AN ETHICAL FRAMEWORK FOR CONTROLLED DONATION AFTER CIRCULATORY DEATH

First National Donation Congress

For Clinical Leads and Donation Committee Chairs

UKDEC's ROLE

Removing the obstacles, both real and perceived, to successful organ donation and transplantation

ADDRESSING ISSUES IN THEIR BROADEST CONTEXT

Ethical

Moral

Legal

Faith

PROVIDING GUIDANCE TO

- Healthcare Professionals
  - Intensivists, CLODs, Surgeons, Physicians
  - Nurses in ICU, Theatres, Emergency Departments, SN-ODs
- Donors and their families
- Recipients and their families
- Local Donation Ethics Committees
- Research Ethics Committees
- National Bodies associated with ODT

UKDEC's TWO GUIDING PRINCIPLES

1 The offer of organ donation should be a routine part of planning end of life care

2 Once it has been agreed that organ donation is in the patient's best interests, the ethical imperative is to enable the most successful outcome to that donation

PART 1 ETHICAL FRAMEWORK

- **Definition, diagnosis and confirmation of death
- Exploring a competent individual's views about organ donation.
- Deciding that continuation of life-sustaining treatment is no longer of overall benefit.
- Determining whether organ donation is of overall benefit to an incompetent patient
- **Conflicts of interest

ISSUES SURROUNDING THE DIAGNOSIS AND CONFIRMATION OF DEATH

- Death is the irreversible loss of the capacity for consciousness combined with the irreversible loss of the capacity to breathe, both of which are functions of the brain-stem and are lost rapidly after cardiac arrest
- Diagnosis should be independent of any consideration of organ donation
- Brain death diagnosis by neurological criteria using the Academy Code of Practice is the accepted standard in the UK

DIAGNOSIS OF DEATH USING CARDIO-RESPIRATORY CRITERIA

- Cardio-respiratory diagnosis as normally practiced does not need to be made quickly
- Cardio-respiratory criteria are valid since they infer that the integrative and consciousness aspects of brain function will inevitably be lost over time
- Cardio-respiratory diagnosis linked to ODT introduces a critical time issue
- Time critical for organ viability and to minimise warm ischaemia time

5 MINUTE RULE

- In DBD, brain death criteria use specific tests to confirm that the integrative and consciousness aspects of brain function have been lost
- In DCD, cardio-respiratory criteria are valid since they infer that the integrative and consciousness aspects of brain function will inevitably be lost provided that certain pre-requisites are fulfilled
- In DCD, the 5 minute rule refers to the period beyond which auto-resuscitation will not occur
- Hence the pressure for shortening this interval

VALIDITY OF CARDIO-RESPIRATORY CRITERIA

The criteria are valid providing:

- There is no intention to attempt cardio-pulmonary resuscitation
- The possibility for spontaneous resumption of cardiac function (auto-resuscitation) has passed
- When reperfusion of organs with oxygenated blood is performed as part of the retrieval process, it should, as far as it practical, be restricted to the relevant organs

IN ALL SITUATIONS IT IS CRUCIAL THAT, AS STATED IN THE ACADEMY'S CODE OF PRACTICE, DEATH IS DIAGNOSED AND CONFIRMED BEFORE ORGAN RETRIEVAL CAN COMMENCE

