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## Pediatric Procedural Sedation/Analgesia

### PURPOSE:

1. To provide uniform guidelines that enhance the safety and effectiveness of moderate and deep sedation/analgesia, during therapeutic, diagnostic, operative, and/or invasive procedures.
2. To provide a medically controlled state of depressed consciousness, alleviate anxiety, minimize pain, increase comfort and amnesia, while minimizing risks during procedures.
3. To return the patient to a state in which safe discharge from medical supervision is possible.
4. To promote one level of care throughout the Rocky Mountain Hospital for Children pediatric system of care for those receiving sedation/analgesia prior to, during, and after procedures.
5. To delineate clinical privileges, competencies, responsibilities and accountabilities of non-anesthesiologist medical staff members and registered nurses who are participating in the administration of sedation/analgesia and the monitoring of patients

### SCOPE:

Pediatric inpatients and outpatients at Rocky Mountain Hospital for Children at Presbyterian/St Luke's Medical Center.

### ACCOUNTABILITY:

1. All medical staff, accountable Advanced Practice Nurses (APNs), registered nurses, and paramedics participating in prescribing, administering, monitoring, and recovering of patients receiving sedation/ analgesia are accountable for safe practice and for incorporating the requirements of this policy and procedure.
2. This policy **does not** include patients who require:
  - a. general anesthesia or who are under the direct care of an anesthesia provider (anesthesiologist or a CRNA supervised by an anesthesiologist)
  - b. therapeutic pain management
  - c. sedation for maintenance on a ventilator
  - d. pre-procedural medication for anxiolytics and minimal sedation (see definition below)
  - e. rapid sequence intubation
  - f. NICU care (A separate neonatal sedation/analgesia policy addresses NICU patients.)
3. **Only anesthesiologists and CRNAs will administer intended general anesthesia.**
4. This policy is intended to facilitate the care of patients requiring moderate or deep sedation by licensed independent practitioners (LIPs) or moderate sedation by APNs with appropriate privileges.
5. Age Guidelines for Policy Selection:
  - a. For the purposes of sedation/analgesia, the following age guidelines are suggested:



Patient Age	Sedation/Analgesia Policy To Use
Greater than or equal to 21 years of age	Adult
Less than 12 years of age	Pediatric
12- 21 years of age	Pediatric or Adult

*Note: For 12-21 year old patients, LIP/APN must be credentialed for either pediatric **OR** adult moderate and/ or deep sedation/analgesia privileges. It is not required that they be credentialed in both for patients 12-21 years old.*

## PRACTICE GUIDELINES WITHIN:

1. Section 1 – Pre-Sedation/Analgesia/Procedure
2. Section 2 – Intra-Sedation/Analgesia/Procedure
3. Section 3 – Post-Sedation/Analgesia/Procedure

## ATTACHMENTS:

- Attachment A: Pediatric Dosing Guidelines for Sedation/Analgesia

## DEFINITIONS:

The American Society of Anesthesiologists (ASA) and The Joint Commission (TJC) recognize four levels of sedation/analgesia that occur on a dose-dependent continuum leading from minimal sedation to general anesthesia as described in the following definitions:

- **Minimal sedation (anxiolytics):** 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/analgesia ("conscious sedation"):** a drug-induced depression of consciousness during which patients respond purposefully to verbal commands, either alone or accompanied by light tactile stimulation. No interventions are required to maintain a patent airway, and spontaneous ventilation is adequate. Cardiovascular function is usually maintained.
- **Deep sedation/analgesia:** a drug-induced depression of consciousness during which patients cannot be easily aroused, but respond following repeated or painful stimulation. The ability to independently maintain ventilatory function may be impaired. Patients may require assistance in maintaining a patent airway and spontaneous ventilation may be inadequate. Cardiovascular function is usually maintained.
- **Anesthesia:** consists of general anesthesia and spinal or major regional anesthesia. It does not include local anesthesia. General anesthesia is a drug-induced loss of consciousness during which patients are not arousable, even by painful stimulation. The ability to maintain independent 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.

