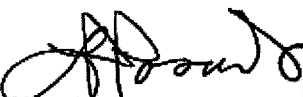


**GUAM MEMORIAL HOSPITAL AUTHORITY
ADMINISTRATIVE MANUAL**

APPROVED BY:  Lillian Perez-Posadas, RN, MN Hospital Administrator/CEO	RESPONSIBILITY: Anesthesia, Surgery, Emergency Medicine, Nursing Services	EFFECTIVE DATE: Interim Approved January 30, 2019	POLICY NO. A-PS1100	PAGE 1 of 18
TITLE: PROCEDURAL SEDATION				
LAST REVIEWED/REVISED:				
ENDORSED:				

PURPOSE:

To provide guidelines for the safe and optimal management of our inpatients and Emergency Department patients who require the administration and monitoring of procedural sedation for short-term therapeutic, diagnostic or surgical procedures so that the patients will receive the maximum benefits of procedural sedation with associated risks.

DEFINITION:

Minimal Sedation (Anxiolysis): 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.

Procedural Sedation: Also known as moderate sedation, this is the use of medication to minimally depress the level of consciousness in a patient during which the patient responds purposefully to verbal commands, either alone or accompanied by light tactile stimulation. The medically depressed level of consciousness allows the patient/individual to retain the ability to independently and continuously maintain their airway for adequate spontaneous ventilation, and cardiovascular function.

Optimal Procedural Sedation: When the patient's condition achieves the following during procedural sedation: (a) independent and continuous airway, (b) retainment of his/her protective reflexes (swallow and gag reflexes); (c) responds to physical and verbal commands or stimulation

Operator: The licensed Physician/Medical Staff with appropriate clinical privileges for the specific procedure to be performed and for procedural sedation. He/She defines the need for procedural sedation, obtains informed consent, orders and administers the medication in appropriate dosage and timing, performs the procedure and serves as the overseer of the process.

Monitor: The licensed professional observing and monitoring the physiological status of the patient during the administration of procedural sedation and assisting in any supportive or resuscitative measures. The monitor is any credentialed & licensed practitioner or registered nurse that has completed the procedural sedation successfully. The monitor shall have no other responsibilities and must remain with the patient throughout the entire procedure. The licensed professional may administer the sedation medications according to established medication administration standards, guidelines, policies and procedures provided the Operator ordering the procedure is immediately available in the hospital.

POLICY:

Guam Memorial Hospital Authority (GMHA) shall perform procedural sedation at the bedside for any inpatient or Emergency Department patients for the purpose of diagnostic, therapeutic, and minor invasive procedures, such as endoscopy, closed reduction of a fracture, and suturing of laceration.

Only qualified and credentialed licensed practitioners for the planned procedure can be the Operator; and a trained, qualified registered nurse can be the Monitor for any procedural sedation.

Procedural Sedation can be done in any inpatient setting and the Emergency Department. However, when an anesthetic agent is to be administered, procedural sedation is only performed in any of the Intensive Care setting, Telemetry/PCU and the Emergency Department. Additionally, the qualified and credentialed physician who is the operator of the procedure must be present if anesthetic agents for procedural sedation is to be administered by the registered nurse.

This policy is NOT intended to address situations that require the services of a qualified, credentialed anesthesia provider, or sedation of patients on a ventilator, patients on pain control, or when agents are given with the intent of providing anxiolysis.

RESPONSIBILITIES:

A. PHYSICIAN RESPONSIBILITIES (OPERATOR)

The responsibilities of the physician as the OPERATOR include:

1. Assessing the appropriateness for utilizing procedural sedation, rather than a higher level of anesthesia/analgesia based on the planned procedure and the patient's physical status using the American Society of Anesthesiology's Physical Status Classification Guide.
2. Obtaining the informed consent for the procedure with the use of procedural sedation from the patient, utilizing the appropriate consent form-Consent for Surgery/Procedures/Sedation/Anesthesia/Transfusion
3. Completion and documentation of the Procedural Sedation Physician Note (Attachment I). The ASA patient classification shall be evaluated. For the Emergency Department, ED physician shall complete the appropriate ePower Doc Procedure Notes for the presenting condition and the ePower Doc Sedation Note. The ASA patient classification shall be assessed and documented. (Refer to attachment II)
4. Ordering of the medication, dosage, and route of administration in the patient's record. Verbal Order is prohibited, with the exception of the need for an emergency intervention (ie reversal agents). All verbal orders given during the procedure must be authenticated in the respective physician order sheet.
5. Directing and providing emergency intervention as necessary.
6. Emergency Department physicians are responsible in ensuring that the patient is stable to be discharged home with the appropriate discharge instructions.

