NEVADA STATE BOARD OF NURSING
Practice Decision
Central Venous Access Device Insertion

The Nevada State Board of Nursing (NSBN) finds that a qualified registered nurse (RN) who has completed appropriate training and competency defined by the institution and in compliance with NAC 632.225, may insert the following Central Vascular Access Devices (CVADs)

- Peripherally Inserted Central Catheters (PICC) via direct puncture, Seldinger Technique, Modified Seldinger Technique (MST), or Accelerated Seldinger Technique (AST) or other techniques as endorsed by Infusion Nurses Society (INS) including use of extended subcutaneous route (pseudo-tunneling) for access into the following areas:
    - Basilic
    - Brachial
    - Cephalic
    - Mid-Thigh
- Centrally Inserted Central Catheters (CICC), including Acute Hemodialysis Catheters (AHD) via direct puncture, Seldinger Technique, Modified Seldinger Technique (MST), or Accelerated Seldinger Technique (AST) or other techniques as endorsed by Infusion Nurses Society (INS) including use of extended subcutaneous route (pseudo-tunneling) for access into the following areas:
    - External Jugular
    - Internal Jugular (AHD, CICC)
    - Umbilical Vein
    - Axillary Vein
    - Femoral Vein (AHD, CICC)

Rationale:

Nursing practice has developed into several specialties, including vascular access. As the vascular access specialty has grown with research from a multi-disciplinary approach, evidence- based practice has changed and developed for a safer patient experience, including: an increase in first attempt success rates, as well as reductions in complications and reductions in repeat radiographic imaging for tip confirmation.

The inserting RN should maintain practices outlined by the highest level of evidence-based measures set by the (INS) and the Association of Vascular Access (AVA.)

Considering associated risks with CICC insertion, an authorized provider should be readily accessible to assist, if needed with any associated procedural complication management.

Requirements:

1. The agency/employer maintains written policies and procedures which addresses initial and ongoing qualifications, competence, scope and supervision requirements.
    a. Qualifications: Completed facility approved training for specific procedure(s)
    b. Previous experience with ultrasound guided PIV insertions (PIVs, and/or Midlines)
    c. Successful supervised insertions, which the required number to be set by the policy of the organization in which the inserter practices, with documented competency in compliance with NAC 632.225.
    d. Accessible authorized provider.

2. The trained RN:
    a. Reviews the provider order for CVAD.
    b. Evaluates the patient and need for the ordered CVAD
    c. Ensures informed consent for procedure is signed and dated.
    d. Assesses the patient to determine safest/most appropriate line and makes recommendations for changes in orders if needed.
    e. Performs Time Out with witness reviewing informed consent prior to procedure
    f. Inserts CVAD, utilizing maximum barrier precautions and aseptic non-touch technique with ultrasound guidance.
    g. Documentation post procedure must include but not limited to:
        - Informed consent obtained
        - Catheter brand, size and lot number
        - Lidocaine used or other anesthetic amount
        - Total catheter length
        - External catheter length
        - Vessel accessed
        - Number of attempts
        - Tip position and confirmation method utilized
        - Patient tolerance
        - Type of securement (suture or sutureless)
        - Dressing and maintenance
        - Presence or absence of sliding lung pre and post procedure (IJ/EJ CICC)
        - Arm circumference (Basilic, Brachial and Cephalic)
        - Leg circumference (Mid-Thigh)
        - Any complications and performed complication mitigation along with patient response to actions if performed

Training:

1. The RN must have completed an instructional program which includes supervised clinical practice in ultrasound guided vascular access device insertion. This would include training for central vascular pathways, both venous and arterial with proficiency of vessels, structures and patient assessment.

2. The RN will be trained with appropriate insertion techniques per the procedure or other techniques as endorsed by Infusion Nurses Society (INS)

3. Training will include Insertion, securement, stabilization, maintenance and removal of CVAD

4. Training will include catheter tip positioning/navigation confirmation including:
    - Intracavitary electrocardiogram (IC-ECG) with or without doppler
    - Chest X-ray (CXR)
    - Any other FDA approved tip positioning device

5. Established competency for ultrasound assessment for sliding lung to rule out pneumothorax and pleural damage.

6. Training will include insertion and post-insertion related complications and management strategies.

7. Didactic and skills education, proctored insertions with demonstrated competency for CVADs are completed and files are kept with the employer/institution/agency.

8. The RN may confirm proper CVAD tip placement with intracavitary electrocardiogram (IC-ECG), doppler technology or other approved tip positioning and confirmation technologies approved by facility policy if trained with the technology and method being used.

9. If radiograph (i.e. chest X-ray [CXR]) is needed for tip placement verification, line may be released for use after read and confirmed in appropriate location by trained personal (radiologist, provider, trained RN, etc.) The RN using chest radiograph to verify all CVAD tip placements must have completed appropriate education and may not extend that training to interpretation of radiographs for any other purpose.

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