BAPTIST HEALTH POLICY AND PROCEDURE MANUAL **No. 7.01.08**		
Section: Patient Care	**Subject:** Sedation: Adult, Non-anesthesia Provided	
Original Date: November 2007	**Supersede:** July 2020	**Effective Date:** July 2021
Review Date: July 2022	**Scope:** Baptist Health, excludes Wolfson Children's Hospital	
Approved: Tammy Daniel, DNP, MA, RN, NEA- BC Senior Vice President, Chief Nursing Officer		

I. POLICY

It is the policy of Baptist Health to provide uniform, safe and evidenced-based standards for the management of patients receiving sedation to adult patients in multiple settings, including but not limited to: the operating rooms, the endoscopy centers, the cardiac catheterization laboratories, the ICUs, the emergency departments, and the diagnostic imaging departments. In all of these locations, a patient can expect a comparable level of pre-procedure, intra-procedure, and post-procedure care provided by equivalently trained personnel.

The clinical state of sedation is a continuum from minimal sedation to moderate to possibly deep sedation. It is not always possible to predict how an individual patient will respond to different sedative agents, so sedation could lead to sedative-induced respiratory depression. Therefore, for patient safety, practitioners administering sedative agents to a patient must be able to recognize a transition from one state of sedation to a deeper level of sedation and be able to safely intervene as needed to "rescue" the patient. Also, certain agents are more likely to induce deep sedation and therefore, the use of propofol, etomidate, and ketamine are restricted to LIP physicians with appropriate sedation credentials and who are also credentialed in Anesthesiology, Emergency Medicine or Pulmonology Critical Care. The restriction on ketamine is for its use for sedation and it is recognized that smaller doses of ketamine may be used for analgesia. The above specialty restrictions do not apply to analgesic use of ketamine. Typical analgesic doses of ketamine range from 0.05mg/kg to a maximum total analgesic dose of 0.5mg/kg via any route; the maximum total analgesic dose is to be repeated no more frequently than every 4 hours. If propofol, etomidate, or ketamine are being employed, then there is increased risk of respiratory depression and a second non-procedure performing physician or dedicated nurse with appropriate sedation training* is required to be present to manage any potential respiratory concerns. A procedure should not be delayed if there is a threat to the patient's life, limb, or organ, or if the patient is already intubated.

* Nurses must have completed hospital sponsored sedation training course in moderate/deep sedation and are ACLS/& or PALS certified per job description.

II. PURPOSE

To ensure patient safety and comfort during diagnostic or therapeutic procedures where sedation may be utilized.

III. DEFINITIONS

A. Conscious Sedation: A drug-induced state during which patients respond normally to verbal commands. Although cognitive function and physical coordination may be impaired, airway reflexes, and ventilation and cardiovascular function are unaffected.
B. Moderate Sedation: 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. (*Reflex withdrawal from a painful stimulus is NOT considered a purposeful response.)

C. Deep Sedation: A drug-induced depression of consciousness during which patients cannot be easily aroused. The ability to independently maintain ventilatory function may be impaired. Patients may require assistance in maintaining a patent airway, and spontaneous ventilation may be inadequate. Cardiovascular function is usually maintained. See pages 3-4.

Personnel

A. The proper location and availability of health care providers during all types of sedation is important to ensure patient safety. Care providers may be grouped broadly as credentialed physicians, nurses, and technicians. Patients receiving sedation should be monitored at all times and accompanied by an appropriately competent RN who has ready access to the sedating physician. The sedating physician must not be encumbered by any other activity that cannot be readily left in the event of the urgent need to return to the sedated patient.
B. Licensed Independent Practitioner (LIP): someone who is appropriately credentialed and privileged by the facility may administer or supervise administration of Sedation.
C. ASA Classification: Developed by the American Society of Anesthesiologists to assess the degree of a patient's "sickness" or "physical state" prior to selecting the anesthetic or prior to performing surgery. The grading system is ***not intended*** for use as a measure to predict operative risk. (At Baptist Health, the ASA status is designated by the surgeon/proceduralist in non-anesthesia cases.
D. This document refers to two levels of sedation: moderate sedation/analgesia (formerly known as conscious sedation) and procedural/deep sedation. The level of sedation is determined by the state of the patient, not by the medication used or the route of administration.
E. Pain, both physical and mental, should be adequately treated. When possible, the patient should have minimal recall of any and all unpleasant experiences. The depth of sedation and the medications used to achieve anxiolysis, amnesia, and sedation, should be matched to the procedure.

