) Death is a process and can only reliably be judged retrospectively after a minimum period of five minutes has elapsed in which there has been no sign of a return of heart (brain stem death excluded) or brain activity.
- b) Following the onset of monitored asystole the patient should continue to be monitored for a minimum of five minutes. The individual should be observed by the person responsible for confirming death for a minimum of five minutes to establish that irreversible cardiorespiratory arrest has occurred. The absence of mechanical cardiac function is normally confirmed using a combination of the following:
 - Absence of a central pulse on palpation
 - Absence of heart sounds on auscultation
 - These criteria may suffice in the primary care setting. However, in the process of identifying a potential organ donor these must be supplemented by one or more of the following:
 - Asystole on a continuous ECG display
 - Absence of pulsatile flow using intra-arterial pressure monitoring
 - Absence of contractile activity using echocardiography
 - Any spontaneous return of cardiac or respiratory activity during this period of observation must prompt a further five minutes of observation from the next point of cardiorespiratory arrest
- c) After five minutes of documented and continued cardiorespiratory arrest the absence of pupillary responses to light, of the corneal reflexes and of any motor responses to supra-orbital pressure should be confirmed.
- d) The time of death is recorded as the time at which these criteria are fulfilled. The medical practitioner must record their certification of death in the patient's medical notes. It is obviously inappropriate to initiate any intervention that has the potential to restore cerebral perfusion after death has been confirmed.
- e) The family can stay with the patient prior to and during the withdrawal of treatment and until death has occurred. The family will have been informed as part of the consenting process that they may withdraw consent for donation up until surgery commences in the operating theatre. Upon certification the family will be given the opportunity for farewells following which the patient should be moved rapidly to theatre. The family will also be given the opportunity to see their relative once the operation has been completed.
- f) The role of the anaesthetist is usually complete when death has occurred and been certified. In some instances the anaesthetist may be asked to re-intubate (if previously extubated as part of withdrawal process). Continuous positive airways pressure (CPAP) may be applied but **under no circumstances** must any cyclical ventilation occur (thus preventing autoresuscitation).

12. Transfer to Theatre

- a) the family wish to have an extended farewell with their loved one donation cannot be facilitated.
- b) following the certification of death and with the agreement of the family, the patients will be disconnected from monitoring and transferred to the waiting operating theatre. No surgical procedure will commence prior to the certification of death. This will result in a **minimum of five minutes** between the onset of functional asystole and the commencement of organ retrieval.
- c) may be generally impractical to await theatre porters and therefore staff from the clinical area, both medical, nursing, and the SNODs, may assist in the transfer to theatre if necessary.

13. Ongoing Care

- a) Following the retrieval process the SNOD will carry out last offices and arrange for transfer to the mortuary. Follow up of family and staff involved in the donation will be carried out according to the Organ and Tissue Donation Policy.
- b) Any queries regarding the donation process following controlled circulatory death should be referred to the embedded SNOD or CLOD.

