Children’s Hospitals and Clinics of Minnesota

Organ and Tissue Donation after Brain or Cardiac Death

Policy Number: 120.00  
Review/Revision #: 5  
Site: System  
Responsible for Review: Director of ethics  
Original Effective Date: 5/30/99  
Reviewed/Revised Date: 10/9/11  
Next Review Date: 10/9/14

Policy: All patients experiencing either cardiopulmonary death or brain death are considered potential organ/tissue donors and must be referred for to Lifesource for assessment. Hospital personnel will refer all imminent patient deaths and actual deaths according to referral criteria described below for consultation with the appropriate procurement agencies to evaluate organ and/or tissue donation eligibility. Children’s complies with applicable regulations regarding referral of potential organ donors and required request, and supports the patient/family free choice regarding donation of organ and tissue. Organ and tissue donation may take place after brain death or in some circumstances after withdrawal of life-sustaining treatment and cardiac death (without the prior diagnosis of brain death) based on the overall interests of the patient. Procurement agencies can be reached 24 hours a day at 1-800-24-SHARE. If donation criteria are met, a collaborative approach including Donation Coordinator from a procurement agency and hospital staff must occur to approach the patient/family to provide information about the option to donate or not to donate organs or tissue. The choice to donate organs or tissue if the patient is eligible is entirely voluntary and solely the choice of the patient or their legal guardian/next of kin.

Key Words: Organ; tissue; donation; organ donation; tissue donation; death; dying; brain death; imminent death; anatomical gifts; organ transplantation; end of life; cardiac death; brain death; organ retrieval; donation after cardiac death, DCD, Lifesource.

Definition(s):

Donation: Donation refers to the decision by the decedent, patient’s family, or the patient’s legal guardian to offer the patient’s solid organs or tissue for use in another patient or medical research after death. Donation is an informed and voluntary choice of the decedent, family or the patient’s legal guardian without pressure to choose either to donate or not to donate.

Clinical Triggers for Referral to Lifesource: All patients must be referred to 1.800.24SHARE within one hour of meeting the following criteria:

1. (a) Ventilated and severe neurological injury (i.e. CVA, GSW, MVC, Anoxia, etc.) AND-
   (b) Loss of two or more brainstem reflexes and/or a GCS of ≤ 5 (loss of brain stem reflexes include: no papillary response, no corneal reflex, no response to cold calorics, no doll’s eye, no cough/gag)

2. Patients for whom a decision to withdraw life-sustaining treatment has been made but who are not currently or imminently brain dead.

3. Patients who have died but did not meet the criteria above.
Donation after Cardiac Death (DCD): The decision to donate organs for a person with an extremely poor prognosis but who is not yet brain dead.

Pulseless Electrical Activity: Pulseless electrical activity (PEA) is a clinical condition characterized by loss of palpable pulse in the presence of recordable cardiac electrical activity.

Conversion Rate: The conversion rate is the total number of organ donors divided by the total number of medically suitable donors.

Imminent Brain Death: Imminent brain death is when a patient exhibits at least two of the following neurological deficits: (1) no response to painful stimuli, (2) pupils are fixed and dilated, (3) no cough/gag reflex, and/or (4) does not appear to be triggering the ventilator.

Organ Donation: Organ donation refers to gifts of heart, lungs, kidneys, liver, pancreas, and intestines from a brain dead patient.

Tissue Donation: Tissue donation refers to gifts of eyes, skin, bone, vessels, connective tissues and heart valves. Donors are patients who have suffered cardiovascular collapse, or are those who also have been donors of organs.

Death: Death refers to either (1) the irreversible cessation of circulatory and respiratory function or (2) the irreversible cessation of all functions of the entire brain, including the brain stem as determined in accordance with generally accepted medical standards. Policy 117, Brain Death Determination, governs determination of brain death.

Cardiopulmonary Death: Cardiopulmonary death refers to the total and irreversible cessation of all circulatory and pulmonary function as determined in accordance with generally accepted medical standards by the physician managing the patient’s care at the time of death.

Brain Death: Brain death refers to total and irreversible loss of brain function while maintained on cardiopulmonary support systems as determined by the physician managing the patient’s care. See Policy 117, Brain Death Determination.

Attending Physician: Attending physician for the purpose of this policy refers to a properly licensed and qualified doctor of medicine or osteopathy with primary responsibility for a patient’s care and treatment, which has been granted clinical and admitting privileges by the organization, and who has primary responsibility for management of the patient in a brain death or donation after cardiac death situation.

Procuring Physician: Procuring physician refers to the physician who has primary responsibility for the procurement of the organs or tissue and who has responsibility for their care and use when removed from the donor’s body.