Because sedation is a continuum, it is not always possible to predict how an individual patient will respond. Hence, hospitals must ensure that procedures are in place to rescue patients whose level of sedation becomes deeper than initially intended. Rescue capacity is defined below:

- **Rescue capacity:** "Rescue" from a deeper level of sedation than intended requires an intervention by a practitioner with expertise in airway management and advanced life support. The qualified practitioner corrects adverse physiologic consequences of the deeper-than-intended level of sedation and returns the patient to the originally intended level of sedation.

## POLICY:

1. Personnel
  - a. Sufficient numbers of qualified personnel, in addition to the LIP or APN performing the sedation, will be at the



patient's bedside during procedures using moderate and deep sedation/analgesia to:

1. appropriately evaluate the patient prior to administering sedation/analgesia
  2. administer the medication used to produce sedation/analgesia
  3. perform the procedure
  4. monitor the patient
  5. recover and discharge the patient from the post-sedation recovery area or from the hospital
- b. The qualified individuals required to be at the patient's bedside for the safe administration of moderate and deep sedation/analgesia include:
1. A licensed independent practitioner (LIP) who has clinical privileges for sedation/analgesia and may prescribe and/or administer the sedative/analgesic and/or an APN who has practice prerogatives for moderate sedation/analgesia. The LIP is responsible for the prescribing of the sedatives/analgesics. A supervising LIP must be immediately available to an APN providing procedural sedation.
  2. An RN who has successfully completed the clinical competency for sedation/analgesia or a paramedic with medical director permission<sup>1</sup> may administer the sedative/analgesic under the direct supervision of an LIP/APN who has been granted sedation/analgesia privileges. The RN/paramedic will also be responsible for monitoring the patient.
  3. A third individual may be present to assist the LIP/APN with the procedure or to function as a circulator (e.g., obtain supplies).
  4. During deep sedation, an additional RN/RT should be at the bedside and prepared to maintain the airway.
2. Licensed Independent Practitioner Privileges and Advanced Practice Nurse Practice Prerogatives for Sedation/Analgesia
- a. Licensed independent practitioner (LIP) as defined by this policy, includes physicians and surgeons. This policy excludes podiatrists due to current Medical Staff Bylaws which do not provide for podiatry to hold privileges for assessment above the ankle and the pre-sedation assessment that are **required for sedation/analgesia**. Provider must have an active DEA license.
  - b. Approved advance practice nurse (APN) as defined by this policy, includes nurse practitioners who have been approved by the necessary credentialing bodies to provide moderate sedation/analgesia. APNs must have an active DEA license.
  - c. Individuals administering moderate or deep sedation must have the appropriate credentials and be qualified to manage patients at whatever level of sedation or anesthesia is achieved, either intentionally or unintentionally.
  - d. Individual requirements for those providing moderate or deep sedation include competency-based education, testing, training, and active practice in:
    1. Evaluating patients prior to performing moderate or deep sedation
    2. Ordering and/or administering pharmacological agents to predictably achieve desired levels of sedation/analgesia
    3. Managing moderate or deep sedation to maintain the desired level of sedation
    4. Performing skills required to rescue patients who unintentionally slip into a deeper-than-desired level of sedation or analgesia.
  - e. **For moderate sedation/analgesia:** LIPs who order and/or administer pediatric moderate sedation/analgesia are required to hold specific procedure and pediatric moderate sedation/analgesia privileges. APNs that provide pediatric moderate sedation/analgesia are required to hold specific procedure and pediatric moderate sedation/analgesia practice prerogatives. These privileges are granted through the credentialing and privileging process of the medical staff and require successful completion of:
    1. Pediatric Advanced Life Support (PALS)
    2. Pediatric Sedation/Analgesia Core Curriculum (includes airway management and pharmacology)



