



The Canadian Association of Critical Care Nurses

Position Statement

Deceased Organ and Tissue Donation

Introduction

Critical care nurses care for complex patients with life threatening conditions, many who will die because of their illness or injury. Overall, nine percent of patients admitted to any type of adult critical care unit in Canada will die before leaving the ICU (Bagshaw et al., 2016). Data available from Ontario, Canada's most populated province, reports critical care unit mortality rates that range from 10.5 percent in community-based facilities to 20.4 percent in academic centers. The highest mortality rates are among patients requiring life support for multi-organ dysfunction (Didiodatas, 2019).

Provided donation criteria are met, organ and tissue donation can proceed in three scenarios. First, tissue donation (e.g., ocular tissue, bones, skin, and heart valves) may occur within 12 to 24 hours after death. Second, deceased organ donation can take place following Death Determination by Neurological Criteria (DNC) or Death Determination by Circulatory Criteria (DCC) (Shemie et al., 2023). In these situations, the donor's substitute decision-maker frequently provides consent for deceased organ and tissue donation. Within the context of DNC, Shemie et al. (2023) remarked that, "Clinicians can facilitate family members understanding and acceptance of DNC, which may also improve bereavement outcomes" (p. 509). Concerning DCC, clinicians should help families to be prepared for the time-sensitive process of determining death and the observation period that is focused on confirmation of permanent cessation of circulation (Shemie, et. al. 2023).

Importantly, tissue and/or deceased organ donation can also occur in conjunction with Medical Assistance in Dying (MAiD) following DCC. Persons requesting MAiD or consenting to

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deceased tissue and/or organ donation in combination with MAiD must be conscious and competent in decision-making (Downar et al., 2019).

Critical care nurses are integral to the provision of high-quality care for potential donors, family members, and recipients (Shemie, 2017).

Background

Canada's demand for organs continues to grow annually (Norris, 2018; Canadian Institute for Health Information [CIHR], 2023). Thousands of people are on the waiting list for organ and tissue donation.

In 2022, 3,777 Canadian patients (59% active/41% on hold) needed an organ transplant. A total of 823 donors (561 DNC and 262 DCC) provided 2,936 organs (CIHR, 2023).

CACCN Position

CACCN endorses the following factors as essential elements of critical care nursing knowledge and practice in the context of organ and tissue donation.

1. There is a disparity between the number of Canadian adults and children waiting for an organ transplant and the number of organs donated (CHIR, 2023),
2. All eligible persons (or their substitute decision-makers) have the right to choose or refuse organ and/or tissue donation (Shemie, et al., 2017a).
3. Front-line care providers must maintain an ethical duty of care, protecting the interests of dying patients while also fulfilling best practices for organ and tissue donation (Canadian Association of Critical Care Nurses, 2017; Canadian Nurses Association [CNA], 2017, Zavalkoff, et al., 2019).
4. Advocating for and identifying potential organ and tissue donors, with the assistance of an organ and tissue donation specialist, is the standard of care (CBS, 2014).
5. Nurses support the patient, family, multidisciplinary team, and organ donation specialists to advocate for care discussions as early as possible when it is suspected that a patient may progress to death. (Shemie et al., 2023)
6. Supporting the patient and their family in whichever decision they make is an important component of high-quality end-of-life care in the ICU (Zavalkoff, et al., 2019).
7. Critical care nurses support and participate in the organ and tissue donation process by national and provincial legislation, and in alignment with employer policies (Zavalkoff, et al., 2019).

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8. Critical care nurses collaborate with organ and tissue donation specialists and interdisciplinary team members throughout the donation process (Shemie, et al., 2017a).
9. Current provincial and territorial legislation and professional nursing code of ethics protect and respect donor and recipient anonymity (CNA, 2017).
10. Organ and tissue donation principles should be integrated into critical care nursing curricula and unit orientation (Zavalkoff, et al., 2019).

Statement

The CACCN believes that all eligible persons have a right to choose to donate organs and/or tissues. Critical care nurses forge unique relationships with patients and families, providing them with the opportunity to explore organ and tissue donation at the end of life.

Responsibilities of the Critical Care Nurse

Critical care nurses provide expert care to patients and families at the end of life. They should be aware of practices for determining death (DNC and DCC), deceased tissue and organ donation guidelines, practice standards and resources. Donation processes are defined by Accreditation Canada, as well as the 2023 Canadian clinical practice guideline on donation (Accreditation Canada, 2019; Canadian Association of Critical Care Nurses, 2017; Shemie, et al., 2023).

Glossary

Death: "Death is defined as the permanent cessation of brain function (i.e. brain function is lost, will not resume spontaneously, and will not be restored through intervention) and is characterized by the complete absence of any form of consciousness (wakefulness and awareness) and of the absence of brainstem reflexes, including the ability to breathe independently" (Shemie et al., 2023, p. 484).

Death Determination by Neurologic Criteria (DNC):

"The process of determining death of an individual based on neurologic criteria" (Shemie et al., 2023, p. 488). Brain death refers to "DNC defines as the permanent cessation of brain function and characterized by the absence of consciousness, brainstem reflexes, and the ability to breathe independently" (Shemie et al., 2023, p. 488).

Death Determination by Circulatory Criteria (DCC):

“The process of determining death of an individual based on circulatory criteria” (Shemie et al., 2023, p. 488). Death determination by circulatory criteria is made based on the absence of extracranial circulation that leads to the permanent absence of intracranial (brain) circulation (Shemie, et al., 2023).

