



KENTUCKY BOARD OF NURSING
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ADVISORY OPINION STATEMENT

**ROLES OF NURSES IN THE ADMINISTRATION OF MEDICATION PER
INTRASPINAL ROUTES**

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: Roles of Nurses in the Administration of Medication Per Intraspinal Routes

Approved Date: 1984

Revised Date: 4/1985; 12/1986; 6/1988; 2/1992; 1/1993; 4/2001; 2/2005; 4/2007; 6/2012; 4/2016

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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.

Advisory Opinion

After study of the issues and concerns regarding the role of registered nurses in the administration of medication per intraspinal routes for the purpose of analgesia and/or anesthesia, the Kentucky Board of Nursing issued the following advisory opinions:

Analgesia Via Intraspinal (Epidural/Intrathecal) Routes

The administration of medication¹ for analgesia per intraspinal routes², as prescribed by a documented order of a qualified provider, is within the scope of registered nursing practice and not within the scope of licensed practical nursing practice.

Registered nurses who administer medication via intraspinal routes:

- 1) are responsible for having substantial specialized knowledge and skill in the administration of medication per these routes;
- 2) should have documented evidence of completion of continuing education which provides for clinical practice and demonstrated competency in the performance of the procedure;
- 3) are responsible for documentation of educational preparation and for maintaining competency in the performance of the procedure; and
- 4) should perform the procedure, according to approved written policies/procedures of the employing agency that are consistent with the legal definition of nursing practice, and include, but are not limited to the following:
 - indications for use
 - patient selection criteria
 - mode of infusion
 - patient assessment and plan of care
 - management of side effects and potential complications
 - care of catheter
 - nursing implications

Anesthesia Via Spinal, Epidural or Caudal Routes

The responsibilities, both for the administration of medication for the purpose of anesthesia per spinal, epidural or caudal routes, and for the monitoring of the patient's reaction or response to such medication are within the scope of practice of the advanced practice registered nurse, designated nurse anesthetist; such acts are not within the scope of registered nursing practice as defined in KRS 314.011(6). Therefore, specific procedures involved in the administration of anesthetic agents via these routes are not appropriate functions for registered nurses, and include, but are not limited to the following:

- 1) Injection of medications for the purpose of anesthesia via intraspinal catheter;
- 2) Changing of syringes on an intraspinal catheter being utilized for anesthesia;
- 3) Adjustment of anesthetic infusion rates per volume control or rate regulators when the physician/anesthesiologist/CRNA is not present to monitor the patient's response.

¹ The administration of medications for analgesic purposes may include such medications as morphine sulfate (duramorph), bupivacaine (marcaine spinal), and sub-anesthesia dosages of ketamine hydrochloride.

² Intraspinal routes - The administration of medication into the epidural or intrathecal space of the spinal cord via an intraspinal delivery system. An intraspinal delivery system may include a) a percutaneous epidural or intrathecal catheter, b) an implanted injection port or reservoir, or c) an implanted infusion pump.

Insertion and Repositioning

The insertion, advancement or repositioning of a percutaneous epidural, intrathecal, or caudal catheter is not within the scope of registered nursing practice, but is within the scope of practice of the advanced practice registered nurse, designated nurse anesthetist.

Removal of an Epidural, Intrathecal, or Caudal Catheter by Registered Nurses

Registered nurses, who have documented evidence of educational preparation and clinical competence in the performance of the procedure, may remove an epidural, intrathecal, or caudal catheter, inserted for the purpose of anesthesia or analgesia, based upon:

- 1) documentation of uncomplicated catheter insertion;
- 2) documentation that no catheter related complications³ have occurred since the insertion of the catheter;
- 3) a direct order of the physician/APRN/CRNA who is responsible for the patient; and
- 4) an approved written facility/nursing policy and procedure.

Intrapartum patients

The Board recognizes and supports the position of the Association of Women's Health, Obstetric and Neonatal Nurses that has issued a position statement entitled, "The Role of the Registered Nurse in the Care of the Pregnant Woman Receiving Analgesia and Anesthesia by Catheter Techniques" (November 2014),

[http://www.jognn.org/article/S0884-2175\(15\)31771-8/abstract?utm_source=awhonn.org](http://www.jognn.org/article/S0884-2175(15)31771-8/abstract?utm_source=awhonn.org)

To that end, it is the opinion of the Board that the insertion, initial injection, bolus or rebolus injection, initiation of continuous infusion, verification of correct catheter placement, and increasing or decreasing the rate of a continuous infusion is within the scope of the advanced practice registered nurse designated nurse anesthetist.