3. Pass Sedation examination
- f. **For deep sedation/analgesia:** A pediatric intensivist or emergency department physician may also request clinical privileges for deep sedation/analgesia, allowing them to order and administer pediatric deep sedation/analgesia. These practitioners are required to hold specific pediatric deep sedation/analgesia privileges that are obtained by fulfilling the following requirements:
  1. Pediatric intensivist or emergency department physician credentials
  2. Pediatric Advanced Life Support (PALS) Pediatric Sedation/Analgesia Core Curriculum (includes airway management and pharmacology)
  3. Pass Sedation examination
- g. LIPs/APN who provide sedation/analgesia must be re-credentialed with the facility every 2 years.
3. Nursing/Paramedic Clinical Competency
  - a. RNs/paramedics responsible for administering pediatric sedation/analgesia under the direct supervision of an LIP/APN and for monitoring the patient are required to successfully complete education and prove competency by completing:
    1. Pediatric Advanced Life Support (PALS)
    2. Pediatric Sedation/Analgesia Core Curriculum
    3. Nursing Sedation/Analgesia Clinical Competency
    4. Pass sedation examination
  - b. The competency is obtained through the Education Department and includes:
    1. satisfactorily completing education and training on sedation/analgesia
    2. demonstrating the function and use of monitoring equipment
    3. interpreting data obtained (e.g., cardiac dysrhythmias; pulse oximetry)
    4. recognizing respiratory distress and abnormal respiratory mechanics
    5. demonstrating basic airway management skills
    6. recognizing other associated complications
    7. demonstrating a working knowledge of resuscitation equipment
    8. Registered nurses/ Paramedics who administer medications and monitor patients during sedation/analgesia must demonstrate competency on an annual basis.
  - c. PALS certification is obtained per policy.
4. Locations where sedation/analgesia is commonly administered may vary by facility. The required personnel and equipment must be available in the areas where sedation/analgesia occurs.
5. Medications Used for Sedation/Analgesia:
  - a. Refer to **Attachment A**, Pediatric Sedation/Analgesia Dosing Guidelines, for a list of medications, dosages, onset, duration, and comments regarding specific medications the Department of Anesthesia has recommended for achieving sedation/analgesia in pediatric patients.
  - b. This list does not preclude the use of other medications for sedation/analgesia, providing the practitioner documents the need for using medications not on the recommended list.
6. Oversight and Performance Improvement:
  - a. Sedation/analgesia policy implementation and compliance are directed by the Chair of Anesthesia. An anesthesiologist provides consultation for development of policies, procedures, and the core curriculum course to be taken by those licensed independent practitioners who apply for sedation/analgesia privileges. Any suspected deviation from the policy will be submitted for facility peer review. A noted trend or pattern of unexpected events with adverse outcomes will also be referred for facility peer review. A practitioner who shows a demonstrated pattern of failure to follow the guidelines outlined in the policy may be subject to review and possible loss of



- sedation/analgesia and/or medical staff privileges.
- b. **The facility Quality Management Committee (QMC) or Sedation/Analgesia Committee or equivalent will coordinate the performance improvement process for sedation/analgesia. It is responsible for:**
    - 1. Reviewing and analyzing departmental and hospital-wide data for trends and patterns.
    - 2. Providing recommendations for process improvement as indicated.
    - 3. Referring practitioner issues for peer review when needed.
  - c. The QMC reports to the Medical Executive Committee (MEC). A Sedation/Analgesia committee is a subcommittee of the QMC if a facility has a Sedation/Analgesia committee.
  - d. The anesthesia department will monitor sedation/ analgesia performed in the facility by continually collecting data on unexpected events related to sedation/analgesia.
  - e. Unexpected events that occur related to sedation/analgesia will be reported by completing a notification report (per hospital policy). These unexpected events include, but are not limited to:
    - 1. Respiratory events (apnea, significant respiratory depression, respiratory arrest, respiratory failure, shortness of breath, need for airway interventions including airway instrumentation, intubation, bag-mask-valve ventilation)
    - 2. Cardiovascular events (sustained hypotension, serious dysrhythmias, chest pain, myocardial ischemia/ infarction, cardiac arrest, CPR required, death).
    - 3. Sedation/analgesia events (, over-sedation, deeper-than-planned, prolonged, adverse drug reaction, seizure, allergic reaction, paradoxical response, unplanned reversal agent given, procedure canceled, anesthesia called for assistance, unplanned admission to hospital, unplanned admission/transfer to PICU)
  - f. Data will be trended, analyzed, and improvements will be implemented based on the analyses.
  - g. This performance improvement process will be facilitated by the Quality Management Department.

