



Nursing Scope of Practice for the Use of Sedating and Anesthetic Agents

OSBN Statement of Purpose

This guide outlines the nursing scope of practice for the use of sedating and anesthetic agents, particularly focusing on the safe administration of these agents to achieve moderate and deep sedation in both intubated and non-intubated patients. The purpose is to provide information to licensees who seek to engage in safe nursing practice. Licensees are encouraged to review the applicable laws themselves and, if necessary, obtain their own legal advice.

Background Information

Nurses are required to administer pharmacologic agents for sedation across various healthcare settings. This policy update reflects the dynamic nature of nursing roles and provides guidance for safe practice within this scope.

Scope Statement

This section of the policy provides detailed guidelines regarding the scope of practice for administering sedating and anesthetic agents by various nursing professionals under the Oregon State Board of Nursing (OSBN).

Education and Competency

Nurses who are not Certified Registered Nurse Anesthetists (CRNAs) must receive additional documented education and demonstrate specific documented competencies before administering pharmacologic agents for sedation. Given the potential for rapid shifts in sedation levels, nurses must be equipped to assess and monitor patients continuously, as well as respond swiftly to any deviations from expected responses.

Minimal Sedation: A drug-induced state in which patients respond to verbal commands, with ventilatory and cardiovascular functions usually unaffected.

- ❖ **LPNs, RNs, and APRNs are permitted** to administer sedating agents for anxiolysis under appropriate guidelines.

Moderate Sedation: Sometimes known as “conscious sedation”, is a drug-induced depression of consciousness during which the patients respond purposefully to verbal commands, either alone or accompanied by light tactile stimulation. No interventions are required to maintain the patient's airway, and spontaneous ventilation is adequate. Cardiovascular function is usually maintained.

- ❖ **RNs and APRNs are permitted** to administer sedating and anesthetic agent to achieve moderate procedural sedation, and to provide sedation for both non-intubated and intubated/ventilated patients. This administration must occur under the direction of a Licensed Independent Practitioner (LIP) and in accordance with the specific guidelines outlined in this policy.

Deep Sedation: A drug induced suppression of consciousness during which patients cannot be aroused easily; but respond purposefully following repeated or painful stimulation. The ability to independently maintain ventilatory function may be impaired. Patients may require assistance in maintaining a patent airway, and spontaneous ventilation may be inadequate. Cardiovascular function usually is maintained.

- ❖ **RNs and APRNs are permitted** to administer sedating and anesthetic agents to achieve deep procedural sedation, and to provide sedation for both non-intubated and intubated/ventilated patients. This administration must occur under the direction of a Licensed Independent Practitioner (LIP) and in accordance with the specific guidelines outlined in this policy.

Recovery Management: RNs and APRNs may also manage the recovery of patients from sedation.

General anesthesia: A drug-induced loss of consciousness during which patients are not arousable even by a painful stimulation. The ability to independently maintain ventilatory function is often impaired. Patients often require assistance in maintaining a patent airway, and positive pressure ventilation may be required because of depressed spontaneous ventilation or drug-induced depression of neuro-muscular function. Cardiovascular function may be impaired.

Certified Registered Nurse Anesthesiologists (CRNA) are permitted to provide general anesthesia.

Other Considerations

- Always consider consulting an anesthesia professional prior to sedation for any patient that poses higher risk, such as:
 - ASA class III or higher
 - BMI ≥ 40
 - Pregnancy
 - Potentially challenging airways
 - Mallampati Class III or IV
 - Known or suspected central or obstructive sleep apnea
 - Large neck
 - History of difficult intubations
 - Abnormal airway or facial anatomy

There should always be a clear policy for who will manage the airway in the case that the patient's ventilatory status becomes inadequate following sedation. This **designated person should have the appropriate skill for intervention (intubation, etc.) and be credentialed to do so by the facility.**

ASA Physical Status Classification Guidelines

- **Adult Patients**
 - **ASA I, II, or III:** Nurses may administer procedural sedation to adult patients with an American Society of Anesthesiologists (ASA) score of I, II, or III in acute care, clinic, or office settings, provided that all criteria in this policy are met.
 - **ASA IV:** Nurses may not administer procedural sedation to patients with an ASA score of IV unless the patient is in an acute care setting, and all policy criteria are satisfied. Additionally, for patients with an ASA score of IV, a CRNA or a LIP with procedural sedation credentials and competency in intubation and airway management must be consulted to determine the appropriate setting and necessary personnel resources for the procedure.
- **Pediatric Patients**
 - **ASA I or II:** Nurses may administer procedural sedation to pediatric patients with an ASA score of I or II in acute care, office, or clinic settings if all policy criteria are met.
 - **ASA III or IV:** Nurses may not administer procedural sedation to pediatric patients with an ASA score of III or IV unless the patient is in an acute care setting, and all policy criteria are satisfied. For these patients, a CRNA or LIP with procedural sedation credentials and airway management competence must be consulted to determine the appropriate setting and necessary personnel resources.

