



Arizona State Board of Nursing

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An advisory opinion adopted by AZBN is an interpretation of what the law requires. While an advisory opinion is not law, it is more than a recommendation. In other words, an advisory opinion is an official opinion of AZBN regarding the practice of nursing as it relates to the functions of nursing. Facility policies may restrict practice further in their setting and/or require additional expectations related to competency, validation, training, and supervision to assure the safety of their patient population and or decrease risk.

OPINION: P.I.C.C. LINES
APPROVED: DATE 10/87
REVISED DATE: 3/95, 1/99, 4/99,
1/02, 11/03, 5/04, 9/08, 3/12, 11/15
ORIGINATING COMMITTEE:
SCOPE OF PRACTICE COMMITTEE

Within the Scope of Practice of X RN LPN

ADVISORY OPINION

PERIPHERALLY INSERTED CENTRAL CATHETER (PICC) INSERTION, SUTURING, MAINTENANCE, REMOVAL & VERIFICATION OF TIP PLACEMENT

It is **not within** the scope of practice for a Registered Nurse (RN) to perform fluoroscopy or operate radiographic equipment.

It is within the scope of practice for a Registered Nurse to insert, do suturing to secure, maintain, and remove a PICC and to obtain informed consent for placement of the PICC, in a manner consistent with agency/employer policies governing the informed consent process.

It is within the scope of practice for a Licensed Practical Nurse (LPN) to provide line and site care including cap and dressing changes; blood draws, and to administer, monitor and discontinue approved medications*, including routine flushes via a PICC.

*See also the Arizona State Board of Nursing Advisory Opinion Intravenous Infusion Therapy/Venipuncture: The Role of the Licensed Practical Nurse.

I. GENERAL REQUIREMENTS

- A. The agency/employer maintains written policy and procedures.
- B. Didactic education and competencies for advanced PICC techniques are completed and on file with the agency/employer.
- C. Completion of an instructional program that includes performance-based competency assessment related to:
 1. PICC insertion using advanced placement techniques such as, but not limited to, Seldinger or Modified Seldinger.
 2. Anchoring of the PICC, including by suturing
 3. Ultrasound-guided placement, over the wire technique, use of tip placement devices and troubleshooting.
- D. An RN may place a PICC using fluoroscopy to guide and/or verify tip placement if the Radiologic Technologist or Radiologist operates the fluoroscopy equipment.
- E. A wire may not extend past the shoulder or past the tip of the catheter for exchange or placement, unless the PICC is placed/repositioned using fluoroscopy.
- F. The RN trained to verify tip placement using initial or repeat chest radiograph (X-ray) may not extend that training to the interpretation of radiographs for any

other purpose.

- G. RNs using advanced techniques to verify placement of the catheter tip, prior to and independent of a Radiologist, will meet the following requirements:
 - 1. Completion of an instructional program related to the technique such as but not limited to: the use of fluoroscopy, interpretation of chest radiography, or the use of other tip placement verification devices such as an electrocardiogram tip confirmation device.
 - 2. Skills verification by a Radiologist to determine interventions for sub-optimal tip placement for age specific patients.
 - 3. The agency/employer maintains a written policy and procedures.
 - 4. The agency/employer maintains documentation of program completion and performance-based competency assessment.
- H. For nurses maintaining a PICC, including removal by an RN: The agency/employer maintains a written policy and procedure.
- I. The nurse may proceed with infusion orders per agency/employer policy and procedure after optimal PICC line tip placement verification.

II. COURSE OF INSTRUCTION

Instruction shall include but is not limited to the following, as applicable to the Individual practitioner's scope, and per agency/employer policy

- A. For RNs performing PICC insertion:
 - 1. Anatomy and physiology of the vascular system as it relates to PICC placement and removal
 - 2. Infection control practices
 - 3. Patient assessment skills associated with PICC placement and removal
 - 4. Use of ultrasound or fluoroscopy as applicable
 - 5. Simulated insertion techniques related to PICC placement and removal (if available)
 - 6. Indications and contraindications for PICC placement and removal
 - 7. PICC/Midline insertion, including patient preparation, sterile technique, set up, and insertion.
 - 8. PICC care, maintenance, and removal
 - 9. Insertion and post-insertion related complications and management
 - 10. Nursing responsibilities including patient education
- B. For RNs using advanced techniques to verify location of the PICC tip:
 - 1. Anatomy and physiology of vascular system as it relates to PICC placement/removal
 - 2. Radiographic landmarks and techniques
 - 3. Abnormal anatomy and techniques for catheter positioning/interpretation
 - 4. Management of PICCs that do not demonstrate optimal positioning
 - 5. Device specific training, such as for electrocardiogram tip placement device
 - 6. If using fluoroscopy, radiation management and safety
 - 7. Nursing responsibilities per facility policies

III. RATIONALE

The expertise of the nurse educated to insert and maintain PICC lines is consistent with current state of practice as outlined by the Infusion Nurse's Society (INS) and the Association of Vascular Access (AVA).-

The expertise and education required for radiographic tip placement interpreting x-rays and using fluoroscopy for positioning and repositioning PICC lines is consistent with the American College Radiology position statement as to ensure safe practice and continuity of care for patients.

IV. REFERENCES

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Infusion Nursing Standards of Practice (2006), *Journal of Infusion Nursing*, 29 (1S), Lippincott Williams and Wilkins.

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Verhey, P; Gosselin, m; Primack, S; Blackburn, P, Kramer, A. (2008). The Right mediastinal border and central venous anatomy on frontal chest radiograph-Direct CT correlation. *JAVA*, Vol 13, No 1. Pages 32-35.

Association of Vascular Access Position Statement. Use of Seldinger or Modified Seldinger Technique, in Combination with Real-Time Imaging Modalities for Peripherally Inserted Central Catheter and Midline Placement by Clinicians (6/2011)

Journal of Infusion Nursing Society, 2010, INS Position Paper: The Role of the Registered Nurse in Determining Distal Tip Placement of Peripherally Inserted Central Catheters by Chest Radiograph, Approved September 2009, *JIN*, Vol 33:1, Jan/Feb 2010

Arizona State Board of Nursing, Advisory Opinion Intravenous Infusion Therapy/Venipuncture: The Role of the Licensed Practical Nurse, updated 9/2011.