B. NURSE RESPONSIBILITIES

The nurse, as the MONITOR, performs procedural sedation in accordance with the Guam Board of Nurse Examiners position statement. It is within the scope of practice that a registered nurse assists in procedural sedation, and can administer its related medication at the direction of a licensed provider, and

with appropriate training and competency. The nurse/monitor also practices patient advocacy in carrying out the following responsibilities:

1. Performs and documents patient and family education
2. Performs and documents continuous assessment and monitoring of the patient and maintains documentation of these assessments and care in the Procedural Sedation Record
3. Administration of medications as per the physician's orders. Administration of anesthetic agents for procedural sedation must be done in the presence of the physician/operator.
4. Documentation of name, dose, route, and time of all medications administered in the appropriate Medication Administration Record.
5. Uninterrupted observation and monitoring of the patient from the time of procedural sedation until time of discharge
6. Provision of appropriate emergency interventions as necessary.
7. Initiate the pre procedural time out process.

C. HEAD NURSE/CHARGE NURSE RESPONSIBILITIES

1. Maintain their designated Procedural Sedation site in the unit; ensuring patient safety, and adequate space for rescue equipment to be available at the bedside.
2. Ensure only authorized Operators and Monitors perform Procedural Sedation.
3. Maintain a list of qualified registered nurses in the unit at all times that is available to the charge nurses.

TRAINING AND QUALIFICATIONS

Procedural sedation will be ordered by a licensed provider of the Medical Staff who has received the appropriate training and skills necessary to safely provide procedural sedation and credentialed in such. Registered Nurses who have the qualifications, certifications, and competencies may assist in and administer procedural sedation in accordance to this policy.

General knowledge required for individuals managing the care of a patient receiving procedural sedation includes:

- Knowledge of the pharmacology of agents administered and prepared to manage complication.
- Understanding of the role of pharmacological antagonists for opioids and benzodiazepines.
- Demonstration of skills to assess total patient care requirement during sedation and recovery. Physiologic measurements include, but are not limited to, respiratory rate, oxygen saturation, blood pressure, cardiac rate and rhythm, and the patient's level of consciousness.
- Application of the principles of oxygen delivery, respiratory physiology, oxygen transport and oxygen up take, demonstrates the ability to use oxygen delivery devices including

proficient use of a bag/valve/mask/device.

- Demonstration of the acquired knowledge of anatomy, physiology, pharmacology, cardiac arrhythmia recognition and complications related to sedation, and analgesia sedation, and medications.

A. Physician Training/Qualification

The physician or other licensed provider must comply with the following requirements in order to perform as an operator or as a monitor. Documented evidence of current, completed competency requirements will be tracked and monitored by the Medical Staff Office:

1. Maintain privileges as a Medical staff provider at GMHA with the appropriate training and skills and credentials on the planned procedure with procedural sedation, per Medical Staff By-laws and rules and regulation, to include
 - a. Demonstration of the requisite knowledge and skills to assess, diagnose, and intervene in the event of complications or undesired outcomes, rescue from deep sedation, and to institute interventions in compliance with orders (including standing orders), protocols, or guidelines.
2. Must remain current with ACLS and/or PALS, or its equivalent (as approved by the Medical Staff), applicable to the patient population being treated

B. Nursing Training/Qualifications:

Administration of medications for procedural sedation by a RN is a specialized skill that requires specific knowledge and competencies including, but not limited to:

1. Knowledge and understanding of the content of this policy.
2. An understanding of the principles of oxygen delivery, and respiratory physiology.
3. Demonstrated competency in airway management appropriate to the age of the patient including monitoring patient oxygenation and ventilation (e.g. skin color, respiratory rate, pulse oximetry, secondary confirmation of endotracheal tube placement, initiation of resuscitative measures, and utilization of oxygen delivery devices.
4. Demonstrated knowledge of cardiac dysrhythmia (ie, completed basic ECG course), and complications related to procedural sedation, and intervene appropriately.
5. Identification and differentiation of the various levels of sedation
6. Demonstrated competence in pre-procedural, procedural, and post-procedural nursing care
7. Age-specific resuscitation certifications (ACLS, PALS, NRP) need to be maintained as applicable to the patient population being treated.
8. Must be current in Intravenous Therapy Certification

This training must be updated every two (2) years.

PROCEDURE:

I. PRE-PROCEDURE

A. Patient Selection

Procedural sedation is NOT for every patient. The evaluation process used is based on the recommendations of the American Society of Anesthesiologist (ASA) as follows:

- i. Procedural sedation will be used for ASA Class I & II patients, as these patients are the lowest risks (see Attachment II).
- ii. Patients classified as ASA Class III may require consultation and collaboration by the healthcare team to determine if they are appropriate candidates for procedural

- sedation, or if Anesthesia assistance is needed
- iii. ASA Class IV & V patients shall require the involvement of the Department of Anesthesiology
- iv. Elderly patients, very young patients, those with Kidney or liver metabolism problems and psychologically immature or developmentally disabled patients are recommended for alternative methods of sedations and/or anesthesia.