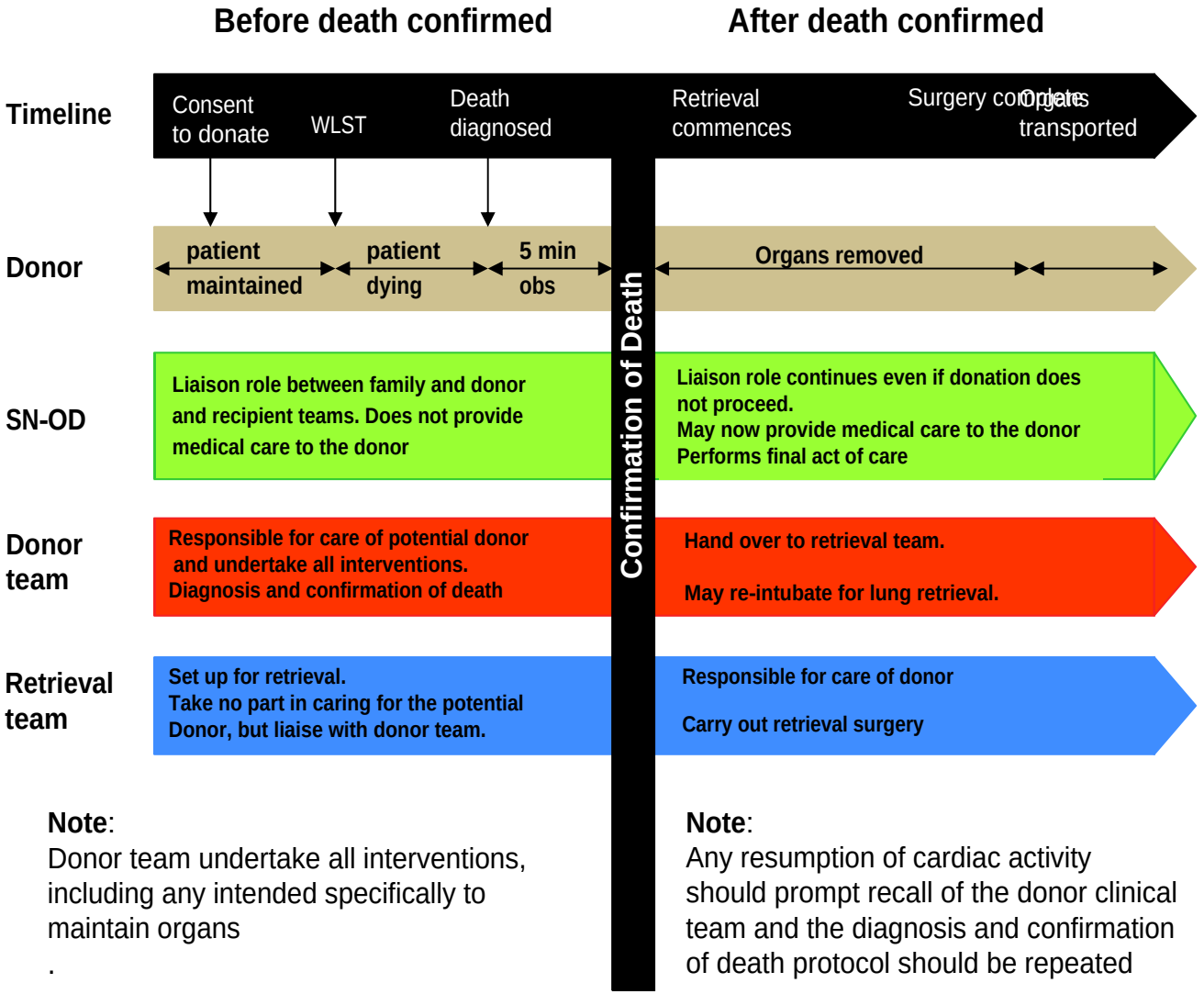
CONFLICTS OF INTEREST

Recommendation Any clinician involved in the care of the donor should not have a duty of care to the recipient at that time. In particular, members of the retrieval team and the recipient's clinical team should not be involved in the care of the potential donor prior to death being confirmed. There should, however, be effective liaison and communication between the retrieval team and those caring for the potential donor in order to ensure that the interests of the patient as a potential donor are maintained at all times

DEATH AND SUBSEQUENT INTERVENTIONS CONFLICTS OF INTEREST

Recommendation After death, the potential conflict of interest between saving the life of the patient and respecting their interest to be an organ donor disappears. Once the decision to accept the organs has been taken, it is for the overall benefit of both the deceased patient and the recipient for procedures such as re-intubation to facilitate lung retrieval, to be carried out by suitably trained individual. Thus, although this professional may have been a member of the donor's clinical team prior to death, this no longer represents a conflict of interest.

