



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.

Within the Scope of Practice of RN LPN

OPINION: SEDATION AND ANALGESIA

DATE APPROVED:

REVISED DATE: 03/19

ORIGINATING COMMITTEE:

SCOPE OF PRACTICE COMMITTEE

ADVISORY OPINION: DEEP SEDATION, MODERATE SEDATION/ANALGESIA, PALLIATIVE SEDATION

The licensed practical nurse (LPN) scope of practice is limited to the administration and monitoring of medications (e.g. opioids) given for minimal sedation (anxiolysis). Therefore, administration of medications for moderate sedation, rapid sequence intubation (RSI), and deep or palliative sedation, including the administration of anesthetic agents, is NOT within the LPN scope of practice.

It is NOT within the scope of practice of a registered nurse (RN) who is not a certified registered nurse anesthetist (CRNA) to provide deep sedation for non-ventilated patients or to administer or monitor medications given to a general anesthesia level. RNs may ONLY administer propofol in acute care settings for sedation of a patient in the following situations: 1) intubated, 2) mechanically ventilated (including continuous positive airway pressure [CPAP]), 3) when assisting with RSI.

It is within the scope of practice of an RN to administer by bolus, intermittent dose, or continuous infusion, and titrate medications to clinical response for the purpose of providing moderate sedation for diagnostic or therapeutic procedures, RSI, deep sedation when mechanically ventilated, analgesia and anti-depressive effects, or for palliative (end of life) care if the conditions set under General Requirements are met.

Medications used for sedation may include opioids, barbiturates, and anesthetic agents at sub-anesthetic levels. It should be noted that sedation exists along a continuum and RNs who administer moderate sedation/analgesia or deep sedation (with a ventilated patient) must be qualified to provide rescue support to patients who proceed to a deeper level of sedation.

The RN has the right and obligation to refuse to administer and/or continue to administer medication(s) in amounts/frequency that may produce sedation at a deeper level than desired.

Anesthetic agents administered locally to block sensations of pain in a specific area of the body and are not injected into the vascular system are not included in this advisory.

See also *Definitions* section (following Rationale section).

I. GENERAL REQUIREMENTS

- A. Written policies and procedures are developed and maintained by the employer/facility. These policies should include, but are not limited to:
1. The RN must work under the direction of an appropriate credentialed and privileged licensed independent practitioner (LIP) who is responsible for prescribing the medications within applicable legal and policy constraints
 2. Which types of sedation/analgesia will be given by RNs in their facility and if anesthetic agents are authorized, must ensure written policies and procedures that address credentialing requirements for non-anesthesiologist LIP
 3. The employer has convened an interdisciplinary team, to include RNs, to identify and approve medications including dosages based on the age of the patient, to be used for each level of sedation provided and included in a written policy
 4. If titration is to be used, the RN must have a medication order that contains specific parameters for the titration, and a validated sedation scale and/or monitoring device must be utilized
 5. Emergency equipment, medications and supplies readily available appropriate to the age of the patient being sedated
 6. Guidelines and equipment in place for patient monitoring, drug administration, and addressing potential complications
 7. Documentation and monitoring requirements for level of sedation and physiologic measurements (e.g. blood pressure, oxygen saturation, cardiac rate and rhythm)
 8. Venous access shall be maintained for all patients having moderate sedation/analgesia, RSI, or deep sedation
 9. For all non-end of life sedation, documentation of Basic Life Support (BLS) is required.
 10. If providing moderate to deep sedation, the RN must have certification in advanced life support specific to the patient population served on file with the employer
 11. For all sedation activities: the facility shall have in place an educational mechanism which includes a process for evaluating and documenting the individual's competence related to the management of patient's receiving sedation. Evaluation and documentation should occur on a periodic basis and must be maintained on file with the employer
- B. Specific requirements related to individual sedation types:
1. **Moderate sedation/analgesia (procedural or conscious sedation):**
 - a. Supplemental oxygen must be available for through the recovery period
 - b. The LIP ordering the medication and performing procedures for moderate sedation must be properly credentialed for such medications and must be present in the department from the time the medication is initiated through the completion of the procedure
 - c. An LIP capable of managing complications must be immediately available in the facility during the post-procedure period and must remain in the facility until the patient is medically discharged from the post procedure area
 - d. The RN administering medications and monitoring the patient receiving moderate sedation and analgesia shall have no other duties that would interfere with primary responsibility of monitoring the patient during the procedure
 - e. A pre-sedation assessment and collaborative sedation plan must be performed for each patient by the LIP and administering RN to determine that the patient is a candidate for moderate sedation

- f. Documentation and monitoring of physiologic measurements including but not limited to blood pressure, respiratory rate, oxygen saturation, cardiac rate and rhythm, and level of consciousness via approved scale should be recorded per facility guidelines during procedure. Documentation of adequate ventilation using continuous capnography is strongly recommended
 - g. Specific guidelines for the use of ketamine:
 - i. Identification of dosage ranges and approved routes in the “sub-anesthetic or low-dose range” only and appropriate to the age of the patient
 - ii. Medication must be prepared by pharmacist
 - iii. IV infusions must be delivered by via IV pump through a dedicated line
 - iv. Additional monitoring requirements per facility guidelines
- 2. Deep sedation/analgesia:**
- a. Identification of which medications and/or anesthetic agents can be given by the RN as a continuous administration (non-bolus) to patients who are intubated and mechanically ventilated
 - b. The RN provides and documents ongoing monitoring, including oxygenation, respiratory or ventilator rate, and cardiac rhythm, non-invasive blood pressure reading
 - c. Equipment for suctioning and maintaining the airway/resuscitation is available
- 3. Rapid sequence intubation (RSI):**
- a. Identification of which medications and/or anesthetic agents can be given by direct IV push by the RN only when acting as the LIP’s third hand during an intubation
 - b. Note: this does not apply to prehospital or transport personnel providing emergency care while in direct communication with their medical director or while following approved medical protocols
- 4. Palliative care sedation/analgesia:**
- a. Facilities must identify medications which can be administered as a continuous infusion and/or given via bolus for the purpose of palliative sedation, including those classified as anesthetic agents, without the presence of an LIP
 - b. The patient must have a monitored level of nursing care to maintain sedation. “Monitored”, in the context of palliative sedation, refers to monitoring by a RN to maintain ordered level of sedation, but may or may not include electronic physiological monitoring modalities
 - c. Pre and post-sedation symptom assessments and ongoing assessments are performed by the RN

