

Policy Title:	SEDATION POLICY					
Category:	1 - Provision of Care				Policy No.:	173
Originally Issued:		4/1/1994		Update (U)/Revised (R):		01/10/19
Distribution:	Distribution: Hospital-Wide 🛛		If not Hospital-Wide, Other:			

# PURPOSE:

The purpose of this policy is to:

- Ensure uniformity in the administration of sedation.
- Achieve adequate, safe sedation with minimal risk.
- Provide age-appropriate care to all patients by ensuring that clinical providers have the appropriate clinical competencies.
- Provide minimum requirements for the delivery of sedation.
- Minimize physical discomfort and pain for patients undergoing procedures or requiring mechanical ventilation with sedation.
- Minimize negative psychological responses to diagnostic and therapeutic procedures.
- Identify criteria for safe discharge.
- Anesthesia services, including sedation throughout the hospital, will be provided in a well-organized manner under the direction of the Department of Anesthesiology.

# SCOPE:

This policy applies to all employees and faculty involved in the care patients receiving sedation in all hospital departments and areas.

It does NOT apply to:

- Medications used for the management of pain (analgesia).
- The use of medications to achieve minimal sedation for anxiolysis or for the management of insomnia.
- Patients who require sedation to control seizures (unless the goal of therapy is moderate to deep sedation).
- The use of medications in the setting of alcohol withdrawal management.
- The use of medications for the management of psychiatric disorders.
- Sedation provided by an Anesthesiologist or Certified Registered Nurse Anesthetist (CRNA).
- The use of medications for the emergency securement of an airway (i.e. rapid sequence induction for intubation).

## **DEFINITION(S):**

## The Sedation Continuum

Awake  $\rightarrow$  Moderate Sedation  $\rightarrow$  Deep Sedation  $\rightarrow$  General Anesthesia

Sedation and anesthesia represent different points on a continuum of responses seen in patients receiving a drug or combination of drugs designed to produce an altered level of consciousness. The degree of patient response depends on multiple factors including: drug dosage, route and rate of administration, combination with other agents, and patient factors such as age, weight and medical condition. Experience and knowledge of the pharmacology of drugs are required to provide effective moderate sedation without unintended progression to deeper levels of anesthesia.

The institution currently defines four (4) levels of sedation/anesthesia:

Minimal Sedation or Anxiolysis (Not addressed by this policy)	A drug induced state during which patients respond normally to verbal commands. Although cognitive function and coordination may be impaired, ventilatory and cardiovascular functions are unaffected.
Moderate Sedation (Formerly conscious sedation)	A drug induced depression of consciousness during which patients respond purposefully to verbal commands. Loss of consciousness is unlikely and the drugs and dosages are not intended to produce a loss of consciousness. Reflex withdrawal from a painful stimulus is <i>not</i> considered a purposeful response. No interventions are required to maintain a patent airway and spontaneous ventilation is adequate. Cardiovascular function is usually not affected.
Deep Sedation	A drug induced depression of consciousness during which patients cannot be easily aroused but respond purposefully to repeated or painful stimulation. Protective reflexes may be lost and with 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 not affected.
General Anesthesia (Not addressed by this policy)	General anesthesia is a drug induced loss of consciousness during which patients are not arouseable even by painful stimuli. The ability to independently maintain ventilatory function is often impaired. Patients often require assistance in

maintaining a patent airway and positive pressure ventilation may be required because of depressed spontaneous ventilation or drug-induced depression of neuromuscular function. Cardiovascular function may
be impaired. The provision of general anesthesia is restricted to Anesthesiologists and CRNA's.
Testincted to Anesthesiologists and CRNA's.

### POLICY:

This policy establishes procedures and general guidelines for the provision of moderate and deep sedation administration. The policy and procedures will be followed wherever moderate or deep sedation is administered during a diagnostic or therapeutic procedure or for the sedation of mechanically ventilated patients.

