MONITORING FOR IV OPIOID-INDUCED SEDATION AND RESPIRATORY DEPRESSION

PURPOSE
Sedation is recognized as an adverse effect of IV opioid analgesia and advancing sedation has been identified as a precedent to clinically significant respiratory depression. Nurses should systematically assess and document in the medical record the therapeutic response and occurrence of adverse effects during IV opioid administration for pain management. Furthermore, the assessment should lead the nurse to make appropriate decisions about how to proceed with IV opioid administration.

POLICY
A. The assessment and monitoring process after the administration of IV opioids will be explained to patients and/or their representative.

B. Patients and/or their representative will be informed that it may be necessary to awaken the patient in order to assess the effects of the IV opioid medication.

C. Patient representatives will be instructed on the importance of alerting staff to breathing problems or other reactions that may be related to the administration of IV opioids.

D. All patients receiving IV opioids are considered high risk, especially during the first 24 hours of IV opioid therapy. Exceptions to this are patients who are being mechanically ventilated and maintained on IV sedation.

E. Certain factors place some patients at greater risk for adverse effects of medication. Factors including, but not limited to, age, altered liver and kidney function, snoring or a history of sleep apnea, patient weight (obesity may increase apnea or smaller patients may be more sensitive to dose levels of medications), preexisting pulmonary or cardiac disease, history of smoking, receiving other sedating drugs, such as benzodiazepines, antihistamines, sedatives, or other central nervous system depressants, and no recent opioid use or first-time use of IV opioids. The need for more frequent assessment than what is prescribed in this policy is determined by the RN or the physician based on individual characteristics and needs of the patient.

F. Administration of opioids will be communicated during shift report and any other handoffs that occur during the patient’s stay.

G. For the purposes of this policy, stable is defined as scoring a one or a two on the POSS.

H. If Naloxalone or other reversal agents are administered because of increased sedation in a patient receiving IV opioids, a report should be made in the event reporting system.

ASSESSMENT
Assessment of patients receiving IV opioid therapy will include vital signs (blood pressure, pulse, temperature, respiratory rate, pulse oximetry, and capnography when used)

B. respiratory status (using the rise and fall of the patient’s chest to determine the rate, depth, and regularity of respirations, sound of respirations)

C. pain level

D. sedation level using the Pasero Opioid-induced Sedation Scale (POSS)
NOTE: Respiratory rate and respiratory status as described above will be assessed while the patient is at rest, prior to verbal or physical stimulation.
PATIENTS RECEIVING CONTINUOUS IV OPIOID THERAPY (PCA WITH BASAL RATE OR IV OPIOID DRIPS)
A. Patients receiving continuous IV opioid therapy (PCA with basal rate or IV opioid drips) will have continuous capnography monitoring. Exceptions to this are those patients who are receiving only comfort care, end of life, or hospice care.

B. Upon initiation of therapy and after any increase in the basal rate or the infusion rate, assessments will be performed every 15 minutes x 1 hour, then every hour for the first 24 hours of therapy. If the patient is stable, then assessments are performed every 2 hours after the first 24 hours.

C. If the patient scores a 3 on the POSS the patient’s physician will be notified. IV opioid dose may be decreased by 25% to 50% per physicians order. The patient will be monitored every 30 minutes until they demonstrate a sedation level of 2 and acceptable respiratory status.

D. If the patient scores a 4 on the POSS the opioid infusion will be stopped, the Rapid Assessment Team called, and the patient’s physician notified. Naloxalone should be immediately available. Respiratory status and sedation level will be continuously monitored until the patient demonstrates a sedation level of 3, then every 30 minutes until the patient reaches a sedation level of 2 and acceptable respiratory status.

PATIENTS RECEIVING PATIENT INITIATED PCA (NO BASAL RATE)
A. Upon the initiation of therapy and after any increase in dose, patients receiving IV opioids by PCA will be assessed every hour x 4. If the patient is stable, assessments will be completed every 2 hours.

B. If the patient scores a 3 on the POSS the patient’s physician will be notified. IV opioid dose may be decreased by 25% to 50% per physicians order. The patient will be monitored every 30 minutes until they demonstrate a sedation level of 2 and acceptable respiratory status.

C. If the patient scores a 4 on the POSS, the Rapid Assessment Team will be called and the patient’s physician will be notified. Naloxalone should be immediately available. Respiratory status and sedation level will be continuously monitored until the patient demonstrates a sedation level of 3, then every 30 minutes until the patient reaches a sedation level of 2 and acceptable respiratory status.

PATIENTS RECEIVING IV OPIOIDS BY SINGLE DOSES
A. Patients, who receive IV opioids by single doses such as IV push, will be assessed at the peak time of the last opioid dose. If the patient scores a 3 on the POSS the patient’s physician will be notified. The patient will be monitored every 30 minutes until they demonstrate a sedation level of 2 and acceptable respiratory status.

B. If the patient scores a 4 on the POSS, the Rapid Assessment Team will be called and the patient’s physician will be notified. Naloxalone should be immediately available. Respiratory status and sedation level will be continuously monitored until the patient demonstrates a sedation level of 2 and acceptable respiratory status.

PASERO OPIOID-INDUCED SEDATION SCALE (POSS)
S Sleep, easy to arouse—Acceptable; no action necessary; may increase opioid dose if needed
1. Awake and Alert--Acceptable; no action necessary; may increase opioid dose if needed

2. Slightly drowsy, easily aroused--Acceptable; no action necessary; may increase opioid dose if needed

3. Frequently drowsy, arousable, drifts off to sleep during conversation--Unacceptable; monitor respiratory status and sedation level closely until sedation level is stable at 2 and respiratory status is satisfactory; notify prescriber

4. Somnolent, minimal or no response to verbal or physical stimulation--Unacceptable; stop opioid; call Rapid Assessment Team and notify prescriber or anesthesiologist. Monitor respiratory status and sedation level closely until sedation level is stable at 2 and respiratory status is satisfactory.