DCDD is an infrequent event in most hospitals and not all hospital staff will be familiar with the process. However, donation agencies in Australia and New Zealand are involved with all cases and have considerable experience. The local treating teams should work closely with donation staff to facilitate the process. Some of this is ideally done as an integrated local hospital plan with development of protocols and processes involving the ICU, operating theatre and donation staff, before the event takes place.
The order of proceedings should be as follows.

- The intensivist caring for the patient ensures that the family (or, rarely, the patient if competent) understands the poor prognosis and agrees to withdrawal of treatment. This should occur prior to donation being discussed.
- The intensivist, in collaboration with donation staff, determines whether the patient is a realistic potential DCDD donor.
- Donation is raised with the family according to the principles outlined in this statement, ensuring involvement of staff who have undertaken communication skills training specific to donation. This may be a collaborative approach involving both treating clinical staff and donation staff. The outcome of the discussion is documented in the patient medical record.
- If the patient or the family have consented to organ donation in anticipation of circulatory determination of death, donation staff undertake the workup and coordinate the logistics of the process. This includes obtaining formal consents. When coronial consent is required, in some jurisdictions donation staff approach the coroner directly and in others this is a role of the intensivist (see Section **Error! Reference source not found.**). It is recommended that donation agencies provide or hospitals create a specific 'checklist' for staff to follow. The intensivist remains responsible for clinical care of the patient throughout the process.
- The donor assessment process must occur before withdrawal of treatment. This includes taking blood samples for serology and tissue typing. Other blood tests and imaging may be required to assess donor and organ suitability. Liaison with transplant units to determine organs to be retrieved, obtaining of formal consents, arrival of retrieval surgeons and preparation of the operating theatre must all occur before withdrawal of treatment. Occasionally the retrieval process can be expedited if the donor is physiologically unstable.
- It is recommended that a brief meeting of donation staff and relevant personnel from the ICU, retrieval team and operating theatre be held in a suitable private location, before cardiorespiratory support is withdrawn. This meeting should cover the specifics of the situation, so that all personnel are aware of the plan and their individual responsibilities and are prepared for them.
- The time and place of withdrawal of cardiorespiratory support is negotiated by the intensivist and donation staff with the donor family, the retrieval surgeons, the operating theatre and ICU staff. Withdrawal of cardiorespiratory support may occur in three different locations.
    - In the ICU, which provides the maximum opportunity for family members to be with the patient, including at the time of death. The patient is not moved to the operating theatre until immediately after death. If death does not occur within the predetermined time frame in which organ donation is feasible, unnecessary patient movement is avoided. However, if death does occur within such a time frame, rapid transfer of the deceased patient to the operating theatre is required. In some instances, the additional warm ischaemic time may make some organs (e.g. the liver) unsuitable for transplantation.
    - In an appropriate room near the operating theatre, which involves moving the living patient but enables similar family access to the patient at the time of withdrawal of cardiorespiratory support as would occur in the ICU, while reducing the time between death and organ removal. However, this approach still requires rapid transfer of the deceased patient to the operating theatre if death occurs within the predetermined time frame, or transfer back to the ICU if this does not occur.
    - In the operating theatre, which requires moving the living patient and may limit family access at the time of death as well as requiring the return of the patient to the ICU should death not occur in the predetermined time frame.

- Any evidence of patient distress is treated with such analgesia and sedation as would be given in any other circumstances of end-of-life care and should be directed by the treating intensivist and not donation or transplantation staff. Medication must not be administered with the intention of hastening death nor should it be withheld when deemed necessary.
- The surgical retrieval team should not be in the proximity of the patient for the treatment withdrawal process or until the departure of the ICU staff and family from the patient's bedside following death. ICU staff should not witness the post-mortem process of organ removal.
- Following determination of death and consent from the designated officer (in Australia) or other appropriate person (in New Zealand), organ removal surgery can proceed. Manoeuvres that may inadvertently restore circulation in the body of the donor, such as cardiac compressions or repeated lung insufflation, should be avoided. It is permissible for the trachea to be re-intubated to protect the airway when lung donation is occurring. This is the responsibility of the anaesthetist who is a member of the lung retrieval team.
- If circulatory arrest does not occur within the required time frame, organ donation will not proceed. The intensivist and/or the donation specialist will then inform the family and care will be continued in an appropriate location. Tissue donation can still occur following death.

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Retrieval-related antemortem interventions in Australia

In Australia, the AOTA national protocol and the NHMRC ethical guidelines on organ and tissue donation support antemortem interventions to maintain organ viability under the following circumstances, providing there is no legal impediment:

- there is evidence that the individual wanted to be an organ donor;
- the individual or their family has been provided with sufficient information and time to make an informed decision;
- consent for the specific intervention has been obtained from the individual or their family;
- such interventions do not contribute to the individual's death or compromise their care; and
- appropriate measures are taken to prevent any pain or discomfort.

Interventions considered in the documents include:

- administering heparin (e.g. 25,000 units [or 300 u/kg]) to prevent small-vessel thrombosis — if there is any concern than heparin may foreshorten the patient's life, the heparin can be given when the patient is apnoeic;
- moving a patient to the operating theatre before withdrawal of treatments; and
- bronchoscopy, which is also commonly performed.

Antemortem interventions are not currently permissible in NSW because the necessary conditions for consent by donors are not present, and the laws relating to substitute consent do not have the scope to enable non-therapeutic procedures in incompetent patients. However, a process of review is underway. The wording of relevant acts elsewhere in Australia considers the best interests of the individual and published ethical and legal opinion contends that antemortem procedures are supported by such consideration.

Retrieval-related antemortem interventions in New Zealand

In New Zealand, the ODNZ national protocol requires the informed consent of the family for antemortem interventions of no benefit to the patient, including the administration of heparin 300 u/kg at the time of withdrawal of treatment.