IV. PROCEDURES

A. When the LIP is requesting Sedation for a procedure, the following should occur:
    1. Verification of LIP credentials to perform appropriate level of sedation
    2. Verification of a nurse that is competent to administer Moderate Sedation (In the event the appropriate staffing is not present on any unit, notify the House Supervisor to determine available resources).
    3. Note that certain agents, propofol, etomidate, and ketamine, are restricted and only to be used for sedation by physicians credentialed in Anesthesiology, Emergency Medicine or Pulmonology Critical Care. Also note that if propofol, etomidate, or ketamine are being employed that there is increased risk of respiratory depression and a second non-procedure performing physician or appropriately trained RN is required to be present to identify any potential respiratory concerns. Refer to Section I for their proper use requirements.

B. Pre-procedure
    1. A documented history and physical will be on the chart prior to the procedure.
    2. The History and Physical (H&P) is valid for 30 days and must be updated within 24 hours of admission and/or prior to procedure. In the Emergency Department (ED) the ED physician note addresses the required elements of the H&P.
    3. The physician will determine the appropriate sedation agent(s) based on their assessment.
    4. After ensuring a timeout is completed and in the medical record, a RN competent in Moderate Sedation, has the responsibility to assess the patient's vital signs, airway, and adequacy of ventilation and to continuously monitor the patient. This RN may provide medications as directed by the physician, see guidelines below. A second RN to document in the EMR is present to assist and obtain any necessary equipment. RT if available.
    5. A documented assessment by the RN and physician must occur prior to administration of Moderate Sedation. The following items should be included:

Performed by RN	Performed by physician (LIP)
Medications and drug allergies	Review of systems and significant medical history
NPO except for clear liquids after midnight, then at 2hr prior to scheduled procedure time, take Ensure Pre-Surgery or Gatorade, then NPO after the pre-op drink. Consult LIP for any concerns regarding NPO status if patient has history of Parkinson's disease, documented gastroparesis, Down's syndrome, history of stroke. **Urgent/Emergent exception will be determined by the procedural physician, for example, the LIP may allow an NPO status exception when they determine that delay may cause threat to the patient's life, limb, and/or organ.	Assessment of patient and documented ASA score prior to sedation
Height and Weight	Airway Status
IV access will be confirmed	Informed consent obtained
Baseline vital signs including: heart rate, blood pressure, respiratory rate, oxygen saturation, ETCOs reading and LOC per Richmond Agitation and Sedation Scale (RASS). Emergency equipment in area/room Repeat vital signs immediately before the administration of the sedating agent to identify any potential changes from baseline	Reassessment of patient immediately prior to administration of medication and documented
Informed Consent verified. Form signed, dated, timed and witnessed	
Possibility of pregnancy addressed, if applicable	

6. If the patient presents with any of the following conditions, the registered nurse should notify the surgeon/proceduralist and/or supervisor for evaluation of patient status: refer to Appendix A for ASA Classification Chart
    a. known respiratory or hemodynamic instability
    b. Obstructive sleep apnea, severe sleep apnea, or other airway related issues
    c. BMI of 50 or greater
    d. one or more significant co-morbidities
    e. previous difficulty with anesthesia or sedation
    f. pregnancy
    g. inability to communicate (e.g., aphasic)
    h. inability to cooperate (e.g., mentally incapacitated)
    i. multiple drug allergies
    j. multiple medications with potential for drug interaction with sedative analgesics
    k. current substance use (e.g., street drugs, herbal supplements, non-prescribed prescription drugs)
    l. ASA classification of an unstable 3. Patient's medical history was a 3 but they are now unstable due to shock, unstable angina, etc. they are now an ASA 4.
    m. ASA classification of 4 and above

