LOUISIANA STATE UNIVERSITY HEALTH SCIENCES CENTER – SHREVEPORT

ORGAN DONATION AFTER CARDIAC DEATH (DCD) PROTOCOL
Louisiana Organ Procurement Agency (LOPA)

Purpose:
The purpose of this protocol is to establish criteria for the identification of patients who can potentially be eligible for organ donation after cardiac death (DCD) and to establish guidelines in presenting the option of DCD organ donation to the patient’s legal-next-of-kin.

A. Medical Criteria:
   1. After the referral of a potential DCD donor following the hospital’s policy for timely notification of patients meeting the clinical trigger(s), LOPA will evaluate the patient to determine medical suitability. The patient must have suffered a non-survivable brain injury or cardiac event such that the patient’s death would be imminent subsequent to the removal of ventilator and vasopressor support. When a patient has been determined medically suitable for DCD donation, LOPA will establish a plan with the attending physician.
   
   2. Furthermore, a patient can be considered DCD if the family has elected to make a patient a “do-not-resuscitate” and the above criteria would be met.
   
   3. The potential DCD must be between the ages of 0 years (36 weeks gestation) and 70 years-of-age, and must not have tested positive for HIV or HepBsAg at the time of the initial referral. All other potential donor medical and social concerns will be presented to the on-call LOPA recovery surgeon by the LOPA representative for further consideration.

B. Referral of the DCD:
   1. Hospital staff will refer all imminent deaths of any ventilator-dependent patient within 2 hours of meeting the Clinical Trigger of an underlying Glasgow Coma Scale (GCS) of 5 or less (or equivalent findings) to LOPA; absent Central Nervous System (CNS) Depressants; if brain death testing is being considered or pursued; or plans are being made to withdraw life-sustaining therapies (mechanical or pharmacological) on patients with a GCS of 5 or less. The consideration of and the discussion between the family regarding the terminal wean and/or disconnection from the ventilator should take place prior to and independent from any consideration of any discussion relating to the possibility of organ donation.
   
   2. The patient will be referred to the Louisiana Organ Procurement Agency (LOPA) at 1-800-833-3666 for preliminary screening to determine if organ donation is a viable option.
   
   3. Upon arrival at the hospital, the LOPA representative will need to contact the attending physician to discuss the patient’s clinical situation and develop a plan for presenting the option of organ donation to the family.
   
   4. Upon arrival at the hospital, the LOPA representative will notify the nursing supervisor, charge nurse and primary nurse to review the hospital DCD policy if applicable, perform an
assessment of the clinical situation / family dynamics and to formulate a plan of the potential procurement process.

5. If the patient meets criteria as a DCD as defined by LOPA criteria, the LOPA representative after consulting with the attending physician or designated hospital personnel, will approach the legal next-of-kin to present the option of donation and inform the family of the process involved.

6. Upon consent for DCD donation by the legal next-of-kin or legally designated decision maker, LOPA will complete the 'Consent for Anatomical Gift - Donation After Cardiac Death' form. A copy will be provided to the hospital. LOPA will also complete a thorough assessment of the patient's medical and social history. During the consent process, LOPA will determine the family's wishes regarding performing cardiopulmonary resuscitation (CPR) efforts should the patient cardiac arrest prior to the terminal wean.

7. After consent is obtained, LOPA will be financially responsible for all subsequent and additional expenses incurred in the procedures to evaluate and preserve the donor's organs or tissues. Admitting will set a 'flag' in the EHR to designate time LOPA assumed care after pronouncement of death. The LOPA representative will contact the hospital and request a copy of the patient's bill in order to discern fees associated with the donation process.

8. The LOPA representative will complete all LOPA and donor documentation as per protocol. All inpatient orders will be discontinued per primary MD. All orders will be entered per LOPA physician on call. In the event of consent, LOPA will provide a representative to facilitate the donor process.

9. The Coroner's Office must be contacted for clearance and instructions per LOPA policy. The LOPA representative shall be responsible for notification of the Coroner's Office.

C. Medical Management and Recovery

1. The primary care attending physician or physician designated by attending shall continue full responsibility for the patient care until declaration of death.