Conclusion

These guidelines ensure that nursing professionals are aware of their scope of practice and are properly trained and supported when administering sedating and anesthetic agents. This policy promotes patient safety by requiring the appropriate level of training, ongoing patient monitoring, and adherence to clearly defined roles and responsibilities.

The medical staff bylaws or rules and regulations must include criteria for determining the anesthesia service privileges to be granted to an individual practitioner and a procedure for applying the criteria to individuals requesting privileges, as required by CMS regulations at §482.22(c)(6) for any type of anesthesia services, including those not subject to the anesthesia administration requirements at §482.52(a). The hospital or clinics governing body must approve the specific anesthesia service privileges for each practitioner who furnishes anesthesia services, addressing the type of supervision, if any, required. The privileges granted must be in accordance with State law and hospital and or clinic policy. The type and complexity of procedures for which the practitioner may administer anesthesia must be specified in the privileges granted to the individual practitioner.

Practice Guidelines and Competencies

Nurse Responsibility and Requirements Relating to Moderate and Deep Sedation

A. Knowledge and Skills

Before administering sedating and anesthetic agents, the nurse must gain and demonstrate the following knowledge and skills across the lifespan, which must be documented through education, training, experience, and ongoing competency:

1. **Anatomy and Physiology:** Understanding of airway anatomy, respiratory physiology, and oxygen delivery, transport, and uptake principles.
2. **Pharmacology:** Knowledge of sedating and anesthesia agents, including mechanism of action, dosing, drug interactions, side effects, contraindications, reversal agents, and potential adverse effects and how to treat them.
3. **Physiological Measurement:** Ability to evaluate respiratory rate and quality, carbon dioxide, oxygen saturation, blood pressure, cardiac rate and rhythm, and the patient's level of consciousness.
4. **Nursing Interventions:** Capability to intervene appropriately in case of complications or unexpected outcomes. Understanding and demonstrating the correct use and set up of oxygen delivery, iv management devices (example: tubing, pumps), and suction equipment.
5. **Emergency Preparedness:** Competence and certification in airway management, arrhythmia recognition, and resuscitation, supported by Advanced Cardiac Life Support (ACLS), Pediatric Advanced Life Support (PALS) if working with pediatrics and Neonatal Resuscitation (NRP) if working with newborns.
6. **Patient Assessment:** Ability to assess total patient care requirements before and during sedation, and recovery phase.

7. **ASA Physical Status Classification:** Understanding and application of the ASA classification in clinical practice.

B. Potential Risk Factors

Nurses are expected to identify and consider potential risk factors across the lifespan that may increase complications associated with sedation. These factors must be assessed and communicated (documented communication and response should be recorded in patient record) to the healthcare team and include but not limited to:

1. Clinical status of the patient
2. ASA score
3. NPO status
4. Extremes of age
5. Developmental delay
6. History of sleep apnea
7. Morbid obesity
8. History of substance abuse or dependence
9. Smoking history
10. Pregnancy
11. Airway anomalies (example: anatomical, congenital, radiation to head and neck, surgical)
12. Previous personal or family adverse experiences with sedation or anesthesia
13. Hypoxia
14. Cardiovascular, respiratory, central nervous system, renal, and endocrine diseases
15. Use of prescribed, over the counter, and herbal medications

C. Practice Setting

The nurse must ensure that the following requirements are met before participating in procedural sedation and or sedation of the intubated ventilated patient:

1. **Policies and Protocols:** Written, medically approved policies and protocols must be readily available and accessible. These should include patient selection criteria, patient monitoring, sedation levels, LIP/CRNA responsibilities, drug administration guidelines, and emergency procedures.
2. **Risk Management and Quality Improvement:** A written plan for risk management, continued competency and quality improvement must be in place.