## **PRACTICE GUIDELINES:**

### **Section 1- Pre- Sedation/Analgesia/Procedure**

- 1. LIP/APN Responsibilities and Documentation:
  - a. History and physical performed by an LIP or their designee within 7 days prior to the procedure per Medical Staff Rules and Regulations. The history and physical should include:
    - 1. Age
    - 2. Current weight
    - 3. Allergies, previous allergic or adverse drug reactions
    - 4. Medication/drug history (should include dosage, time, route, and site of administration for prescription, over-the-counter, herbal, and illicit drugs). Potential drug interactions with the sedative medications should be considered. St. John's wort, Echinacea, kava, or valerian can potentially increase or prolong the sedative effects.
    - 5. Relevant diseases, physical abnormalities, and neurologic impairment that may increase the risk of airway obstruction
    - 6. Pregnancy status, if applicable
    - 7. History of previous sedation or anesthesia and complications
    - 8. Relevant family history, especially with regard to anesthesia complications
    - 9. Review of systems with focus on any cardiac, pulmonary, renal, hepatic abnormalities
    - 10. Physical examination that includes vital signs and a focused exam of the airway to assess for increased risk of airway obstruction
    - 11. Name and phone number of the child's primary care provider or medical home, if available.



- b. Completion of the pre-sedation/analgesia assessment in Meditech/EMR or on the Sedation/Analgesia Form to include:
1. Allergies, including past medication reactions
  2. Previous history of adverse reactions to sedation/analgesia/anesthesia
  3. NPO status
  4. Upper airway assessment - Mallampati Classification
  5. Auscultation of lung
  6. Auscultation of heart
  7. ASA classification
  8. Appropriateness for sedation/analgesia
  9. Sedation/analgesia plan
  10. Re-evaluation of patient immediately prior to sedation/analgesia administration and that the patient remains a candidate for the planned procedure and choice of sedation/analgesia
- c. Whenever possible, appropriate medical specialists will be consulted prior to administration of sedation/analgesia to patients with significant underlying conditions. Consider consulting anesthesia for patients with ASA III, IV or V scores.

ASA Classification	
ASA I	A normal healthy patient.
ASA II	A patient with mild systemic disease (e.g. controlled reactive airway disease))
ASA III	A patient with severe systemic disease(e.g. child actively wheezing)
ASA IV	A patient with severe systemic disease that is a constant threat to life (e.g. child with status asthmaticus)
ASA V	A patient who is not expected to survive without the procedure (e.g. child with severe cardiomyopathy requiring heart transplant)

- d. Pulmonary aspiration risk will be considered in determining timing of an elective or scheduled procedure and the depth of sedation used for an urgent or emergent procedure.
1. The ASA guidelines which are consensus based, recommend the following for normal healthy patients of all ages who are undergoing **elective or scheduled** procedures (excluding women in labor):

Fasting Guidelines to Reduce the Risk of Pulmonary Aspiration for Elective or Scheduled Procedures	
Ingested Material	Minimum Fasting Period
Clear Liquids (water, clear tea, black coffee, carbonated beverages, juice without pulp, Popsicle, jello)	2 hours
Breast milk	4 hours
Non-human milk, infant formula	6 hours
Light meal	6 hours
Regular or heavy meal	8 hours

2. It is permissible for routine, necessary medications to be taken with a sip of water on the day of the procedure at the discretion of the LIP/APN.



