Saskatoon Health Region	Policies and Procedures Title: MODERATE SEDATION FOR ADULTS (Age 18 Years & Older) I.D. Number: 1132
Authorization: [X] SHR Nursing Practice Committee	Source: Nursing Date Revised: November, 2008 Date Effective: May 2002 Scope: Saskatoon City Hospital Royal University Hospital St. Paul's Hospital

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PREAMBLE

The term 'Sedation and Analgesia' describes the administration of medication to alleviate anxiety and pain during short-term diagnostic, therapeutic, or surgical procedures, e.g. endoscopy, emergency procedures, ambulatory care procedures. The term 'conscious sedation' was redefined in 2001 by the American Society of Anesthesiologists (ASA) as 'moderate' sedation to emphasize that sedation is on a continuum. Sedation occurs on a continuum, with minimal sedation at one end and general anesthesia at the other.

The purpose of this guideline is to provide patients with the benefits of Moderate Sedation/Analgesia while minimizing the associated risks. This guideline will provide safe, effective criteria for the administration and monitoring of intravenous moderate sedation.

INTRODUCTION

Moderate or deep sedation/analgesia may be used to reduce the distress and pain associated with diagnostic and therapeutic procedures.

In children and uncooperative adults, it may expedite the conduct of procedures that are not particularly uncomfortable but require the patient to be immobile.

The drugs will vary in the intensive care settings. These guidelines do not encompass all drugs used for moderate/deep sedation/analgesia, but focuses on the drugs commonly used on the wards and in ambulatory care.

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.

Moderate Sedation: a drug-induced depression of consciousness during which the patients respond purposefully (reflex withdrawal from a painful stimulus is not considered a purposeful response) 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 the patient cannot be easily aroused but responds purposefully following repeated or painful stimulation. The patient may require assistance in maintaining a patent airway. Cardiovascular function is usually maintained. Regardless of the intended level of sedation or route of administration, sedation represents a continuum and protective reflexes may be lost. The patient may move from light sedation to obtundation rapidly and unpredictably. Most procedures that are painful or need the individual to be completely immobile will require the individual to be deeply sedated.

CONTINUUM OF DEPTH OF SEDATION

	Minimal Sedation (Anxiolysis)	Moderate Sedation/ Analgesia	Deep Sedation/ Analgesia	General anesthesia
Responsiveness	Normal response to verbal stimulation	Purposeful response to verbal or tactile stimulation	Purposeful response following repeated or painful stimuli	Unarrousable even with painful stimulus
Airway	Unaffected	No intervention required	Intervention may be required	Intervention often required
Spontaneous ventilation	Unaffected	Adequate	May be inadequate	Frequently inadequate
Cardiovascular function	Unaffected	Usually maintained	Usually maintained	May be impaired

From ASA (1999). Continuum of depth of sedation. Accessed from www.asahq.org

1. PURPOSE

1.1 To provide effective, standardized guidelines for the safe administration, monitoring, recovery, and discharge of patients who have received sedation/analgesia in ambulatory or inpatient settings.

2. POLICY

Intravenous procedural sedation may be used to reduce the pain and distress associated with diagnostic and therapeutic procedures.

Follow specific medication administration and monitoring guidelines as outlined in the SHR IV Medication Reference Manual.

2.1 **Definition**

Moderate sedation utilizes IV analgesics and sedatives to produce a depressed level of consciousness in which the patient:

- Retains independent ability to maintain patent airway
- Responds appropriately to physical or verbal stimulation

2.2 Qualified Personnel

- Intravenous sedation may be administered by a **physician** with a licensed health care professional in attendance **or by an RN with a physician in attendance**. The RN **must** also be certified in Direct IV Push Medication.
 - ❖ Licensed Practical Nurses (LPN) do not have the advanced level of knowledge required to administer direct IV push medication.
- Licensed personnel monitoring sedation/analgesia must have an understanding of the drugs administered, the ability to monitor the patient's response to the medications given, and the skills necessary to intervene in managing all potential complications.
- Monitoring must be provided by licensed personnel other than those who are performing the procedure.

Note: Whenever propofol is used for sedation/anesthesia, it should be administered only by persons who are: (1) trained in the administration of drugs that cause deep sedation and general anesthesia, (2) able to intubate the patient if necessary, and (3) not involved simultaneously in the procedure itself.

