



midland memorial hospital

Title:	Provision of Anesthesia Services_The Continuum from Local to General Anesthesia				
Version:	5	Approved:	Committee - Med Exec, Section - Anesthesia, Brandon Bredimus (VP CNO)	Date:	09/10/2020

Purpose:

To establish a consistent standard of care for patients receiving anesthesia services

Scope and Applicability:

This is an organizational wide policy. As referenced herein, portions or all of this policy shall apply to all areas involved in the provision of anesthesia services.

Policy:

DIRECTION OF ANESTHESIA SERVICES

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Anesthesia services throughout the organization shall be organized into one anesthesia service, under the direction of a qualified doctor of medicine (MD) or doctor of osteopathy (DO). The medical staff shall establish criteria for the qualifications for the director of anesthesia services in accordance with State laws and acceptable standards of practice.

The director of anesthesia services is responsible for:

- Planning, directing, and supervising all activities of the service;
- Establishing staffing schedules for the anesthesia department;
- Evaluating the quality and appropriateness of the anesthesia patient care

The anesthesia service is responsible for developing policies and procedures governing the provision of all categories of anesthesia services

Definitions:

Anesthesia Services: Includes both anesthesia and analgesia, provided along a continuum, ranging from the application of local anesthetics for minor procedures to general anesthesia for patients who require loss of consciousness as well as control of vital body functions in order to tolerate invasive operative procedures.

- **Topical or local anesthesia:** Administration of a drug that produces only a localized response with no systemic effects.
- **Regional anesthesia:** The delivery of an anesthetic medication at a specific level of the spinal cord and/or to peripheral nerves, including epidurals, spinal and other peripheral nerve blocks, used when loss of consciousness is not mandatory but analgesia* is required.
 - **Exception:** The administration of medication via an epidural or spinal route for the purpose of analgesia during labor and delivery is not considered “anesthesia”. However, if the obstetrician or other qualified physician attending to the patient determines that an operative delivery (i.e., C-section) of the infant is necessary, it is likely that the subsequent administration of medication is for anesthesia as defined above and is therefore considered regional anesthesia.

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***Analgesia:** Involves the use of a medication to provide relief of pain through the blocking of pain receptors in the peripheral and/or central nervous system. The patient does not lose consciousness, but does not perceive pain to the extent that may otherwise prevail. This includes labor epidurals administered by CRNAs.

- **Minimal sedation (Anxiolysis):** This type of sedation DOES NOT require continuous monitoring. A drug-induced state during which patient responds normally to verbal commands. Although cognitive function and coordination may be impaired, ventilation and cardiovascular functions are unaffected.
- **Moderate sedation/analgesia:** This type of sedation DOES require continuous monitoring. A drug-induced depression of consciousness during which a patient responds 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 and is NOT classified under the moderate sedation criteria.

- **Deep sedation/analgesia:** This type of sedation DOES require continuous monitoring. A drug-induced depression of consciousness during which a patient cannot be easily aroused but responds purposefully** following repeated or painful stimulation. The ability to independently maintain spontaneous ventilation may be inadequate. Cardiovascular function may be impaired.

** Reflex withdrawal from a painful stimulus is NOT considered a purposeful response and is NOT classified under the deep sedation criteria.

- **General anesthesia:** A drug-induced loss of consciousness during which patients are not arousable, even by painful stimulation. The ability to independently maintain ventilation 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.
- **Monitored anesthesia care (MAC):** Does NOT describe the continuum of depth of sedation, rather it describes “a specific anesthesia service” in which an anesthesiologist has been requested to participate in the care of a patient undergoing a diagnostic or therapeutic procedure.

Qualified RN or RT: A registered nurse or respiratory therapist qualified to monitor moderate sedation has successfully completed the required elements of the Sedation and Analgesia Competency Course and has maintained competency.

Policy:

PROVISION OF MINIMAL SEDATION (ANXIOLYSIS) AND LOCAL / TOPICAL ANESTHETICS

Unless otherwise restricted, minimal sedation (anxiolysis) and local / topical anesthetics may be administered by licensed staff within their scope of practice upon order of a licensed independent practitioner or other individual authorized to prescribe or furnish medications.