B. Documentation of Informed Consent

Informed consent shall be obtained for all procedures involving sedation and documentation placed in the medical records. During this discussion all anesthesia options and risks should be discussed with the patient (family/guardian, if applicable) prior to administration of the sedation. As part of the consent process, the operator or physician must clearly explain the proposed treatment or procedure to include the following:

1. Potential benefits, risks, and limitations associated with the procedure
2. Potential problems related to recuperation
3. Any possible adverse effects of treatment
4. Any significant/reasonable alternatives
5. The likelihood of success

C. Patient Assessment/Documentation

Prior to the procedure, the following must be completed and included in the patient's medical record:

1. The Operator shall complete the Procedural Sedation Physician Note within 30 minutes prior to sedation (Attachment I). For the Emergency Department, ED physician shall complete the appropriate ePower Doc Procedure Notes for the presenting condition and the ePower Doc Sedation Note.
2. The Monitor of the procedure shall ensure that proper time-out is performed (using the Pre-Procedure Verification *Checklist*, Procedures Outside the Operating Room), and complete the Procedural Sedation Record appropriately (Attachment III).
3. For the Emergency Department:
 - a. The monitor shall ensure there is an available responsible adult to accompany patients who will be discharged home. If there is no responsible adult to accompany the patient home after the procedure, the patient should be asked to contact one with a confirmation that he/she will arrive shortly.
 - b. Discharge Instructions should be provided to the patient and/or responsible adult prior to the procedure (Attachment IV). The patient and the adult responsible for the patient shall receive instructions and education according to the patient's plan for care to include, but not limited to, the following information:
 - i. information about expected behavior following procedural sedation
 - ii. limitations of activities or precautions
 - iii. instructions for eating
 - iv. warning signs of complications

D. Patient Preparation and Room Set up

Prior to the procedure, the following must be completed by the Monitor or Nurse and

documented in the patient's chart.

1. Vascular access for patient receiving intravenous medication (for procedural sedation administration by non-intravenous routes or intravenous lines that have become dislodged or blocked, practitioners will determine the advisability of establishing or reestablishing intravenous access on a case by case basis. A patent, operational intravenous (I.V.) access should be established and maintained throughout the sedation and recovery stages.
2. Required equipment is assembled at the bedside and in good working order
3. Baseline assessment of blood pressure, pulse, respiratory rate and pattern, Oxygen saturation rate, Level of Consciousness (LOC), cardiac rhythm, and weight.
4. Assessment of Airway status
5. Assessment of Mental status
6. Assessment of last Oral Intake: In the event of an emergency, the need for sedation may outweigh the risk of aspiration from a full stomach, and a consultation with an anesthesia provider is recommended:

	<u>Minimum Fasting Period (NPO)</u>
Solid Food	4-6 hours
<u>PEDIATRIC PATIENTS</u>	
Milk/Solid Foods	4-6 hours
Formula	6 hours
Breast Milk	4 hours

E. For Special Circumstances

1. Pregnancy: Consultation with an obstetrician is required for procedural sedation during pregnancy. This consultation and subsequent recommendation will be documented in the patient record.

F. Equipment

Prior to sedating the patient, the Operator needs to assure that all monitoring equipment, appropriate for the size of the child or adult being sedated, must be secured, checked and located to provide immediate access to patient (bedside, exam table, etc.). Monitoring and observing the patient before, during and after the period of sedation is crucial. Discrete changes in patient status are often observed before noticeable change in vital signs and other parameters occur.

Resuscitation equipment should be operational and personnel skilled in Advanced Cardiac Life Support (ACLS) and other related resuscitative skills appropriate to the age of the patient (PALS), including airway management, should be in the immediate area and able to perform resuscitation activities.

Minimum equipment **MUST INCLUDE:**

1. Pulse oximeter with both visible and audible display and alarm
2. Operating wall oxygen source with a flow meter or a full portable oxygen tank.
3. (E-Cylinder) capable of delivering 100% oxygen at 10 L/min for at least 30 Minutes.
4. Positive pressure oxygen delivery device (bag-valve-mask) such as Ambu-bag.
5. Automated or manual blood pressure monitoring device.
6. Suction source with regulator (wall or portable)
7. Suction catheters
8. Face masks (appropriate size)
9. Defibrillator with EKG recorder capabilities

10. Oral and Nasal airway
11. Endotracheal Tube
12. Laryngoscopes
13. Emergency Drugs including the reversal agents, such as Naloxone (Narcan), Flumazenil (Romazicon), and Ephedrine, and Epinephrine.
14. Emergency Drug Card, ACLS and PALS protocols

In addition to the above equipment, a telephone, code 72 button or other device capable of summoning immediate assistance in an emergency must be immediately accessible.