Trained Requester: A trained requester is a LifeSource Donation Coordinator.
Donor Designation: The patient’s indication of intent to donate at the time of death as expressed in a document of gift, i.e. driver’s license indication, donor card, advanced directive, will.

LifeSource Donor Coordinator (LDC): A member of the Lifesource staff who makes actual requests for donation.

Guiding Principles: Children’s Hospitals and Clinics of Minnesota (Children’s) recognizes the potential benefits of organ and tissue donation to recipients and surviving family members, while at the same time recognizing the difficult circumstances leading to the situation in which organs and tissue may be donated.

In carrying out obligations to the individual patient and potential recipients, Children’s is guided by the following principles:

1. The best interests and optimum care of the individual patient remain the primary goals when organ and/or tissue donation is possible; organ or tissue donation is a secondary goal pursued to the extent it is congruent with the best care of the patient.

2. Requests for organ and tissue donation are made in all cases determined to be potential donors after consultation with Lifesource by the Lifesource Donor Coordinator working with Children’s staff. Donations are gifts freely given, and staff discussing donation must attempt to avoid influence or pressure to donate organs and/or tissue. The beliefs and wishes of the family, the patient, and/or the patient’s legal guardian are considered and respected in all discussion of organ and tissue donation.

3. Organ and tissue donation occurs only after a patient is pronounced dead by brain death or cardiopulmonary criteria. Planning for organ and/or tissue donation will, in part, occur before death is declared.

4. The patient’s family or legal guardian are recognized and supported as the appropriate decision-makers. If the patient is > 18 then their documented wishes regarding donation will be honored. The health care team and procurement agencies strive to work with the family in a coordinated, respectful, and sensitive manner at all times.

Procedure: General Procedures for all donations

24-Hour Procurement Line: Access to organ and tissue procurement agencies is available 24 hours a day through the shared referral number at 1-800-24-SHARE (1-800-247-4273)

Collaboration with LifeSource: Children’s collaborates with Lifesource, Inc., the regional organ procurement organization, in determination of eligibility to donate, requesting donation, and determining the conversion rate of the number of eligible donations that are completed.

Designated Organ and Tissue Procurement Agencies: Children’s works with LifeSource, Inc., a member of the organ procurement and transplantation network for procuring organs and tissue for transplantation and the Minnesota Lions Eye Bank for procuring eyes for transplantation. Both agencies can be reached through the 24-hour donor referral number at 1-800-247-4273, who will contact the appropriate agency based on the patient’s donation eligibility.
Medical Criteria for Possible Donation Determined by LifeSource: Medical criteria for organ and tissue donation must be discussed with the procurement agencies to determine if a potential for organ and/or tissue donation exists. No medical diagnosis should be considered a rule out diagnosis without consultation with the procurement agency. The local caregivers cannot make medical criteria determination. Because criteria for organs and tissue which can be used for clinical or research purposes changes, discussion with the donation coordinator must take place regarding medical criteria for donation in each case of a patient who dies.

All patients must be referred to 1.800.24SHARE within one hour of meeting the following criteria:

1. (a) Ventilated and-severe neurological injury (i.e. CVA, GSW, MVC, Anoxia, etc.) AND- (b) Loss of two or more brainstem reflexes AND/OR a GCS of \( \leq 5 \) (loss of brain stem reflexes include: no papillary response, no corneal reflex, no response to cold caloric, no doll’s eye, no cough/gag)

2. Patients for whom a decision to withdraw life-sustaining treatment has been made but who are not currently or imminently brain dead.

3. Patients who have died but did not meet the criteria above.

Determination of Imminent Death: The physician managing the patient’s care at some time will consider the possibility that a patient is dying imminently. This does not require certainty regarding the patient’s death, but the strong possibility that death will occur according to the criteria set forth in the definition above.

Contact with Organ / Tissue Procurement Agency to Discuss Potential Donation: Within one hour of the loss of two brain stem reflexes or within one hour after cardiac death the physician or their designee must consult with the organ/tissue donation coordinator to determine the medical feasibility of donation. All dying patients are to be considered potential organ or tissue donors and must be discussed with the procurement agency. No potential donor should be ruled out based on medical criteria without discussion with the procurement agency. This discussion should be documented in the patient’s medical record. Referrals are made within one hour to allow the Organ Procurement Organization (OPO) to assess the patient’s suitability for organ donation before brain death is declared and before the option of organ/tissue donation is presented to the family of the potential donor. Timely assessment of the patient’s suitability for organ donation.

1. Increases the likelihood that the patient’s organs will be viable for transplantation (assuming that there is no disease process identified by the OPO that would cause organs to be unsuitable).