PROVISION OF MODERATE SEDATION

The policy requirements of this section apply to the provision of moderate sedation. This section of policy does not apply to patients who are maintained on artificial ventilator support. The rules and regulations of the medical staff shall address the specific criteria for granting privileges to provide moderate sedation for any practitioner who does so, as well as the level of supervision – if any – that is required.

Scope and Applicability

Procedures requiring moderate sedation/analgesia are limited to the following areas:

Emergency Department	Operating Room
POCU	PACU
Cystoscopy	Heart Institute/Cath Lab
Critical Care Unit	NICU
Nursery	Pediatric ICU
CT	MRI
Interventional Radiology (Specials Lab)	

Cardiopulmonary (may be done in patient rooms with cardiopulmonary staff and staff RNs to monitor the patient). See RT Bronchoscopy Post Procedure power plan for post procedure RT and staff RN monitoring instructions.

Endoscopy (may be done in patient rooms with endoscopy staff to monitor the patient).

Focus

These guidelines are applicable to procedures performed by physicians who are not specialists in anesthesiology.

Physically Administering a Sedating Agent

The mechanical act of administering moderate sedation may only be performed by licensed staff, consistent with scope of practice, professional standards, and demonstrated competency.

Provision of Personnel

Sufficient numbers of qualified personnel (in addition to the practitioner performing the procedure) will be present during procedures using moderate sedation to:

- Appropriately evaluate the patient prior to administration of moderate sedation
- Provide the moderate sedation
- Perform the procedure
- Monitor the patient, and
- Recover and discharge the patient

A minimum of two personnel must be involved in the care of patients undergoing procedural sedation during the entire procedure:

- The individual who performs the procedure.
- An individual whose responsibility is directed to the patient (administering medication, monitoring the patient, and observing the patient's response to both the sedation and the procedure). This individual may assist with minor, interruptible tasks once the patient's level of sedation–analgesia and vital signs have stabilized, provided that adequate monitoring for the patient's level of sedation is maintained.
- The practitioner performing the procedure and at least one individual must have the ability to recognize and rescue a patient who slips into deep or general anesthesia. At a minimum, this shall include:
 - o Current American Heart Association basic cardiac life support (BCLS) training, or other training program of equivalent scope and content

- o Current American Heart Association age-appropriate advanced life support training (ACLS, PALS, NRP), or other training program of equivalent scope and content.
- o Being capable of establishing a patent airway and positive pressure ventilation using a bag-valve-mask technique

Patient Selection and Evaluation

The physician performing the procedure will determine that the patient is a candidate for moderate sedation

The physician performing the procedure will determine that the patient is a candidate for moderate sedation and will indicate the patient's ASA physical status in the medical record. If the pre-sedation evaluation of the patient's physiologic status raises concern that monitored anesthesia care may be necessary, medical consultation with an anesthesiologist should be considered. All patients receiving intravenous medications for sedation/analgesia must have vascular access maintained throughout the procedure and until the patient is no longer at risk for cardiopulmonary depression. In those situations where sedation is begun by non-intravenous routes (e.g., oral, rectal, intramuscularly), IV access should be secured.

American Society of Anesthesiologists (ASA) Physical Status (PS) Classification System:

The purpose of the grading system is simply to assess the degree of a patient's "sickness" or "physical state" prior to selecting the anesthetic. Describing the patient's preoperative physical status is used for recordkeeping, for communicating between colleagues, and to create a uniform system for statistical analysis.

ASA PS Class	Definition	Examples
ASA 1	A normal healthy patient	Healthy, non-smoking, no or minimal alcohol use.
ASA 2	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 3	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, HTN, COPD, morbid obesity (BMI ≥ 40), active hepatitis, alcohol dependence or abuse, implantable 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 4	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 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	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

	operation	organ/system dysfunction.
ASA 6	A declared brain-dead patient whose organs are being removed for donor purposes	

*The addition of “E” denotes an Emergency procedure/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).