7. Verify that the resuscitative equipment, medication and oxygen are immediately available. The equipment and medication should include:
    a. Code cart with defibrillator, intubation tray
    b. Bag-valve-mask

c. Non-invasive blood pressure devices with appropriate sized cuff
d. Cardiac monitor
e. Pulse oximeter
f. Continuous ETCO2 monitoring
g. Reversal agents
h. Suction
i. Oxygen and delivery devices
j. Intubation tray
k. IV supplies
l. Personal protective equipment
m. Malignant hypothermia bag at free standing emergency departments

8. Provide patient/family education
    a. Purpose of sedation
    b. Potential side effects of medications administered
    c. Post sedation dietary and activity instructions
    d. Discharge instructions for outpatient

C. Intra-procedure
1. Medications are administered to produce desired therapeutic effects by the physician or competent moderate sedation RN. .
    a. Desirable therapeutic effects include:
        i. Relaxation
        ii. Cooperation
        iii. Diminished verbal communication
        iv. Intact protective reflexes
        v. Easily aroused by verbal stimuli

2. Notify the physician if any of the following occurs:
    a. Nystagmus (may be normal with large doses of diazepam)
    b. Unarousable sleep
    c. Agitation
    d. Hypoventilation
    e. Airway obstruction
    f. Cardiac dysrhythmias
    g. Hypotension/hypertension
    h. Persistent slurred speech
    i. Combativeness
    j. Respiratory depression
    k. Apnea

3. Monitoring parameters should include:
    a. Respiratory rate and depth of respiration
    b. Oxygen saturation
    c. Continuous ETCO2monitoring
    d. Blood pressure
    e. Heart rate and rhythm
    f. Level of consciousness (Richmond Agitation Sedation Scale RASS table 2)
    g. Pain scale: Wong-Baker or Non-verbal adult pain scale (table 3 and table 4)

4. Monitoring and documentation for sedation administration:
    a. Medications administered: dosage, route, time and effects of all medications administered (Richmond Agitation Sedation Scale (RASS)(table 2)
    b. IV site
    c. Type and amount of fluids administered, including blood and blood products
    d. Procedure performed
    e. Any interventions and outcomes related to moderate sedation
    f. Continuously monitored and documented every 5 minutes during the procedure, parameters include heart rate, rhythm, blood pressure, respiratory rate, oxygen saturation, ETCO2 continuous and LOC) Richmond Agitation Sedation Scale (RASS)

g. Pain management during pre-procedure, intra-procedure, and post-procedure

V. Levels of Monitoring

	Moderate	Deep
Personnel	-Procedural Physician -2 RNs who have completed hospital sponsored Sedation Training course in moderate/deep sedation and are ACLS &/or PALS certified per job description -Respiratory therapist if available. In procedural areas such as Radiology and the Cath Lab, where opioid medications for moderate sedation is being provided, an RN with completion of hospital sponsored sedation training course and ACLS and/or PALS certified per job description must be present. If another RN is not available, the RN will monitor the patient's airway and vital signs and a Certified Technologist in the Specialty will assist the physician during the procedure.	-Procedural Physician** -Sedating Physician* or dedicated RN with completion of hospital sponsored sedation training course and ACLS and/or PALS certified per job description must be present to monitor the patient for any physiologic changes suggestive of airway compromise. RN to provide medication administration assistance and assist procedural physician --Respiratory therapist if available. *physician must be credentialed in either moderate or deep sedation. ** Note deep sedation is restricted to physicians credentialed in Anesthesiology, Emergency Medicine or Pulmonology Critical Care. In procedural areas such as Radiology and the Cath Lab, where opioid medications for moderate sedation is being provided, an RN with completion of hospital sponsored sedation training course and ACLS and/or PALS certified per job description must be present. If another RN is not available, the RN will monitor the patient's airway and vital signs and a Certified Technologist in the Specialty will assist the physician during the procedure.
Monitoring Equipment Continuous	0_2 saturation, blood pressure, EKG, with respiratory rate, and continuous ETCO2 capnography monitoring	0_2 saturation, blood pressure, EKG, with respiratory rate, and continuous ETCO2 capnography monitoring
Location	EDs, Procedure suites (MRI, Cardiac Cath Labs, Radiology Suites, Endoscopy suites) and, OR spaces, and under exceptional circumstances patient care areas, with appropriate monitoring, personnel, and resuscitation equipment	EDs, Procedure suites (MRI, Cardiac Cath Labs, Radiology Suites, Endoscopy suites-when anesthesia is not providing) and, OR spaces, and under exceptional circumstances patient care areas, with appropriate monitoring, personnel, and resuscitation equipment.