2. Assures that the family is approached only if the patient is medically suitable for organ donation.

3. Assures that an OPO representative is available to collaborate with the hospital staff in discussing donation with the family.

Donation Requests Made by Lifesource in Collaboration with Children’s Staff: A Lifesource Donor Coordinator in collaboration with Children’s staff makes all approaches to patients or families as appropriate. Discussion of organ donation is sometimes raised by family to Children’s staff, and general information may be provided as clinically appropriate. Discussion of actual potential for donation or request should be deferred until after evaluation by Lifesource and must be done collaboratively by the LDC with Children’s staff.

Discussion with Family Regarding Potential Donation: Discussion with the family regarding the patient’s overall condition and death should precede discussion of donation. When possible, time for the realization of death should be allowed before discussion of donation, although that may not be
Donation: possible in every instance. The individuals involved in the actual organ and tissue donation requests must be Lifesource Donor Coordinators who will be familiar with:
1. The patient’s and family’s situation.
2. The potential eligibility to donate organs or tissue
3. The anticipated use of the organs or tissue donated (i.e. for transplantation or research purposes).
4. If > 18, whether patient is a designated donor.

Direct contact is preferable to telephone communication. The Children’s staff person coordinates with the LDC in direct discussion with the family. This should include consideration of both the unique needs of the family, the history and situation of the patient, and the additional knowledge of transplantation that the coordinator might bring to the conversation. Family members should be made aware of counseling resources available through Children’s, including chaplain, social work, psychology and ethics services as appropriate to the case. Discussions with the family regarding Organ Donation should be documented in the medical record.

Determination of Death: The determination of death of a patient is the legal responsibility of the Children’s attending physician. Documentation of the date and time of death shall be made by the attending physician.

The clinical judgment of death is dependent on establishing one of two sets of criteria:
1. Cardiopulmonary death: the total and irreversible cessation of all circulatory and pulmonary function. For the purposes of DCD death is determined by the absence of apical pulse for one minute (see DCD procedure section)
2. Brain death: the irreversible cessation of cell function of the entire brain, including the brain stem. This is determined in accordance with policy 117, Brain Death Determination. Determination of death must be made in accordance with generally accepted medical standards and, in every instance, must precede taking organs or tissue from the patient.

Organ / Tissue Procurement of Donation agreed to by Family:

The actual procurement of organs and/or tissue is managed by the Lifesource donation coordinator and the organ and/or tissue procurement team with oversight from the Children’s attending physician regarding overall patient care planning.

Roles of Procuring and Managing Physicians:

To avoid the appearance of or actual conflict of interest in obtaining organs and managing other aspects of patient care, the procuring physician must not be the same physician who declares the patient dead.

Required Request, Notification, and Consent:

Minnesota law, CMS regulations, and Joint Commission accreditation standards require that all patient deaths or all patients whose brain death is imminent be referred for assessment for donation within one hour of the loss of two brain stem reflexes or within one hour after cardiac death. If the donation coordinator determines that the person is eligible to donate, a request is made of the next of kin by a Lifesource donation coordinator in collaboration with Children’s staff. A request for consent from the family for a patient’s organ and/or tissue donation must be approached with timeliness, sensitivity, and concern for their grieving. That request should note the alternatives of donating and not donating and should provide information but avoid attempts to influence the family to either alternative.
If previous wishes have been expressed, the managing physician should confirm with the family that the previously stated decision still holds.

Minnesota law recognizes the following order of priority for obtaining consent for organ and tissue donation:
1. The spouse;
2. An adult child;
3. Either parent;
4. An adult brother or sister;
5. A grandparent;
6. A legal guardian of the decedent at the time of death.
7. Any other persons authorized and under obligation to dispose of the body
Consent or refusal must be obtained only from the highest available person on the list. A refusal of consent by a person of higher priority in the above list is binding on those of lower priority. If appropriate, make reasonable attempts to ascertain and locate any documentation of the patient’s desires concerning donation.

The individual who obtains the next of kin’s consent or refusal must document notification of the option to donate and the option to decline donation, as well as any identified contraindication, in the patient’s medical record. In each case, documentation should include description of the contact with the organ procurement agency, the name of the family member contacted regarding authorizing donation and the person’s relationship to the decedent, whether the request was granted and, if the request was granted, the organs and/or tissue donated. Authorization for organ and tissue donation should be documented using the Authorization for Organ, Tissue and Eye Donation form provided by the procurement agencies. The original form will be placed in the patient’s chart.

County Medical Examiner Cases:
The fact that a patient’s case is a medical examiner case does not exclude organ or tissue donation per se. In all cases in which death must be reported to the county medical examiner’s office, including but not limited to cases in which death may be the result of child abuse, the medical examiner or coroner must grant permission for retrieval before the organs and/or tissues are removed. The date, time, and name of the person in the medical examiner’s office or coroner’s office granting permission must be recorded in the patient’s medical record.

