Procedural Sedation and Analgesia

Procedural sedation and analgesia (PSA) is defined as the technique of administering 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). The intent of the sedation, not necessarily the agent itself, determines whether medications are being delivered to relieve anxiety or to facilitate a specific procedure. Procedural sedation and anesthesia is intended to depress consciousness, but allows the patient to maintain oxygenation and independent control of the airway (Godwin, et.al., 2014).

This Advisory Opinion identifies the role of the Registered Nurse (RN) caring for the patient undergoing PSA under the supervision of non-anesthesiologist physicians, other medical providers, or, advanced practice medical or nursing providers meeting applicable state practice laws and/or health care facility credentialing requirements to administer sedation.

Dentists are required to have sedation permits (Dentistry Practice Act, § 38-1137). Certified Registered Nurse Anesthetists (CRNAs) do not supervise RNs for the administration of PSA and patient monitoring. The supervision of RNs by Nurse Practitioners (NPs) and Certified Nurse Midwives (CNMs) for the administration of PSA and patient monitoring shall be limited to licensed health care facilities. Procedural sedation and analgesia are an acquired practice competency for NPs and CNMs.

Medication administration, perioperative monitoring and postanesthesia care for PSA 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 (Nurse Practice Act, Ne. Rev. Stat. §38-2311).

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], 2014a). Registered nurses administering medications and monitoring patients during sedation and providing post-sedation recovery shall be minimally certified in Basic Life Support (BLS) for the healthcare professional. Advanced Cardiac Life Support (ACLS) certification is recommended for RNs in practice settings that do not have within facility access to a dedicated resuscitation team for emergency airway management, including intubation. Pediatric Advanced Cardiac Life Support (PALS) is recommended for RNs in the preceding practice settings providing services to pediatric patients.

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).

MINIMAL SEDATION

**Definition:** Minimal sedation (anxiolysis) is a drug-induced state during which patients respond normally to verbal commands. Cognitive function and coordination may be impaired, but airway reflexes, and ventilatory and cardiovascular functions are unaffected (ASA, 2014a).

**Medications:** It is within the scope of practice of an appropriately trained RN to administer medications for minimal procedural sedation. Nitrous Oxide should be administered by the RN as a single agent, not concurrently with any other sedative or depressant.
MODERATE SEDATION

**Definition:** Moderate sedation (formerly referred to as 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. Reflex withdrawal from a painful stimulus is NOT a purposeful response. Interventions are not required to maintain a patent airway. Spontaneous ventilation is adequate, as demonstrated by measurements of respiratory rate, SPO2 level and End Tidal Capnography. Cardiovascular function is usually maintained. (ASA, 2014a). Loss of consciousness should not be the goal for patients undergoing moderate sedation. Registered nurses administering medications and providing patient monitoring during moderate procedural sedation shall have no other responsibilities that would leave a patient unattended or compromise continuous patient monitoring.

**Medications:**

*Non-Anesthetic Agents.* It is within the scope of practice of an appropriately trained RN to administer non-anesthetic medications for moderate procedural sedation. Pharmacologic agents used for the purposes of moderate sedation should render loss of consciousness unlikely.

*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 (ACLS) 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, 2014b). 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 anesthesia provider who is intubating or otherwise managing 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.

DEEP SEDATION/GENERAL ANESTHESIA

Deep sedation is a drug-induced depression of consciousness during which patients cannot be easily aroused but respond purposefully after repeated or painful stimulation. The ability to independently maintain respiratory function may be impaired. Patients may require assistance maintaining a patent airway and spontaneous ventilation may be inadequate. Cardiovascular function is usually maintained (ASA, 2014a).

General anesthesia is a drug-induced loss of consciousness during which patients are not arousable, even with painful stimulation. Patients often require assistance in maintaining a patent airway, and positive-pressure ventilation may be required. Cardiovascular function may be impaired (ASA, 2014a).

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 have the right to refuse to administer and/or refuse to continue to administer medications in amounts that may induce or maintain deep sedation and general anesthesia.

References


