Demonstrate how the state Nurse Practice Act, other regulatory stipulations and professional standards are incorporated into the development, implementation and evaluation of profession models of care.

As described in the Professional Practice Model in Force 1.1, Standards of Practice provide the scientific rationale to support practice. The process by which the Massachusetts Nurse Practice Act, regulatory guidelines and professional standards are incorporated into the Professional Practice Model is articulated through the department’s nursing policies and procedures.

The “Forward to the Practice Manual” (attachment 5.2.a) outlines the structure, process and outcomes standards used to define the scope of nursing practice within the organization. As defined in the Practice Manual, standards are broad statements that describe the full scope of professional practice. “Structure standards” focus on the environment in which nurses’ practice and are often written as policy. “Outcome standards” focus on expected changes in a patient’s health and/or knowledge status. “Process standards” define care-providing activities in terms of standards of practice and standards of care as follows:

A Standard of Practice is an authoritative statement that describes a level of care or performance common to the profession of nursing by which the quality of nursing practice can be judged. These include both Standards of Care and Standards of Professional Performance.

A Standard of Care describes a competent level of care demonstrated by a process of accurate assessment and diagnosis, planning, appropriate interventions, and predicted patient outcomes.

A Standard of Professional Performance describes a competent level of behavior in the professional role including activities related to quality, education, consultation, research, ethics, resource utilization, accountability, peer review and interdisciplinary collaboration.

Force 13.16 describes the process by which clinical and administrative policies and procedures are developed, implemented and evaluated. The “Department of Nursing Policies” (Force 13.16) describes the process by which administrative policies and procedures are developed, implemented and evaluated. Clinical polices and procedures impacting nursing practice are reviewed, approved and disseminated through the Nursing Practice Committee. This Collaborative Governance committee is co-chaired by two Staff Nurses with a Clinical Nurse Specialist serving as a coach and resource. Attachment 5.2.b is the worksheet used by the Nursing Practice Committee as a guide to develop new policies and procedures.
The following are two examples demonstrating how the Nurse Practice Act, regulations and professional standards are incorporated into practice. One example illustrates the use of these standards in the development and implementation of administrative policies. The other looks at the way standards are incorporated into the development of clinical polices and procedures.

**Nursing Position Descriptions**

Position descriptions at MGH are based on the legal scope of practice identified in the Massachusetts Nurse Practice Act and regulations set forth by the Massachusetts Board of Registration in Nursing (BORN), which define roles and delegation and supervision standards, as described in Force 5.1.

Each position description begins by outlining the responsibility and accountability for patient care within each specific role. The Nurse Practice Act describes the scope of practice for licensed Registered Nurses in the Commonwealth of Massachusetts. *Each individual licensed to practice nursing in the Commonwealth shall be directly accountable for the nursing care s/he delivers.* The practice of Registered Nurses shall include, but not be limited to:

- **the application of nursing theory to the development, implementation, evaluation and modification of plans of nursing care for individuals, families and communities;**
- **coordination and management of resources for care delivery;**
- **management, direction and supervision of the practice of nursing, including the delegation of selected activities to unlicensed assistive personnel.**

The Staff Nurse position description (OOD 23e) states that the nurse is responsible and accountable for the overall nursing care management of his/her patient assignment. It also outlines the nurse’s role in communication and delegation to assure appropriate care is delivered by other members of the team. The Patient Care Associate position description (OOD 23f) begins with the statement, “Under the direction of a Registered Nurse”, which defines the supervisory relationship between these two team members and addresses the aspects of delegation and scope of practice.

