



KENTUCKY BOARD OF NURSING

312 Whittington Parkway, Suite 300
Louisville, Kentucky 40222-5172

<http://kbn.ky.gov>

ADVISORY OPINION STATEMENT

Roles of Nurses in Orthopedic Nursing Practice

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 Orthopedic Nursing Practice

Approved Date: 4/1990

Revised: 1/1993, 4/1999; 2/2005; 4/2007; 4/2024

Editorial Revision: 1/2011; 6/2012, 4/2016; 5/2018

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 individual's 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

After review of the statutes governing nursing practice and study of the issues and concerns regarding both the role and scope of nursing practice for nurses in orthopedic nursing, the Kentucky Board of Nursing issued the following opinions:

Nursing Interventions identified in this Advisory Opinion Statement include:

- **The Role of Nurses in the performance of:**
 - Cast Application
 - Removal, Spreading, or Splitting of a Cast
 - Closed Reduction of Fracture

Educational Preparation and Clinical Competency

Pursuant to KRS 314.021(2) all nurses are held responsible and accountable for making decisions that are based upon the individual's educational preparation and current clinical competence. One method for demonstrating educational preparation and clinical competence is through obtaining relevant certifications within a specialty area. Another method would be to create a portfolio of trainings, workshops, and continuing education that demonstrates the acquisition of additional knowledge and clinical competency in the specialty area.

Advisory Opinion: Cast Application

Cast application involves circumferential application of plaster or fiberglass to the affected limb to provide mobilization. The procedure is performed beginning with the application of a stockinette and padding. The use of a cast promotes healing, maintains bone alignment, diminishes pain, protects the injury, and helps compensate the area for surrounding muscular weakness (American Academy of Family Physicians, 2024).

Registered Nursing Practice

- 1) It is within the scope of registered nursing practice for a registered nurse to apply a cast for the purpose of immobilization, support, and/or protection based upon a direct order of a qualified provider for an individual patient. The application of casts for treatment of musculoskeletal deformities or compound fractures, and closed reduction of fractures are **not** within the scope of registered nursing practice.
- 2) As required by KRS 314.021(2), a registered nurse who applies a cast is responsible for having adequate educational preparation and clinical competence to perform the procedures in a safe manner.
- 3) The registered nurse should maintain documentation of educational preparation that provides for clinical practice and demonstration of competency in the performance of the procedures.

Advisory Opinion: Removal, Spreading, or Splitting of a Cast

Splitting a cast involves the procedure of creating a longitudinal cut in the full length of the cast (from distal to proximal or vice versa), through all cast layers, padding, and stocking so that the skin is clearly visible along the entire distance of the channel of the split to treat pain and provide comfort (The Plaster Room, ND).

Nursing Practice

- 1) It is within the scope of registered nursing and licensed practical nursing practice for the nurse who is qualified in the performance of the procedure to perform the removal, splitting, and/or spreading of a cast, based upon an order of the patient's provider.
- 2) To intervene in neurovascular compromise from cast compression when the physician/provider is not available for issuance of a patient care order, a qualified nurse may split and/or spread a cast.

Nurses who apply casts or remove, spread, or split casts should:

- a) Possess knowledge and competent technical skill in the performance of the procedures;
- b) Be knowledgeable of the potential complications and adverse reactions that may result from the performance of the procedures;
- c) Possess the knowledge and skill to recognize adverse reactions, and to take appropriate action;
- d) Perform acts which are in accordance with 1) the *Kentucky Nursing Laws*, 2) documented facility policy and procedures, 3) standards of nursing practice, and 4) evidence-based practice;
- e) Maintain documentation of educational preparation that provides for clinical practice and demonstration of competency in the performance of such acts.

Advisory Opinion: Closed Reduction of Fracture

Closed reduction of a fracture is a procedure to set (reduce) a broken bone without creating an incision in the skin. The broken bone is put back in place by way of manipulation, allowing the bone to fuse together in alignment (National Library of Medicine, 2022).

Advanced Practice Registered Nursing Practice

It was the opinion of the Board that the closed reduction of a fracture is within the scope of advanced practice registered nursing practice for the APRN who is educationally prepared and clinically competent to perform the act in a safe, effective manner. Closed reduction of a fracture is **not** within the scope of registered nursing or licensed practical nursing practice.

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>.

The following grid provides a list of procedures outlined in the AOS. An "X" indicates that such is within the practice of the nurse who is educationally prepared and clinically competent to provide care as described above.

Care /Procedure	LPN	RN	APRN
	Requires Qualified Healthcare Provider* Orders	Requires Qualified Healthcare Provider* Orders	APRNs Certified in the Relevant Role and Population Foci
Cast Application			
Application of cast for the purpose of immobilization,		X	X
Application of cast for the treatment of musculoskeletal deformities or compound fractures			X
Cast Removal			
Removal, splitting, and/or spreading for a cast	X	X	X
Intervene in neurovascular compromise from cast compression when the physician/provider is not available for issuance of a patient care order.	X	X	X
Closed Reduction of Fracture			
Closed Reduction of Fracture			X
<i>Please Note: Nurse must be educationally prepared and clinically competent to perform any of the tasks/procedures listed above and follow the policies of their facility or organization.</i>			
<i>*Qualified Healthcare Providers include MD, PA, APRN, and/or Dentist KRS 314.011 (6) and (10)</i>			
1.24			

Applicable Statutes From the Kentucky Nursing Laws

KRS 314.021(2) holds all nurses responsible and accountable for making decisions that are based upon the individuals' educational preparation and experience in nursing.

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;
- d) The supervision, teaching of, and delegation to other personnel in the performance of activities relating to nursing care; and
- 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(10) defines "licensed practical nursing practice" as:

...The performance of acts requiring knowledge and skill such as are taught or acquired in approved schools for practical nursing in:

- a) The observing and caring for the ill, injured, or infirm under the direction of a registered nurse, advanced practice registered nurse, physician assistant, a licensed physician, or dentist;
- b) The giving of counsel and applying procedures to safeguard life and health, as defined and authorized by the board;
- c) The administration of medication or treatment as authorized by a physician, physician assistant, dentist, or advanced practice registered nurse and as further authorized or limited by the board which is consistent with the National Federation of Licensed Practical Nurses or with Standards of Practice established by nationally accepted organizations of licensed practical nurses;
- d) Teaching, supervising, and delegating except as limited by the board;
- e) The performance of other nursing acts, which are authorized, or limited by the board and which are consistent with the National Federation of Licensed Practical Nurses' Standards of Practice or with Standards of Practice established by nationally accepted organizations of licensed practical 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;...

References

American Academy of Family Physicians. (2024). *Principles of casting and splinting.*
<https://www.aafp.org/pubs/afp/issues/2009/0101/p16.html>

National Library of Medicine. (2022). *Closed reduction of a fractured bone.*
<https://medlineplus.gov/ency/patientinstructions/000521.htm>

The Plaster Room. (ND). *Splitting Casts.* <https://theplasterroom.co.uk/basics/splitting-casts/>