Donor Management after Determination of Death:
Death will be pronounced and recorded in the chart by the attending physician before organs or tissues are procured.
Once consulted, the donation coordinator will confirm with appropriate personnel that the donor is medically acceptable for organ and/or tissue donation and that appropriate authorization has been obtained. After authorization, the donation coordinator will manage the clinical support of the potential donor necessary to insure optimal physiologic status of the organs and/or tissues to be donated.

In the physician orders, responsibility for patient care and charges should be transferred after authorization from the family or the patient’s legal guardian at the time of death to the appropriate procurement agency since emphasis of care is now on donor maintenance rather than treatment of underlying condition.

The donation coordinator is responsible for contacting appropriate transplantation agencies and physicians. The donation coordinator and transplant team will initiate the alert and scheduling of the operating room, anesthesia, surgical teams, and any personnel involved in the surgical removal of organs and tissues.
The procurement team will be responsible for the preservation, transportation, and transplantation of all organs and tissues after removal.

**Donor Family Follow-ups:** Once the decision has been made to donate, the family will be made aware that they will receive notification of what organs and/or tissues have been utilized if they so desire. It is then the donation coordinator’s responsibility to actually provide this information to the family.

**Procedures for Donation after Cardiac Death (DCD):**

**General Considerations for DCD:**

Patients or their family or legal guardian, in consultation with their health care providers, may choose to withdraw life-sustaining treatment based on the overall interests of the patient without the presence of brain death. Following the decision to withdraw life-sustaining treatment, Children’s Hospitals and Clinics of Minnesota (Children’s) provides potential donor patients/families the option of organ donation after cardiac death occurs (DCD) when the patient is determined by LifeSource to be a candidate. DCD provides patients and/or families an additional organ donation opportunity when brain death criteria are not met but the patient is expected to die imminently after removal of ventilator and/or other life sustaining treatment. Occasionally patients may be awake and alert and should participate in such a decision with their parents or legal guardians to the extent of their capacity.

A. The following criteria must be met for application of this policy.

- The patient has an extremely poor prognosis and is extremely unlikely to recover and is receiving life-sustaining treatment, usually on a ventilator
- The criteria for brain death have not been met.
- Cardiac death is anticipated to occur within a very short time frame (less than 90 minutes) following the withdrawal of life support.
- The patient/family reaches a decision that withdrawing life-sustaining treatment is in the patient’s best interest independent of any decision regarding organ donation

1. The treatment team does not raise the possibility of organ donation until a firm decision has been reached to withdraw treatment.
2. If the family raises the question of organ donation, notify Lifesource. A brief discussion of DCD may occur, but it should be stressed that the decision regarding withdrawal of life-sustaining treatment must precede and be independent of a decision about organ donation.
3. The care of the patient continues based on the interests of the patient and not on the possibility of organ donation until immediately before any donation would be made.

B. The patient/family or legal guardians reach a decision in consultation with the treatment team to withdraw life-sustaining treatment in view of the patient’s prognosis and independent of any decision about organ donation.

C. The nurse, physician, or other health care professional consults with LifeSource for evaluation of organ donation potential using the established clinical guidelines. The LifeSource Coordinator (LC) conducts a preliminary evaluation of the patient’s medical status. If the patient appears to be a candidate for DCD, the LC works with Children’s staff to conduct a more in-depth evaluation of the patient’s medical status and hospital course.

**Request for Donation:**

A. An LDC in collaboration with the Children’s health care team generally including one medical team and one psychosocial team member discusses the option for DCD with the family/legal guardian. Appendix B provides a list of
required topics to be discussed with the family. The discussion occurs after
the family has made the decision to withdraw life-sustaining treatment.

B. In collaboration with the patient’s health care providers, the LC ascertains that
the family understands the patient’s status, confirms the decision to withdraw
life-sustaining treatment and that the basis for this decision is solely the
interests of the patient, and discusses potential options for organ and tissue
donation utilizing the standard requesting process.

C. The LC in collaboration with the health care team conducts an in depth DCD
assessment that may be guided by use of a Donation After Cardiac Death
evaluation tool.

D. The LC contacts the medical examiner to obtain permission for organ
donation.

E. The LC in collaboration with the Children’s health care team generally
including one medical team member and one chaplain or social worker
provides information about the DCD process to the family including the
opportunity for family to be present for withdrawal of support and death of
their loved one, timing, and organ/tissue recovery procedures. In addition, the
LC discusses, with the family, steps to be taken if the patient continues with a
viable heartbeat and respirations for greater than 90 minutes following the
withdrawal of medical treatment.