All patients should be carefully evaluated by the physician to ensure that the proposed procedure can be completed safely using sedation/analgesia.

Clinicians administering sedation/analgesia should be familiar with sedation-oriented aspects of the patient’s medical history and how these might alter the patient’s response to sedation/analgesia. These include but are not limited to:

1. Abnormalities of the major organ systems
2. Previous adverse experience with sedation/analgesia as well as general anesthesia
3. Drug allergies, current medications and potential drug interactions
4. Time and nature of last oral intake
5. History of tobacco, alcohol or substance use or abuse.
6. Sleep apnea, snoring or stridor
7. Body Habitus:
 - a. Significant obesity especially of the neck and facial structures
 - b. Short neck, limited neck extension, neck mass, decreased hyoid-mental distance < 3cm
 - c. Small mouth opening, macroglossia, poor dentition
 - d. Micrognathia, retrognathia, TMU

A focused physical examination including vital signs, auscultation of the heart and lungs, and evaluation of the airway should be performed by the physician. Pre-procedure laboratory testing should be guided by the patient’s underlying medical condition and the likelihood that the results will affect the management of sedation/analgesia.

Pre-Sedation Evaluation

Each patient undergoing moderate sedation will receive a pre-sedation evaluation. The content of this evaluation shall include, but not necessarily be limited to:

- A relevant history (major organ systems, sedation–anesthesia history, medications, allergies, last oral intake)
- A focused physical examination (to include heart, lungs, airway)
- Review of laboratory testing, if ordered as guided by underlying conditions and possible effect on patient management
- Verification that a timely and appropriate history and physical is in the patient’s record.
- Verification that a responsible adult is available to transport the patient home (for outpatient procedures).
- Confirmation that the patient has been NPO for a sufficient time to allow for gastric emptying (nonemergent situations/elective procedures).

- ASA Recommendations:

Ingested Material	Minimum Fasting Period
Clear liquids	2 hours minimum

Breast milk	4 hours minimum
Non-human milk & infant formula	6 hours minimum
Light meals	6 hours minimum
Fried or fatty foods, or meat	8 hours minimum

*In urgent, emergent, or other situations where 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.

Patients will be classified by the American Society of Anesthesiology (ASA) classification system.

The pre-sedation evaluation must be performed either by the practitioner responsible for the provision of the moderate sedation, or by licensed staff operating within their scope of practice, and qualified – by virtue of education, training, experience, and demonstrated competency – to do so.

If performed by the latter, the practitioner responsible for the provision of moderate sedation must review the results of the pre-sedation evaluation prior to sedation being administered.

Consent for Moderate Sedation

The practitioner responsible for providing moderate sedation is responsible for assuring that the patient has received the information necessary for an informed consent to occur. Whenever possible, patients or their legal guardians should be informed of and agree to the administration of sedation/analgesia including the benefits, risks, limitations of this therapy, as well as possible alternatives.

Emergency Equipment & Supplies

Age and size appropriate emergency equipment and supplies shall be immediately available (e.g. in the area where the sedation is being administered). At a minimum, this shall include:

- Supplemental oxygen
- Suction
- Appropriately sized advanced airway equipment and means of positive-pressure ventilation with supplemental oxygen
- Intravenous equipment, pharmacologic antagonists, and basic resuscitative medications
- Defibrillator immediately available for patients with cardiovascular disease

Monitoring of Patients Receiving Moderate Sedation

A qualified registered nurse or respiratory therapist will be present to monitor patients during sedation. The RN or RT responsible for monitoring the patient should have no other duties that would cause the patient to be unattended or compromise continuous monitoring. **Mandatory data to be recorded at appropriate intervals before, during, and after procedure include, but are not necessarily limited to:**

- **Oxygenation status via pulse oximetry** - Hypoxemia during sedation/analgesia is more likely to be detected by oximetry than by clinical assessment alone. However, oximetry is not a substitute for monitoring ventilatory function.
- **Oxygen amount and delivery** – nasal cannula or face mask.
- **Pulmonary ventilation** - (by observation and/or auscultation) Reduces the risk of adverse outcomes associated with sedation/analgesia – drug-induced respiratory depression and airway obstruction.