A. Medications: Drug selection and dosage are directed by the physician and should be adjusted as appropriate to patient's age, weight and medical condition.

VI. GUIDELINES:

A. A nurse competent for moderate/deep sedation may prepare and administer opioid analgesics and benzodiazepines (ex: fentanyl and midazolam). Nurses competent in moderate/deep sedation may assist the physician administering medications etomidate, propofol and ketamine but under the Florida Board of Nursing may not administer, even if physician is present, during time-limited procedures for moderate sedation procedures in specified areas noted above.

B. A RN can prepare and set up a continuous infusion of propofol if ordered by a Physician following the above second witness guideline. The initiation dose and titration dose of the continuous infusion must be ordered by a physician with appropriate level of sedation credentials.
C. A RN can prepare and administer any of the above medications via IVP or titration for an urgent or emergency intubation or when there is threat to life, limb, or organ, under the direct supervision of the sedating physician
D. **Post-procedure**
    1. Continue to monitor patient and document monitoring parameters at least every 15 minutes
    2. Monitoring and documenting parameters will continue until the following criteria are met, utilizing the modified Aldrete scoring system (table 1).
        a. **8 to 10 points (2 of which must come from respiration section), then patient can be discharged from post- procedure area**
        b. **If less than 8 points, then the physician must be notified prior to discharge**

    3. When a narcotic antagonist is used, patient will be observed for a minimum of 90 minutes post administration. Metric reporting should be completed for trending
    4. Supplies (e.g. syringes) and medications must be attended/secured and accounted for.
    5. If the patient is discharged after the procedure, discharge instructions are given to the patient and/or caregiver. The patient cannot drive self home. The patient is to be discharged into the care of a responsible party. Patients will not be discharged unaccompanied into a taxicab or public transportation vehicle except by an order from the physician. Unaccompanied discharge is discouraged.
    6. If the patient is an inpatient, hand off communication will occur utilizing the SBAR method for report and called to the licensed professional receiving the patient.
    7. If the patient's procedure was performed in their hospital room, monitoring and documentation continues until the patient reaches a modified Aldrete score of 8.
    8. Included in hand-off communication:
        a. Patient's condition
        b. Patient's current vital signs
        c. Procedure performed and patient response
        d. Medications administered including any reversal agents
        e. Modified Aldrete score post-procedure

TABLE 1: Modified Aldrete Score system
Modified Aldrete Score
Consciousness
2 = Fully awake
1 = Responds to name
0 = No response
Activity on command
2 = Moves all extremities
1 = Moves two extremities
0 = No movement
Respiration
2 = Free deep breathing
1 = Dyspneic, hyperventilating, obstructed breathing
0 = Apneic
Circulation
2 = Blood pressure within 20% of pre-op level
1 = Blood pressure within 50%–20% of pre-op level
0 = Blood pressure 50%, or less, of pre-op level
Oxygen saturation
2 = SpO_2 greater than 92% on room air
1 = Supplemental O_2 required to maintain SpO_2 greater than 92%
0 = SpO 2 less than 92% with O_2 supplementation
Total Score: _____

- **8 to 10 points (2 of which must come from respiration section), then patient can be discharged from post-procedure area**
- **If less than 8 points, then the physician must be notified prior to discharge**

TABLE 2: Richmond Agitation Sedation Scale (RASS)

+4 Combative Overtly combative, violent, immediate danger to staff

+3 Very agitated Pulls or removes tube(s) or catheter(s); aggressive

+2 Agitated Frequent non-purposeful movement, fights ventilator

+1 Restless Anxious but movements not aggressive vigorous

0 Alert and calm

-1 Drowsy Not fully alert, but has sustained awakening (eye-opening/eye contact) to *voice* **(>10 seconds)**