2.3 Exclusion Criteria

- 2.3.1 This guideline will not apply to the following circumstances:
 - the administration of pre-operative medications
 - analgesic therapies (e.g. for the unsupervised treatment of pain, etc.)
 - sedation therapies (e.g. required for the unsupervised treatment of insomnia, etc.)
 - local anesthesia only
 - patients who are intubated and mechanically ventilated while located in a critical care unit
 - psychiatric population requiring sedation as a component of their treatment plan (e.g. delirium, or extreme agitation)

3. PROCEDURE

3.1 **INPATIENT**

Pre-Procedure		Intra-Procedure		Post-Procedure		Recovery Criteria
•	Review patient history to identify co morbid	 Pre-oxygenation is 	•	Ensure Resuscitative	•	Patients return to
	medical disorders, medications, allergies or prior	recommended. (low flow O2		equipment (suction and O2)		pre-procedure:
	drug reactions	per nasal prongs)		and qualified personnel (see		o LOC
•	If patient NPO for procedure, document last	Maintain continuous IV access.		1.2) remain available.		Vital signs
	oral intake	Follow specific medication	•	Monitor patient and		o Or as
•	Medical/Surgical flow sheet shift assessment	monitoring guidelines as		document as per SHR IV		expected for
	must be completed prior to procedure	outlined in the SHR IV		Medication Reference		procedure
•	Obtain baseline vital signs	Medication Reference		Manual <u>or</u> LOC, HR, BP, SpO2		
•	Ensure patent IV access	Manual.		for a minimum of q15min for		
•	Ensure treatment area allows for easy access to	Continuous monitoring of SpO2		30 minutes or until recovered		
	the patient in the event of respiratory or	and HR will be done		for whichever is greatest.		
	circulatory collapse.	throughout the procedure.	•	If reversal agent is used,		
•	Appropriate documentation records (e.	Constant observation of respiratory status, color and		monitor patient as above for		
	Progress notes, vital sign records) to be at the bedside.	respiratory status, color and LOC will be done throughout		120 minutes post reversal agent		
_	Equipment/supplies	the procedure.		ageni		
•	Ordered sedation or analgesic doses	 Documentation of the 				
	with additional doses	patient's tolerance of the				
	Appropriate reversal agent	procedure, LOC, HR, BP, RR,				
	Supplemental oxygen	SpO2 for a minimum of q 15				
	 Oral and tracheal suction apparatus 	min.				
	(set-up and test function)					
	 Non invasive blood pressure monitor 					
	Pulse oximeters	Note: Sedation represents a				
	 Resuscitative equipment to be 	continuum. The patient may				
	available:	move easily from a light level of				
	 Size appropriate airway 	sedation to deep sedation. Deep				
	management equipment	sedation requires increased				
	including oral airways, face mask	monitoring of vital signs and				
	and manual ventilation device	assistance with airway and/or				
	Code cart	breathing. Patient may require				
	ECG monitor (drug/patient	drug reversal agents.				
	indicated)					

3.2 **OUTPATIENT**

Pre-Procedure	Intra-Procedure	Post-Procedure	Discharge Criteria
 Obtain patient history to identify co morbid medical disorders, medications, allergies or prior drug reactions Ensure patient NPO is for procedure, document last oral intake Provide pre & post procedure teaching, include signing Release & Indemnification form #102532 Obtain baseline vital signs Establish IV access Ensure treatment area allows for easy access to the patient in the event of respiratory or circulatory collapse. Appropriate documentation records: "Procedural Sedation/Analgesia Record" #102740 or other approved SHR form, Endoscopy # 101267 Equipment/supplies Ordered sedation or analgesic doses with additional doses Appropriate reversal agent Supplemental oxygen Oral and tracheal suction apparatus (set-up and test function) Non invasive blood pressure monitor Pulse oximeters Resuscitative equipment to be available:	 Pre-oxygenation is recommended. (low flow O2 per nasal prongs) Maintain continuous IV access. Follow specific medication monitoring guidelines as outlined in the SHR IV Medication Reference Manual. Continuous monitoring of SpO2 and HR will be done throughout the procedure. Constant observation of respiratory status, color and LOC will be done throughout the procedure. Documentation of the patient's tolerance of the procedure, LOC, HR, BP, RR, SpO2 for a minimum of q 15 min. Note: Sedation represents a continuum. The patient may move easily from a light level of sedation to deep sedation. Deep sedation requires increased monitoring of vital signs and assistance with airway and/or breathing. Patient may require drug reversal agents. 	 Ensure Resuscitative equipment (suction and O2) and qualified personnel (see 1.2) remain available. Monitor patient and document as per SHR IV Medication Reference Manual or LOC, HR, BP, SpO2 for a minimum of q15min for 30 minutes or until recovered for whichever is greatest. If reversal agent is used, monitor patient as above for 120 minutes post reversal agent 	The Patient may be discharged when: The patient is conscious & responds appropriately. Vital signs are +/- 20% of preprocedure vital signs. Respirations are regular & SpO2 levels are >92% on room air. Motor function has returned to pre-procedure levels, and the patient is able to sit up or ambulate without dizziness. Pain & nausea are controlled, or is consistent with procedure preformed. Procedure site is dry & clean without evidence of active or unexpected bleeding & CSM is adequate. Verbal & written discharge instructions and information pamphlet have been given to the patient and/or caregiver. Discharge instructions should include but are not limited to: Physician contact information for post-procedure problems & review of release & indemnification for information.

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