- **Blood pressure and heart rate at 5-minute intervals** - Early detection of changes in patients' heart rate and blood pressure reduce the risk of complications.
- **EKG** - Continuous cardiac monitoring is required for all patients, unless it interferes with the procedure.
- **Response to verbal commands** – The response of patients to verbal commands during procedures serves as a guide to their level of consciousness. *Patients whose only response is “reflex withdrawal from painful stimuli” are deeply/over- sedated and should be immediately treated to reverse the depth of sedation along with any accompanying side effects.*
RN/RT monitoring will continue until the patients no longer at risk for cardiac or respiratory depression.

Patients who become hypoxemic or apneic during sedation/analgesia should:

1. Be encouraged or stimulated to breathe deeply
2. Receive supplemental oxygen
3. Receive positive pressure ventilation if spontaneous ventilation is inadequate
4. Consider Narcan or flumazenil if appropriate

*If cardiac or respiratory complications occur, initiate emergency protocol for the area (Adult Resuscitation/Code Blue)

Post-Moderate Sedation Monitoring & Care

The recovery area should be equipped with, or have direct access to, appropriate monitoring and resuscitation equipment. Patients receiving moderate sedation should be monitored until they are near their baseline LOC and are no longer at increased risk for respiratory depression. The duration and frequency of monitoring should be individualized depending on the level of sedation achieved, the overall condition of the patient, and the nature of the intervention for which sedation/analgesia was administered.

A Registered Nurse or other individual trained to monitor patients and recognize complications should be in attendance until discharge criteria are fulfilled.

An individual capable of managing complications (e.g., establishing a patent airway and providing positive pressure ventilation) should be immediately available until discharge criteria are fulfilled.

Discharge from Moderate Sedation Monitoring & Care

The patient may be discharged in the care of a responsible adult when discharge criteria have been met.

Discharge Criteria:

1. Aldrete score of 9 or return to pre-sedation status
2. Minimal nausea, vomiting or dizziness
3. No apparent post-procedure complications
4. Post-procedure instructions reviewed and signed by the responsible adult.
5. Readiness for discharge shall be documented in the medical record.
6. No patient is to be discharged less than 2 hours after receiving reversal medications.

Aldrete Scoring System:

Activity: Simple commands for the movement of extremities.

2: All four extremities move voluntarily or on command

1: Two extremities move voluntarily or on command

0: Patient cannot move two extremities

Respiratory Status:

2: Patient can breathe and cough freely

1: Patient has dyspnea or limited breathing

0: Patient experiences apnea or has O2 saturation below 92%

Blood Pressure Values:

2: Blood Pressure is + or - 20% of pre-procedure level

1: Blood Pressure is + or - 21% to 49% of pre-procedure level

0: Blood Pressure is + or - 50% of pre-procedure level

Level of Consciousness:

2: Patient responds to commands or is fully awake

1: Patient is easily aroused

0: Patient is nonresponsive or requires external stimulus to arouse

Evaluation of skin condition and color:

2: Skin is pink, warm and dry

1: Skin is pale, dusky, blotchy, jaundice

0: Patient is cyanotic

If patient scores zero in any category, the RN/RT should immediately notify the physician and ensure a patent airway.

Outpatients must be discharged in the care of a responsible adult who will accompany the patient home, be able to report any post procedure complications and assist in transport. The responsible adult will receive and sign written post-sedation/procedure guidelines and must acknowledge responsibility for the patient at discharge.

Written discharge instructions will include:

1. Common post-procedure complications
2. Physical activity limitations
3. Diet
4. Medications
5. Plan for follow up care
6. Emergency phone number
7. Wound care

A qualified licensed independent practitioner must discharge the patient from the recovery area or from the hospital. In the absence of a qualified licensed independent practitioner, patients may be discharged according to approved criteria.