II. DURING THE DIAGNOSTIC/SURGICAL PROCEDURE

A. Pharmacological Agents for Procedural sedation

Procedural sedation is achieved by administering pharmacological agents. The most common route of administration is intravenous (IV), although medications may be given orally (PO), rectally, intramuscular (IM), subcutaneously (SQ), or nasally. The agents/medications used depend on the type, duration and intensity of the procedure. Medications/agents frequently given for procedural sedation are sedatives, narcotics/analgesics, and/or anesthetics

B. Guidelines for Administration

1. Document name, dose, route, and time of all medications administered, in the appropriate Medication Administration Record
2. Give drugs slowly and in small incremental doses. Refer to Attachment VI for medication information.
3. Assess the therapeutic effect before determining the next incremental dose and observe the patient for:
 - a. A decrease in oxygen saturation
 - b. Ability to maintain patent airway
 - c. Appropriate response to physical stimulation and/or verbal command
 - d. Significant changes in vital signs
4. Adjust doses per operator/physician order based upon patient's age, level of debilitation, drug combinations, patient tolerance, pulmonary reserve, previous narcotic usage, and length of procedure.

NOTE: Refer to Attachment V: Procedural Sedation Medications Information, Recommended Guidelines

C. Monitoring of Patient on Procedural Sedation

The patient must be continuously monitored from the start of procedural sedation until the time discharge criteria are met. Baseline vital signs, oxygen saturation level, heart rate and rhythm, respiratory rate and pattern, and level of consciousness are the minimum assessment parameters obtained and documented prior to sedation.

Because the patient can slip into a deep sleep, proper continued monitoring of procedural sedation is essential. The nurse/monitor must monitor the patient's heart rate and rhythm, blood pressure, respirations, oxygen saturation level and alertness throughout and after the procedure. The patient should be monitored at 5-minute intervals during the procedure and at 5-15 minute intervals during the recovery phase, and at any significant event throughout the procedure. The nurse/monitor caring for the patient receiving procedural sedation **MUST** have no other responsibilities during the procedure and must remain with the patient at all times during the procedure.

III. DURING THE RECOVERY PERIOD

A. Post Procedure Progress Notes

1. The Operator of the procedure must complete the Procedure Sedation Physician Note, immediately after the procedure in the appropriate form (Attachment I)
2. The registered nurse will continue to MONITOR the patient during the post procedure recovery period, until the PARS score is at 8 or greater. This means the patient must be awake, able to move, able to maintain oxygen saturation greater than 92% on room air and VS must be within 20% of baseline. Vital signs must be taken at least every 5-15 minutes until stable or within the 20% baseline.
3. Transportation of the patient
 - a. The patient will always be accompanied by either the monitor or the operator when being transported to another area prior to meeting discharge criteria. The state of consciousness, heart rate, and oxygen saturation will continue to be monitored while in transit.
 - b. The monitor or operator will remain with the patient and continue monitoring the patient until the patient is at pre-sedation baseline, meets clinical discharge criteria, or the unit staff has assumed responsibility for the continuous monitoring of the patient through the recovery period.

B. Post Anesthesia Recovery System (PARS)

Post –Anesthesia Recovery Criteria	Score	Description of Recovery Criteria
Activity	2	Able to move 4 extremities voluntarily or on command
	1	Able to move 2 extremities voluntarily or on command
	0	Not able to move any extremity voluntarily or on command
Respiration	2	Able to deep breathe and cough freely
	1	Dyspnea or limited breathing
	0	Apnea
Circulation	2	BP within 20% of pre-sedation level
	1	BP within 20-50% of pre-sedation level
	0	BP greater or less than 50% of pre-sedation level
Consciousness	2	Fully awake
	1	Arousable when called
	0	Not responding
Color	2	Oxygen saturation >92%
	1	Oxygen saturation >92 with supplemental O2
	0	Oxygen saturation <92% with supplemental O2
TOTAL PARS SCORE		A PARS of 8 or greater or return to baseline must be achieved for patients to be eligible for discharge or to discontinue monitoring

C. Discharge Criteria (for the Emergency Department):

1. The patient must achieve a PARS of 8 or greater or return to his/her pre-sedation baseline. The attending physician shall be notified of patient’s status and determine if the patient has met the discharge criteria, and document appropriately in the ePower Doc Sedation Note.

2. The adult responsible for the patient shall receive written instructions prior to discharge that include special instruction in case of emergency (*Attachment IV*).
 - a. specific procedure-related instructions when indicated
 - b. a telephone number (available 24 hours/day) to contact the medical service responsible for the patient's care
 - c. a notation shall be placed in the medical record that instructions were received and understood by a responsible adult.

