RN SCOPE OF PRACTICE
Administer moderate sedation
• within the RN scope of practice defined by your state board of nursing and the state nurse practice act.
• under the supervision of a licensed independent practitioner who is qualified by education, training, and licensure to administer moderate sedation and who meets the organization’s privilege requirements.
• with the licensed independent practitioner physically present and immediately available in the procedural suite.
• after completing a formal training program in the safe administration of sedative and analgesic medications and rescue of patients who may slip into a deeper level of sedation.

Each state’s nurse practice act defines the RN scope of practice. In some states, for example, propofol cannot be administered by the sedation RN.

NURSING ASSESSMENT
• Review the patient’s
  - medical history
  - allergies and sensitivities
  - age, height, weight, and body mass index (BMI)
  - laboratory tests results
  - current medications and supplements
  - tobacco, alcohol, and drug use
  - vital signs
  - level of consciousness
  - airway (difficult mask ventilation, obstructive sleep apnea)
  - sensory impairments (visual, auditory)
  - levels of anxiety and pain
  - consent, including risks, benefits, and alternatives to sedation
  - pregnancy test results if applicable
  - NPO status
  - previous adverse experiences with moderate sedation
  - need for IV access
• Ensure there is a responsible adult caregiver to escort the patient home.
• Use a tool such as the American Society of Anesthesiologists Physical Status Classification (ASA) to determine patient acuity.
• Collaborate with the licensed independent practitioner to develop and document the sedation plan.

A nursing assessment determines whether a patient is at risk for an adverse outcome related to sedation and whether the patient is an appropriate candidate for RN-administered moderate sedation.
AIRWAY ASSESSMENT

- Assess for characteristics of a difficult mask ventilation:
  - > 55 years of age
  - BMI ≥ 30
  - history of snoring, stridor, or sleep apnea
  - missing teeth
  - beard
  - short neck
  - limited neck extension
  - small mouth opening
  - jaw abnormalities
  - large tongue
  - nonvisible uvula
  - previous difficulty with anesthesia or sedation
  - rheumatoid arthritis
  - chromosomal abnormality (such as trisomy 21)
  - tonsillar hypertrophy

- Assess for obstructive sleep apnea using sleep apnea assessment screening tools.

- Consult with the anesthesia professional if the patient has a history of obstructive sleep apnea.

- Use additional precautions such as continuous positive airway pressure (CPAP) for patients with sleep apnea.

The respiratory depressive effects of moderate sedation medications may compromise respiration. The ability to ventilate a patient with a mask is vital if an unanticipated compromised airway occurs.

OBSTRUCTIVE SLEEP APNEA IN PEDIATRIC PATIENTS

Consider screening for obstructive sleep apnea in a pediatric patient if the patient presents with any of the following symptoms:

- weight above the 95th percentile for age and sex
- talking in his or her sleep
- parental report of restless sleep, difficulty breathing, and struggling respiratory effort during sleep
- night terrors
- unusual sleep positions
- new onset of enuresis
- daytime sleepiness
- distracted behavior
- overly aggressive behavior
- irritability
- difficulty concentrating

For a pediatric patient, the screening assessment for obstructive sleep apnea is different than for an adult patient. The perioperative nurse screening for obstructive sleep apnea in a child should use a different screening tool.
ANESTHESIA CONSULTATION
Consult with an anesthesia professional if a patient presents with any of the following:

- known history of respiratory or hemodynamic instability
- coagulation abnormality
- previous difficulties with anesthesia or sedation
- severe sleep apnea or other airway-related issues
- one or more significant comorbidities that may affect metabolism of medications administered for moderate sedation
- pregnancy
- inability to communicate
- inability to cooperate
- multiple drug allergies
- multiple medications with the potential to cause drug interactions with sedative analgesics
- current substance abuse (street drugs, alcohol, non-prescribed prescription drugs)
- a classification of unstable ASA III or ASA IV or above

An anesthesia professional should be consulted when it is determined that a patient is at risk for complications related to moderate sedation. Assessing the patient preoperatively to determine his or her risks allows the moderate sedation RN to alert and consult the anesthesia professional and to develop a plan of care for safe administration of anesthesia and analgesia.