Dosage Guidelines for Medications Used in Moderate Sedation/Analgesia

- Purpose: To establish medication guidelines for moderate sedation/analgesia to preserve the patient's current cardiovascular, neurological and respiratory status.
- Policy: Based on the pre-procedural evaluations and the level of sedation desired, privileged physician/provider will select medications to be used. The following are suggested drug and dosage guidelines including routes of administration. This is not an exclusive list.

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Common Medications Used in Sedation/Analgesia**A. Narcotics****Meperidine (Demerol®)**

Initial Dosage:

Adult: IV: 25 – 50 mg IV over 2 minutes. May repeat 10 - 15 mg every 5 - 10 minutes. Maximum dose 150 mg.Pediatrics: IV: 0.5 - 1.0 mg/kg
IM: 1 -3 mg/kg

Use with caution in patients with liver or renal disease. Do not use in patients taking MAO inhibitors.

Morphine Sulfate

Initial Dosage:

Adult: IV: 2.5 – 10 mg IV slowly. May repeat 2 – 5 mg every 5 minutes.Pediatric: IV: 0.05 – 0.1 mg/kg
IM: 0.1 – 0.3 mg/kg

Give slowly, assess for hypotension, nausea and vomiting.

Fentanyl (Sublimaze®)

Initial Dosage:

Adult: IV: 0.5 – 1.5 micrograms/kg, normal 20 – 50 mcg. May repeat 25 mcg every 5 minutes.Pediatric: IV: 0.5 – 1.5 micrograms/kg
Transmucosal: 5 – 20 mcg/kgGive slowly to prevent chest wall rigidity. Apnea may occur. 2nd peak effect possible. Caution in patients with asthma and COPD.**B. Benzodiazepines****Midazolam (Versed®)**

Initial Dosage:

Adult: IV: 0.5 – 2 mg over 2 minutes. May repeat ½ dose every 5 minutes. Do not exceed 2.5 mg as initial dose or 1.5 mg initially in the elderly. Maximum dose 4 mg.Pediatric: IV: 0.01 – 0.02 mg/kg
IM: 0.05 – 0.15 mg/kg

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Nasal: 0.2 – 0.5 mg/kg
 Oral/Rectal: 0.5 – 0.75 mg/kg

Give slowly. Can be given by infusion. Elderly may exhibit paradoxical excitement.

Diazepam (Valium®)

Initial Dosage:

Adult: IV: 2 – 10 mg. Maximum dose 20 mg
 IM: 10 mg

Pediatric: IV: 0.04 – 0.2 mg/kg
 Oral: 0.04 – 0.2 mg/kg
 Rectal: 0.2 – 0.3 mg/kg

C. Reversal Agents

Naloxone (Narcan®)

Initial Dosage:

Adult: IV: 0.1 – 2 mg. May repeat every 1 minute. Maximum cumulative dose is 10 mg.
Pediatrics: IV: 0.01 – 1.1 mg/kg

Duration of action is ~ 45 – 60 minutes. Half-life is ~ 60 – 90 minutes. Observe for re-sedation. Monitor patient for 2 hours after administration. Drug use may not reverse CV effects and may cause non-cardiogenic pulmonary edema.

Flumazenil (Romazicon®)

Initial Dosage:

Adult: IV: 0.2 mg over 15 seconds. May repeat every 1 minute. Maximum cumulative dose is 1 mg.
Pediatric: IV: 0.01 – 0.2 mg/kg

Duration of action is ~ 1 – 2 hours. Half-life is ~ 40 – 80 minutes. Observe for re-sedation. Monitor patient for 2 Hours after administration. Caution in patients addicted to benzodiazepines. Caution in patients with seizure history.

*****The use of **Diprivan (Propofol®)**, **Etomidate** and/or dissociative anesthesia doses of **Ketamine (Ketelar®)** is strictly prohibited by any person with Moderate Sedation/Analgesia privileges, with the exclusion of Anesthesiologists and CRNAs, Board Certified Emergency Medicine (BCEM) physicians and ***advanced practitioners (Pas and NPs) working under the direct supervision in the ED who have maintained compliance, and Intensive Care physicians who have been granted approval via the credentialing application process from the Medical Staff Office. Sub-anesthesia analgesia analgesic low doses of **Ketamine (Ketelar®)** are permitted for pain management.

