

ADVISORY OPINION

OPINION: Sedation and Analgesia
ADOPTED: 8/2021
REPLACES: Procedural Sedation
Analgesia
REVISED: 7/2022
TEMPLATE REVISED: 08/2016
REAFFIRMED:

Sedation and Analgesia

Definition

Sedation and analgesia are the administration of medications to induce an altered state of consciousness that enables a patient to tolerate a painful or unpleasant procedure (Godwin, et.al., 2005) or condition.

This advisory opinion does not include:

- ***Nurse-led initiation of nitrous oxide in maternity care (Collins, 2018) for patient self-administration.*** Readers are referred to the Scope of Practice Decision-Making Framework (2017) for nursing practice decisions.
- ***Intravenous Ketamine administration for other than procedural or other acute analgesia indications.*** Readers are referred to the Advisory Opinion, *Sub-Anesthetic Ketamine* (2022).

Scope of Practice and Supervision

It is within the scope of practice of the **Registered Nurse (RN)** to administer medications and monitor the patient for sedation and analgesia, including:

- Minimal sedation (Anxiolysis)
- Dissociative sedation
- Moderate sedation for diagnostic or therapeutic procedures under direct, in-person supervision of a physician or other licensed practitioner (Nurse Practice Act, §38-2209) meeting applicable state practice laws and/or health care facility credentialing/privileging requirements for sedation and analgesia.

- Deep sedation in acute care settings
 - 1) The patient is intubated and mechanically ventilated, OR
 - 2) The nurse is assisting a qualified health care professional with Rapid Sequence Intubation (RSI) under direct, in-person supervision of a physician or other licensed practitioner (Nurse Practice Act, §38-2209) meeting applicable state practice laws and/or health care facility credentialing/privileging requirements for RSI;
- Palliative, or end-of-life care or sedation, including the withdrawal of treatment and comfort care (Cassone, Stoltzfus & Melnychuk, 2020; Truog, Campbell, Curtis, Haas, Luce et.al., 2008)

Licensed Practical Nurses (LPNs) are directed in practice by a RN or licensed practitioner (Nurse Practice Act, Ne. Rev. Stat. §38-2311). Scope of practice is limited to the administration and monitoring of medications for minimal sedation (anxiolysis). Licensed practical nurses may practice in support roles in RN-led nursing care teams for patients requiring sedation or analgesia when the RN has primary responsibility for administering medications and monitoring the patient.

Certified Registered Nurse Anesthetists (CRNAs) do not supervise RNs for the administration of medications for sedation and analgesia and patient monitoring. The supervision of RNs by **Nurse Practitioners (NPs) and Physician Assistants (PAs)** for the administration of sedation and analgesia and patient monitoring shall be limited to licensed health care facilities with credentialing/privileging requirements. Supervising **dentists** are required to have permits for sedation, but not inhalation analgesia (Dentistry Practice Act, Ne. Rev. Stat. §38-1137).

Requirements

Employers/Facilities shall develop and maintain written policies/procedures/protocols/order sets/records including, but not limited to:

1. Credentialing/privileging requirements for licensed practitioners that prescribe sedation and analgesia;
2. Documentation of Advanced Cardiac Life Support (ACLS) certification for the patient population in the practice setting for nurses administering moderate and deep sedation; Basic Life Support (BLS) for palliative sedation;

3. Education/training and competency assessment requirements for nurses;
4. Levels of sedation that RNs may assist with based on the location of a patient in the facility;
5. Approved medications, including age/weight dosages;
6. Medication orders shall include the initial dose, specific parameters for titration and maximum dose based on ongoing assessment according to a validated sedation scale and/or monitoring device data;
7. Availability of appropriate emergency equipment, medications and supplies
8. Guidelines and equipment for patient monitoring, medication administration and managing potential complications;
9. Documentation and monitoring requirements for the level of sedation and physiologic measurements, e.g., blood pressure, respiratory rate, oxygen saturation, capnography, heart rate and cardiac rhythm; and
10. Venous access requirements.