-2 Light sedation Briefly awakens with eye contact to *voice* **(<10 seconds)**

-3 Moderate sedation Movement or eye opening to *voice* **(but no eye contact)**

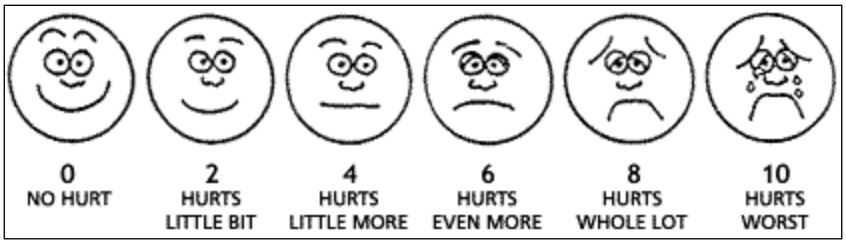
-4 Deep sedation No response to voice, but movement or eye opening to *physical* stimulation

-5 Unarousable No response to *voice or physical* stimulation

TABLE 3: Adult Non-Verbal Pain Scale

Categories	**Scoring**		
	0	**1**	**2**
Face	No particular expression or smile	Occasional grimace or tearing, frowning, wrinkled forehead, withdrawn, disinterested	Frequent grimace, tearing, frowning, wrinkled forehead
Activity (Movement)	Lying quietly, normal position	Seeking attention through movement or slow, cautious movement	Restless, excessive activity and/or withdrawal reflexes
Guarding	Lying quietly, no positioning or hands over body	Splinting areas of the body, tense	Rigid, still
Physiology (Vital Signs)	Stable vital signs Baseline RR/SpO2, compliant with ventilator	Change SBP >20mmHg or HR >20/min	Change SBP>30mmHg or HR > 25/min
Respiratory	Baseline RR/SpO2, compliant with ventilator	RR>10 above baseline or 5%SpO2 drop, mild asynchrony/vent	RR>20 above baseline or 10%SpO2 drop, severe asynchrony/vent
Each of the five categories (F) Face; (A) Activity; (G) Guarding; (P) Physiology (R) Respiratory is scored from 0-2, which results in a total score between zero and ten.			

TABLE 4: Wong-Baker Pain Scale



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This policy/procedure is only intended to serve as a general guideline to assist staff in the delivery of patient care; it does not create standard(s) of care or standard(s) of practice. The final decision(s) as to patient management shall be based on the professional judgment of the health care provider(s) involved with the patient, taking into account the circumstances at that time. Any references are to sources, some parts of which were reviewed in connection with formulation of the policy/procedure. The references are not adopted in whole or in part by the hospital(s).

Appendix A

ASA PS Classification	Definition	Examples, including, but not limited to:
ASA I	A normal healthy patient	Healthy, non-smoking, no or minimal alcohol use
ASA II	A patient with mild systemic disease	Mild diseases only without substantive functional limitations. Examples include (but not limited to): current smoker, social alcohol drinker, pregnancy, obesity (30 < BMI < 40), well-controlled DM/HTN, mild lung disease
ASA III	A patient with severe systemic disease	Substantive functional limitations; One or more moderate to severe diseases. Examples include (but not limited to): poorly controlled DM or HTN, COPD, morbid obesity (BMI ≥40), active hepatitis, alcohol dependence or abuse, implanted pacemaker, moderate reduction of ejection fraction, ESRD undergoing regularly scheduled dialysis, premature infant PCA < 60 weeks, history (>3 months) of MI, CVA, TIA, or CAD/stents.
ASA IV	A patient with severe systemic disease that is a constant threat to life	Examples include (but not limited to): recent (< 3 months) MI, CVA, TIA, or CAD/stents, ongoing cardiac ischemia or severe valve dysfunction, severe reduction of ejection fraction, sepsis, DIC, ARD or ESRD not undergoing regularly scheduled dialysis
ASA V	A moribund patient who is not expected to survive without the operation	Examples include (but not limited to): ruptured abdominal/thoracic aneurysm, massive trauma, intracranial bleed with mass effect, ischemic bowel in the face of significant cardiac pathology or multiple organ/system dysfunction
ASA VI	A declared brain-dead patient whose organs are being removed for donor purposes	

*The addition of "E" denotes Emergency surgery: (An emergency is defined as existing when delay in treatment of the patient would lead to a significant increase in the threat to life or body part)

These definitions appear in each annual edition of the ASA Relative Value Guide®. There is no additional information that will help you further define these categories.