DCC refers to the controlled circumstances where death is anticipated but has not yet occurred because of the presence of life-sustaining measures in the context of a non-recoverable illness or injury. Once a consensual decision (physician and patient or family) is made to withdraw life-sustaining measures where imminent death is anticipated, organ donation can be explored (Shemie, 2006).

Medical Assistance in Dying (MAiD):

Medical Assistance in Dying (MAiD) is “the administering by a physician or nurse practitioner of a substance to a person, at their request, that causes their death; or the prescribing or providing by a physician or nurse practitioner of a substance to a person at their request, so that they may self-administer the substance and in doing so cause their own death” (Parliament of Canada, 2016)

Donation after death determination by circulatory criteria:

“[R]efers to the recovery of organs for transplantation from individuals after DCC” (Shemie et al., 2023, p. 489). Previously referred to as donation after cardiocirculatory death. Determination of death in these cases is reliant upon ensuring that the appropriate amount of time has passed after cessation of circulation to preclude unassisted resumption of spontaneous circulation” (Shemie et al., 2023, p. 497).

***Approved by the CACCN Board of Directors
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This position statement revision was completed with contributions from CACCN Members: Wendy Sherry, MN, RN, Clinical Resource Nurse, Organ and Tissue Donation, McGill University Health Centre and Allana LeBlanc, MScN, RN, CNCC(C), Clinical Nurse Specialist, Vancouver General Hospital.

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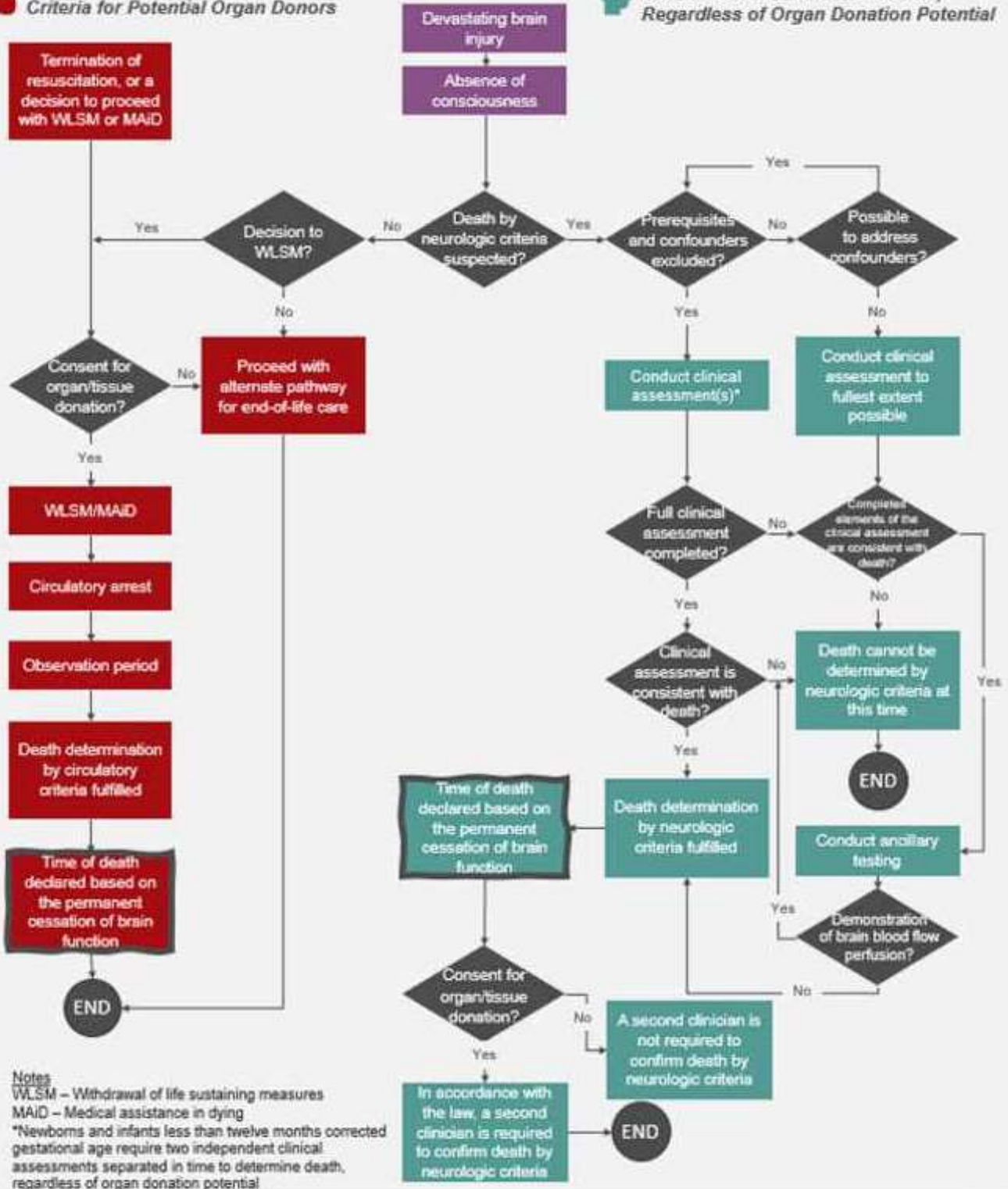
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Death Determination by Circulatory Criteria for Potential Organ Donors



Death Determination by Neurologic Criteria for All Ventilated Patients, Regardless of Organ Donation Potential



Notes
 WLSM – Withdrawal of life sustaining measures
 MAiD – Medical assistance in dying
 *Newborns and infants less than twelve months corrected gestational age require two independent clinical assessments separated in time to determine death, regardless of organ donation potential