The disclosure to the parents or guardians must include all elements in
Appendix B of this policy

F. If the family decides to proceed with DCD, the LDC obtains consent and
places the original document in the patient’s medical record.

Medical Management:

A. Medical management is done based on the interests of the patient, not on
the interest of the potential organ donation. To facilitate organ recovery,
the patient is maintained on a ventilator and hemodynamically supported for
organ perfusion until the withdrawal of life-sustaining treatment occurs, as
long as that is not deemed to be against the interests of the patient.

B. The medical management remains the responsibility of the patient’s attending
physician or designee until a declaration of death. The LDC collaborates with
the medical staff on treatment options to implement DCD standing orders
including heparin prior to extubation to increase organ viability, maintain
hemodynamic stability, and obtain tests to determine organ suitability.

C. Standard patient care and comfort measures are administered prior to the
withdrawal of life-sustaining treatment at the discretion of the attending
physician or his/her designee. This includes analgesics and/or sedatives
to provide patient comfort during withdrawal. Analgesics and/or sedatives
should not be used with the intention to hasten death, although this may be an
unintended side effect.

Withdrawal of Treatment:

A. Two plans of care are developed for the patient based on whether the patient
dies within the 90-minute time frame

- A plan for DCD organ donation
- A plan for the situation in which the patient does not die within 90 minutes
  after withdrawal of life-sustaining treatment and the patient needs to be
  returned to regular end-of-life management. Every effort will be made to
  provide continuity of staff and care to the patient and family subsequent to
  transfer from the OR within that plan.

B. To maximize outcomes of organ viability for transplantation, the withdrawal of
life-sustaining treatment takes place in the operating room. Accommodation is
made for the family to be present for the withdrawal of life-sustaining

treatment until death occurs if they choose. The family is offered the choice to
say last goodbyes to the patient in the ICU before transfer to the OR, or to accompany the patient to the OR to be present when the ventilator is withdrawn and death is declared. The LDC in collaboration with the hospital staff (e.g. nursing, chaplaincy, social work) provides a peaceful atmosphere and support to the family.

C. A meeting (pre-donation huddle) of the LDC, PICU staff, OR staff and chaplain/SW team occurs to plan the logistics of the DCD donation.

D. The LDC working with hospital staff fully inform about and prepare the family for the family the circumstances and conditions of withdrawal of life-sustaining treatment, staying with the patient until death, the situation in the OR, the plan for leaving the OR when death is declared.

E. The LDC and at least one hospital staff member such as a chaplain or social worker must accompany the family during the transport to the OR and until the family is ready to leave the building after death is declared.

F. When the transplant team arrives at the hospital and is ready for organ recovery, the patient is transferred to the operating room while being ventilated by the respiratory care practitioner, cared for by the Critical Care RN, and monitored by the attending physician or designee.

G. The surgical recovery team prepares and drapes, the patient in a sterile fashion. Once the patient is prepared and necessary recovery equipment and preservation solutions are in place, one member of the Lifesource recovery team remains in the OR to monitor the sterile field.

H. When the OR is ready to receive the child, the child is transported and stabilized in the OR.

I. If the family has chosen to be present for withdrawal of the ventilator in the OR, accommodation is made for the family to be present in the OR for the withdrawal of life-sustaining treatment until death occurs if they choose. It is possible for a family member to hold the child during or immediately after extubation until death is declared if they wish to do so. The details of this plan is agreed on by the team in the pre-donation huddle. Family will wear gowns and hair covering as directed by the Lifesource recovery staff person in the OR. The family is accompanied to the OR by the social worker and chaplain who are both present.

J. The attending physician extubates the patient and/or withdraws other life-sustaining treatment. The Critical Care RN accompanying the patient provides comfort care measures and administers medications, as ordered by the attending physician or designee.

K. Monitoring at this time is continuous and includes a cardiac monitor, arterial line or other blood pressure monitoring, and a pulse oximeter. The patient remains on the cardiac monitor with continuous blood pressure monitoring. The LDC monitors patient vital signs. The monitors may be turned away from the family with alarms turned off to provide a more peaceful environment. The attending physician or designee remains on-site or within immediate proximity until the patient expires. All comfort care order and administration is the responsibility of the attending physician or designee and not Lifesource.

**Determination of Death:**

A. The patient’s attending physician or designee pronounces death. The physician certifying death **may not** be involved as part of a transplant or organ procurement team.

