ANNA JAQUES HOSPITAL
ADMINISTRATIVE POLICY AND PROCEDURE MANUAL

Moderate Sedation	**Patient Care**
Subject: Moderate Sedation by Non-Anesthesiologists	Policy Number: A-18
Category: Anesthesia	**Effective Date: 06/22/90**
Page: 1 of 11	**Revised Dates: 3/99, 12/00, 6/01, 2/02, 5/03, 9/04, 09/07, 6/10, 9/10, 09/13**
	Reviewed Dates: 11/04, 01/13

Attachments:

1. **Moderate Sedation Short Form History & Physical [AnnaOnLine>Forms>MD Forms]**
2. **Moderate Sedation Medications [AnnaOnLine>Policies> Admin> Patient Care> Moderate Sedation Meds]**
3. **Moderate Sedation Nursing Record**
4. **Moderate Sedation Reversal QA**

References:

1. **Commonwealth of Massachusetts/Board of Registration in Medicine Policy 94-004**
   Patient Care Assessment Guidelines for Intravenous Conscious Sedation – May 11, 1994
2. **Formerly named: Anesthesia Sedation & Analgesia by Non-Anesthesiologists**

POLICY
STATEMENT:

I. All patients receiving Moderate Sedation throughout this facility will receive a comparable level of care and monitoring by qualified personnel. This policy provides parameters for the care of adult and pediatric patients receiving moderate sedation:

   A. Given in conjunction with operative/invasive and non-invasive procedures outside the presence of an anesthesiologist; and,

   B. The intent of this policy is to provide patients with the benefits of moderate sedation while minimizing the associated risks. The policy does not apply to cases of pain management or sedation of patients on ventilators.

II. The Department of Anesthesia acts as a resource in the development of standards of practice for Moderate Sedation in collaboration with Nursing and other departments that provide the service or participate in the process. The Chief of each medical staff department and the Director of each patient care department administering moderate sedation will be responsible for ensuring that the standard is followed. Moderate sedation shall be monitored and evaluated by the Department of Anesthesia.

III. Statement

   A. Moderate Sedation provides two primary benefits:

      1. Moderate Sedation minimizes anxiety and discomfort, while also reducing undesirable autonomic responses to painful stimuli during uncomfortable procedures.

      2. Moderate Sedation may also help the patient through a procedure that is not uncomfortable but requires that they remain still for an extended period of time.

   B. Definitions

      1. **Minimal Sedation** (anxiolysis)
         A drug induced state during which:

         a. Patients respond normally to verbal commands

b. Cognitive function and coordination may be impaired

c. Ventilatory and cardiovascular functions are unaffected

2. **Moderate Sedation**
A drug induced depression of consciousness during which:

a. Patients respond purposefully to verbal commands (reflex withdrawal from painful stimuli is not a purposeful response)—either alone or accompanied by light tactile stimulation.

b. No interventions are required to maintain a patent airway, and spontaneous ventilation is adequate.

c. Cardiovascular function is usually maintained

d. Amnesia may or may not be present

3. **Deep Sedation/Analgesia**
A drug induced depression of consciousness during which:

a. Patients cannot be easily aroused but respond purposefully after repeated painful stimulation

b. Ability to independently maintain ventilatory function may be impaired

c. Patients may require assistance in maintaining patent airway and spontaneous ventilation may be inadequate

d. Cardiovascular function is usually maintained

4. **Anesthesia**
Consists of general anesthesia and spinal or major regional blocks (does not include local anesthesia). Anesthesia is a drug induced loss of consciousness during which patients are:

a. Not arousable, even to painful stimulation

b. Ability to maintain independent ventilatory function is often impaired

c. Often require assistance in maintaining ventilatory function with positive pressure ventilation

d. Cardiovascular function may be impaired

5. The various degrees of sedation defined in the above paragraphs occur on a continuum. The patient may progress from one degree to another, based on the medications administered, route, and dosages. The determination of patient monitoring and staffing requirements should be based on the patient's acuity and the potential response of the patient to the procedure.

RESPONSIBILITIES:

I. Personnel & Competencies

A. Personnel

1. Only a physician is qualified to prescribed, order or select the medications used to achieve moderate sedation.

2. Minimum number of personnel involved in the care of a patient undergoing sedation/ analgesia during the entire procedure shall be two (2). The personnel shall consist of the operator (physician) who performs the procedure and the monitor (Registered Nurse) whose responsibility during the performance of moderate sedation is to:

    a. Administer moderate sedation medication under the supervision of the physician conducting the procedure

    b. Monitor the patient, the patient's response to both sedation and procedure

    c. Document on the Moderate Sedation nursing record.

    d. Continuously monitor (recover) the patient until discharge criteria are met or the patient is transferred to an appropriate recovery setting

3. All physicians responsible for the administration of moderate sedation will have delineated clinical privileges as defined by the Medical Staff Executive Committee. They will be knowledgeable of the indications, precautions, interactions, adverse reactions, dosage and administration of the sedatives and/or narcotics intended for use during the procedure. They will be knowledgeable regarding the appropriate reversal medications and when to administer them.