Institutional moderate and deep sedation practices shall be monitored and evaluated by the Department of Anesthesiology.

Identified concerns will be referred to the appropriate departments and/or committees to ensure that processes related to the use of sedation are continually assessed and improved.

### **PROCEDURE:**

### I. PREPARATION FOR THE PROCEDURE

#### A. <u>Personnel Responsibility</u>

#### A. Supervision:

All moderate and deep sedation must be administered under the supervision of a licensed independent practitioner (Attending Physician) who has been granted clinical privileges for the administration of moderate and/or deep sedation.

#### **B. Licensed Personnel:**

- Physicians authorized by the Medical Executive Committee to administer moderate/deep sedation shall be deemed authorized to administer sedating drugs.
- Resident Physicians-in-training may administer moderate or deep sedation only under the <u>direct</u> supervision of an Attending Physician who has privileges for the administration of moderate and/or deep sedation.
- Registered Nurses authorized to administer moderate sedation, assess, monitor and/or provide immediate post-procedure care to patients receiving moderate/deep sedation shall demonstrate competency in: basic airway management, use of medications, pulse oximetry, cardiac monitoring equipment, and arrhythmia recognition. The Registered Nurse shall have current, age-appropriate, advanced life support knowledge.

# C. Staffing

A minimum of two personnel must be directly involved in the care of patients undergoing procedural sedation. Both must be present during the entirety of the procedure: 1) the physician who performs the diagnostic, therapeutic or surgical procedure and 2) the individual whose responsibility is directed only to the patient: to administer medication, to monitor the patient, and to observe the patient's response to both the sedation and the procedure. Qualified personnel shall also be present during the recovery period and to discharge the patient from the post-sedation recovery area.

<u>Moderate Sedation</u>: The licensed personnel assigned to monitor the patient during moderate sedation may assist with minor, interruptible tasks once the level of sedation / analgesia and vital signs have stabilized, provided that adequate monitoring of the patient's level of sedation is maintained. A second nurse or assistant may be required to assist the physician with those procedures that are complicated either by the severity of the patient's illness and/or complexity of the diagnostic and therapeutic procedures being performed.

**Deep Sedation**: During deep sedation a licensed personnel must be assigned to **only** monitor the patient - without any other responsibilities. A qualified registered nurse or qualified licensed practitioner must have the primary responsibility for medication administration and/or monitoring of the patient's vital signs and level of sedation during the administration of moderate and deep sedation. Registered Nurses with appropriate training may monitor deep sedation and/or adjust it; and may adjust the sedation in order to begin a rescue; this shall be under the direct supervision of a Qualified Practitioner who has privileges for the administration of deep sedation and who is not involved in performing the procedure.

## B. Personnel Requirements (Competency)

1. Attending Physicians

All moderate/deep sedation will be supervised by a credentialed attending physician holding current privileges to administer moderate/deep sedation. Privileging for moderate and deep sedation (formerly known as Procedural Sedation) is part of the Medical Staff/Professional Staff Association appointment and reappointment process and is subject to final approval by the Medical Executive Committee.

Renewing of privileges for moderate/deep sedation shall occur in conjunction with renewal of attending staff privileges. Demonstration of didactic **and** clinical competency is required. Documentation of current competency related to the use of moderate/deep sedation shall be maintained by the Medical Staff Office.

Attending staff must demonstrate having performed or supervised a minimum of eight (8) cases within the past 2 years or repeat the competency requirement as stated below. Additional requirements for privileging in deep sedation include ongoing demonstration of competency in airway rescue as stated below.