B. During the final stages of preparation for withdrawal of life-sustaining treatment and declaration of death, and organ recovery, the following monitors are appropriate
• If an arterial catheter is in place it remains in place for information for the Lifesource Coordinator; it is not required to place an arterial line for the purposes of the organ donation.
• A cardiac monitor (EKG), a pulse oximeter, and some form of blood pressure monitoring that allows at least every minute measurement is required by Lifesource for information regarding the recovered organs
• These monitors may be but are not required to be used in the determination of death by the attending physician
• These monitors may be turned away from the family to encourage peaceful focus on the patient

C. For the purposes of this policy, death is determined by the absence of apical pulse for one minute. The attending physician uses clinical observation and/or monitors that are in place to watch for indication of cessation of pulse. The physician then listens for absence of apical pulse for one minute with a stethoscope in a sterile sleeve. If apical pulse is absent for one minute, death is declared. The physician records the date and time of death in the medical records and completes necessary documentation per the hospital’s established policy. Monitors that are in place continue to operate so that Lifesource can record information useful in future use of the organs.

D. At the time of the declaration of death if the family is present, they are escorted out of the operating suite and the procurement surgery proceeds five minutes after the declaration of death in accordance with Lifesource protocol. If the family decision changes before the declaration of death, the Children’s attending physician will return the patient to medical management.

E. The family returns to the family waiting room or may elect to leave the hospital at this time. Chaplaincy and social work support is provided to the family and accompany the family until the family is ready to leave Children’s.

F. If desired, the family may spend time with the deceased patient following organ recovery.

G. If cardiac death does not occur within the timeframe of 90 minutes, organ recovery is abandoned and end-of-life care is provided. The patient is returned to a palliative/hospice care room, per the previously established plan, where comfort care measures are maintained by written order of attending physician or designee.

Organ Donation for Research Purposes: In some instances organs not viable for transplantation can be used for research purposes. This is an accepted use of donated organs and is part of the consent obtained by Lifesource. If an organ is recovered with the intention of use in research, this must be specified to the family before they consent to organ donation.

Staff Nonparticipation: If a staff member chooses not to participate in the process for reasons of conscience, they should contact the charge nurse as soon as possible, so an alternative care provider can be located. Staff members are not required to participate in DCD, but also cannot abandon patients. See policy 107.00.

Financial Considerations: Financial responsibility for organ/tissue procurement and all activity carried out after the declaration of death lies with the organ/tissue procurement agency.

Financial Procedures: Registration and Financial Issues: At the actual time of brain death and following family consent, PICU health unit coordinators will send a discharge notification to admitting using status code 20
and type “Organ Donation” in the special instructions field.

**Financial Procedure:**
Admitting will discharge the inpatient account according to the following procedure.
1. The inpatient account will be discharged with a disposition of “organ donor”.
2. A new inpatient account will be registered using a patient type “V” and a guarantor organization of LifeSource.
3. The account will have the same medical record number as the previous encounter.
4. The original account is coded and the discharge disposition is modified to the UB92 value “expired”.
5. Organ recovery is completed. The inpatient account with the “LifeSource” guarantor billing is discharged with a disposition of "organ donor".

**Legal and Regulatory Obligations:**
All procedures for organ and tissue donation must be carried out in compliance with 42 U.S.C. 274 (U.S. Public Health Service Act § 372), 42 CFR 482.45 (CMS regulations), Joint Commission standard RI.2, Minn. Stat. §§ 525.921-525.9225 (Uniform Anatomical Gift Act of 1987), and Minn. Stat. § 145.135 (Minnesota Determination of Death Act).

**Related Policy(s):**
116.00 Allowing Natural Death: DNR and Forgoing Life-sustaining Treatment
398.00 Death of a Patient: Reporting, Care, and Support

**Review / Revision Dates:**
Original policy: Organ and Tissue Donation-#1202.00-Minneapolis (9/25/90)
Original policy: Organ and Tissue Donation-Adm-52-St. Paul (4/96)
Revised system policy: May 30, 1999
Revised: 8/23/02
Rev. 3: 08/31/05
Revision 4: 11/8/07; Major rewrite added cardiac death
Revision 5: 10/9/11

**Stakeholders:**
Intensivist, ethics committee, surgery, critical care division

**Approval Group(s)**

<table>
<thead>
<tr>
<th>Group</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Patient Care Practices Committee</td>
</tr>
<tr>
<td>5</td>
<td>Leadership</td>
</tr>
</tbody>
</table>
APPENDIX A
SCREENING FORM FOR ORGAN, TISSUE, EYE DONATION
**Complete for all patients.

1. EVALUATION AS POTENTIAL DONOR
   All deaths must be referred to Donor referral number at 1-800-247-4273 to evaluate donation options.*
   - For patients on a ventilator, call within one hour of the loss of two brain stem reflexes.
   - For patients not on a ventilator, call within one hour of cardiopulmonary death.
   - Call if family initiates discussion of donation to obtain further information.