The Statement of Accountability (Force 5.1) supports the individual position descriptions by describing the Registered Nurse’s responsibility for nursing care and for the coordination and implementation of the collaborative aspects of care for each patient. The statement further describes the Registered Nurse’s role in determining patient needs and assigning care to other members of the team based on this assessment and the qualifications and level of competence of team members.
The following statements from the Staff Nurse position description support the State’s practice standards. The Staff Nurse:

- **Is a Registered Nurse who is responsible for assuring competent, compassionate nursing care for specific patients and families, including delegation to and supervision of non-professional and support staff.**
- **Collaborates with other professionals and directs non-professional nursing personnel in maintaining recognized standards.**
- **Teaches and directs all nursing personnel for whom he/she is responsible.**
- **Interprets hospital and departmental policies and procedures to nurses and other health team members.**

The specific roles and responsibilities of unlicensed assistive personnel are also clearly described in the Patient Care Associate (PCA) position description. This position description outlines the scope of practice for this unlicensed position. Roles and responsibilities are described in terms of **assists with and accepts responsibilities that are delegated by the Registered Nurse.** A PCA Skills/Task list (attachment 5.2.c) has also been developed for the Registered Nurse Orientation Manual to help define the skills and tasks that are within PCA scope of practice at MGH.

In addition, the Competence of Licensed and Unlicensed Personnel policy (attachment 5.2.d) addresses how competence is assessed and maintained for licensed clinicians and unlicensed personnel. The policy states that the manager is accountable for assessment of staff competency. It states that the competence of licensed clinicians and unlicensed personnel is maintained through both ongoing competence assessment and educational activities. The policy also specifies the documentation required of competence assessment for both licensed clinicians and unlicensed personnel.

Job performance and compliance with these standards is evaluated on an ongoing and annual basis. The Required Training policy that states that Department of Nursing staff is prepared for their responsibilities through appropriate orientation, education, and training programs. This document lists the required training by job code based on the scope of practice for each position. An annual competency assessment and required training report is completed by the manager and attached to the performance appraisal at the time of annual evaluation. The required competencies are reviewed annually through The Norman Knight Nursing Center for Clinical & Professional Development. Required training and competencies was described in full in Force 4.18.
Palliative Sedation

Regulations and standards are also used to develop clinical policies and procedures that define evidence-based practice and standards of care. Each patient care policy and procedure at MGH is based on established practice guidelines that set a level of expectation for care delivery within the organization. Policies and procedures are reviewed and updated at least every three years or whenever new regulations or improvements in care are made available. A recent change to the Hospital’s policy and procedure on palliative sedation demonstrates how standards are incorporated into practice.

With advancements made in the use of continuous infusion benzodiazepines, an interdisciplinary team of clinicians, including the Clinical Nurse Specialist from the Nursing Practice Committee, a Nurse Practitioner from the Palliative Care Service and a Pharmacist came together to review the hospital’s procedure on “Palliative Sedation: Sedation for Intractable Distress for the Dying Patient Using Continuous Intravenous Infusion of Pentobarbital or Propofol.” After a review of the literature and a review of current practice standards (attachment 5.2.e), the team incorporated the use of benzodiazepine continuous infusion into the current policy and procedure related to palliative sedation.

The new procedure details the applicable Hospital policies and defines the accountability of the Registered Nurse. Prior to implementation in April 2007, the revised procedure (attachment 5.2.f) was reviewed and approved by the Nursing Practice Committee and the Hospital’s Medical Education Safety and Approval Committee.
The purpose of this manual is to communicate to nursing staff some of the standards that provide the framework for nursing practice at the Massachusetts General Hospital. All documents within this manual have been approved by the Patient Care Services Executive Committee or its designee. The dates of review, revision and approval, are recorded in the lower left corner of each document. The most recent approval date is on the Table of Contents. Materials are reviewed as often as necessary, but at least every three years. All documents are kept on file for a three-year period prior to the date of last review.

The manual is organized under structure, process, and outcome standards. Standards are defined as broad statements that describe the full scope of professional practice.

**STRUCTURE STANDARDS** focus on the environment in which nurses practice and are often written as policy:

- Describe the physical, organizational and other characteristics of hospital relating to the provision of nursing care;
- Describe the conditions that allow or provide for quality of care;
- Define conditions and mechanisms needed to operate, direct and control a department, service or unit.