- a. Didactic Competency
  - All Attending Staff shall demonstrate didactic competency by completion of a sedation module. The privileging requirements for moderate sedation are different from those for deep sedation.
  - Attending physicians requesting privileges to perform <u>moderate sedation</u> must demonstrate didactic competency by completion of the Moderate Sedation Module (Attachment A) and successful completion of the Moderate Sedation Post Test. The Moderate Sedation Module contains important information about the administration of sedation and the requirements for patient sedation assessment and monitoring.
  - Physicians requesting privileges for <u>deep sedation</u> must demonstrate didactic competency by completion of the Deep Sedation Module (Attachment B) and successful completion of the Deep Sedation Post Test. The Deep Sedation Module contains important information about the administration of deep sedation and the requirements for patient sedation assessment and monitoring.
- b. Clinical Competency

Attending Physicians responsible for providing moderate sedation shall have, at a minimum, age-specific training which includes:

- i. Recognition of the compromised airway and knowledge of basic airway management skills.
- ii. Current, age-appropriate advanced cardiac life support knowledge is required. This may include Advanced Cardiac Life Support (ACLS), Pediatric Advanced Life Support (PALS).
- iii. Cardiopulmonary monitoring
- iv. Use of sedative/reversal agents and knowledge of their use
- v. The ability to intervene in the event of complications
- vi. Implementation of required resuscitation efforts including summoning additional personnel with advanced life support skills.
- vii. The ability to recognize when a patient has passed into a deeper level of sedation than intended and the knowledge and skills to bring the patient back to the intended level of sedation
- viii. Demonstration of knowledge of sedation policy and procedure

Attending physicians (other than Emergency Medicine Physicians1) responsible for providing deep sedation must satisfy the following additional requirements:

 a. Demonstration of clinical competency in managing or rescuing a compromised airway through the successful performance or direct supervision of endotracheal intubation and/or other advanced artificial airway securement. Physicians must provide attestation to performing airway management a minimum of six (6) times every two (2) years.

Note: Demonstration of both didactic and clinical competency in <u>deep</u> <u>sedation</u> satisfies competency requirements for <u>moderate sedation</u>.

2. Resident Physicians

Physicians-in-training may administer sedation only under the **direct** supervision of an Attending Physician who has privileges for the administration of moderate and/or deep sedation.

Footnote: 1 Emergency Medicine-trained physicians have very specific skill sets to manage airways and ventilation that are necessary to provide patient rescue. Therefore, these practitioners are uniquely qualified to provide all levels of analgesia and sedation (moderate-to-deep to general). For other practitioners requesting privileges, the ability to perform airway rescue will be demonstrated through successful performance of airway management a minimum of six (6) times every two (2) years.

3. Registered Nurses

Nursing Staff involved in the care of patients receiving sedation must demonstrate both didactic **and** clinical competency by:

- a. Completion of the Moderate Sedation Module and successful completion of the Moderate Sedation Post Test every two years (Attachment A).
- b. Current, age-appropriate, advanced cardiac life support knowledge.
- c. Recognition of the compromised airway and knowledge of basic airway management skills.

## C. Locations

This policy will apply to all locations in the hospital where moderate/deep sedation is administered. These locations include but are not limited to:

- DEM
- Intensive Care Units / Step-down Units
- Bronchoscopy Suites
- Endoscopy Suites
- Cardiac Catheterization Lab
- Radiology Suites, including the MRI center

## D. Patient Selection Criteria

Candidates for moderate/deep sedation are those patients who must undergo painful or difficult procedures, where cooperation and/or comfort will be difficult or

impossible without pharmacological support through the titration of narcotics and sedatives.

Patients must be screened for potential risk factors for any pharmacological agents selected. The decision on which agent to use will be based on the goals of sedation, the type of procedure being performed, and the age and physiologic condition of the patient.

Risk Assessment: It is the responsibility of the physician to select only those patients who can safely undergo the required procedure with the use of moderate/deep sedation. The risk of each case should be assessed and documented in the pre-procedure note. The following patients are at increased risk during moderate/deep sedation.