IV. DOCUMENTATION

Written documentation must be maintained regarding all aspects of care associated with the administration of procedural sedation. Documentation in the patient's permanent medical record should include the following:

- Informed Consent
- Patient assessment data performed by the operator and the monitor
- Name, dose, route, time of all medications administered.
- Patient response to each intervention or treatment.
- Details of the procedure performed.
- Any adverse reactions or complications, and the management of these events.
- Recovery status
- For the Emergency Department: Written discharge instructions for outpatients that provide information regarding:
 - o anticipated or potential behavior change
 - o limitations of activities or precautions, if any
 - o appropriate dietary precautions, if any
 - o specific procedure related instructions
 - o 24 hour telephone contact number for post-procedure concerns
- o For the Emergency Department: Documentation that patient was released from GMHA to a responsible adult.

IV. QUALITY MONITORING

1. Key aspects of the procedural sedation will be monitored quarterly to track and improve outcomes, care provided, and compliance to standards. The operator or monitor must complete a Quality Monitoring Form after each procedure. This form will be forwarded to Quality Management Department for monitoring and tracking (*attachment VI*).
2. Adverse events that occur during the sedation or the recovery period will be reported by the operator or the monitor via the established hospital's incident reporting process. Monitoring results will be provided to the following:
 - a. Medical Staff
 - b. Medical Records Department
 - c. Nursing Administration
 - d. Patient Safety Committee

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Burbulys, D. Procedural sedation and analgesia, Chapter 4. Available online at <http://www.slremeducation.org/wp-content/uploads/2015/02/Chapter-4.-Procedural-Sedation-and-Analgesia.pdf>

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RESCISSIONS:

7010-II B-48, Procedural Sedation in the Emergency Department, of the Emergency Department Policy and Procedure Manual made effective 04/2015

A-PS900, Procedural Sedation, of the Administrative Manual made effective 04/2013.

ATTACHMENTS:

- I. Procedural Sedation Physician Note
- II. American Society of Anesthesiology (ASA) Patient Classification Status
- III. Procedural Sedation Record
- IV. Procedural Sedation Discharge Instructions
- V. Procedural Sedation Medications Information
- VI. Procedural Sedation Quality Monitoring Form

NOTE: The Emergency Department physician documentation for procedural sedation is completed using appropriate ePower Doc Procedure Notes.

ATTACHMENT I

Directions: To be completed within 24 hours prior to the procedure by the OPERATOR

Name of Operator (Physician): _____

Indication: _____

Last oral intake Solid
Date/Time: _____ Liquid

ASA Classification: _____ If female of childbearing age, Pregnancy Test Result: Negative
 I: Normal healthy patient Positive
 II: Patient with mild system disease
 III: Patient with a severe systemic disease (in consultation with anesthesiology)

ASSESSMENT (H&P)
 Attending Physician's History and Physical reviewed, no updates Refer to consultation sheet
 Attending Physician's History and Physical reviewed, updated as follows: Refer to Notes
 Focused Assessment,as follows: Refer to Notes
NEURO: Normal (alert, oriented) Abnormal
HEENT/Airway: Normal Abnormal
Cardiovascular: Normal Abnormal
Respiratory Normal Abnormal
Abdomen Normal Abnormal
Extremities: Normal Abnormal
 Vital Signs reviewed, see nurses record for monitoring/vital signs
 Diagnostic results, if applicable: _____

Additional Notes: _____

PROCEDURE PLAN
Procedure: _____
 Procedure, its risk and benefits and alternatives provided to include sedation explained to
 patient parent/guardiant Other:
 Consent signed
 Post Procedure patient education provided to patient and/or responsible adult
 Sedation Drug Ordered: _____
NOTE: Sedation Drug ordered must be transcribed in the physician order sheet

Physician's Signature _____

Date/Time _____

CONTINUED ON NEXT PAGE >>>>>>>>

Date: _____ Time _____

RESPONSE	Response during Procedure																								
	<input type="checkbox"/> No complication, VS stable, oxygenation stable, airway maintained. <input type="checkbox"/> Complications occurred _____ _____																								
	<input type="checkbox"/> Reversal agent administered:	<input type="checkbox"/> Naloxon (Narcan) _____ <input type="checkbox"/> Flumazenil (Romazicon) _____																							
POST-PROCEDURE	Procedure Completed: _____																								
	RN Monitor: (Name): _____																								
	Other staff present (Name and Title) <input type="checkbox"/> N/A _____																								
	Sedation Used: _____																								
	Specimens Obtained _____																								
	Disposition of Specimen _____																								
	Additional Procedure Notes: _____																								