**PROCESS STANDARDS** define care-providing activities:

- **Standard of Practice:** An authoritative statement that describes a level of care or performance common to the profession of nursing by which the quality of nursing practice can be judged.
- Standards of nursing practice include both Standards of Care and Standards of Professional Performance.
- **Standard of Care:** Describe a competent level of care demonstrated by a process of accurate assessment and diagnosis, planning, appropriate interventions, and predicted patient outcomes.
- **Standards may be written as:**
  - Procedures: Describe a series of recommended actions for the completion of a specific task or function.
  - Guidelines: Describe a process of care management with recommended interventions to accomplish desired outcomes.
Protocols:  Describe the plan for the interdisciplinary collaborative management a patient.

Instructions: Describe the use of forms.

- **Standard of Professional Performance**: Describe a competent level of behavior in the professional role including activities related to quality, education, consultation, research, ethics, resource utilization, accountability, peer review and interdisciplinary collaboration. Include position descriptions and performance appraisals.

**OUTCOME STANDARDS** focus on expected changes in a patient's health and/or knowledge status, which are achievable during the patient's anticipated length of stay (or other time frame) as a direct result of the nursing care delivered. MGH Standards of Care may include an outcome statement.

Revised and approved: Department of Nursing 7/00
Revised and approved: Nursing Executive Operations 08/03
Revised and approved: Nursing Executive Operations 08/06
Attachment 5.2.b

Department of Nursing: Policy Review Form

Title of policy: ____________________________________________
Date review initiated: ________________________________
Date review completed: ________________________________

<table>
<thead>
<tr>
<th>Review for: (as appropriate)</th>
<th>Supporting Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>❑ Relevance to other policies/procedures</td>
<td></td>
</tr>
<tr>
<td>❑ Relevance to Nursing Standards of care/Standards of Practice</td>
<td></td>
</tr>
<tr>
<td>❑ Consistency with current practice</td>
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<tr>
<td>❑ Ethical and legal concerns</td>
<td></td>
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<tr>
<td>❑ Current scientific knowledge</td>
<td></td>
</tr>
<tr>
<td>❑ Findings from QA</td>
<td></td>
</tr>
</tbody>
</table>

Taken to the following committees for review and approval (as appropriate):

| ❑ Nursing Practice Committee                                      | Dates and committee actions                      |
| ❑ Quality Committee                                               |                                                  |

Other: (Medical Staff/Hospital)

❑
❑

Disposition of policy/procedure:

| ❑ Revised                                                        | Distribution/filed:                             |
| ❑ Deleted                                                        |                                                  |
| ❑ Reviewed - no changes needed                                   |                                                  |
### PATIENT CARE ASSOCIATE SKILLS/TASKS