2. CONSULTATION WITH DONOR COORDINATOR
   Check one:
   In consultation with Donor Coordinator, this patient meets donation criteria for
   - Organ
   - Tissue
   - Eye
   (Please complete Sections 3 and 4 below)
   - In consultation with Donor Coordinator, this patient is not a suitable organ/tissue donor due to the following contraindication(s):
   (Do not offer donation option. Skip to Section 4)

3. ORGAN, TISSUE, AND EYE DONATION OPTION
   A. Next of kin, was offered option of donation by a Donor Coordinator or
      _______________________________ (Name/relationship)
      Designated Requester on.
      _______________________________ (Name/title) (date/time)
   B. Per Donor Coordinator or Designated Requester: Check one:
      - Next of kin authorizes donation. Authorization form for Organ, Tissue & Eye Donation
      completed by Donor Coordinator.
      - Next of kin declines option.
      - Donor Coordinator will contact the family regarding donation options. Donation Coordinator
      will contact Children’s Pathology lab to inform of family decision.

4. NAME AND TITLE OF PERSON COMPLETING FORM:
   __________________________________________
   - Referrals are made within one hour to allow the Organ Procurement Organization (OPO) to assess the
     patient’s suitability for organ donation before brain death is declared and before the option of
     organ/tissue donation is presented to the family of the potential donor. Timely assessment of the
     patient’s suitability for organ donation increases the likelihood that the patient’s organs will be viable
     for transplantation (assuming there is no disease process identified by the OPO that would cause
     organs to be unsuitable), assures that the family is approached only if the patient is medically suitable
     for organ donation, and assures that an OPO representative is available to collaborate with the
     hospital staff in discussing donation with the family.
Appendix A

Organ Donation after Cardiac Death (DCD) Flow Chart

As currently mandated, all patients meeting the clinical triggers for donation will be referred to LS within one hour of simultaneously meeting all three of these conditions:

- Ventilated
- Severe neurologic injury
- Loss of two or more brain stem reflexes and /or a GCS if, ? to 5

1. Patient in ICU determined to be unlikely to survive without ICU care (almost always severe, unrecoverable neurological and ventilator dependent but not brain dead), and determination to withdraw life-sustaining treatment (LST)

Who: Intensivist, team, and parents

2. Call made to LifeSource to inform them of the anticipated death. For unexpected cardiac death the call can be made at the time of death; for expected death after withdrawal of LST, to allow for the possibility of DCD, the call must be made before death and as soon as possible after decision to withdraw LST.

Who: ICU MD or RN
Who: Intensivist or ICU RN

3. Determination by Lifesource if the patient is a potential DCD donor

Who: Lifesource Telephone Triage

4. If patient is a potential DCD donor, approach to the family regarding organ donation

Who: Lifesource Donor Coordinator (LDC) in conjunction with Children’s intensivist and psychosocial team member

5. If family desires to do a DCD donation, in depth description and preparation for DCD process and reaffirmation of the decision to do DCD donation after knowing the details (see list of required discussion topics, Appendix A)

Who: LDC in conjunction with Children’s staff as appropriate (generally intensivist, ICU nurse, chaplain, social worker; ethics if desired)

6. If family reaffirms they wish to do a DCD donation, exploration of actual matches and preparation for availability of organ recovery team is explored by LDC working in conjunction with Children’s OR staff around availability of OR staff and time and with Children’s ICU staff around family timing preferences

Who: LDC, OR and ICU staff

7. Specific arrangements for DCD donation are made over the ensuing time, and an agreed upon target time for donation to occur is planned with family, LifeSource, and Children’s OR and ICU staff including psychosocial support personnel (including both a social worker and a chaplain for every case) ; specific medication plan developed

Who: Parents, LDC, Children’s team (OR, ICU, Psychosocial)

8. Family spends time with the patient in the ICU and gathers family as desired

Who: Family

9. As time for withdrawal of ventilator and organ recovery approaches a huddle between LDC, OR and ICU staff is held to discuss specific plan for transfer, who accompanies patient and family at each step, and where everyone will be as the process takes place; a “walk-through” occurs if desired by the team;

Who: LDC, Children’s team (OR, ICU, Psychosocial)
10. Patient is transported to the OR; final goodbyes may be said before this happens if desired by family; family may stay until death in OR or leave with contact information available
Who: ICU nurse, Respiratory Care Practitioner (RCP), and other staff as appropriate

11. Patient is draped and prepped by recovery team except for one arm and face; a member of Lifesource team remains in room to observe sterile field
Who: OR staff, LC organ recovery team

