

Guidelines for Procedure with Sedation: Checklist and Timeout

I. Definitions of Sedation

Minimal Sedation/Analgesia (Anxiolysis): A drug-induced state for a procedure during which patients respond normally to verbal commands. Medications administered by mouth for the purpose of minimal sedation/analgesia are excluded from this policy by virtue of its slower onset of action and lower peak blood drug levels compared with other routes of administration. Although cognitive function and physical coordination may be impaired, ventilatory and cardiovascular functions are generally unaffected. Administration of nitrous oxide in doses from 30-50% by inhalation without co-administration of additional analgesia and sedative medications is defined as Minimal Sedation.

<u>Moderate Sedation/Analgesia:</u> 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. Administration of nitrous oxide in doses from 51-70% without co-administration of additional analgesia and sedative medications is defined as Moderate Sedation.

Deep Sedation/Analgesia: A drug-induced depression of consciousness during which patients cannot be easily aroused but respond purposefully following repeated or painful stimulation. Patients may require assistance in maintaining a patent airway, and spontaneous ventilation may be inadequate. Cardiovascular function is usually maintained. The rapid onset and narrow therapeutic window of General Anesthesia induction agents (for example, propofol or etomidate) mandate specific education, equipment, and monitoring consistent with Deep Sedation. The combined use of nitrous oxide at any percentage with other sedative/analgesic agents for procedural sedation increases the risk of Deep Sedation and is thus defined as Deep Sedation.

<u>General Anesthesia:</u> A drug-induced loss of consciousness during which patients are not arousable, even by painful stimulation. 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.

Please refer to the VUMC Policies on Procedural Sedation, Moderate Sedation, and Deep Sedation for additional information.

Procedural Sedation - https://vanderbilt.policytech.com/dotNet/documents/?docid=32989

Moderate Sedation - https://vanderbilt.policytech.com/dotNet/documents/?docid=32990

Deep Sedation - https://vanderbilt.policytech.com/dotNet/documents/?docid=32991

II. Confirmation of Procedure and Anesthesia

• Confirm the correct patient (name, MRN, date of birth)

- Confirm the procedure
- Confirm the proceduralist(s)
- Confirm the method of anesthesia HARD STOP if deep sedation or general anesthesia
 - Is the ICU attending present? HARD STOP if "no"
 - What is the medication plan including quantity and specific dose ensuring the correct concentration has been identified? HARD STOP if the anesthesia plan qualifies as general anesthesia as a secure airway is required

III. Equipment that must be present

Monitoring	Minimal	Moderate	Deep	Nitrous*
Oxygen saturation	Required	Required	Required	Required
Heart rate	Required	Required	Required	Required
Respiratory rate		Required	Required	
Blood pressure		Required	Required	
Capnography			Required	
Electrocardiography†			Required	
Level of consciousness/sedation score	Required	Required	Required	Required
Post-anesthesia recovery scoring		Required	Required	
system				
Minimum interval during procedure‡	X 1 and prn	15 min	5 min	X1 and prn
Minimum interval during recovery		15 min	15 min	

^{*}Indicates minimum required monitoring for minimal sedation with nitrous oxide.

Additional requirements are according to depth of sedation provided.

‡For procedures less than the time interval in duration, the minimum recording parameters are prior to beginning of procedure, after sedative administration, on completion of the procedure.

- 1. Cardiac monitor
- 2. Blood Pressure cuff or arterial line
- 3. Pulse oximetry (on opposite side of BP cuff or forehead)
- 4. IV access (on opposite side of BP cuff or central access)
- 5. Non-rebreather mask with oxygen source connected
- 6. High-flow nasal cannula with oxygen source connected

Available:

- 1. Bag-valve mask with oxygen connected
- 2. ACLS drugs
- 3. End-tidal CO2 detector
- 4. Emergency airway cart

V. Preparation for Procedure Checklist

[†]Electrocardiographic monitoring is required for Moderate Sedation in patients with significant cardiovascular disease undergoing procedures in which dysrhythmias are anticipated.

- 1. Review medical chart for previous airway management note or Anesthesia OR record
- 2. Consent for procedure if not emergent
- 3. Critical Care attending present
- 4. Ensure that Respiratory Therapy aware in case change is required for airway management
- 5. If airway exam is concerning for high-risk airway (i.e. beard, thick neck, short thyromental distance, small mouth opening, prominent incisors, facial trauma or recent head neck surgery, documented difficult airway by Anesthesia OR record, halo or cervical traction) then moderate or deep sedation without a secure airway should not be attempted and the Anesthesia airway team should be notified
- 6. Identify medication nurse
- 7. Identify individual performing sedation
- 8. Verify a functioning IV (verified by medication nurse)
- 9. Verify a functioning oxygen saturation probe with back up probe available
- 10. Blood pressure cuff should be set to record every 1 minute and not on the same side as saturation probe or IV
- 11. Verify medication doses (quantity/concentration) and sequence to be given with 3-4 10ml flush syringes available (Consider contraindications for particular meds or dosage adjustments as indicated)
- 12. Perform a "timeout" once everyone that is to be involved with the procedure is at the bedside

VI. Procedure Timeout

1. Proceed with EPIC procedure timeout per standard nursing protocol.

Authors:

Rachel D. Appelbaum, MD C. Patrick Henson, DO Shannon C. Eastham, MD

Revised/Updated:

7/7/2024