PROCEDURE: NURSING/RT RESPONSIBILITIES

The following information must be documented:

Pre-Procedure

1. Explain the procedure to patient/family.
2. Verify/obtain signed consent.
3. If an outpatient, verify that an adult responsible for transportation will be available at discharge.
4. Obtain and document baseline nursing assessment to include:
 - a. Level of consciousness
 - b. History of any adverse or allergic drug reactions, including during anesthesia or sedation
 - c. Time of last oral intake
 - d. Height, weight, vital signs (T, HR, BP, RR) and baseline pulse oximetry
 - e. Current medications and time of last dose
 - f. Cardiac and respiratory assessment including EKG rhythm, breath sounds
 - g. Level of comfort
 - h. Aldrete score
5. Establish venous access. Document site, gauge etc.
6. Document ASA and Mallampati scores provided by physician
7. Ensure that appropriately sized monitoring and resuscitation equipment is available
8. Ensure that a "Time Out" is taken just prior to the procedure that includes verification of patient ID, consent, procedure and site.

During Procedure

1. Monitor and document every 5 minutes:
 - a. Level of consciousness
 - b. Respiratory rate and/or breath sounds
 - c. Oxygenation and heart rate by continuous pulse oximetry with digital and auditory displays
 - d. Continuous EKG, rhythm
 - e. Blood pressure
 - f. Oxygen amount and delivery (nasal cannula or face mask)
2. Document:
 - a. Medication administered, time, route and patient response
 - b. Level of comfort; note any restlessness or agitation (hypoxemia)
 - c. Any interventions and the patient's response.
 - d. Any changes in patient status, including any untoward or significant reactions

Following Procedure

1. Continue to monitor physiological parameters every 5-15 minutes based on the level of sedation, until the patient returns to pre-sedation status or appropriate level of consciousness.
2. Document the use of any reversal agent including dose, route and time; if given, and continue to monitor for a minimum of 2 hours.
3. Document that discharge criteria is met, including Aldrete scores.
4. Provide patient/family with discharge instructions.

STAFF TRAINING:

1. Goals, objectives of moderate sedation/analgesia
2. Assessment skills
3. Basic Life Support (BLS)
4. Advance Cardiac Life support (ACLS)and/or Pediatric Advance Life Support (PALS) (NRP for RNs and RTs working in the nursery) certification are mandatory except for those RNs performing post procedure monitoring of bronchoscopies performed in a patient room as defined by the RT Bronchoscopy Post Procedure power plan.
5. Pharmacology of agents used and reversal agents
6. EKG rhythm interpretation
7. Monitoring skills
8. Age-specific airway management and oxygen delivery devices
9. Recognition and management of complications associated with sedation/analgesia
10. Recognition of cardiac and respiratory decompensation, specific to age
11. Recognition of discharge criteria
12. Emergency resuscitative procedures and equipment use
13. Delivery of sedation/analgesia to specific patient populations (as appropriate).

The unit manager/director will verify that all RNs or RTs monitoring moderate sedation/analgesia are appropriately trained with competencies on file. Competencies are maintained annually.

PROVISION OF GENERAL ANESTHESIA, REGIONAL ANESTHESIA, & DEEP SEDATION

The policy requirements of this section apply to the provision of general, regional, and deep sedation (hereinafter known collectively in this section as “anesthesia”).

Individuals Permitted to Administer Anesthesia

Only those individuals privileged by the medical staff shall be permitted to administer anesthesia. These individuals may include:

- A qualified anesthesiologist
- A doctor of medicine or osteopathy (other than an anesthesiologist) who has been granted permission by medical staff to do so (e.g., Intensive Care specialists, Board Certified Emergency Medicine physician)
- A dentist, oral surgeon, or podiatrist who is qualified to administer anesthesia under State law
- A certified registered nurse anesthetist (CRNA), as defined in §410.69(b) of the CMS Medicare Conditions of Participation (CoP), who, unless exempted in accordance with paragraph §410.69(c) of the CoP, is under the supervision of the operating practitioner or of an anesthesiologist who is immediately available if needed.