14. Monitoring and Audit Criteria

This guideline will be audited in line with the Organ and Tissue Donation Policy

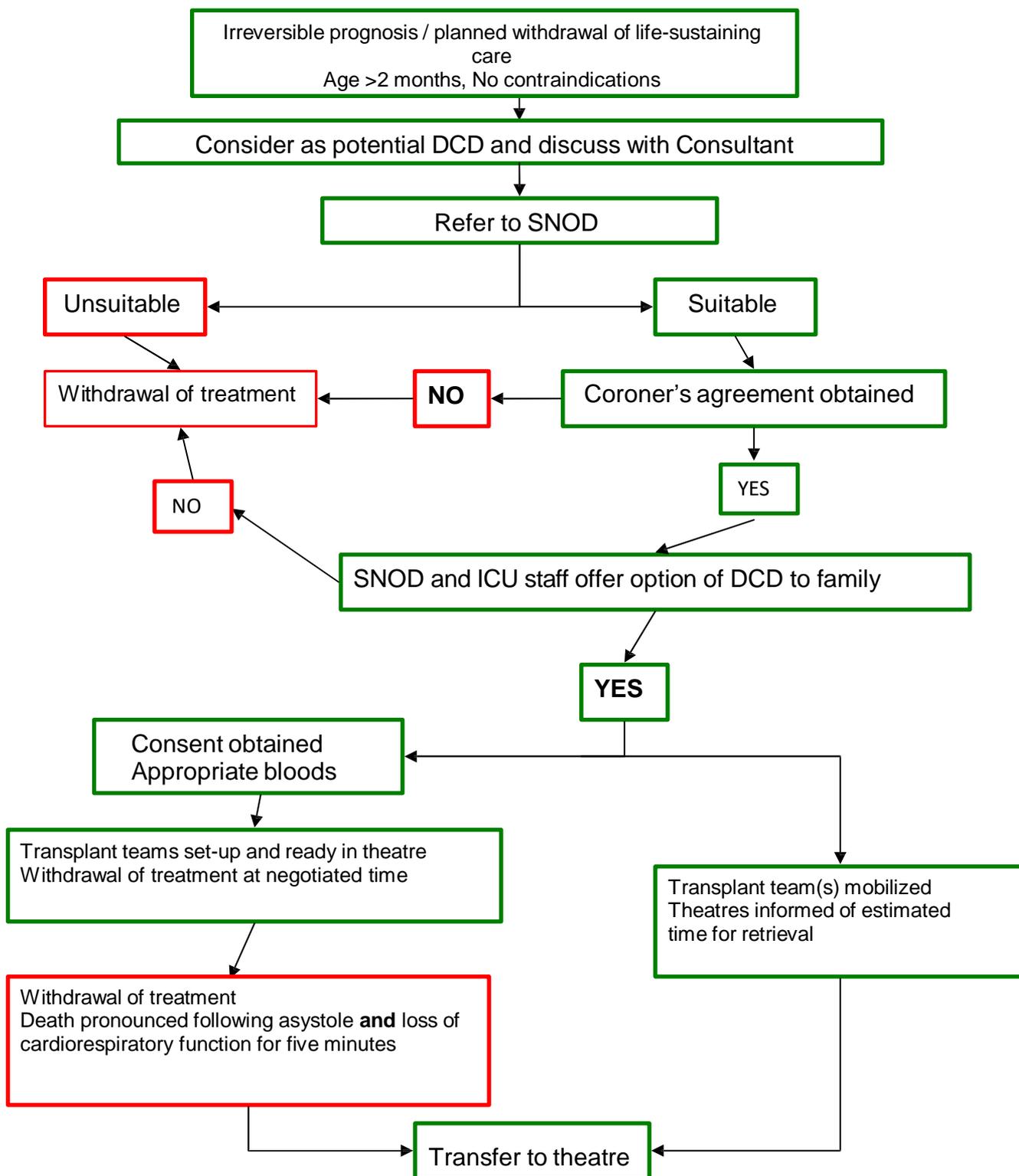
15. Further information / References

Policy for Organ and Tissue Donation

16. Legal Liability Guideline Statement

Guidelines or Procedures issued and approved by the Trust are considered to represent best practice. Staff may only exceptionally depart from any relevant Trust guidelines or Procedures and always only providing that such departure is confined to the specific needs of individual circumstances. In healthcare delivery such departure shall only be undertaken where, in the judgement of the responsible healthcare professional, it is fully appropriate and justifiable - such decisions are to be fully recorded in the patient's notes.

Appendix J
DCD Donor Referral Flowchart



NB In some circumstances treatment withdrawal can be performed in the anaesthetic room

1. Introduction

University Hospitals of Derby and Burton NHS Foundation Trust endorses the donation of organs / tissues to support the end of life (EOL) wishes of patients in our care.

One important difference between organ donation and tissue donation is that whereas organ donation is seen as lifesaving, tissue donation is considered as life enhancing. It may also have been the deceased patient's wish to donate tissues, and it may help bereaved relatives to feel that some good has come from their loss. Heart valves, corneas, skin, bone, tendons, menisci and other tissues can be donated. These tissues do not necessarily need to be removed from the deceased at the time of their death.

This document sets out the Trusts guideline for tissue donation. The guideline will ensure that tissue donors are referred and managed in accordance with current legislation and that potential tissue donors are identified and referred to the Tissue Donation National Referral Centre (NRC).

2. Scope

This guideline applies to all in patients who are eligible for Tissue donation and is to be used by Trust nursing and medical staff working within patient areas.

The guideline applies to all nursing and medical staff employed by the Trust including those on the bank, locum, agency and honorary contract staff. This document is the final appendix to the Organ Donation Policy.

3. Eligibility for Tissue Donation.

Patients eligible for tissue donation are those who are self-ventilating where imminent death is anticipated, and patients who have recently died.

4. Process for Tissue Donation

4.1 Considerations prior to referral:

If a Coroner's involvement is required or anticipated for any medical reasons:

- The doctor must have discussed the case with the coroner prior to referral to NRC.
- If tissue only donation is to be requested the doctor must establish there are no Coronial objections to tissue donation.
- The doctor must inform the coroner that they may be contacted by the NRC nurse practitioner after discussion with the family.

To refer a potential Tissue Donor **-Please Call 08004320559**

4.2 The contraindications for tissue donation include:

- HIV
- CJD
- Hepatitis B or C
- Human T Cell Lymphotropic Virus (HTLV)
- Syphilis
- Previous or current malignancies (may not preclude corneal donation)
- Positive serology
- Disease of an unknown aetiology for example Parkinson's or Alzheimer's
- Leukaemia, lymphoma or myeloma.
- Had a transplant in the past which required immunosuppressive treatments

The above list is not exhaustive. In all cases advice must be sought from the NRC irrespective of whether the patient has any of the contraindications listed above. The NRC will make the final decision for suitability.