<table>
<thead>
<tr>
<th>Location Specific:</th>
<th>Site Specific:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Responsibilities:</strong></td>
<td><strong>Psychiatric Patient Care Associate</strong></td>
</tr>
<tr>
<td>- Data specimen collection</td>
<td>- Performs extensive wound care: designated units</td>
</tr>
<tr>
<td>- Urine/hemoccult testing/sputum</td>
<td>- Performs urinary catheterizations (age specific competencies required)</td>
</tr>
<tr>
<td>- Blood glucose monitoring</td>
<td>- Removal of tubes and lines: urinary catheters, IV lines, arterial lines (not femoral)</td>
</tr>
<tr>
<td>- Assists with admission/discharge process</td>
<td>- Doppler pulses: designated units</td>
</tr>
<tr>
<td>- Orient patient to surroundings</td>
<td>- Sets up and preparation of lines and equipment requiring aseptic technique: transducers, priming of tubing for line changes and flushes, infusion pumps, chest tube drainage system</td>
</tr>
<tr>
<td>- Vital signs</td>
<td>- Assists with IV catheter tip cultures</td>
</tr>
<tr>
<td>- Safekeeping of patient valuable</td>
<td>- Assists with peripheral, arterial and pulmonary artery line insertion</td>
</tr>
<tr>
<td>- Packing of patient's belongs</td>
<td>- Checks unit emergency equipment: locks travel boxes for completeness and integrity</td>
</tr>
<tr>
<td>- Checks patients for ID bands</td>
<td>- Non-invasive vital signs</td>
</tr>
<tr>
<td>- Activities of daily living</td>
<td>- Trach care</td>
</tr>
<tr>
<td>- Routine treatments</td>
<td>- Chest tube dressing for sutured chest tube</td>
</tr>
<tr>
<td>- Suture line care</td>
<td>- A-line dressing for sutured A-line</td>
</tr>
<tr>
<td>- Tube care/Foley care</td>
<td>- Assists with chest physical therapy</td>
</tr>
<tr>
<td>- Ostomy care on established ostomy</td>
<td>- Oropharyngeal suctioning with Yankauer</td>
</tr>
<tr>
<td>- Applies compression boots/teds</td>
<td>- Blood withdrawal from non-heparinized A-line</td>
</tr>
<tr>
<td>- Simple dressings</td>
<td>- PCIS</td>
</tr>
<tr>
<td>- Preventative skin care</td>
<td>- Sets up room/cubicle for admissions</td>
</tr>
<tr>
<td>- Assists with deep breathing/coughing</td>
<td>- Ambulating in the presence of healthcare professional</td>
</tr>
<tr>
<td>- Removes and applies splints/devices</td>
<td>- Discontinues short peripheral IV catheters</td>
</tr>
<tr>
<td>- Assists patients with positioning, turning, mobilization, and passive and active ROM per plan</td>
<td>- Performs simple dressings</td>
</tr>
<tr>
<td>- Feeds patients</td>
<td>- Phlebotomy</td>
</tr>
<tr>
<td>- Sets up food trays</td>
<td>- Responds to call lights</td>
</tr>
<tr>
<td>- Charts intake of fluids, food and output</td>
<td>- Assists RN with plan of care</td>
</tr>
<tr>
<td>- 12 lead ECG</td>
<td>- Preparation of patient</td>
</tr>
<tr>
<td>- Set-up equipment</td>
<td>- Retrieving equipment</td>
</tr>
<tr>
<td>- Cardiac monitors</td>
<td>- Assists RN with plan of care including ambu</td>
</tr>
<tr>
<td>- Tube feeding/tubing</td>
<td>- Provide constant observation for suicidal/homicidal patients</td>
</tr>
<tr>
<td>- Portable oxygen cylinder</td>
<td>- Pulse Volume Recorder (PVR): designated units</td>
</tr>
<tr>
<td>- Nasal cannula</td>
<td>- Continuous Passive Motion (CPM): designated units</td>
</tr>
<tr>
<td>- Simple Venturi mask</td>
<td>- Ambulating in the presence of healthcare professional</td>
</tr>
<tr>
<td>- Aerosol nebulizer system</td>
<td>- Discontinues short peripheral IV catheters</td>
</tr>
<tr>
<td>- Pulse oximetry</td>
<td>- Performs simple dressings</td>
</tr>
<tr>
<td>- Suction canister-liner system</td>
<td>- Phlebotomy</td>
</tr>
<tr>
<td>- Ambulating in the presence of healthcare professional</td>
<td>- Responds to call lights</td>
</tr>
<tr>
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<td>- Assists RN with plan of care</td>
</tr>
<tr>
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<td>- Preparation of patient</td>
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<td>- Sets up room/cubicle for admissions</td>
</tr>
</tbody>
</table>

**Notes:** These roles are consistent with the application of professional delegation as outlined in the Board of Registration in Nursing and Nurse Practice Act.
TITLE: COMPETENCE OF LICENSED AND UNLICENSED PERSONNEL

POLICY: The manager is accountable for assessment of staff competency. A manager may delegate this function to a designee who is skilled in competency assessment.