- Elderly patients (> 70 years of age)
- Neonatal/ Pediatric patients
- Morbidly obese patients
- Patients at increased risk of aspiration (full stomach, trauma, hiatal hernia)
- Patients with concomitant diseases, especially cardiovascular and pulmonary diseases
- Pregnant patients
- Patients with difficult airway (known difficult intubation, neck injury, facial trauma or anomalies, etc.)

All patients will be pre-screened by the ordering physician for risk factor utilizing the ASA (American Society of Anesthesiologists) Physical Status Classification Scale. An Anesthesiologist is available for consultation if classification is unable to be determined.

# ASA Physical Status Classification

ASA 1	A normal healthy patient.
ASA 2	A patient with mild systemic disease (e.g. Mild diseases only without
	substantive functional limitations. Examples include (but not limited to):
	current smoker, pregnancy, obesity (30 <bmi<40), td="" well-controlled<=""></bmi<40),>
	DM/HTN, mild lung disease.)
ASA 3	A patient with severe systemic disease. (e.g. Substantive functional
	limitations; One or more moderate to severe diseases. Examples
	include (but are not limited to): poorly controlled DM or HTN, COPD,
	morbid obesity with BMI>40, implanted pacemaker, ESRD undergoing
	regularly scheduled dialysis, moderate reduction of ejection fraction,
	history (>3 months) of MI, CVA, TIA, or CAD/stents.)
ASA 4	A patient with severe systemic disease that is a constant threat to life
	(e.g. 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 5	A moribund patient who is not expected to survive without the operation (e.g. Examples include (but not limited to): massive trauma, ischemic bowel in the face of significant cardiac pathology or multiple organ/system dysfunction).
E	"E" is added if the procedure is performed as an emergency. (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.)

All patients falling into ASA classification 1-3 are eligible for moderate/deep sedation. They should be carefully evaluated by the attending physician to ensure that the magnitude of the procedure will not require the presence or involvement of Anesthesia Services to maintain patient safety.

Patients who are greater than ASA 3 or who present special considerations (i.e. mental disorders, psychosis, dementia, drug dependency and alcohol abuse requiring greater than normal doses for sedation) may require consultation and possible participation by the Department of Anesthesiology. A consultation with the Department of Anesthesiology is **required** for patients classified as ASA 5.

Elective ambulatory patients must be accompanied by a competent adult to escort them home. This must be established prior to starting the procedure. Patients who do not have an escort will be cancelled if the procedure cannot be done under local anesthesia without sedation. If the case is deemed urgent/emergent and requires sedation, the patient will be admitted under observation status or until appropriate discharge criteria are met. (Refer to page 12 for discharge criteria.)

#### E. Equipment and Medication Requirements

- Oxygen source (if tank is to be used, ascertain to full).
- Functioning suction source with appropriate size suction catheters and Yankauer
- Cardiac monitoring equipment.
- Automated blood pressure monitoring.
- Pulse oximetry.
- Capnography (End-Tidal CO2).
- Appropriate selection of masks and airways.
- Airway devices (e.g. oral/nasal airway).
- Resuscitative equipment (e.g. laryngoscope, endotracheal tubes and stylets).
- Bag-valve-mask device (e.g. Ambu bag) with C02 detector.
- Additional oxygen delivery devices (e.g. face mask, nasal cannula, nonrebreather face mask).
- Emergency Crash Cart with defibrillator
- Intravenous Fluids and Supplies
- Electrical outlet connected to emergency power supply system

- Telephone access in immediate vicinity
- Naloxone and Flumazenil must be immediately available prior to the start of the procedure that uses opioid analgesics and/or benzodiazepines, respectively.

### F. <u>NPO Status</u>

The following NPO guidelines apply for otherwise healthy patients for scheduled procedures. Gastric emptying may be influenced by many factors including anxiety, pain, autonomic dysfunction (e.g. diabetes), pregnancy, and mechanical obstruction. Adherence to these guidelines does not guarantee that compete gastric emptying has occurred. Deviations from these guidelines may be indicated because of the patient's clinical presentation.