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Abdomen	<input type="checkbox"/> Returned to Baseline	<input type="checkbox"/> Abnormal	_____																						
Extremities:	<input type="checkbox"/> Returned to Baseline	<input type="checkbox"/> Abnormal	_____																						
<input type="checkbox"/> Vital Signs reviewed, see nurses record for monitoring/vital signs <input type="checkbox"/> Complications occurred during recovery period: _____																									
PLAN: _____																									
DISCHARGE	<input type="checkbox"/> Patient Returned to baseline, and/or is in no acute distressed. Patient is STABLE <input type="checkbox"/> PARS score >8 <input type="checkbox"/> patient care returned to attending physician (for inpatients). <input type="checkbox"/> Pt discharged home with responsible adult																								
	Discharge Instructions: _____																								

Physician's Signature _____ Date/Time _____

ATTACHMENT II

AMERICAN SOCIETY OF ANESTHESIOLOGY (ASA) PATIENT CLASSIFICATION STATUS

ASA Classification	Medical Description of Patient	Comments	Examples
ASA I	No known systemic disease. No organic, physiologic, biochemical or psychiatric disturbance	May have procedural sedation without consultation	Healthy patient without any systemic medical problems other than surgical. Healthy patient for colonoscopy or vasectomy
ASA II	Mild to moderate or well controlled systemic disease		Patient who smokes and has hypertension or diabetes which is well controlled
ASA III	Multiple or moderately controlled systemic disease(s)	Consider medical consultation	Patients with diabetes and angina. Takes medications including insulin. Angina fairly stable
ASA IV	Poorly controlled systemic disease	Mandatory involvement of Anesthesiology Department	Patients with diabetes, angina, and congestive heart failure. Patients with dyspnea on mild exertion and chest pains. Patients with acute MI, sepsis, shock and trauma
ASA V	Moribund patient		Patient is unstable. Not expected to survive with or without surgical intervention.
ASA VI	Brain dead patient		A declared brain-dead patient whose organs are being removed for donor purposes.
E	Connotes emergency		

ATTACHMENT III

To Be Completed by the Nurse:

Date: _____ Time _____ NPO Time _____ Allergies: _____
Diagnosis/Indication: _____ Sedation Start Time: _____
Procedure: _____ Procedure Start Time: _____ End Time _____
Responsible Adult for Discharge: _____ Relationship _____ Contact No. _____

BP _____ HR _____ RR _____ SpO2: _____ O2 Therapy: _____ Cardiac Rhythm: _____

PRE-PROCEDURE

IV Site: _____ ASA Category: I II III

- Patient Identified Pre-Procedure Verification Checklist Completed H&P
 Consent Completed Equipment (Cardiac Monitor, Oxygen, etc) Implants (if applicable)

Time Out Participants (Name and Title)		

Medication Orders should be transcribed by the physician in the physician order sheet

M.A.R.

MEDICATION (Name, Dose, Route)	Time	Initial	Time	Initial	Time	Initial	Time	Initial

ASSESSMENT

	INTRA-PROCEDURE							POST-PROCEDURE				
TIME												
BP												
HR												
RR												
SpO2												
O2 Therapy												
CARDIAC												
RHYTHM												
LOC/												
SEDATION												

SEDATION LEVEL: 1- Alert; 2- occasionally drowsy; easy to arouse; 3- frequently drowsy, easy to arouse; 4-asleep; easy to arouse; 5- Somnolent; difficulty to arouse
The patient should be monitored at 5 minute intervals during the procedure and at 5-15 minute intervals during recovery phase

PARS SCORE
PAIN SCORE

PAIN TOOL: _____

Nurses' Notes: _____

DISCHARGE

- Discharge not applicable, patient care returned to attending physician (for inpatients)
Discharge Criteria Met: PARS Score >8 Pt returned to his/her pre-sedation baseline
Discharged Instructions Provided: _____
To: Patient Other: _____
 Patient and/or responsible adult verbalized understanding of discharge instructions
Patient discharged on _____ at _____ via ambulation wheelchair
 Other

RN Signature: _____ Date/Time _____

PROCEDURAL SEDATION RECORD

PATIENT ID

Guam Memorial Hospital Authority

Review/Revised:

Form # _____ Stock # _____

ATTACHMENT IV

Directions: This is to be discussed and sent home with the patient by the RN/Monitor. A copy is to be placed in the medical records. It is to be used for outpatient and Emergency Department patients.