4. Pediatric patients – Physicians that do not have routine pediatric patients should obtain an Anesthesia consult prior to giving moderate sedation to a child. Endoscopy procedures on patients under 16 years will be done in the OR with an Anesthesia provider.

B. Competencies

1. General Competency: General Competency for the qualified physician and Registered Nurse managing the care of the patient receiving moderate sedation includes:

    a. Knowledge of anatomy, physiology, pharmacology, cardiac arrhythmia recognition; and possess the requisite knowledge of skills to assess, diagnose, and intervene in the event of complications or undesired outcomes; and to institute interventions in compliance with orders or facility protocols and guidelines.

    b. Ability to assess total patient care requirements during moderate sedation and recovery. Physiologic measurements should include, but are not limited to, respiratory rate, oxygen saturation, blood pressure, heart rate and rhythm, and the patient's level of pain and level of consciousness.

    c. Knowledge of the principles of oxygen delivery, respiratory physiology, oxygen transport and oxygen uptake and demonstrate the ability to use oxygen delivery devices.

    d. Knowledge of basic emergency skills in airway management including bag and mask ventilation.

2. Physician/Registered Nurse managing the care of patients receiving moderate sedation will possess, understand and demonstrate:

    a. Knowledge of the medications administered including the actions, side effects, pharmacological antagonists and reversal agents for the type of sedation used, the half-life of the reversal agents used, and the ability to anticipate and recognize potential complications of moderate sedation medications utilized during a given procedure.

    b. Knowledge of narcotic reversal agents and familiarity with the possible serious side effects involving the potential for resurgence of the narcotic medication sedative effects

after the effects of the reversal agent has worn off. Observation of the patient's response will be continued until such time as the potential for significant resurgence of the narcotic effects has been eliminated.

c. Skills and knowledge to assess, diagnose, and intervene in the event of complications or undesired outcomes and to institute nursing interventions in compliance with orders or emergency protocols. Current BLS is required.

C. Documentation of Competencies
All personnel responsible for providing care of the patient during the course of moderate sedation shall have documentation on file with this facility that supports competency in the provision of appropriate moderate sedation care for the patient.

1. Documentation Specific to Medical Staff

a. Initial Appointment

i. Evidence of current BLS and ACLS* certification required

ii. Completion of applicable written tests obtained through documentation of Moderate Sedation education a minimum every two years.

b. Re-Appointment

i. Evidence of current BLS and ACLS* certification required

ii. Completion of applicable written tests obtained through documentation of Moderate Sedation education a minimum every two years.
- or –

iii. Completion of 25 moderate sedation procedures without major incidents/complications.

*ACLS certification required effective 1/1/2011 and excludes board certified emergency medicine physicians.

2. Documentation Specific to Registered Nurses

a. Evidence of current BLS certification

b. ACLS required

c. Completion of applicable written tests obtained through documentation of Moderate Sedation education a minimum of every two years

PROCESS:

I. Environment and Equipment

A. Moderate sedation may be administered in any department provided that appropriate personnel and equipment specified in this policy are available.

B. The following equipment and supplies are to be immediately available.

1. Establishment of IV access for each patient

2. Emergency Code cart (age appropriate)

3. Defibrillator

4. Monitoring equipment:
    a. EKG monitor
    b. Blood pressure device age appropriate
    c. Pulse oximetry monitor
5. Stethoscope, oxygen, suction equipment and ambu bag at bedside

II. Medications/Administration (see attachment)

A. Medications to provide moderate sedation will be given on the direct order of a physician who has been trained to perform procedures requiring sedation and who is physically present during the initial and continued administration of the medications. Specific medications and recommended dosages for moderate sedation to which this policy applies are listed in the attached medication grids. Medication may be given by the physician or registered nurse. All medications ordered and administered during the procedure are to be entered onto the Moderate Sedation Nursing Record (see attachment)

III. Initial Patient Assessment and Documentation by Physician

A. The patient requiring moderate sedation will meet criteria to determine the appropriateness of this method and anesthesia. A pre-anesthetic assessment will be documented on a separate dictated H&P or on the Moderate Sedation Short Form History and Physical (see attachment) to include:

1. History and physical performed by physician to include review of systems, current medications and history of any adverse or allergic drug reactions with anesthesia or sedation. The ASA Physical Status Classification will be documented (see attachment).

    a. NOTE: Patients classified as ASA IV, V must have Anesthesia consult.