3. Do not delay procedural sedation in adults or pediatrics in the ED based on fasting time.
  4. When proper fasting has not been assured, the increased risks of sedation/ analgesia should be carefully weighed against the benefits, and the lightest effective sedation/analgesia should be used. For deep sedation/ analgesia in a patient who has not been NPO, an anesthesia consult and endotracheal intubation will be considered.
- e. **Prior to performing the procedure, only an LIP will obtain and document an informed consent:**
1. the procedure **and**
  2. the sedation/analgesia.
- f. Parents/guardian may be permitted to remain in the room during sedation/analgesia if approved by LIP/APN.
- g. Immobilization tools must be applied in a manner that does not obstruct the airway or restrict chest movement.
- h. The LIP's sedation/analgesia plan is documented and communicated to the nursing staff. The medication choices and dosing and maximum doses must be approved by the supervising LIP prior to procedural sedation if an APN is performing the procedural sedation.
2. Nursing/ Paramedic Responsibilities and Documentation:
- a. The RN will complete the nursing history, nursing assessment, and the pre-procedure documentation appropriate for that facility.
  - b. For outpatients, the RN/paramedic will ensure prior to administration of sedation/analgesia that the patient has a responsible adult who will receive verbal and written discharge instructions, drive the patient home, and be able to report any post-procedure complications. In the event that a responsible adult is not available, the patient will be required to stay until the patient meets discharge criteria and a discharge order is obtained from the LIP. In this instance, the patient will receive instructions to not drive.
  - c. The RN/paramedic individualizes and prioritizes the patient's care needs and documents the findings. The plan of care is developed which includes, but is not limited to:
    1. Educating patient/parents/guardian. (Refer to Procedure statement #9 for content.)
    2. Assembling and checking for proper operation of required age- and size-specific equipment. A **pediatric Code Blue cart with defibrillator** should be in the sedation room or immediately outside of the room.
    3. Preparing medications to be administered
    4. Having naloxone (Narcan), flumazenil (Romazicon), diphenhydramine (Benadryl), and epinephrine readily available.

## Section 2- Intra-Sedation/Analgesia/Procedure

1. A time-out will be completed prior to the procedure with all involved providers in the room. (Refer to the Safe Procedural and Surgical Verification policy).
2. Patients receiving moderate sedation/ analgesia will have IV access if receiving IV medications. Intravenous access for patients receiving moderate sedation orally, rectally or intramuscularly may be considered, especially if the patient is ASA Class II or higher. Patients receiving deep sedation/analgesia will always have IV access established with IV fluids infusing to assure that a route is available immediately for administration of reversal or resuscitative drugs.
3. The LIP/APN will be present from the initiation of medication administration through the post-procedural interval, at which time, if appropriate, it is determined that the patient care can be safely assumed by an RN or paramedic.
4. RN/ Paramedic Responsibilities
  - a. Remains at the bedside to monitor the patient throughout procedures performed with sedation/analgesia
  - b. The type of procedure, depth of central nervous system depression, and overall health of the patient will determine the type and frequency of monitoring parameters.
    - i. **Minimal monitoring parameters and documentation required are as follows:**



1. Level of consciousness/sedation - The Ramsey Sedation Scale will be used to assess sedation level:

Ramsey Sedation Scale	
Level	Patient Response
1	Anxious and agitated or restless
2	Awake, cooperative, oriented, tranquil
3	Awake (will be resting, usually with eyes closed) and responds to normal verbal stimuli
4	Asleep, but will awaken with light auditory and/or light tactile stimulus
5	Asleep with sluggish response to loud auditory and/or vigorous tactile stimulus, difficult to awaken or elicit response
6	No response