You will receive a sedative for your procedure:

- Do not drive or operate machinery for 24 hours
- Do not consume any alcoholic beverages for 24 hours
- You may experience some dizziness and balance problem;
- You should not engage in any activities that require balance or coordination.
- ***Children should not be left unattended
- ***When applicable, children should be placed in a car seat for monitoring

DIET:

- Begin with a light meal and progress to your regular diet
- You may resume your normal diet
- Start with sips of water at _____
- Diet Change: _____

MEDICATION

- Stop aspirin and/or arthritis medication (including ibuprofen and naprosyn and
 - restart it on _____
 - Do not restart
- Pain Medication:
- Review Medication Reconciliation for home medications

FOLLOW UP

Follow up with your private physician:

- Primary physician
- Consulting/Referred Physician

Doctor: _____ Clinic: _____

Telephone Number: _____

Any signs of

- Increasing pain, nausea, vomiting
- New abdominal distention (swelling)
- Fever/chills
- Other: _____
- New/increased bleeding
- Pain unrelieved by medication
- Shortness of breath

OTHER INSTRUCTION

If a complication or emergency situation arises and you are unable to reach your physician, call 911 or proceed to the nearest Emergency Department

- No heavy lifting, straining, or exercising for the next 24 hours
- See additional discharge instruction sheet
- Other: _____

I have read or have had a read to me the post sedation instructions. I understand these instructions and will follow-up with my physician if I have any questions.

PATIENT SIGNATURE (SIGNED DURING PREPROCEDURE PREPARATION) Date/Time

Responsible Adult included in Discharge Teaching : _____
Name Relationship

Witnessed by _____
Name Signature

PROCEDURAL SEDATION DISCHARGE INSTRUCTIONS

Guam Memorial Hospital Authority
Reviewed/Revised: 08/ Form #
Stock #

MEDICATIONS FOR PROCEDURAL SEDATION RECOMMENDED GUIDELINES

Reference:

American Association of Moderate Sedation Nurses. Medications. Available online at <https://sedationcertification.com/medications/>

Jonas, T. Pediatric & Adult Moderate Sedation. Available online at <http://www.clinicalsolutionse.com/Courses/Online/pediadultsedation.pdf>

SEDATIVES: Benzodiazepines produce sedation, amnesia, diminished anxiety, skeletal muscle relaxation and anticonvulsant effects. They have no analgesic properties. Adverse events include respiratory depression, laryngospasm, cardiac arrhythmia, bradycardia, hypotension, and CNS excitement.

REVERSAL AGENT: Flumazenil (Romazicon)

	ADULT DOSE	PEDIATRIC DOSE	ONSET	PEAK	DURATION	NOTES
Lorazepam (Ativan)	1mg – 2mg IV or	0.05mg/kg – 0.1mg/kg IV slowly over 2-5 mins. Titrate dose to desired effects. Dilute with equal volume of NSS	Rapid	15-20 minutes	Amnestic effect: 6-8 hours	
Diazepam (Valium)	2-5mg IV, or 2–10mg PO	0.1-0.2mg/kg IV. Inject slowly: less than 1-2mg/min IV push. Titrate to desired effect	IV 1-5mins PO 15-60 mins	8 mins	30 mins to one hour, May be up to 24 hours	
Midazolam (Versed)	0.5-2.5mg IV, slowly over two minutes	0.05-0.2mg/kg IV titrate dose to desired effect. Total maximum IV dose = 0.6mg/kg	1-5 mins	Rapid	30 mins to one hour. May last 2-6 hours	DO NOT administer to patients with acute narrow-angle glaucoma and shock
Precedex (NO REVERSAL AGENT)	0.5-1 mcg/kg over 10 mins.	Not Indicated	5-10 mins	15-30 mins	60-120 mins	ADVERSE EFFECTS: Bradycardia and Sinus Arrest, Hypotension, Transient HTN. Use cautiously in patients with advanced heart block or severe ventricular dysfunction. NO REVERSAL AGENT

NARCOTICS: Opioids produce analgesia and sedation. Adverse effects include respiratory depression, hypotension, airway obstruction, bradycardia, cardiac arrest, and seizures.

REVERSAL AGENT: Naloxone (Narcan)

	ADULT DOSE	PEDIATRIC DOSE	ONSET	PEAK	DURATION	NOTES
Morphine Sulfate	2-5mg IV, slowly	0.05-0.1mg/kg IV. Titrate to desired effect	Rapid (1-3 mins)	20 mins	1-2 hours	
Dilaudid (Hydromorphone)	0.5-1mg IV, slowly over 2-3 mins	0.01mg/kg – 0.02mg/kg IV, slowly	5 mins	10-20 mins		2mg Dilaudid = 10mg of Morphine
Fentanyl (Sublimaze)	25-50mcg. Over 1-2mins	1-2mcg/kg as a slow IV bolus (Rapid infusion may cause skeletal muscle and chest wall rigidity). Titrate dose to desired effect	1-3mins	3-5 mins	30 mins to 1 hour	