B. The physician should consider the following in determining whether the patient is an appropriate candidate for moderate sedation:

1. Certain classes of patients, eg, uncooperative patients, extremes of age, severe cardiac, pulmonary, hepatic, renal or central nervous system disease, morbid obesity, sleep apnea, pregnancy, and drug or alcohol abuse are at increased risk for developing complications related to moderate sedation unless special precautions are taken. Whenever possible, appropriate medical specialists should be consulted prior to administration of moderate sedation to patients with significant underlying conditions.

2. Certain conditions such as gastroesophageal reflux disease, dysphagia symptoms, other gastrointestinal motility disorders, potential for difficult airway management, and metabolic disorders such as diabetes mellitus may increase the risk of regurgitation and pulmonary aspiration.

C. The risks, benefits, potential complications, and alternatives associated in the planned procedure, anesthesia and possible use of blood will be discussed with the patient and/or responsible adult and noted in the Pre-Sedation/ Anesthesia Form.

D. The patient is reassessed by the physician **immediately** prior to the administration of the medication(s). This re-assessment will include heart rate, blood pressure, respiratory rate, oxygen saturation and level of consciousness; and verification of NPO status. The patient's monitor pattern will also be assessed at this time. Completion of this reassessment is to be noted on the Pre-Sedation/ Anesthesia Form.

IV. Nursing Care of Patient

A. Pre-Procedure

1. RN will verify and document the following:

a. Patient identification – ID bracelet applied

b. Allergy bracelet applied (if applicable)

c. Informed consent for procedure has been signed by patient/legal guardian/durable power of attorney for health care when indicated.

d. Availability of responsible adult to accompany patient home post-procedure

e. Pre-procedure education was being provided.

f. Time-out: Prior to the start of any invasive procedure, conduct a final verification process to confirm the correct patient, procedure, site and availability of appropriate equipment. This verification process uses active – not passive – communication techniques. The "time out", or immediate pre-operative/pre-procedural pause, must occur in the location where the procedure is to be done (for example, when the patient is on the operating table). The "time out" should involve the entire procedural team which, at a minimum, includes the practitioner doing the procedure, the anesthesia provider (if any), and the circulating nurse or other assistant. In addition, there should be no barrier to anyone speaking up if there is a concern about a possible error. "Active" communication, in this context, means an affirmation, orally or by some action (for example radiographically), that the patient, procedure and site are correct.

g. NPO status/last po intake including medications. The physician may instruct/order that patient take usual oral medications with a small amount of water. The physician is to be notified if the patient has not met the following fasting recommendations (physician will be responsible for consulting anesthesia regarding sedation administration if patient does not meet the NPO criteria):

Ingested Material	Minimum Fasting Period
Clear liquids (examples of clear liquids include water, fruit juices without pulp, carbonated beverages, clear tea and black coffee)	2 hours
Breast milk	4 hours
Infant formula	6 hours
Non-human milk	6 hours
Light meal (Typically consists of toast & clear liquids. Meals that include fried or fatty foods or meat may prolong gastric emptying time. Both amount & type of foods ingested must be considered when determining appropriate fasting period.)	6 hours

Urgent and Emergent Situations

In urgent and emergent situations when gastric emptying is impaired, the potential for pulmonary aspiration of gastric contents must be considered in determining the timing of the intervention and the degree of sedation/analgesia to be achieved. Gastric emptying may be influenced by many factors including anxiety, abdominal pain, autonomic dysfunction (e.g., diabetes), pregnancy, and mechanical obstruction. Therefore, the suggestions listed do not guarantee that complete gastric emptying has occurred.

If the patient requires an emergency procedure and the patient has not been NPO according to the above parameters, Moderate Sedation may be dangerous. In such situations, moderate sedation should:

1. Be delayed,
2. Be done judiciously to avoid unconsciousness and suppression of airway reflexes, or;
3. Not be administered; or
4. Performed at the clinical discretion of the physician after determining the potential benefits outweigh the associated risks.

2. Review history with patient and medical record. Document on Moderate Sedation Nursing Record.
   a. Allergies
   b. Current prescription and over the counter medications, last doses
   c. Last menstrual period, if applicable
   d. History of narrow angle glaucoma
3. Complete nursing assessment documentation will be done on Moderate Sedation Nursing Record.
4. Assess baseline prior to administration of moderate sedation:
   a. Heart rate, respiratory rate, blood pressure
   b. O2 saturation (notify physician if SP02 90% or below)
   c. Breath sounds
   d. Skin color
   e. Mental status/Level of Consciousness (LOC)
   f. Pain, if applicable
   g. EKG monitor pattern
   h. Pre-procedure education and support
5. Establish/validate patent intravenous access

