Sedation and Analgesia

Definition

Sedation and analgesia is the administration of sedatives or dissociative agents with or without analgesics to induce an altered state of consciousness that enables a patient to tolerate a painful or unpleasant procedure (Godwin, et.al., 2005) or other acute clinical condition. The patient maintains oxygenation and independent control of the airway.

*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.*

Supervision According to Licensure

This advisory opinion identifies the role of the *Registered Nurse (RN)* administering medications and monitoring the patient under the supervision of non-anesthesiologist physicians and other licensed practitioners (Nurse Practice Act, §38-2209) meeting applicable state practice laws and/or health care facility credentialing/privileging requirements for sedation and analgesia.

*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, §38-1137).
Medication administration and primary responsibility for procedural and post-procedural recovery monitoring for sedation and analgesia are outside the scope of practice of the Licensed Practical Nurse (LPN) in all health care settings. Scope of practice for the LPN is limited to responsibilities and the performance of acts for patient conditions that are stable and predictable. Practice by the LPN is directed by the RN or licensed practitioner (Nurse Practice Act, Ne. Rev. Stat. §38-2311).

**Requirements**
Registered nurses administering sedation and analgesia, monitoring patients and providing post-sedation recovery shall maintain Advanced Cardiac Life Support certification for the patient population in the practice setting.

The role, responsibilities and competencies of the RN must be defined within the context of a sedation team. There should be dedicated policies, procedures and protocols for all procedural sedation activities, including, but not limited to defining health care professional roles for pre-sedation assessment and evaluation; patient education and consent; procedural support; level of consciousness, cardiovascular and respiratory monitoring; medication administration; management of adverse reactions or complications; post-sedation recovery; and, appropriate use of available and emerging technology (American Association of Nurse Anesthetists, 2016).

**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). *The administration of medications and primary responsibility for monitoring the patient during intended 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.*
<table>
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<tr>
<th></th>
<th>Minimal Sedation (Anxiolysis)</th>
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<th>Moderate Sedation/Analgesia (Conscious Sedation)</th>
<th>*Deep Sedation</th>
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<tr>
<td><strong>Responsiveness</strong></td>
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<td>Purposeful response to verbal or tactile stimulation</td>
<td>Purposeful response following repeated or painful stimulation</td>
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<td><strong>Airway</strong></td>
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<td>Unaffected</td>
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<td>Unaffected</td>
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<td>May be impaired</td>
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</table>

*Not within RN scope of practice

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, 2021; Food & Drug Administration, 2018). Registered nurses shall be trained in risk assessment and fire intervention protocols when these gases are administered for PSA 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 moderate sedation under the following circumstances:

1. To intubated, ventilated patients in a critical care setting OR
2. When assisting a licensed practitioner intubating, or otherwise qualified and prepared to manage the patient airway

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

References


American Association of Moderate Sedation Nurses [AAMSN]. (2019). *Registered nurse*


aornguidelines.org.


http://aspho.org/uploads/knowledge_center/Practice_Guidelines_for_Moderate