D. Personnel and Equipment

To administer sedation, the nurse must ensure that:

1. **Rescue Capability:** personnel must be capable of rescuing the patient if sedation progresses deeper than intended including but not limited to apnea, laryngospasm, and/or airway obstruction include the ability to open the airway, suction secretions, provide continuous positive airway pressure (CPAP), perform successful bag-valve-mask ventilation, insert an oral airway, a nasopharyngeal airway, or a laryngeal mask airway (LMA), and, rarely, perform tracheal intubation. Ability to manage respiratory and cardiovascular complications that occur across the lifespan.

2. **LIP Supervision:** The nurse must work under the direction of a credentialed Licensed Independent Practitioner (LIP), who is responsible for prescribing medications and being immediately available throughout the procedure. The practitioner may not simultaneously serve as the person monitoring the patient or monitoring the airway intra-procedure but will direct airway management and abandon the procedure in the event of airway compromise to attend to the airway. He/She must possess the requisite knowledge and skills to assess, diagnose, and intervene in the event of complications or undesired outcomes. This practitioner must have age-appropriate airway management and resuscitative skills.
3. **Emergency Equipment:** Essential emergency equipment must be immediately available, including a bag mask device with 100% oxygen, suction equipment, age-appropriate airways and intubation equipment, cardiac monitor and defibrillator, and reversal/resuscitation medications.

E. Patient Monitoring

The nurse must continuously monitor the patient during the procedure and recovery phase and ensure:

1. **Intravenous Access:** All patients must have patent intravenous access from the time of intravenous medication administration until recovery from sedation.
2. **Continuous Monitoring:** Continuous monitoring must include:
 - Airway patency and ventilatory effort
 - Pulse oximetry
 - End Tidal Carbon Dioxide (moderate and deep sedation)
 - Intermittent blood pressure (a minimum every 5 minutes), heart rate, and respiratory rate
 - Cardiac monitoring for moderate and deep sedation
 - Patient's pain response using age-appropriate scales
 - Level of consciousness or response to stimuli

Special Circumstances

A. Use of Ketamine as an Adjunct to Clinical Therapy in the Acute Care Setting

RNs, APRNs may administer Ketamine under a LIP's direction in non-intubated patients as an adjunct for pain and respiratory management, provided the criteria for intubated/ventilated patients are met.

B. Emergency Intubation

Nurses may administer sedation, including anesthetic agents, during emergency intubation under a credentialed LIP's direction, provided the criteria for sedation is met.

The following patient monitoring criteria must also be followed:

1. The nurse must not leave the patient unattended or perform other tasks that compromise monitoring.
2. Airway patency and ventilatory excursion must be monitored.
3. Pulse oximetry must be monitored.

C. End of Life Care

RNs, APRNs may administer sedating and anesthetic agents as a palliative care intervention to mitigate suffering at the end of a patient's life, but not to hasten death. The nurse must possess knowledge of:

1. **Pharmacology:** Understanding of sedating and anesthetic agents, including drug actions, side effects, and contraindications.
2. **Death and Dying:** Knowledge of the processes involved in death and dying.
3. **Pain Management:** Ability to assess and manage pain appropriately at the end of life.
4. **Symptom Management:** Ability to assess and manage end-of-life symptoms.

These guidelines ensure that nurses are well-prepared to safely administer sedation and anesthetic agents within their scope of practice, addressing both routine and special circumstances in patient care.

Appendix

A. Definitions

1. **“Anesthetic Agent.”** A drug that, when administered, causes partial or complete loss of sensation, with or without loss of consciousness.
2. **“ASA Physical Status Classification.”**
 - a. Class I: A normally healthy patient
 - b. Class II: A patient with mild systemic disease
 - c. Class III: A patient with severe systemic disease
 - d. Class IV: A patient with severe systemic disease that is a constant threat to life
 - e. Class V: A moribund patient who is not expected to survive 24 hours with or without the procedure.
3. **“Credentialed Licensed Independent Practitioner (LIP).”** An individual permitted by law and the individual's employer to independently provide care, treatment and services that are within the individual's scope of practice and consistent with clinical privileges granted by his/her employer.
4. **“Deep Sedation/Analgesia”** is a drug-induced depression of consciousness during which patients cannot be easily aroused but respond purposefully* following repeated or painful stimulation. The ability to maintain ventilatory function independently may be impaired. Patients may require assistance in maintaining a patent

airway, and spontaneous ventilation may be inadequate.
Cardiovascular function is usually maintained.

(*Reflex withdrawal from a painful stimulus is NOT considered a purposeful response.)