- 1. **Patients less than 2 years** old may take clear liquids up to 2 hours before procedure and may take solids up to 6 hours before procedure.
- Patients greater than 2 years old (including adults) may take sips of clear liquids up to 4 hours before procedure and may take solid up to 8 hours before procedure.
- 3. Clear liquids are defined as water, apple juice, carbonated beverages, clear tea and black coffee.
- 4. Patients may have a light meal up to 8 hours before a procedure. A light meal is defined typically as toast and clear liquids. Heavier meals that include fried or fatty foods or meat may prolong gastric emptying and require a longer fasting period.
- 5. High-risk patients should have the standard 8-hour fasting prior to sedation when possible. These conditions may include, but are not limited to:
  - a. Pregnancy
  - b. Obesity
  - c. Diabetes
  - d. Hiatal hernia
  - e. Gastroesophageal reflux
  - f. Ileus or bowel obstruction

When proper fasting cannot be ensured, or in the case of an urgent or emergent procedure, the increased risks of sedation (e.g. pulmonary aspiration) shall be weighed against its benefit. An emergency procedure may require endotracheal intubation for protection of the patient's airway against aspiration prior to sedation.

#### II. PERFORMANCE OF PROCEDURE

#### A. <u>Pre-procedure</u>

## 1. Physician Responsibility

The practitioner shall perform an appropriate patient assessment and documentation prior to the administration of moderate /deep sedation which must include:

- a. Informed Consent including explanation of risks, benefits and alternatives to procedure and/or moderate / deep sedation.
- Relevant history including past anesthetic history or airway issues, current medications, allergies, alcohol and other substance abuse history, and smoking history.
- c. Overall physical assessment of major organ system including cardiac and pulmonary.
- d. Examination of the patient's airway, recognition of high-risk airways and documentation of a Mallampati classification shall be made on assessment forms.
- e. Ensuring NPO (nothing by mouth) status prior to the sedation and appropriate for the procedure.
- f. Pain assessment.
- g. Pregnancy status.
- h. Assessment of the patient's ability to lie in a required position for the procedure.
- i. Review of relevant diagnostic testing.
- j. ASA risk classification / stratification.
- k. Procedure plan with choice of moderate/deep sedation agents to be utilized
- I. Pre-Induction Assessment: The patient must be reevaluated immediate before moderate or deep sedation use when the patient is on the procedural table, in the moments before the sedation is to be administered. The Assessment may include vital signs, status of the airway, and response to any pre-procedure medications.
- 2. Monitoring Registered Nurse/Licensed Personnel Responsibility

The registered nurse or licensed personnel shall perform the following:

- a. Assess, verify and, and document:
  - Presence of current history and physical.
  - Presence of signed/competed informed consent.
  - Baseline vital signs, including heart rate, cardiac rhythm, blood pressure, respiratory rate, and oxygen saturation.
  - Pain assessment.
  - Fasting (NPO) status.
  - Level of sedation / responsiveness.
- b. Secure intravenous access in all patients receiving intravenous medications. For pediatric patients receiving moderate/deep sedation through routes other than intravenously, the patient's physician may determine if intravenous access

is necessary. If it is determined that intravenous access is not necessary, then personnel and equipment necessary to start an intravenous line should be immediately available.

- c. Ensure proper placement of blood pressure cuff, pulse oximeter, and cardiac monitoring equipment.
- d. Ensure proper administration of oxygen via nasal cannula/mask per physician or as appropriate.
- e. Universal Protocol Implementation of Universal protocol should contain all the elements as required by current policy and include:
  - Pre-operative verification of the correct person, procedure and site.
  - Marking of the operative site and laterality, where applicable.
  - "Time Out" immediately before starting the procedure.
- f. Remain with the patient from the time sedation is initiated.