MEDICATION ADMINISTRATION

- Verify that administering the specific medications for the procedure is allowed in the scope of nursing practice for your state.
- Know the recommended dose, dilution, onset, duration, effects, potential adverse reactions, drug compatibility, and contraindications for each medication.
- Verify the physician’s orders.
- Adjust the dose according to the patient’s age and under the supervision of a licensed independent practitioner.
- Administer each intravenous medication separately in incremental doses and titrate to the desired effect.
- When administering non-IV medications, allow sufficient time for drug absorption before considering additional medication.
- Continuously monitor the patient’s response to the medications.
- When using computer-assisted personalized sedation (CAPS) technology,
  - ensure an anesthesia professional is immediately available for assistance or consultation as needed.
  - define “immediately available” in your policy and procedures.
  - follow manufacturer’s recommendations and US Food and Drug Administration labeling.
- Have supplemental oxygen available and administer it as needed and as ordered.
- Have opioid antagonists (naloxone) and benzodiazepine antagonists (flumazenil) available whenever opioids and benzodiazepines are administered.

Safe administration of medications for moderate sedation requires knowledge of the intended purpose of the medications administered. Patients react differently to medications depending on factors such as their weight, age, and circulation and the method of delivery. The dose and the route of the medication should be verified with the physician when outside of the recommended parameters.
PATIENT MONITORING

- Continuously care for the patient receiving moderate sedation.
- Be in constant attendance with unrestricted immediate visual and physical access to the patient.
- When you are performing the sedation nurse role, another RN should perform the circulator role while you administer sedation and monitor the patient.
- Have monitoring equipment (pulse oximetry, capnography, blood pressure measurement devices, oxygen masks and cannulas, suction and tubing, tips, oral and nasal airways) immediately available in the room where the procedure is taking place.
- Ensure clinical alarms for equipment are set, working, and audible.
- Consider using bispectral index (BIS) monitoring to measure the level of sedation.
- When providing moderate sedation, you may perform short interruptible tasks, such as opening suture or tying a gown.
- When propofol is used, you should not perform any other tasks and should monitor the patient without interruption for level of consciousness, signs of hypotension, bradycardia, apnea, airway obstruction, and oxygen desaturation.
- Have an emergency cart that includes age- and size-appropriate resuscitation medications, airway and ventilator equipment, a defibrillator, IV fluids, and IV access supplies available in the location in which sedation is administered.

Continuous monitoring and observation of the patient’s physiological and psychological status can lead to early detection of potential cardiorespiratory complications.

DOCUMENTATION

- Document baseline patient monitoring, including pulse (rhythm and rate), blood pressure, respiratory rate, blood oxygen level (SpO₂) by pulse oximetry, end-tidal-carbon dioxide (CO₂) by capnography, pain level, anxiety level, and level of consciousness.
- Document intraoperative patient assessment and monitoring, including pulse (rhythm and rate), blood pressure, respiratory rate, SpO₂, end-tidal CO₂, pain level, depth of sedation, anxiety, and level of consciousness.
- Monitor and document vital signs before the procedure, after administration of the sedative or analgesics, at least every 5 minutes during the procedure based on the patient’s condition, and after the procedure.
- Assess and document the depth of sedation using an objective scale.
- Document the moderate sedation medications administered, including medication type, strength, amount, route, time, response, and adverse reactions.
- After surgery, document the patient’s pulse, blood pressure, respiratory rate, SpO₂, pain level, anxiety, sedation level, and level of consciousness; the intravenous line (patency, site, type of fluid), the condition of the dressing and wound, and the type and patency of drainage tubes.

Documenting the patient’s physiological and psychological responses and assessing these data helps in determining nursing diagnoses and implementing the plan of care. Documentation also provides a record of the continuum of care and the hand over of care between practitioners.
DISCHARGE READINESS

- Develop discharge criteria collaboratively with a multidisciplinary team; include the following:
  - return to preoperative baseline mental status
  - stable vital signs
  - sufficient time interval since the last administration of an antagonist (2 hours)
  - use of an objective patient assessment scoring system
  - absence of protracted nausea
  - intact protective reflexes
  - pain control
  - return of motor/sensory control
  - ability to remain awake for at least 20 minutes
  - arrangement for safe transport from the facility

- Provide a copy of the written discharge instructions and document the patient’s or responsible adult’s verbal understanding.

- Provide additional discharge instruction to adults caring for an infant or toddler in a car seat (careful observation of child’s head position to avoid airway obstruction, need for two responsible adults [a driver and an observer]).

- Consider delaying discharge in cases of obstructive sleep apnea, use of morphine or dexmedetomidine, use of an antagonist, postoperative nausea and vomiting, or use of a medication with a long half-life (for pediatric patients).

★ Decreased procedural stimulation, delayed absorption of medications administered by non-intravenous routes, and slow drug elimination are factors that contribute to residual sedation and cardiorespiratory depression in the postoperative phase of care after moderate sedation/analgesia. Establishing discharge criteria minimizes the risk for an adverse outcome after the patient has been discharged.