



KENTUCKY BOARD OF NURSING
312 Whittington Parkway, Suite 300
Louisville, Kentucky 40222-5172
<http://kbn.ky.gov>

ADVISORY OPINION STATEMENT

**SCOPE OF REGISTERED NURSING PRACTICE IN THE DEACTIVATION OF IMPLANTED
CARDIOVERTER DEFIBRILLATORS (ICDS) AND VENTRICULAR ASSIST DEVICES (VADS)**

The Kentucky Board of Nursing is authorized by Kentucky Revised Statutes (KRS) Chapter 314 to regulate nurses, nursing education and practice, promulgate regulations and to issue advisory opinions on nursing practice, in order to assure that safe and effective nursing care is provided by nurses to the citizens of the Commonwealth.

The Kentucky Board of Nursing issues advisory opinions as to what constitutes safe nursing practice. As such, an opinion is not a regulation of the Board and does not have the force and effect of law. It is issued as a guideline to licensees who wish to engage in safe nursing practice, and to facilitate the delivery of safe, effective nursing care to the public.

Opinion: Scope of Registered Nursing Practice in the Deactivation of Implanted Cardioverter Defibrillators (ICDs) and Ventricular Assist Devices (VADs)

Approved Date: 4/2012

Revised: 10/2019

Editorial Revision: 5/2012; 4/2016;
5/2018; 12/2019

Accountability and Responsibility of Nurses

In accordance with KRS 314.021(2), nurses are responsible and accountable for making decisions that are based upon the individuals' educational preparation and current clinical competence in nursing, and requires licensees to practice nursing with reasonable skill and safety. Nursing practice should be consistent with the *Kentucky Nursing Laws*, established standards of practice, and be evidence based.

Rationale for Advisory Opinion

This statement is written to provide an advisory opinion on whether it is within the scope of registered nursing practice for the registered nurse who is educationally prepared and clinically competent to apply a magnet to either temporarily disable an Implanted Cardioverter Defibrillator (ICD), or deactivate ICDs, and Ventricular Assist Devices (VADs) for patients, in hospice or palliative care, pursuant to physician orders.

Advisory Opinion

After review of the statutes governing nursing practice, curricula of pre-licensure and continuing education nursing programs, standards of nursing practice, and evidence based articles; the Kentucky Board of Nursing issued this advisory opinion statement:

LPN Practice

The Board determined that it is **not** within the scope of licensed practical nursing practice to disable a heart assistive device.

RN Practice - ICD

It is within the scope of registered nursing practice for the registered nurse who is educationally prepared and clinically competent to apply a magnet to disable an Implanted Cardioverter Defibrillator (ICD) for patients receiving hospice/palliative care. Nurses caring for hospice patients are advised to follow the position statement issued by the National Hospice and Palliative Care Organization (NHPCO) titled, "Care of Hospice Patients with Automatic Implantable Cardioverter-Defibrillators", https://www.nhpc.org/wp-content/uploads/2019/04/NHPCO_ICD_position_statement_May08.pdf

RN Practice - VAD

It is within the scope of registered nursing practice for the registered nurse who is educationally prepared and clinically competent to disable an Ventricular Assist Device (VAD) for patients receiving hospice/palliative care in a home setting, when ordered by a physician. (Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3523274/> 2013)

Facilities and Providers

Health care facilities and providers should have written policies and procedures that provide for the deactivation or disabling of heart assistive devices in place.

Policies Related to Deactivation of heart assistive devices after death

Health care providers and facilities should have in place procedures and policies regarding the deactivation or disabling of ICDs and VADs once a patient has died. Nurses who are educationally prepared and clinically competent in the disabling of a heart assistive device must follow procedures and protocols as outlined by the provider and facility, as well as device specific instructions, pursuant to a physician's order.

Devices

All heart assistive devices are created to prolong life in patients with heart failure.

Devices are unique in their design, function, management, and steps for deactivation. Nurses working with patients, who have implanted devices must be educationally prepared and clinically competent in the management and deactivation of the specific device.

Implanted Cardioverter Defibrillator (ICD)

It is within the scope of registered nursing practice for the registered nurse who is educationally prepared and clinically competent to apply a magnet to temporarily disable an Implanted Cardioverter Defibrillator (ICD) when the following conditions are met:

Disabling of ICD in an Acute Care Setting

1. Disabling of an ICD by an RN is allowed by documented institutional policy, procedures, and protocols;
2. A patient specific order is written by an authorized provider;
3. A physician or APRN is in attendance the entire time that the magnet is in use;
4. A complete nursing assessment should be performed and documented prior to each episode of temporary disabling of the ICD;
5. Cardiac monitoring is continuously performed;
6. An emergency cart must be immediately available;
7. The institution or practice setting has in place written policies and procedures/protocols, developed in accordance with accepted standards of practice, to guide the RN in temporarily disabling the ICD;
8. There is documentation/evidence of education, training and continuing competence of the RN in temporarily disabling the ICD; and
9. The ICD should be evaluated by the appropriate cardiac provider post procedure.