2. Prior to declaration of death, LOPA will not order any changes or adjustments to the patient's current medical therapy unless ordered by the patient's attending physician. However, in accordance with the informed consent of the family, LOPA will request to perform necessary blood, urine, sputum testing and chest x-rays in order to evaluate end organ function, serologies, tissue typing and cultures. Should the patient require the insertion of any intravenous and or arterial-line catheters, necessary measures will be taken to minimize patient discomfort.

3. Any laboratory tests or procedures performed at the request of LOPA will be done at no additional cost to the family. LOPA will request an itemized patient bill for review of charges and payment. The terminal wean will be scheduled in accordance to hospital operating room availability as to not interfere with scheduled cases or emergencies.

4. The terminal wean may take place in either the critical care unit or operating room. The family may be present during the terminal wean if it is to take place in the critical care unit.
5. **LOPA** representatives, attending physician or designee, and operating room personnel will review the 'Louisiana Consent for Anatomical Gift- Donation After Cardiac Death' form.

D. Medication Administration  
No medication will be administered with the intention of hastening cardiac cessation. Comfort measures may be given, in accordance with hospital policy, during the withdrawal process. Medications such as Heparin and Mannitol may be given to maintain organ function, as appropriate.

E. Transportation of Patient  
1. A pre-recovery conference prior to transport should occur between the **LOPA** representatives, attending physician or designated physician and the operating room personnel (which may include anesthesiologist, circulating nurse, scrub nurse and/or surgical technician). The group will review the process of the terminal wean, administration of medication, where the recovery teams will wait and organs to be recovered.

2. The patient will be transported to the operating room with a respiratory therapist (to support ventilation), a critical care/attending physician or anesthesiologist (the physician cannot be associated with **LOPA** or a member of the organ recovery team) and the **LOPA** representative.

3. The patient will remain ventilated, be placed on a cardiac and blood pressure monitor and infusions will be maintained.

F. Operating Room Procedure  
1. In the Operating Room, prior to the terminal wean, the patient will be surgically prepped and draped by the operating team and **LOPA** representative. The transplant recovery team will be available to assist in this process, however will not be present in the operating room during the terminal wean and until the patient is declared dead. Either the attending physician or a physician designated by the attending (not associated with transplant team) will perform the declaration of death in accordance with hospital protocol. The physician will write a pronouncement note and document the time of death in the patient’s chart.

   a. Cold perfusion preservation and/or recovery of organs will not begin until two (2) minutes after death. The pronouncement of cardiopulmonary death will be documented in accordance with hospital protocol.

   b. No incision for the purpose of removing organs will be made until the patient meets cardiopulmonary death criteria. At the time death has been declared, the transplant recovery team will wait two minutes after cardiac death (as recommended by the IOM), then promptly enter the operating room to begin the process of surgically removing the organs in accordance to **LOPA** organ recovery protocol.

   c. **LOPA** requests that designated hospital personnel record vital signs in one-minute intervals from the time of disconnection of ventilator until declaration of death.
Should cardiac cessation not occur within 120 minutes from ventilator cessation, the patient would be considered unsuitable for organ donation and returned to the hospital designated patient care area. The patient’s primary care physician and family will be notified. The physician shall provide orders for the continuation of care as appropriate.

2. When the patient is pronounced, the recovery team will be immediately notified in order to expedite the organ recovery and minimize warm ischemic time.

3. The organ recovery will take place in accordance to LOPA protocol.

G. Post Organ Donation

1. The LOPA representative will notify the nursing supervisor at the time of case completion to discuss the post case process.

2. The LOPA representative will assist hospital personnel in preparing the body for the morgue and/or family viewing (if requested), and clean the operating room.

3. The LOPA representative will contact the family to inform them of the patient’s time of death and organs recovered; the coroner (if required) and the funeral home chosen by the family. The death chart and completed Funeral Home Release shall be sent to Admitting.

4. A post-case conference should be scheduled by the LOPA representative and hospital liaison to review the case with nursing staff, hospital administration and physicians as needed to further discuss the case and circumstance and to allow the staff to express personal or institution concerns as needed.

5. Post-case paperwork will be completed by the LOPA representative according to LOPA protocol.

Administrator

6/19/13
Date

Approved by Clinical Board: 6/21/05, 1/16/07, 2/20/07, 9/16/08, 2/21/12, 6/18/13
Written: 5/05
Reviewed: 10/06, 8/08, 2/12, 9/12, 4/13
Revised: 10/06, 8/08, 2/12, 9/12, 4/13