

## South Carolina Department of Labor, Licensing and Regulation

# South Carolina Board of Nursing

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## **Advisory Opinion #79**

Is it within the role and scope of practice for a Registered Nurse in South Carolina to insert a small bore internal jugular central intravenous catheter (IJCVC) utilizing ultrasound guidance in the non-pediatric patient?

The State Board of Nursing for South Carolina acknowledges that it is within the expanded role and scope of the registered nurse (RN) to insert a small bore internal jugular intravenous catheter utilizing ultrasound guidance in the non-pediatric patient. The indications for central venous access by the Registered nurse should be limited to the following:

Emergent situations/ Critically ill Intensive Care Unit (ICU) patients

Resuscitation of intravascularly depleted patients/Sepsis Protocol

Vasopressor/inotropic administration

Total Parental nutrition administration

Hypertonic fluid administration

Hemodynamic monitoring including central venous pressure

Emergent renal replacement therapy

## A registered nurse shall not:

- 1. Engage in activities that constitute the practice of medicine or surgery in the state of South Carolina;
- 2. Diagnose a medical condition or determine the need for the IJCVC;
- 3. Insert an IJCVC without a valid order to do so;
- 4. Insert an IJCVC on pediatric patients;
- 5. Insert an IJCVC in circumstances where it is contraindicated; or
- 6. Utilize the RN-inserted IJCVC before an authorized provider has confirmed intended placement of the IJCVC and authorized its use.

# Contraindications for placement of IJCVCs by the Registered Nurse in South Carolina include the following:

- 1. Local cellulitis
- 2. Low platelet count
- 3. Anticoagulant therapy
- 4. Thrombocytopenia
- 5. Congenital anomalies
- 6. Mechanical heart valves/pacemakers
- 7. Stroke risk
- 8. Coronary artery disease
- 9. Chronic liver disease

RN insertion of an IJCVC for the purpose of initiating intravenous therapy may be within the scope of registered nursing practice, if the following guidelines are observed:

1. The RN has acquired and documented knowledge, skills and competency including proctored bedside experience, regarding insertion of IJCVCs for the purpose of initiating intravenous therapy consistent with an authorized provider's order, and has acquired and documented knowledge, skills and competency

- in the management of potential complications. The facility shall develop and maintain training and competencies for the RN to complete prior to insertions of small bore internal jugular intravenous placement.
- 2. The RN inserts IJCVCs only in a facility that maintains and implements written policies developed in accordance with currently accepted standards of practice that address at minimum:
  - a. The minimum qualifications for RNs who may insert IJCVCs that may include, but not be limited to, RNs with extensive practice experience caring for patients with CVCs in a Critical Care Unit or elsewhere, and/or with extensive practice experience as a member of a CVC team or designated IV team;
  - b. RN education, training and competency requirements, including continuing competency requirements, relevant to insertion of an IJCVC and management of complications, and policies for facility retention of documentation to demonstrate the RN's education, training and competency; and
  - c. The conditions under which the RN may insert the IJCVC, including but not limited to a clinical environment that supports patient safety and well-being through appropriate:
    - i. Monitoring and documentation of physiologic measurements (e.g., blood pressure, oxygen saturation, cardiac rate and rhythm, CVP waveform);
    - Immediate availability of emergency equipment and supplies, and authorized providers designated to respond to complications; and Procedures for authorized provider confirmation of intended placement of the IJCVC prior to RN insertion;
    - iii. Ultrasound equipment to support insertion of the line.
- 3. The RN has a valid order from an authorized provider in South Carolina to insert an IJCVC.
- 4. An authorized provider, who is qualified to manage complications of CVC insertion, is present in the facility and readily available to manage or assist with management of complications.
- 5. The RN has a valid order, prior to insertion, from an authorized provider for the IJCVC insertion that includes all of the following:
  - a. The purpose of the IJCVC;
  - b. The type of IJCVC to be inserted;
  - c. The method by which placement is to be confirmed; and
  - d. Infusion parameters and/or patency methods.
- 6. In executing a nursing regimen, the RN shall perform the following activities:
  - a. Complete a review of the patient's medical records and a physical examination to determine and document the patient's anatomical landmarks necessary for the IJCVC insertion prior to implementing the order to insert the IJCVC;
  - Identify and document the patient's baseline physiologic measurements including but not limited to blood pressure, oxygen saturation, and cardiac rate and rhythm prior to implementing the order to insert the IJCVC;
  - c. Notify the authorized provider of the presence of any patient parameter(s) or other information for which IJCVC insertion is contraindicated prior to implementing the order to insert the IJCVC; and
  - d. Insert the IJCVC only in clinical settings and environments where the patient's safety and well-being will be supported by the use of required sterile techniques, availability of monitoring of physiologic measurements including but not limited to blood pressure, oxygen saturation, cardiac rate and rhythm,

and availability of an authorized provider and additional health care personnel to respond to complications

#### Considerations in RN Insertion of IJCVCs

- The RN shall maintain documentation of his/her acquisition of education demonstrated competency, and
  continuing competency with respect to both RN insertion of the IJCVC and management of complications
  as well as documentation that ensures practice is guided by the facility/institutional policies and
  procedures, and the manufacturer's published information for the use of the devices utilized in both
  IJCVC insertion and management of complications.
- 2. The RN's education, training and demonstrated competence, that is verified through proctored bedside experience, shall include, but is not limited to, the following:
  - a. Anatomy and physiology of the vasculature and adjacent structures of the neck, chest, axillary, veins, and nerve structures;
  - b. Indications and contraindications for placement of central venous lines in general and IJCVCs in particular;
  - c. Techniques and procedures for insertion of IJCVCs including use of technology such as ultrasound and EKG devices;
  - d. Anchoring techniques;
  - e. Interpretation of physiologic measurements including but not limited to blood pressure, oxygen saturation, cardiac rate/rhythm and CVP waveform;
  - f. Signs and symptoms of potential complications related to central lines generally and Internal Jugular Catheterization specifically, and actions to be taken in the event of complications;
  - g. Proper use of devices utilized in CVC insertion and in management of complications, consistent with the authorized provider's orders and manufacturer's published information; and h. Types of CVCs and their indications and contraindications for use.

The South Carolina Board of Nursing recognizes when performed properly, the insertion of a small bore internal jugular central venous catheter is safe, efficacious, and potentially life-saving when the aforementioned guidelines are adhered to by the Registered Nurse.

#### **Reference:**

Ohio Board of Nursing, Considerations in RN Insertion of IJCVCs (Rule 4723-4-03, OAC) website, accessed 12/20/24

SC BON Line Chart (Cardiovascular System-Registered Nurse)

This statement is an advisory opinion of the Board of Nursing as to what constitutes competent and safe nursing practice.