#### B. Intra-procedure

- 1. A physician or registered nurse shall continuously monitor the patient throughout the procedure and recovery.
- Supplemental oxygen should be available throughout the administration of moderate sedation, as needed to maintain oxygen saturations goals. Supplemental oxygen should be provided throughout the administration of deep sedation.
- 3. Monitoring of the patient is to be continuous throughout the procedure and shall include documentation of the following at a minimum of every five (5) minutes or upon any significant change or event:
  - a. Level of sedation / responsiveness, using the sedation scale currently approved by Olive View UCLA Medical Center.
  - b. Electrocardiogram (EKG).
  - c. Blood pressure, pulse and respiratory rate.
  - d. Oxygen saturation (oximetry).
  - e. Capnography (End-Tidal CO2): Need to continually monitor ventilatory function with capnography. The Department of Anesthesiology may be contacted for consultation.
  - f. The presence of monitor alarms should be confirmed and functioning.
  - g. Moderate / deep sedation documentation shall also include the following:
    - Procedure performed.
    - Patient identification and procedure site verified.
    - Start time and end time.
    - Personnel performing procedure and monitoring the patient.

- Name and dose of all medications used, including liters of oxygen administered.
- Type, rate, and amount of intravenous fluids infused.
- Record of all vital signs.
- Patient response to procedure/sedation.
- Patient status at the end of the procedure.
- Post-procedure findings.
- Unusual events or interventions.
- 4. Significant changes to be reported immediately by the registered nurse /licensed personnel to the provider include:
  - a. Heart rate less than 60 or greater than 100 beats per minute, or bradycardia/tachycardia as determined by age-appropriate normal.
  - b. Oxygen saturation changes:
    - i. Adults 10% drop or saturation less than 90%
    - ii. Pediatrics 5% drop or saturation less than 90%
  - c. Level of sedation changes.
  - d. Change where the patient cannot communicate verbally or appropriately for age.
  - e. Tissue perfusion changes with cyanosis, mottled skin, or clamminess.
  - f. Pain.
- 5. Rescuing the patient from complications of deep sedation shall include the following as clinically appropriate:
  - a. Recognition of airway obstruction.
  - b. Appropriate use of supplemental oxygen (increasing the concentration).
  - c. Insert airway devices (oral/nasal).
  - d. Perform jaw thrust/head tilt.
  - e. Use Bag-Valve-Mask Resuscitation.
  - f. Endotracheal intubation.
  - g. Administration of Naloxone or Flumazenil.

## C. <u>Post-Procedure</u>

- 1. Recovery
  - a. All patients will be recovered in the procedural area or at an appropriate postprocedural area within the facility.
  - b. Intensive Care Unit (ICU) patients will be returned to the ICU as soon as the patient can safely be transferred.
  - c. The Aldrete scoring system will be used to assess the patient's recovery from the effects of sedating medications:

ACTIVITY	2 – Able to move 4 extremities
	1 – Able to move 2 extremities
	0 – Able to move 0 extremities
RESPIRATION	2 – Able to breath deeply/cough
	1 – Dyspnea or limited breathing
	0 – Apneic
CARDIOVASCULAR	2 – BP within 20% or pre-procedures level
	1 – BP within 21-50% of pre-procedure level
	0 – BP greater than 50% of pre-procedure level
COLOR	2 – Pink or normal
	1 – Pale or dusky
	0 – Cyanotic
PATIENT RESPONSE	2 – For <1 year old – strong cry
	2 – For 1-3 years old – Verbally responsive and strong cry
	2 – For >3 years (including adults) – fully awake
	1 – Arousable on calling
	0 – Not responding