The organization shall specify the anesthesia privileges for each practitioner that administers anesthesia, or who supervises the administration of anesthesia by another practitioner as listed above. The privileges granted must be in accordance with State law and organization policy. The type and complexity of procedures for which the practitioner may administer anesthesia, or supervise another practitioner supervising anesthesia, must be specified in the privileges granted to the individual practitioner.

Supervision of a CRNA (if applicable according to state law)

A CRNA may administer anesthesia when under the supervision of the obstetrician or of an anesthesiologist who is immediately available if needed. This does not include insertion of labor epidurals which are considered analgesia and not anesthesia.

“Immediately available” to intervene includes at a minimum that the supervising anesthesiologist or obstetrician, as applicable, is:

- Physically located within the operative area or in the labor and delivery unit
- Prepared to immediately conduct hands-on intervention if needed; and
- Not engaged in activities that could prevent the supervising practitioner from being able to immediately intervene and conduct hands-on interventions if needed

Anesthesia Planning

There shall be sufficient personnel and resources to safely provide anesthesia services. At a minimum this shall include:

- Individuals administering anesthesia shall be qualified and have credentials to manage and rescue patients at whatever level anesthesia is achieved, either intentionally or unintentionally.
- In addition to the individual performing the procedure, a sufficient number of qualified personnel shall be present to evaluate the patient, to provide the sedation/anesthesia, to help with the procedure, and to monitor and recover the patient.
- There shall be equipment available to monitor the patient’s physiological status.
- There shall be equipment available to administer intravenous fluids and medications, and blood and blood components.
- There shall be resuscitation equipment available.

Pre-Anesthesia Evaluation

The pre-anesthesia evaluation may only be performed by an individual permitted to administer anesthesia as noted in this section of the policy.

A pre-anesthesia evaluation must be performed within 48 hours prior to any inpatient or outpatient surgery or procedure requiring anesthesia services. The delivery of the first dose of medication(s) for the purpose of inducing anesthesia, as defined above, marks the end of the 48 hour timeframe.

At a minimum, the pre-anesthesia evaluation of the patient should include:

- Review of the medical history, including anesthesia, drug and allergy history;
- Interview and examination of the patient;
- Notation of anesthesia risk according to established standards of practice (e.g. ASA classification of risk);
- Identification of potential anesthesia problems, particularly those that may suggest potential complications or contraindications to the planned procedure (e.g., difficult airway, ongoing infection, limited intravascular access);
- Additional pre-anesthesia evaluation, if applicable and as required in accordance with standard practice prior to administering anesthesia (e.g., stress tests, additional specialist consultation);

- Development of the plan for the patient's anesthesia care, including the type of medications for induction, maintenance and post-operative care and discussion with the patient (or patient's representative) of the risks and benefits of the delivery of anesthesia.

Consent for Anesthesia

The individual administering anesthesia is responsible for assuring that the patient has received the information necessary for an informed consent to occur.

Monitoring of Patients during Anesthesia

Patients shall be appropriately monitored during the administration of anesthesia. Monitoring shall be documented on an intra-operative / intra-procedure anesthesia record. This documentation shall address at a minimum:

- Name and hospital identification number of the patient;
- Name(s) of practitioner who administered anesthesia, and the name of the supervising anesthesiologist practitioner, as appropriate;
- Name, dosage, route and time of administration of drugs and anesthesia agents;
- Techniques(s) used and patient position(s), including the insertion/use of any intravascular or airway devices;
- Name and amounts of IV fluids, including blood or blood products if applicable;
- Timed-based documentation of vital signs as well as oxygenation and ventilation parameters;
- Any complications, adverse reactions, or problems occurring during anesthesia, including time and description of symptoms, vital signs, treatments rendered, and patient's response to treatment.