Following stabilization of vital signs after either initial insertion, initial injection, bolus injection, rebolus injection, or initiation of continuous infusion by a licensed, credentialed anesthesia care provider, the educationally prepared, clinically competent non-anesthetist registered nurse, in communication with the obstetric and anesthesia care providers may:

- Monitor the status of the mother and fetus;
- Replace empty infusion syringes or infusion bags with new, pre-prepared solutions containing the same medication and concentration, according to standing orders provided by the anesthesia provider; and
- Stop the continuous infusion if there is a safety concern or the woman has given birth.

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Catheter related complications may include, but are not limited to: a) kinking, knotting, shearing, compression or leakage of the catheter, b) unilateral anesthesia, c) extrusion of the catheter out of the epidural/intrathecal space, d) unpredictability of the direction of the catheter, e) fibrosis, or f) infection.

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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Applicable Statutes From the *Kentucky Nursing Laws*³

KRS 314.011(6) defines "registered nursing practice" as:

... The performance of acts requiring substantial specialized knowledge, judgment, and nursing skill based upon the principles of psychological, biological, physical, and social sciences in the application of the nursing process in:

- a) The care, counsel, and health teaching of the ill, injured or infirm.
- b) The maintenance of health or prevention of illness of others.
- c) The administration of medication and treatment as prescribed by physician, physician assistant, dentist, or advanced practice registered nurse and as further authorized or limited by the board, and which are consistent either with American Nurses' Association Scope and Standards of Practice or with standards of practice established by nationally accepted organizations of registered nurses. Components of medication administration include, but are not limited to:
 1. Preparing and giving medication in the prescribed dosage, route, and frequency, including dispensing medications only as defined in subsection (17)(b) of this section;
 2. Observing, recording, and reporting desired effects, untoward reactions, and side effects of drug therapy;
 3. Intervening when emergency care is required as a result of drug therapy;
 4. Recognizing accepted prescribing limits and reporting deviations to the prescribing individual;
 5. Recognizing drug incompatibilities and reporting interactions or potential interactions to the prescribing individual; and
 6. Instructing an individual regarding medications;

³ A copy of the *Kentucky Nursing Laws* may be downloaded from the Kentucky Board of Nursing website at <http://kbn.ky.gov>.

- d) The supervision, teaching of, and delegation to other personnel in the performance of activities relating to nursing care.
- e) The performance of other nursing acts which are authorized or limited by the board, and which are consistent either with American Nurses' Association Standards of Practice or with Standards of Practice established by nationally accepted organizations of registered nurses.

KRS 314.011(8) defines "advanced practice registered nursing practice" as:

"Advanced practice registered nursing" means the performance of additional acts by registered nurses who have gained advanced clinical knowledge and skills through an accredited education program that prepares the registered nurse for one (1) of the four (4) APRN roles; who are certified by the American Nurses' Association or other nationally established organizations or agencies recognized by the board to certify registered nurses for advanced practice registered nursing as a certified nurse practitioner, certified registered nurse anesthetist, certified nurse midwife, or clinical nurse specialist; and who certified in at least one (1) population focus. The additional acts shall, subject to approval of the board, include but not be limited to prescribing treatment, drugs, devices, and ordering diagnostic tests. Advanced practice registered nurses who engage in these additional acts shall be authorized to issue prescriptions for and dispense nonscheduled legend drugs as defined in KRS 217.905 and to issue prescriptions for but not to dispense Schedules II through V controlled substances as classified in KRS 218A.020, 218A.060, 218A.080, 218A.100, and 218A.120, under the conditions set forth in KRS 314.042 and regulations promulgated by the Kentucky Board of Nursing on or before August 15, 2006. ... The performance of these additional acts shall be consistent with the certifying organization or agencies' scopes and standards of practice recognized by the board by administrative regulation