- sedation scores of 1-2 are consistent with minimal sedation/analgesia
  - sedation scores of 3-4 are consistent with moderate sedation/analgesia
  - sedation score of 5 is consistent with deep sedation/analgesia
  - sedation score of 6 is consistent with general anesthesia
2. Pulmonary ventilation: Observation of chest movement will be continuous. The head position will be maintained to ensure airway patency.
3. Continuous pulse oximetry monitoring with documentation every 5 minutes
4. Blood pressure, heart rate, respiratory rate:
- baseline before sedation/analgesia
  - during onset of sedation/analgesia
  - every 5 minutes during procedure
  - end of procedure
5. Continuous cardiac monitoring with documentation of cardiac rate
6. Continuous cardiac monitoring with documentation of cardiac rhythm every 5 minutes, if indicated.
7. Continuous capnography for deep sedation should be recorded every 5 minutes. Capnography may be considered for moderate sedation as well.
8. Pain assessed by observation of patient response. An age-appropriate pain scale will be utilized.
- This nurse/paramedic may assist with minor, interruptible tasks of short duration once the patient's level of sedation/analgesia and vital signs have stabilized, while assuring that continuous monitoring is maintained.
  - Administers medications as ordered by the LIP or APN.
  - Nursing documentation throughout sedation/analgesia procedures will reflect continuous assessment, planning, implementation of the plan, and patient evaluation.
    - i. Documentation will include patient assessment data, physiological monitoring data, interventions and the patient's responses to those interventions, and any untoward reaction and its resolution.
    - ii. Documentation frequency is designated in the Pre-procedure, Intra-procedure and Post-procedure sections.
    - iii. Documents medications administered, including the name, route, site, time, dosage and effect of drugs given on patient.
  - Immediately communicates the following to the LIP or APN:
    - i. respiratory rates outside the age-appropriate range



- ii. blood pressure variant of (+/-) 25% of baseline
- iii. heart rate variant of (+/-) 25% of baseline
- iv. O2 saturation lower than 90% or greater than 10% decrease from baseline O2 saturation
- v. Loss of the capnography wave
- vi. cardiac dysrhythmias
- vii. significant change in level of consciousness/sedation level
- viii. Adverse events and their treatment.

### Section 3- Post-Sedation/Procedure

#### 1. Monitoring and Documentation

- a. Upon admission to the post-sedation/analgesia area, BP, HR, RR, oxygen saturation, cardiac rhythm (if indicated), LOC/sedation level, pain, and procedure-site dressing (when applicable) will be assessed and documented.
- b. During the patient's stay in the post-sedation area, HR, RR, and oxygen saturation assessments will be done every 5 minutes X 4, then every 15 minutes until stable.
- c. At discharge from the post-sedation area, BP, HR, RR, oxygen saturation, cardiac rhythm (if indicated), LOC/sedation level, pain, and procedure-site dressing (when applicable), will be assessed and documented.

#### 2. Discharge Guidelines

- a. Patient may be discharged by one of the following:
  - i. The LIP/APN or designee who performed the procedure,
  - ii. An RN using discharge criteria approved by medical staff and according to department protocol.
- b. Patients may be discharged from the procedure area to their respective units if they meet all of the following discharge criteria:
  - i. Vital signs are stable and within normal limits for patient's age, with documentation that includes BP, pulse rate, cardiac rhythm consistent with baseline, respiratory rate, oxygen saturation on room air greater than 90% or at baseline
  - ii. Cardiovascular function and airway are satisfactory and stable
  - iii. Afebrile
  - iv. Absence of respiratory distress
  - v. Adequate hydration status
  - vi. Presence of the protective swallow and gag reflexes demonstrated by ability to swallow and tolerate fluids (if capable at baseline)
  - vii. Absence of nausea/vomiting or nausea/vomiting that has been adequately addressed with plans to continue monitoring and intervention
  - viii. Awake and responsive to commands (age-appropriate and/or baseline)
  - ix. Able to sit up with minimal assistance (if age appropriate and/or able to complete at baseline)
  - x. Sufficient time has lapsed (one hour for inpatients) after last administration of reversal agents (naloxone, flumazenil) so those patients do not become re-sedated after reversal effects have abated
  - xi. Pain controlled by analgesics or rated at or below baseline
  - xii. Able to ambulate as well as prior to the procedure (age-and physical status-appropriate); able to use extremities similar to baseline (age-appropriate)
  - xiii. Post Anesthesia Recovery score of greater than or equal to 8 or equal to pre-sedation baseline achieved and maintained for 30 minutes after procedure. If above score cannot be achieved, the LIP who performed the procedure will be notified and will assess patient and determine disposition (see Attachment B)