Post-Anesthesia Monitoring & Care

Patients shall be appropriately monitored and cared for during the post-anesthesia recovery period. At a minimum, this shall include:

- A Post-anesthesia Care Unit (PACU) or an area which provides equivalent post-anesthesia care shall be available to receive patients after anesthesia care. All patients who receive anesthesia care shall be admitted to the PACU or its equivalent except when patient meets criteria to bypass this area.
- The medical aspects of care in the PACU (or equivalent area) shall be governed by policies and procedures which have been reviewed and approved by the Department of Anesthesiology.
- Patients shall be transported to the PACU accompanied by a member of the anesthesia care team who is knowledgeable about the patient's condition. The patient shall be continuously evaluated and treated during transport with monitoring and support appropriate to the patient's condition.
- Upon arrival in the PACU, the patient shall be re-evaluated and a verbal report provided to the responsible PACU nurse by the member of the anesthesia care team that accompanied the patient.
- The member of the anesthesia care team shall remain in the PACU until the PACU nurse accepts responsibility for the nursing care of the patient.
- The patient shall be observed and monitored by methods appropriate to the patient's medical condition. Particular attention should be given to monitoring oxygenation, ventilation, circulation, level of consciousness, hydration status and temperature. During recovery a quantitative method of assessing oxygenation such as pulse oximetry should be employed in the initial phase of recovery.
- An accurate written report of the PACU period shall be maintained. Use of an appropriate PACU scoring system is encouraged for each patient on admission, at appropriate intervals prior to discharge and at the time of discharge.
- Monitoring of the patient's physiological status, mental status, and pain level at a frequency and intensity consistent with the potential effect of the operative or other high risk procedure or anesthesia administered.

- An anesthesiologist discharges the patient from the recovery area.
- An Emergency Room physician credentialed in deep sedation may discharge the patient from the emergency room following deep sedation.
- Patients who have received anesthesia as outpatients are discharged in the company of an individual who accepts responsibility for the patient.

Post-Anesthesia Evaluation

A post-anesthesia evaluation must be completed and documented no later than 48 hours after surgery or a procedure requiring anesthesia services. The calculation of the 48-hour timeframe begins at the point the patient is moved into the designated recovery area. The evaluation must be completed and documented by any practitioner who is qualified to administer anesthesia as noted in this section of the policy.

The evaluation may not begin until the patient is sufficiently recovered from the acute administration of the anesthesia so as to participate in the evaluation, (e.g., answer questions appropriately, perform simple tasks, etc.) The evaluation can occur in the PACU/ICU or other designated recovery location. For outpatients, the post-anesthesia evaluation must be completed prior to the patient's discharge.

The elements of an adequate post-anesthesia evaluation should be clearly documented and conform to current standards of anesthesia care, including:

- Respiratory function, including respiratory rate, airway patency, and oxygen saturation;
- Cardiovascular function, including pulse rate and blood pressure;
- Mental status;
- Temperature;
- Pain;
- Nausea and vomiting; and
- Post-operative hydration.

Depending on the specific surgery or procedure performed, additional types of monitoring and assessment may be necessary.

Performance Measurement

Sedation/analgesia practices throughout Midland Memorial Hospital shall be monitored and evaluated by the Medical Staff Quality Council. A Moderate Sedation Performance Monitoring Sheet should be completed on all patients and sent to QM for review.

References:

American Society of Anesthesiologists. "Practice Guidelines for Moderate Procedural Sedation and Analgesia 2018: A Report by the American Society of Anesthesiologists Task Force on Moderate Procedural Sedation and Analgesia, American Association of Oral and Maxillofacial Surgeons, American College of Radiology, American Dental Association, American Society of Dentist Anesthesiologists, and Society of Interventional Radiology. *Anesthesiology* 3 2018, Vol. 128, 437-479.

“Basic Standards for Pre-Anesthesia Care: - American Society of Anesthesiology, 2005

“Standards for Post-Anesthesia Care” – American Society of Anesthesiology, 2004

Watson, D. Conscious Sedation/Analgesia. St. Louis: C.V. Mosby Co. 1998

DNV-NIAHO (SM) Accreditation Requirements. Anesthesia Services (AS)

CMS - §482.52 Condition of Participation: Anesthesia Services