4.3 Approach and Gaining Consent

- a) It is important to understand that if the relatives agree to the referral they are only agreeing to discuss the options for donation with the NRC Nurse Practitioner rather than consenting to the donation itself. It is the decision of the NRC practice nurse regarding suitability of patient donation and the contraindications should not exclude patients being referred.
- b) However, the following good practice points that should be observed before approaching bereaved relatives about tissue donation:
 - relatives should be given the bad news and the opportunity to see the body
 - tissue donation allows the relatives to be with the body at and after death, before the tissue is taken.
 - other needs such as contacting other family members or the Hospital Chaplains should be addressed
- c) The UK currently operates an "opting in" system of consent, based on the Human Tissue Act (1961). This means that individuals actively choose to donate organs/tissues after death. While there is no legal requirement to gain consent to donation if the deceased's wishes are known, efforts should be made to establish that the deceased had not expressed objections to donation. Any documentation should be worded in terms of "lack of objection".
- d) Once these issues have been dealt with, the member of staff who will approach the family regarding tissue donation should be identified. Ideally, this person should have spent time with the family already and should be experienced in dealing with bereaved relatives.

4.4 **Timely Referral.**

- a) Potential tissue donors can be located in any area within the Trust; bereaved relatives should be made aware that they can discuss the possibility of tissue donation with the tissue donation coordinators
- b) In order to preserve the tissue the body must be refrigerated within 6 hours of death. However there can be time lapses for tissue removal e.g. Corneas can be removed 24 hours after asystole, heart and pulmonary valves can be removed 48 hours after asystole (even if the heart is not suitable for organ donation).

4.5 **In all cases a nurse from the national retrieval centre (NRC) will return your call to obtain further information about the patients please have the following information ready:**

- a) Name- DOB address and hospital number of the deceased
- b) Patient GP details
- c) Date and time of death and provisional cause of death
- d) Next of Kin details including a contact number
- e) Brief Medical history including any recent infection, trauma and medication
- f) Height and Weight of the patient
- g) Knowledge of any blood samples
- h) If discussions with the Coroner have taken place this must be made clear to the NRC Nurse Practitioner.

5. **Process following referral.**

Once the health care professional has called the NRC and handed over the patient information the NRC nurse practitioner will:

- a) Check the patient's details against the Organ Donation Register (ODR).
- b) Contact next of kin and suitability is discussed further
- c) If the NRC Nurse Practitioner requires further information they will contact the patient's GP
- d) If the Coroner is involved in the case the NRC nurse practitioner will contact them to gain permission for tissue donation to proceed (please note the doctor involved in the case is still responsible for making a medical referral to the coroner as is normal practice).
- e) The NRC Nurse Practitioner will inform the patient's next of kin about what tissue can potentially be donated.
- f) If the family wish to go ahead with donation the NRC Nurse Practitioner will take telephone consent.
- g) Once consent is taken the NRC Nurse Practitioner will organise a retrieval team and donation will take place.

APPROACHING RELATIVES AFTER DEATH

If patient's wishes are known:

Explain to relatives that "I am aware that your relative carried a donor card / was registered on the Organ Donor Register, and in this way had expressed a wish to donate for transplantation.

If patient's wishes are unknown:

Explain to relatives that "It may be possible for your relative (name of patient) to donate tissues for transplantation.

In either case ensure you state:

I can give you some information about donation if you would like to proceed with this".

RELATIVES AGREE TO TISSUE DONATION REFERRAL

- Contact Tissue Donation National Referral Centre on: **0800 432 0559**
- Give all relevant patient details and relatives contact information
- Explain to relatives that a tissue coordinator will contact them at home
- Continue all aspects of bereavement care.
- Give Tissue donation information leaflet
- Complete bereavement care checklist.

RELATIVES DO NOT WISH FOR DONATION

- Guidelines for Death and Bereavement must be followed.
- Continue support of relatives
- Complete all aspects of bereavement care checklist

NB: PLEASE NOTE ALL RELATIVES SHOULD BE APPROACHED ABOUT TISSUE DONATION IF THE DONOR MEETS THE INCLUSION CRITERIA

6. Monitoring and Audit Criteria

This guideline will be audited in line with the Organ and Tissue Donation Policy.

7. Further information / References

All enquires should be directed to:

- Locally to Specialist Nurse for Organ Donation or to Clinical Leads for Organ Donation.
- Nationally to National Referral Centre.

8. Legal Liability Guideline Statement

Guidelines or Procedures issued and approved by the Trust are considered to represent best practice. Staff may only exceptionally depart from any relevant Trust guidelines or Procedures and always only providing that such departure is confined to the specific needs of individual circumstances. In healthcare delivery such departure shall only be undertaken where, in the judgement of the responsible healthcare professional' it is fully appropriate and justifiable - such decision to be fully recorded in the patient's notes