II. COURSE OF INSTRUCTION includes but is not limited to:

Only RNs meeting the following criteria may administer medication for moderate sedation for diagnostic or therapeutic procedures, deep sedation while on the ventilator, or for palliative (end of life) care. The RN must possess the knowledge of and demonstrate competence in the application of the following into practice:

- A. Anatomy and physiology of the respiratory system including principles of oxygen delivery, transport and uptake
- B. Physiology of the four levels of sedation; including minimal sedation, moderate sedation, deep sedation and anesthesia with emphasis on deep sedation of the intubated/mechanically ventilated patient
- C. Indications and contraindications for the sedation level to be provided, including potential adverse consequences including over or under sedation

- D. Legal implications, responsibility, documentation associated with sedation
- E. Pharmacology of drugs used for sedation/analgesia, and anesthetic agents to be used singly or in combination which includes drug implementation and discontinuation, action, onset, peak, duration, side effects, contraindications, and untoward effects
- F. Availability and knowledge regarding administration of reversal agents for the pharmacological agents used
- G. Required nursing interventions in the event of complication or untoward outcomes
- H. Ability to assess the overall status of the patient in relation to the practice of sedation/analgesia
- I. Use of specialized monitoring devices or sedations scales
- J. Occupational exposure risks related to specific agents
- K. Education specific for different types of sedation or specific agents:
 - a. If providing **deep sedation**: instruction in mechanical ventilation including mode of ventilation
 - b. For **palliative**-specific sedation, the RN should demonstrate knowledge of the process of death and dying and end of life symptom assessment and management of care

III. RATIONALE

Because medicine is ever-evolving, this advisory opinion is not intended to limit what medications can or cannot be given but rather to focus the nurse on providing safe care at the desired level of sedation.

The administration of anesthetics for the purpose of general anesthesia is outside of the scope of practice for RNs or advanced practice nurses who are not a CRNA. However, it is within the scope of practice of the RN to safely provide sedation, including the use of an anesthetic agent, provided the conditions set in this advisory opinion are met. The ultimate responsibility of the RN is to assure patient safety and this independent obligation under his or her licensure supersedes any LIP order or facility policy.

IV. DEFINITIONS

For the purpose of this advisory opinion:

RN is a registered nurse or advanced practice nurse who does not meet the qualification requirements of A.R.S. § 32-1634.03 to practice nursing as a certified registered nurse anesthetist (CRNA). The requirements set by the statute to practice as a CRNA include completing an accredited program in the science of anesthesia, and national certification by the National Board of Nurse Anesthetists or other national certifying body recognized by the board.

Anesthetic agents are medications which cause partial or complete loss of sensation with or without loss of consciousness.

Immediately available is defined as being present on site, in the unit of care and not otherwise engaged in any other uninterruptable procedure or task.

IV bolus is a small volume of medication or large volume solution that is given rapidly intravenously (IV) to hasten or magnify the response

IV push is the direct injection of medication via an IV. The rate of injection is determined by the type of the medication being given and the patient's response.

IV piggyback is a medication administration procedure in which medication is diluted into a small volume (50-250 mL) and is usually given intravenously via a secondary line.

Licensed independent practitioner (LIP) is a physician, dentist, nurse practitioner, nurse midwife, certified nurse anesthetists, or any individual permitted by law and the organization to provide care and services without direction or supervision within the scope of the individual's license.

Minimum sedation/anoxiolysis is a drug-induced state during which patients respond normally to verbal commands, may have impaired cognitive function or coordination but respiratory and cardiovascular functions remain stable.

Moderate sedation/analgesia (also known as procedural or conscious sedation) is defined as "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. Centers for Medicare and Medicaid Services (CMS) consistent with American Society of Anesthesiologist (ASA) guidelines, does not define moderate or conscious sedation as anesthesia" (CMS, 2011).

Deep sedation/analgesia is a drug-induced depression of consciousness during, which patient cannot be easily aroused but responds purposefully, following repeated or painful stimulation. While, cardiovascular function is usually maintained, the ability to independently maintain respiratory function may be impaired. Patients may require assistance in maintaining a patent airway, and spontaneous ventilation may be inadequate, therefore the patient must be intubated and mechanically ventilated.

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

General anesthesia is a drug-induced loss of consciousness during which patients are not arousable, even by painful stimulation. General anesthesia affects the patient's ability to maintain an adequate airway and respiratory function, and may impair cardiovascular function.

Palliative sedation is the monitored use of medications at end of life *intended to provide relief of intolerable and refractory symptoms but not to intentionally hasten death*. This distinction separates it from euthanasia and/or assisted suicide where the intent is solely to end life. A refractory symptom is one that cannot be controlled in a tolerable time frame despite use of therapies, and seems unlikely to be controlled by further therapies without excessive or intolerable acute or chronic side effects/complications.

Rapid sequence intubation (RSI) is an airway management technique in which a powerful sedative or anesthetic induction agent is administered virtually simultaneously with a paralytic agent

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