COMPETENCE OF LICENSED CLINICIANS

The competence of licensed clinicians who practice at Massachusetts General Hospital is maintained through a combination of ongoing competence assessment and educational activities. Documentation of competence assessment is required and includes the following elements:

A. Licensure
B. Completion of a competency based orientation with a preceptor
C. Performance appraisal
D. Annual required training
E. Hospital, departmental and/or unit-specific competency achievement
F. Management of age specific needs of patients (Attachment A – Available on-site)
G. In-service and educational activities
H. Completion of cross-training (if applicable)

Optional Element:

I. Professional certification

COMPETENCE OF UNLICENSED PERSONNEL

POLICY: The competence of unlicensed personnel who practice at Massachusetts General Hospital is maintained through a combination of ongoing competence assessment and educational activities. Documentation of competence assessment is required and includes the following elements:

A. Completion of a competency based orientation
B. Performance Appraisal
C. Annual required training
D. Hospital, departmental and/or unit-specific competency achievement
E. Age-specific care of patients (Attachment B – Available on-site)
F. In-service and educational activities
G. Completion of cross-training (if applicable)

ADMINISTRATIVE PROCEDURE:

1. Annually, The Knight Nursing Center for Clinical and Professional Development will coordinate review and/or revision of competencies to be assessed.
2. The Knight Nursing Center will communicate the competencies to clinical leadership prior to the implementation time-line.

3. The manager will designate an evaluator(s) for his/her practice area.

4. The evaluator will document on the Annual Competency Assessment and Required Training Record, the employee’s ability to meet identified competencies. The remainder of Record will be completed by each employee and reviewed by the evaluator at the time of performance evaluation.

5. The Annual Competency Assessment and Required Training Record will be attached to the completed Performance Appraisal at the time of evaluation and retained in the employee’s file in Staff Records. (See Performance Evaluation policy in the Human Resources Policy and Procedure Manual, http://is.partners.org/hr/manual/manual/manual/performance.htm)

Revised and approved: Department of Nursing  8/20/02
Revised and approved: Nursing Executive Operations 08/06
References: Palliative Sedation Policy and Procedure


Attachment 5.2.e continued


Lo, B., & Rubenfeld (2005). Palliative sedation in Dying patients; ‘we turn to it when everything else fails’” *JAMA*, 294(14), 1810-1816.


National Ethics Committee of Veterans Health Administration (2006). The Ethics of Palliative Sedation.


Massachusetts General Hospital  
Department of Nursing  
Pharmacy  
Palliative Care

Title: PALLIATIVE SEDATION: Sedation for Intractable Distress of a Dying Patient  
Using Continuous Intravenous Infusion of Pentobarbital or Propofol  
&  
Benzodiazepine Continuous Infusion for Severe Distress of a Patient with a  
Life-Threatening Illness

Level of Personnel: RN  
Designated Clinical Areas: All

Definition

Palliative sedation is the use of sedating medication to relieve a dying patient’s severe symptoms that cannot be controlled adequately without sedation despite aggressive efforts. Palliative sedation is intended only to relieve refractory distress, not to hasten death. It is recognized, however, that death may be hastened as an unintended, but foreseeable side effect of palliative sedation. Because of this risk of hastening death, palliative sedation must be used only for a proportionally grave reason: to relieve the severe, refractory distress of a dying patient.

Applicable Policy Statements

1. The patient must have a severe, chronic, life-threatening illness such as, but not limited to, advanced incurable cancer: end stage major organ failure; advanced AIDS; advanced neuromuscular disease; or advanced dementia.

2. The patient must be distressed by severe symptoms such as, but not limited to, pain, dyspnea, nausea/vomiting or agitation, that are refractory to standard palliative medications, such as opioids, neuroleptics and benzodiazepines.

3. An active order must exist to withhold at least the following life sustaining treatments: Chest compressions, defibrillation, endotracheal intubation, and mechanical ventilation.