<p><u>ANESTHESIA:</u> Anesthetic agents act upon the brain to produce general anesthesia, which is partial or complete loss of sensation with loss of consciousness. Since anesthesia may result in partial or complete loss of protective reflexes. <u>These medications must be administered in any of the ICU settings and Emergency Department, in the direct supervision of the OPERATOR (Physician), or administered by an anesthesia provider.</u></p>						
	ADULT DOSE	PEDIATRIC DOSE	ONSET	PEAK	DURATION	NOTES
Ketamine (Ketalar)	0.5-2mg/kg IV 3-4mg/kg IM	IV: 0.5-1mg/kg/dose IM: 2-5mg/kg/dose	IV 40 seconds IM 3-4 mins	IV 5-10 mins IM 12-25 mins	1-2 hours	Monitor patient for emergent reactions including vivid dreams, or hallucinations. Consider premedication (Midazolam) to reduce potential for symptoms NO REVERSAL AGENT
Etomidate	0.1– 0.3mg/kg IV over 30-60seconds. Followed by 0.05mg/kg every 3-5 mins, as needed		30-60 seconds	1-2 mins (depends upon dose)	3-10mins	Precautions: Not intended for prolonged infusion; marked hypotension, severe asthma, and severe cardiovascular disease
Propofol (Diprivan)	1-2 mg/kg IV Bolus administered in 10mg increments over several minutes		40seconds	1min	5-10mins	Strict aseptic technique must be maintained in handling, as Diprivan is preservative free and will support bacterial growth. Discard after opened for 6 hours. Reduce dose in elderly, hypovolemic, and high risk patients. Potentiation occurs when combined with narcotic analgesics and CNS depressants. NO REVERSAL AGENT
REVERSAL AGENTS						
	ADULT DOSE	PEDIATRIC DOSE	ONSET	PEAK	DURATION	NOTES
Naloxone (Narcan)	0.01-0.1mg/kg IV 0.4 – 2 mg IV	<u>≤ 5 years old or ≤ 20kg:</u> 0.1mg/kg/dose, may repeat q 2-3 mins if needed (MAX DOSE: 2mg) <u>>5 years old or >20kg:</u> 2mg				Adverse effects: Hyper- or Hypotnesion
Flumazenil (Romazicon)	0.2mg over 30 seconds IV	0.01mg/kg IV (max dose 0.2mg)				Adverse effects: Seizures, arrhythmia, dizziness, headahces, and agitation

**ATTACHMENT VI
PROCEDURAL SEDATION QUALITY MONITORING FORM**

*Directions: **To be completed by Monitor and submitted to unit Quality Management Department.***

PATIENT NAME: _____ DATE OF BIRTH: _____

MEDICAL RECORD #: _____ DATE OF PROCEDURE: _____

LOCATION OF PROCEDURE: _____

PROCEDURE PERFORMED: _____

PROCEDURE PERFORMED BY (CREDENTIALLED PROVIDER/OPERATOR): _____

PROCEDURE MONITORED BY (REGISTERED NURSE): _____

Patient reassessed by physician immediately prior to sedation time? <input type="checkbox"/> Yes <input type="checkbox"/> No Emergency Physician completed ePower Doc Procedure Notes? <input type="checkbox"/> Yes <input type="checkbox"/> No	Procedure is: <input type="checkbox"/> emergent <input type="checkbox"/> elective <input type="checkbox"/> urgent
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Respond to "YES" and "NO" boxes. If triggers checked, MUST write a comment.

MAJOR TRIGGERS			
	YES	NO	COMMENTS
1. Death			
2. MI/Stroke/Aspiration pneumonia during procedure			
3. Endotracheal tube placement during procedure			
4. Sedation on patients with Down's Syndrome or Halo brace			
5. Unexpected admission following outpatient procedure			
6. Violation of NPO status on Elective cases (Clear Liquids less than 4 hours--- Non clear liquids, light solids less than 6 hours)			
7. Use of any anesthetic agents for Moderate Sedation (Use of these drugs by Emergency Medicine physician does not constitute a trigger, but please indicate if any drug below was used) Anesthetic: <input type="checkbox"/> Propofol <input type="checkbox"/> Precedex <input type="checkbox"/> Ketamine <input type="checkbox"/> Etomidate			
Reversal Agent Used	YES	NO	COMMENTS
8. <input type="checkbox"/> Naloxone <input type="checkbox"/> Flumazenil <input type="checkbox"/> Other _____			
MINOR TRIGGERS			
Airway Management	YES	NO	COMMENTS
9. Oxygen was used during procedure (NO USE of Oxygen is a trigger)			
10. Oxygen saturation LESS THAN 90% at any time			
11. Airway intervention performed: Ambu bag with mask. Insertion or oral, airway, chin lift			
Cardiovascular Assessment/Treatment	YES	NO	COMMENTS
12. Hypertension: Systolic BP>180 / Diastolic BP >110 (pre-procedure)			
13. Hypotension requiring medical intervention (e.g. fluids, vasopressors)			