- c. Patients may be discharged home if they meet the following criteria:
    - i. Vital signs are stable and within normal limits for patient's age, with documentation that includes BP, pulse rate, cardiac rhythm consistent with baseline, respiratory rate, oxygen saturation on room air greater than 90% or at baseline
    - ii. Cardiovascular function and airway are satisfactory and stable
    - iii. Afebrile
    - iv. Absence of respiratory distress
    - v. Adequate hydration status
    - vi. Presence of the protective swallow and gag reflexes demonstrated by ability to swallow and tolerate fluids (if capable at baseline)
    - vii. Absence of nausea/vomiting or nausea/vomiting that has been adequately addressed with plans to continue monitoring and intervention
    - viii. Awake and responsive to commands (age-appropriate and/or baseline)
    - ix. Able to sit up with minimal assistance (if age appropriate and/or able to complete at baseline)
    - x. Sufficient time has lapsed (one hour for inpatients) after last administration of reversal agents (naloxone, flumazenil) so those patients do not become re-sedated after reversal effects have abated
    - xi. Pain controlled by analgesics or rated at or below baseline
    - xii. Able to ambulate as well as prior to the procedure (age-and physical status-appropriate); able to use extremities similar to baseline (age-appropriate)
    - xiii. Post anesthesia recovery score of greater than or equal to 8 or equal to pre-sedation baseline achieved and maintained for 30 minutes after procedure. If above score cannot be achieved, the LIP who performed the procedure will be notified and will assess patient and determine disposition (**see Attachment B**).
  - d. A discharge order will be obtained from the attending LIP and/or anesthesiologist.
  - e. Outpatients will be discharged in the presence of a responsible adult who will receive verbal and written discharge instructions, drive the patient home, and be able to report any post-procedure complications.
  - f. Disposition of inpatients will include documentation of the patient care unit, time the patient was transferred, the name of individual who received the patient and report.
3. Patient/Family Education related to sedation/analgesia for patient/family/parents/guardian will include, but may not be limited to, the following:
- a. objectives of the sedation and anticipated changes in behavior during and after sedation.
  - b. variable dose-response; both in terms of the amount of drug required to achieve effect and incidence of adverse response
  - c. monitoring standards so patients and/or families are not overwhelmed by the magnitude or frequency of monitoring
  - d. post-sedation behavioral changes may be anticipated (i.e., sleepiness, irritability, problems with coordination and the ability to think, lack of appetite)
4. Discharge instructions will be discussed with patient/family/parents/guardians prior to release of patient with a copy of the discharge instructions given to responsible party. Discharge instructions include post-procedure diet, medications, activity, indications for when to notify the physician and a phone number for reaching the physician.
- a. **Caregivers must be aware that pediatric patients are at risk for airway obstruction should the head fall forward while the child is secured in a car seat. It is recommended that two adults accompany the patient home; one to drive, and one to observe the patient's airway and breathing. Consider a longer period of observation prior to discharge if only one adult is available to drive the child home.**



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## Attachments

A: Pediatrics Dosing Guidelines for Sedation/Analgesia

B. Post-anesthesia recovery score



## Approval Signatures

Approver	Date
Michelle Grimpo: VP of Quality	September 21st, 2020
David Leslie: CNO	September 18th, 2020
Shelly Koets: Quality Coordinator	September 17th, 2020
Stephanie Prothro: Quality Management Coordinator	September 17th, 2020
Rajul Rajiah: RN	September 17th, 2020
Reghan Stumpf: PICU Manager	September 17th, 2020
Lauren Adamo: Clinical Nurse Coordinator	September 17th, 2020

## Applicability

Presbyterian/St. Luke's Medical Center

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