Ventricular Assist Device (VAD)

It is within the scope of registered nursing practice for the registered nurse who is educationally prepared and clinically competent to disable a Ventricular Assist Device (VAD) utilizing device specific instructions, when the following conditions are met:

Deactivation of a VAD in a Hospital Setting

1. Deactivation of an VAD by an RN is allowed by written institutional policy, procedures, and protocols;
2. A patient specific order is written by an authorized provider;
3. A physician or APRN is in attendance the entire time;
4. A complete nursing assessment should be performed and documented prior to deactivation;
5. Cardiac monitoring is continuously performed;
6. An emergency cart must be immediately available;
7. The institution or practice setting has in place written policies and procedures/protocols, developed in accordance with accepted standards of practice, for the deactivation of the VAD;
8. There is documentation/evidence of education, training and continuing competence of the RN in deactivation of the VAD; and
9. The procedure is completed according to device specific instructions.

Disabling of ICD and VAD in Hospice/Palliative Care

Although ICDs provide lifesaving therapy and are beneficial to patients, disease progression and the development of co-morbidities may affect the quality of the patient's life. Multiple reports have shown that as many as 27% of patients receive shocks as a result of ICD devices near the end of life (Brady, 2016). The witnessing of shocks delivered during the last hours of a loved one's life may be distressing for the family members who are there at the bedside (Cornelius & Mager, 2018).

The goal of palliative care is to relieve suffering, improve quality of life, provide support to patients and the family member or friends who care for them, and to enable the patient to die with dignity at the end of life. Patients and families should be encouraged to consult with a palliative care clinician prior to the implantation of an ICD or VAD. As part of the pre-operative discussion, the patient and family should consider defining acceptable and unacceptable quality of life as part of the preoperative plan of care. Further, the palliative care provider should discuss the importance of completing health care power of attorney documents preoperatively and provide information about living wills.

Palliative care clinicians should work with heart failure teams to gain experience in deactivating commonly implanted ICDs and VADs devices. Agencies/Facilities providing palliative care treatment may wish to establish standing orders/protocols regarding the administration of medications.

The Nurse who deactivates an ICD or VAD should:

- Confirm that there is a health care power of attorney, living will, DNR or DNI prior to deactivation.
- Discuss the plan of care regarding discontinuation of additional treatments upon deactivation of the ICD or LVAD.
- Clearly outline the process regarding deactivation to those participating in the care of the patient and determine their understanding.
- Explain that survival after ICD or LVAD deactivation at the end of life ranges from a few minutes to a few days.
- Reassure families that comfort measures will be continued through patient's end of life (Gafford, et.al. 2013).

Advisory opinion statements are issued by the Kentucky Board of Nursing as a guideline to licensees who wish to engage in safe nursing practice. As such, an opinion statement is not a regulation of the Board and does not have the force and effect of law.

Determining Scope of Practice

KRS 314.021(2) holds all nurses individually responsible and accountable for the individual's acts based upon the nurse's education and experience. Each nurse must exercise professional and prudent judgment in determining whether the performance of a given act is within the scope of practice for which the nurse is both licensed and clinically competent to perform. In addition to this advisory opinion statement, the Kentucky Board of Nursing issued Advisory Opinion Statement #41 RN/LPN Scope of Practice Determination Guidelines which contains the KBN Decision-Making Model for Determining Scope of Practice for RNs/LPNs, and published the APRN Scope of Practice Decision Making Model providing guidance to nurses in determining whether a selected act is within an individual nurse's scope of practice now or in the future. A copy of the KBN Decision-Making Model for Determining Scope of Practice for RNs/LPNs may be downloaded from the Board's website <https://kbn.ky.gov/practice/Documents/41%20KBN%20Decision-Making%20Model%20for%20Determining%20Scope%20of%20Practice%20for%20RNs-LPNs.pdf> and a copy of the APRN guidelines may be downloaded from the Board's website <http://kbn.ky.gov/practice/Documents/APRN%20Scope%20of%20Practice%20%20Decision%20Making%20Model.pdf>.

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