Sedation Continuum

Patient safety is the first priority of the nurse caring for the patient undergoing sedation (American Society of PeriAnesthesia Nurses, 2010). Sedation is a continuum and it is not always possible to predict how an individual will respond (American Society of Anesthesiologists [ASA], 2019).

- ***In the absence of a health care professional credentialed/privileged by an employer to perform RSI, the licensed practitioner (Nurse Practice Act, §38-2209) performing a procedure and supervising the RN administering medications for sedation and analgesia must have competence and credentialing in advanced airway management, including emergency intubation AND the availability to abandon the procedure to rescue the patient from unintended deep sedation or general anesthesia.***

- *The administration of medications and primary responsibility for monitoring the patient during intended procedural deep sedation or general anesthesia are not within RN scope of practice. Registered nurses are responsible and accountable for refusing to administer and/or refusing to continue to administer medications in amounts that may induce or maintain unintended levels of sedation.*

	Minimal Sedation (Anxiolysis)	Dissociative Sedation	Moderate Sedation/ Analgesia (Conscious Sedation)	Deep Sedation	General Anesthesia
<i>Responsiveness</i>	Normal response to verbal stimulation	Trance-like cataleptic, profound analgesia and amnesia	Purposeful response to verbal or tactile stimulation	Purposeful response following repeated or painful stimulation	Unarousable even with painful stimulus
<i>Airway</i>	Unaffected	Unaffected	No intervention	Intervention may be required	Intervention often required
<i>Spontaneous Ventilation</i>	Unaffected	Unaffected	Adequate	May be inadequate	Frequently inadequate
<i>Cardiovascular Function</i>	Unaffected	Unaffected	Usually maintained	Usually maintained	May be impaired

Table adapted from American College of Emergency Physicians, 2017; ASA, 2019; Huang & Johnson, 2016.

Medications, Special Considerations

Nitrous Oxide. Continuous pulse oximetry is recommended when using nitrous oxide for minimal and moderate sedation. Concurrent administration of any other sedative, anesthetic or narcotic analgesic with nitrous oxide is outside the scope of practice of the RN. If nitrous oxide is administered following an opioid analgesic, the patient must be monitored using a validated sedation scale (Huang & Johnson, 2016).

Nitrous oxide alone, and particularly when administered with supplemental oxygen are potentially highly flammable and combustible gases, i.e., potential oxidizers when there is an ignition source (e.g., electrosurgical units, electrocautery, laser, fiber-optic illumination systems) and fuel source (e.g., surgical drapes, alcohol-based skin preparation agents, patient tissue, hair or skin (Association of periOperative Registered Nurses [AORN], 2021; Food & Drug Administration, 2018). Registered nurses shall be trained in risk assessment and fire intervention protocols when these gases are administered in the presence of potential ignition sources.

Anesthetic Agents. Using anesthetic agents for the purposes of moderate sedation presents serious risks to the patient, including loss of protective reflexes and airway, no matter who is administering the drug. Advanced Cardiac Life Support certification does not ensure the RN ongoing expertise in airway management and emergency intubation. Personnel with expertise in airway management and emergency intubation must be readily available.

Propofol. The clinical effects for patients receiving Propofol may vary widely within a negligible dose range and there are no reversal agents (ASA, 2014). An appropriately trained RN may only administer Propofol for sedation under the following circumstances:

1. To intubated, mechanically ventilated patients *OR*
2. When assisting a qualified health care professional during RSI, or
3. Palliative sedation for end-of-life care

Other. Other medications, including Ketamine and Etomidate labeled as anesthetics may be administered by the RN for moderate sedation.

Paralytics. Neuromuscular blocking agents (NMBAs) may be administered as an intravenous bolus or continuous infusion by an appropriately trained RN under the following circumstances:

1. To intubated, mechanically ventilated patients as long as a qualified health care professional is available for rescue if the airway becomes dislodged
2. When assisting a qualified health care professional during RSI

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