# Aldrete Score

- d. Patients shall be observed continuously until recovery criteria are met, which includes an Aldrete Score of no less than 10, or the same as the pre-procedural score, or at the clinical direction of the responsible attending physician.
- e. Patients who fail to meet the desired outcome status, or have an Aldrete Score less than 10 will be evaluated by the physician for possible transfer to/from the PACU or appropriate postprocedural area for further monitoring and recovery.
- f. Level of sedation and vital signs (blood pressure, pulse, respirations, and oxygen saturation) shall be recorded at least every 15 minutes until recovery criteria are met.
- g. A written record is maintained which describes the following:
  - i. Intravenous fluids administered and time IV discontinued.
  - ii. Name and dosage of all medications used, including oxygen level.
  - iii. PO fluids and nourishment.
  - iv. Unusual events.
  - v. Record of vital signs, including: cardiac rate and rhythm, blood pressure, oxygen saturation and temperature.
  - vi. Adequacy of ventilation (respiratory rate and effort, skin color).
  - vii. Level of consciousness.
  - viii. Pain assessment.

## Discharge

1. Elective Outpatient Procedures:

The following discharge criteria must be met prior to the patients release from the hospital following all elective outpatient procedures involving moderate or deep procedural sedation as defined within this policy.

- a. Physical assessment by a Licensed Independent Practitioner or compliance with pre-established discharge criteria, including, but not limited to:
  - i. Level of consciousness greater than/equal to pre-procedure
  - ii. Level Aldrete score greater than/equal to pre-procedure score
- b. Patient is able to ambulate or manage appropriate aids to ambulate with the level of assistance available at home.
- c. Able to void, or instructed to return to the Emergency Department if unable to void within eight (8) hours post-procedure.
- d. Able to tolerate liquids and/or light nourishment.
- e. Patient and an accompanying adult have been provided with discharge instructions.
- f. Patient must be discharged in the presence of a responsible person who will accompany the patient home.
- 2. Urgent/Emergent Procedures performed under sedation in the Department of Emergency Medicine (DEM):

Rarely, patients present to the DEM who require an urgent/emergent procedure with sedation and the patient does not have a ride "home". If indicated, sedation will not be denied to these patients based solely on the fact that they do not have a "ride" after the procedure. After the indicated procedure with sedation, these patients will be observed in the DEM for a time period such that criteria 1-4 as noted above are attained. Then, based on careful assessment of the patient, the Emergency Room Attending Physician shall determine and certify that the patient has recovered to his/her pre-sedation state and is stable to leave the Emergency Department. Meanwhile, every effort should be made to contact a person designated by the patient and/or obtain a "ride" by coordination with the social worker or other designated hospital personnel.

# III. QUALITY ASSURANCE AND PERFORMANCE IMPROVEMENT

The following events shall be referred to the Department of Anesthesiology quality assurance committee and Invasive Procedures Committee for evaluation:

- Unplanned admission
- Cardiac arrest
- Use of reversal agents
- Use of assistance with ventilation (e.g. Ambu bag)
- Prolonged periods of oxygen desaturation (<85% for 3 minutes)
- Failure of the patient to return to with 20% of pre-procedure vital signs

### IV. SEDATION OF THE MECHANICALLY VENTILATED PATIENT:

Intravenous medications may be used to maintain sedation for the intubated and mechanically ventilated patient. The physician will use the sedation order sheets to order sedation and analgesia for the mechanically ventilated patient.

Based on the Physician's orders, the infusion rate may be titrated by the RN for moderate and deep sedation for the mechanically ventilated patient in the ICU and DEM.

At all times, an attending physician who has privileges for the administration of moderate and/or deep sedation will be immediately available in the Hospital. These privileges include the ability to perform airway rescue, provide sedation and manage mechanical ventilation.

For other practitioners requesting privileges, the ability to perform airway management needs to be demonstrated a minimum of six (6) times every two (2) years.

Note: The maintenance of sedation for a mechanically ventilated patient is a unique situation where the airway is secured and the patient is receiving mechanical ventilation. Because all mechanically ventilated patients are at risk of significant consequences if the artificial airway is unintentionally removed, the ICU standards for alarms, monitoring and response times apply.