Timelines and responsibilities



Note:
Donor team undertake all interventions, including any intended specifically to maintain organs
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Note:
Any resumption of cardiac activity should prompt recall of the donor clinical team and the diagnosis and confirmation of death protocol should be repeated
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PART 2: THE POTENTIAL DONOR PATHWAY

- **Deciding further treatment is no longer in a patient's best interests and seeking consent for organ donation
- **Management before withdrawal of life sustaining treatment
- Suitable criteria for DCD
- **Process of withdrawal of life-sustaining treatment
- If death does not occur within a time appropriate for donation
- Death and subsequent interventions

DECIDING FURTHER TREATMENT IS NO LONGER OF OVERALL BENEFIT AND SEEKING CONSENT FOR ORGAN DONATION

Recommendation Two senior doctors, who should both have been registered for at least five years, and at least one of whom should be a consultant, should verify that further active treatment is no longer of overall benefit to the patient. It would be preferable for this to be the case for all patients, not only for those where organ donation is a possibility (although the UKDEC remit extends only to organ donation).

MANAGEMENT BEFORE WITHDRAWAL OF LIFE-SUSTAINING TREATMENT

Recommendation If organ donation has been identified as part of the end of life care pathway for a patient, then caring for that patient during the dying process in such a way as to maintain the organs in the best possible condition for donation does not represent a conflict of interest on the part of the treating clinician. Because it is considered to be for the overall benefit of the patient to become a donor, interventions to facilitate this are also likely to be of benefit unless they may cause harm or distress or risk causing harm or distress.

PROCESS OF WITHDRAWAL OF LIFE-SUSTAINING TREATMENT

Recommendation Until national protocols for withdrawal of life-sustaining treatment are available, local protocols need to be agreed within each institution. Organ donation will be one of a number of factors which will have a bearing on the way in which withdrawal of life-sustaining treatment is carried out. Donation Committees have an important role in facilitating their development locally and should forge effective links with End of Life Care strategy teams.

MANAGEMENT BEFORE WITHDRAWAL OF LIFE-SUSTAINING TREATMENT

Recommendation Interventions to maintain cardio-respiratory stability and critical organ perfusion are appropriate, until such time as withdrawal of life-sustaining treatment (WLST) is instigated.

DEATH AND INDIVIDUAL ORGAN FUNCTION

- Death as diagnosed by cardio-respiratory criteria means that integrated bodily function in terms of consciousness or the capacity to breathe has ceased, rather than that individual organs have died
- Thus the filtration activity of the kidney or the metabolic activity of the liver can be restored by the provision of a supply of oxygenated blood

HEART DONATION

- In the case of circulatory death, the heart stops because its inherent pumping action is inhibited by the build up of acid metabolites, secondary to hypoxia, following cessation of respiration
- In this situation, the heart itself has not actually died and reperfusion of the heart, in a variety of ways, with oxygenated blood will restore its pumping action
- Thus cardiac function is preserved in a brain dead patient who is still being artificially ventilated

ORGAN REPERFUSION
RE-ESTABLISHING CARDIAC ACTIVITY

Any in vivo procedure which restores blood flow to the whole body rather than an isolated organ contravenes the provisions under which the 5 minute rule is valid

Recommendation When reperfusion of organs with oxygenated blood is performed as part of the retrieval process, it should, as far as it practical, be restricted to the relevant organs

ETHICAL / CLINICAL REASONS FOR ISOLATING THE CEREBRAL CIRCULATION

- Any procedure that risks restoring circulation throughout the whole body has the potential merely to prolong the final stages of the dying process, and is therefore unethical and not of overall benefit to the patient
- The Code of Practice clearly states “it is obviously inappropriate to initiate any intervention that has the potential to restore cerebral perfusion after death has been confirmed”
- Recent evidence suggests that cerebral re-perfusion may also have a detrimental effect on the organs to be donated

ISSUES WHICH STILL NEED FURTHER RESOLUTION

- Could the time interval prior to cardiac donation be shortened, particularly in children?
- Pharmacological therapy to improve organ function e.g. inotropes, heparin
- Invasive interventions to improve organ function and minimise warm ischaemia time e.g. cold perfusion, ECMO, elective ventilation
- For an intervention to be considered, it has to be shown not to cause or risk causing harm or distress to the patient, but the degree of risk versus benefit is undefined.

FAITH AND ETHNICITY ISSUES

- Widespread support for ODT in principle
- Many faiths actively promote donation in perpetuating the “gift of life”
- While donation “normal” in UK, those coming from countries where ODT is not available are uncertain over faith teaching
- Different interpretations within single faith
- Does my faith allow me to donate?
- Relatives need reassurance from their faith leader