B. Intra-Procedure

1. Administer hospital approved moderate sedation as directed by physician (see attached Sedation, Analgesia Agents and Antagonists).
2. Continuously monitor and document the following:
   a. Time in (preparation start time), procedure start time, end time and time out of treatment area
   b. Assessment within 3 minutes after a dose of medication
   c. Then at least every 5 minutes x 3 then at least every 15 minutes, until a new dose is administered
   d. Repeat this cycle after each dose is administered Pulse, Respiratory Rate, Blood Pressure

e. SPO2

f. Mental status/Level of Consciousness (LOC)

g. Change in EKG monitor pattern, if applicable

3. Monitor safe level of sedation as indicated by:

a. Patient ability to maintain airway independently

b. Airway reflexes intact, ability to swallow or cough patient responds to verbal command or stimulation

c. Level of consciousness (LOC)

d. Stable vital signs including SpO2

4. Inform MD of parameter indicating excessive level of sedation or need for additional medication to maintain desired level of sedation.

5. Post-procedure transfer criteria on Moderate Sedation Nursing Record are met and documented.

C. Reversal of Moderate Sedation will be ordered by physician when necessary. If the patient does not stabilize, Anesthesia will be paged, "STAT".

1. The use of a reversal agent will be documented on Moderate Sedation Nursing Record.

2. Moderate Sedation Reversal Form (see attachment) will be completed by RN and forwarded to the Surgical Services Nursing Director after the "Follow-Up" is completed.

3. Anesthesia will review and provide feedback on all unplanned reversals.

V. Post-Procedure

A. Monitor the following post-procedure.

1. Vital signs, level of consciousness, color, warmth and dryness of skin will be assessed upon arrival, then at 15 minutes x 2 or as patient's condition warrants, until discharge.

2. If O2 saturation is 95% or above, or at patient's normal on room air, oximetry may be discontinued after second reading. If below 95% or below patient's baseline, notify MD for further orders.

3. Intake & Output

VI. Discharge

A. Orders for discharge or transfer are the responsibility of the Attending MD.

1. Following any transfer, licensed personnel will give report to receiving licensed personnel.

B. Medication reconciliation must be done prior to the patient being discharged from the hospital or transfer to an inpatient unit.

1. Discharge Home:

a. List of home medications is reviewed

b. Patient is instructed when to continue usual medications

c. Patient is instructed to "hold" any medications considered to be contraindicated following the procedure. Instruction on when to continue the medication or instruction to follow-up with the primary care physician is provided to the patient.

2. Transfer to an inpatient unit:

   a. The current inpatient medication list is reviewed

   b. Medications to be continued are reordered

   c. Medications considered to be contraindicated following the procedure are either discontinued or put on "hold" with an accompanying restart date and time

C. Outpatients undergoing procedures with sedation and analgesia, including those in the Emergency Department, should be stable enough to safely return home, ie, stable vital signs, protected airway, and baseline level of consciousness. (Note: discontinue intravenous prior to discharge.)

D. A responsible adult must accompany outpatients undergoing elective procedures and who are discharged home. When appropriate, patient must be instructed not to drive for 24 hours.

E. Outpatients must be given written discharge instructions, including the names and phone numbers of hospital department to contact in the event of an emergency.

F. Evidence that the patient has met discharge recovery criteria must be clearly documented per the Moderate Sedation Nursing Record.

G. Special Procedure Documentation

   a. This section of the Moderate Sedation Nursing Record can be utilized to document special information required for procedures such as cardioversion, radiology, etc.

Authorizing Signatures	Name / Title	Date
Administration: SIGNED ORIGINAL IN ADMINISTRATION	Delia O'Connor President and CEO	
Medical Staff Exec:	Saira Naseer-Ghiasuddin, MD President, Medical Staff	
Anesthesia:	Mark Kats, MD Chief of Anesthesia	

Moderate Sedation Reversal QA

This is for department use and not part of the patient's record. It will be used to study the incidence of reversal, the causes and the outcomes. This will help us provide a safe and comfortable environment for our patients.

Instructions:

1. If a patient requires a reversal agent, RN will place patient name sticker, fill out a reversal form and then put that form in the designated month section of the book.

2. Notify charge nurse or Director before transferring a reversed patient from the APR.

3. The patient or unit will be called at the end of the shift or the next day for follow-up. This is also documented on the sheet.

4. QA forms will be reviewed at the end of each month and results reported at staff meetings.

Thank you.

ANNA JAQUES HOSPITAL

Moderate Sedation Patient Reversal QA

Patient Label

Procedure:	Location:
MD:	Staff: _____

Medications	Dose	Time

Reasons for Reversal: ❑ Respiratory ❑ Level of Consciousness ❑ Hypotension
❑ Other (*describe*): _____

_____

_____

Reversal Agent	Dose	Time

Patient Response:

_____

_____

_____

Patient Disposition: _____

Follow up phone call Date and Time: _____
❑ Stable / No complications ❑ Complications (*describe*):

_____

_____

_____

_____

_____
RN Signature / Date