5. **“General Anesthesia”** is a drug-induced loss of consciousness during which patients are not arousable, even by painful stimulation. The ability to maintain ventilatory function independently is often impaired. Patients often require assistance in maintaining a patent airway, and positive pressure ventilation may be required because of depressed spontaneous ventilation or drug-induced depression of neuromuscular function. Cardiovascular function may be impaired.
6. **“Immediately available.”** Present on site in the unit of care and not otherwise engaged in any other uninterruptible procedure or task.
7. **“Minimal Sedation (Anxiolysis)”** is a drug-induced state during which patients respond normally to verbal commands. Although cognitive function and coordination may be impaired, ventilatory and cardiovascular functions are unaffected.
8. **“Moderate Sedation/Analgesia” (“Conscious Sedation”)** is a drug-induced depression of consciousness during which patients respond purposefully* to verbal commands, either alone or accompanied by light tactile stimulation. No interventions are required to maintain a patent airway, and spontaneous ventilation is adequate. Cardiovascular function is usually maintained.
9. **“Rescuing.”** Possessing the competency to manage a compromised airway, provide adequate oxygenation and ventilations, and administer emergency medications and/or reversal agents.
10. **“Procedural Sedation.”** Anesthetic or sedating agents administered to achieve moderate or deep sedation during diagnostic, therapeutic, or surgical testing or treatment.
11. **“Sedating Agent.”** A drug that, when administered, causes calmness, relaxation, reduced anxiety, and sleepiness.

B. Questions & Answers

Q: I am a RN, and the physician has just written an order for a Ketamine infusion for pain management for my critical care ventilated patient. I have never given this drug before and we do not have a policy about administration of Ketamine for this purpose. Is it within my scope of practice to follow the order?

A: Although it is within the scope of practice to administer Ketamine for this purpose, you would not have yet fulfilled the knowledge requirement regarding pharmacology for a sedating agent. In addition, the requirement for your practice setting to have written policies and protocols that are readily available and medically approved has also not been fulfilled. You would need to ensure that you and the nursing staff administering the Ketamine had the required competencies, and that your unit or hospital had a policy in place that is consistent with current practice.

Q: I am a RN. Can I give an ordered bolus dose of Propofol to sedate an agitated, ventilated ICU patient?

A: Yes, it is within the scope of practice for the RN, NP or CNS to administer sedation, including the administration of anesthetic agents (Propofol), in continuous and bolus dosing, to the mechanically ventilated patient. Again, it is also the responsibility of the nurse to ensure that the requirements for knowledge and skills, practice setting, personnel and equipment, and patient monitoring are met.

Q: During an emergent intubation, the emergency physician asked me to give Etomidate. Is it within the scope of practice of the RN to do so?

A: Yes, it is within the scope of practice for a RN, NP or CNS to administer Etomidate, an anesthetic agent, under the direction of a credentialed LIP, for sedation of a patient during an emergency intubation provided that the requirements (Knowledge & Skills 1-6, Practice Setting, Personnel and Equipment) identified for the intubated/ventilated patient are met.

Q: I have been offered a job as a RN in a free-standing Endoscopy Suite. They want to train me to administer Propofol to sedate patients for procedures. Is it within my scope of practice to administer this drug?

A: It is within your scope of practice if the patient's ASA's physical status classification is I, II or III (adult) or I or II (pediatric) and the nurse responsibility and requirements relating to procedural sedation are met.

Q: I am a LPN. The physician has written an order for Ketamine via IV bolus to be given to a non-ventilated patient on my acute care inpatient unit for the purpose of pain management for a dressing change (anxiolysis). Is it within my scope of practice to administer this?

A: This is not within the LPN's scope of practice since Ketamine is classified as an anesthetic.

Q: Sometimes as a RN, I am asked to care for a non-ventilated patient in the intensive care unit who is receiving intermittent IV medications or via continuous drip to manage their agitation. Is this all right?

A: If this medication is a non-anesthetic drug that is being given for anxiolysis, you may administer it. If the patient progresses to a deeper level of sedation, the nurse responsibility and requirements outlined in this policy for procedural sedation must be followed.

Q: I have received an order for Propofol that is to be given for anxiolysis for a non-ventilated patient. As a RN, can I administer this?

A: No, the RN may not administer anesthetic agents for anxiolysis.

Q: In my emergency department, our physicians sometimes want me to give Ketamine IM for procedural sedation. Can I as a RN administer this?

A: The interpretive statement does not specify route of administration, so it is within your scope to administer this if the requirements for procedural sedation are followed.

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