12. Family is escorted to OR by psychosocial staff; this generally involves 2 parents only; large extended family group is not permitted
Who: Family, Children’s psychosocial staff and other staff as appropriate; psychosocial staff person stays with the family until they leave the hospital

13. Ventilator/ET tube withdrawn and ventilator turned off by RCP or designee and all other life-sustaining treatment withdrawn
Who: ICU staff

14. Death is declared after one minute of no apical pulse
Who: Intensivist

15. Family is escorted from OR by Children’s psychosocial staff and may return to PICVU for a time, go to chapel, or may leave the hospital at that time
Who: Family, Children’s psychosocial staff

16. Organ recovery takes place
Who: Lifesource organ recovery

14b. If the child does not die within 90 minutes, the organ donation is permanently abandoned and the child is returned to ICU for regular cares as would be done for any child who does not die as expected after withdrawal of Life-sustaining treatment
Who: ICU staff, family
Appendix B- Required Discussion and Disclosure Topics with Potential DCD Family

These issues must be discussed with the consenting family members collaboratively by the Lifesource Donor Coordinator, one medical team member, and one psychosocial team member

1. The decision to withdraw life-sustaining treatment (LST) was reached independently by the family and team and was not motivated by organ donation
2. After withdrawal of the ventilator and other life-sustaining treatment, it is expected that the patient will die within 90 minutes, but that is not certain, and if it does not occur the plan of care can no longer include organ donation
3. Organ donation is entirely a free choice by the family and there is no pressure to choose to donate organs; families should only agree to DCD donation if they feel the details and conditions of death are acceptable to them to allow the goal of organ donation
4. The patient continues to receive appropriate analgesia and/or sedation in keeping with providing complete comfort cares to the patient
5. The patient’s ability to donate can not be guaranteed
6. The patient will remain in ICU until arrangements for donation are complete, which could be 48-72 hours; during this time the family may specify if they wish CPR to be used if the patient experiences a cardiac arrest
7. The family may withdraw its consent at any time in this process up to the time organ recovery is begun, including in the OR at the time of death
8. The family may say final goodbyes in the ICU before the transfer to the OR, or may go to the OR and be present with the patient until the patient is declared dead
9. A description of the OR setting, who can accompany the child, what must be worn, the limits of what one can do in the sterile room, the expectations regarding touching the patient in the OR, the expected course of events at time of death, and the expectation of the family promptly leaving the OR after a brief final goodbye and death being declared
10. Only two family members can accompany a child to the OR, and minors under the age of about 15 are not allowed; if a child is present a child life person must also be present

11. If parents are in disagreement with any of this, it is perfectly acceptable to choose to stop the DCD donation process at this time or any time
12. The actual withdrawal of the ventilator will occur in the OR, with the following process
   A. The patient is taken on the ventilator to the OR accompanied by a ICU nurse and is draped and prepped for surgery except for the right hand and arm and the face
   B. The people in the OR will be the parents, ICU nurse, Chaplain and Social Worker accompanying the family, the Intensivist (at time of declaration of death), a LifeSource OR Tech, and the LifeSource Donor Coordinators,
   C. The ventilator and ET tube and other life-sustaining treatments are removed
   D. The patient is observed and monitored until breathing has stopped, and then evaluated for death by the physician listening for pulse/heartbeat on the chest for 1 minute
   E. The family may hold the patient during after extubation in the OR, and after death is declared the staff will transfer the child to the table in the OR and parents must promptly leave the OR
   F. After 1 minute of no heartbeat, the patient will be declared dead
   G. At that time the family will be asked to leave the OR with the Children’s Chaplain or Social Worker;
   H. The family may return to ICU for a time or may leave the hospital at that time, since the patient is dead
   I. After the family leaves the room, the Organ Recovery Team and the OR staff enter the room to begin preparation for organ recovery
   J. 5 minutes after the patient has been declared dead the organ recovery will begin
13. Interventions are used at the time before withdrawal of LST such as anticoagulation medicines to improve organ viability
14. The family incurs no costs associated with the donation process; costs associated with the donation process are assumed by LifeSource
15. If the patient does not die within 90 minutes following withdrawal of life support, the DCD process ceases and the patient is returned to ICU for clinical hospice care as it would regularly be provided after a decision to withdraw LST and the patient does not immediately die
16. Tissue donation may be possible even if organ donation is abandoned
17. If the DCD process ceases, for any reason, the financial responsibility for continued treatment reverts to the original responsible party at the time of the transfer back to the ICU is complete.
18. Any other questions and concerns of the family should be addressed. The family should only agree to DCD organ donation they feel the details and conditions of death are acceptable to them to allow the goal of organ donation.