#### A. Procedure (for mechanically ventilated patients in the ICU):

- 1. In addition to ICU Admission orders, the physician completes the Analgesia, Sedation orders as indicated. The physician will write a goal or level of sedation using the Sedation Scale as currently approved by OVMC.
- 2. The registered nurse will first assess the patient for pain using the Olive View-UCLA Pain Assessment & Management Protocol and document accordingly on the 24 Hour Pain Flow Sheet.
  - a. Assess patient for pain utilizing the Numerical Scale (1-10) or Faces of Pain, if patient is able to communicate.
  - b. If the patient is unable to communicate, assess patient using the Critical Care Pain Observation Tool (CPOT). (Refer to Olive View UCLA Medical Center Policy #1011 v.1: "Pain Management Policy)
  - c. Reassess patient for pain before and after all painful procedures.
  - d. Patients that are sedated and/or are receiving a neuromuscular blocker may not be able to demonstrate any signs of pain.
  - e. Assess and document vital signs according to ICU Patient Care Standards.
- 3. The registered nurse will assess and document vital signs and response to intravenous sedation as follows:

- a. Assess vital signs prior to the initial dose to determine if patient is hemodynamically stable.
- b. Assess vital signs at least 15 minutes or more often, if indicated, at the initiation of the sedation medication.
- c. Assess vital signs every two (2) hours thereafter and the patient's response to sedation as identified by the Sedation Scale currently approved by OVMC.
- d. Reassess sedation goals daily: titrate and taper moderate sedation therapy to maintain goal.
- e. Daily "wake-up" assessment is to be performed, unless contraindicated.
- f. If indicated, titrate analgesia to patient comfort as per Pain Management policy.
- g. Daily "wake-up" must be documented in the "comments" section of the 24-hour nursing/patient assessment flowsheet
- 4. If patient unable to achieve a goal sedation score after analgesia and sedation, assess patient for signs & symptoms of delirium, assess vital signs and notify the Physician.
- 5. If respiratory parameters are not optimized, and the patient is sufficiently receiving deep sedation, Neuromuscular Blockade (NMB) may be considered.
- 6. All sedated patients and patients on neuromuscular blockade, must have an order for Lacrilube q4 hours to each eye. All patients on neuromuscular blockade, and patients on higher levels of sedation and cannot blink must also have both eyes taped shut to prevent corneal damage.

## B. Education: Patient/Family:

1. The nurse will educate the patient and/or family regarding the Pain Management and Sedation Protocols.

## C. Documentation:

- 1. The Registered Nurse will document pain assessment, interventions (including pain medication) and reassessments on the 24-Hour Pain Flow Sheet.
- 2. Other medications will be documented on the patient's Medication Administration Record.
- 3. The Sedation Score is documented on the ICU 24 Hour Flow Sheet.
- 4. Patient/Family teaching will be documented on the Multidisciplinary Patient/Family Teaching Record

## D. <u>R.N. Personnel Requirements:</u>

1. Education/Licensure: Registered Nurse (RN)

- 2. Training: Established clinical competencies, specifically for ICU
- 3. Experience: Completion of Basic Critical Care Program (minimum) and Clinical Orientation & Training in ICU.
- 4. Other: Successful completion of Sedation Module with Post-test Every 2 years.
- 5. Initial Evaluation: Eligibility of Registered Nurse in the implementation of standardized practice will be determined by:
  - a. Clinical competency in the care of ICU patients.
  - b. Documented attendance of in service and understanding of purpose and legal responsibility in the implementation of standardized practice.
- 6. On-going Evaluation
  - a. Should be conducted by Nurse Manager or designee.

#### ATTACHMENTS/FORMS:

None

#### **REFERENCE(S)/AUTHORITY:**

Centers for Medicare and Medicaid Services, Conditions of Participation

#### APPROVED BY:

Bonnie Bilitch (Chief Nursing Officer) Judith Maass (Chief Executive Officer) Rima Matevosian (Chief Medical Officer)