4. A consult with Palliative Care Service must be obtained.

5. The attending physician must be in agreement with the plan to provide palliative sedation.

6. Consent must be obtained by the responsible physician, a house officer supervised by the responsible physician, or the Palliative Care consultation. If the patient does not have
capacity to make medical decisions, the consent may be obtained from the surrogate
decision maker (per the MGH life sustaining Treatment policy).

7. A progress note must be written by the responsible physician or by the Palliative Care
consult attending. This note must describe the clinical indication for palliative sedation
and document that informed consent and approval both from the responsible physician
and from the Palliative Care have been attained.

8. It is the expectation that Palliative care would be in attendance when medications are
initiated and during the titration of the medications until the appropriate level of
sedation is achieved.
It is also appropriate to call the Palliative Care NP for support.

Critical Elements

1. Once the desired level of sedation is achieved, the infusion should be reduced to the
lowest rate that maintains the desired level of sedation.

2. After an initial steady dose is found that maintains the desired level of sedation, any
dose adjustment requires documentation of the reason for the adjustment (intention)
and the level of comfort before and after adjustment.

3. Low blood pressure, low respiratory rate or other abnormal vital signs should not lead
to reduction of the infusion rate if the patient exhibits any evidence of pain other
distressing symptoms.

4. The pharmacy should be notified 2 hours before the next bag or bottle is needed to
avoid interruption of the infusion.
Protocol for Palliative Sedation Using Continuous Intravenous Infusion of Pentobarbital or Propofol

**Pentobarbital:**
- **Standard Concentrations:**
  - 1000 mg/250 ml D5W or NS
  - 2000 mg/250 ml D5W or NS

1. Pentobarbital solution should be inspected for precipitation prior to administration. If precipitation is present, the solution should not be used.
2. A loading dose of 2 to 3 mg/kg should be given IV by slow push (no faster than 50 mg/min).
3. A physician should give the loading dose. During loading dosing, a physician and nurse must be present at the bedside and remain there for 15 minutes to observe the effect.
4. Infusion should be started at 1 to 2 mg/kg/hr at the time of the loading dose and titrated to the desired level of sedation.
5. Since tolerance may develop rapidly, the patient’s comfort should be assessed frequently and the infusion rate adjusted if necessary.
6. Dose adjustments are to be made based on evidence of pain or other distressing symptoms and not on vital sign parameters alone.
7. Patients with pain requiring an opioid should continue to receive the opioid.
8. The pentobarbital preparation specified above is stable for 24° at room temperature.

**Propofol**
- **Standard Concentration:** 1000mg/100 ml infusion vial

1. Strict aseptic technique must be used during the administration of propofol. The propofol vial and infusion tubing must be changed every 12 hours and unused drug discarded.
2. Vented tubing must be used.
3. A central venous catheter, peripherally inserted central venous catheter, or peripherally inserted mid-line catheter should be used.
4. Infusion should be started at 2.5 to 5 μg/kg/min (for adults approximately 10 to 20 mg/hr) and titrated to desired level of sedation every 10 minutes by increments of 10 to 20 mg/hr.
5. Bolus doses of 10 to 20 mg every 10 minutes should be used only for rapid control of extreme symptoms.
6. During dose initiation, a physician and nurse must be present at the bedside and remain there for 5 minutes to observe the effects. Any initial bolus doses should be given by a physician. During subsequent doses titration and bolus dosing, a physician or nurse must be present at the bedside and remain there for 5 minutes to observe the effects.
7. Dose adjustments are to be made based on evidence of pain or other distressing symptoms and not on vital sign parameters alone.
8. Patients with pain requiring an opioid should continue to receive the opioid.
9. Because of propofol’s very short duration of action, the infusion should not be interrupted longer than 60 seconds when changing tubing and/or vials.

Administration of a Benzodiazepine Using Continuous Intravenous Infusion for Severe Distress of a patient with a life-Threatening Illness

Level of Personnel: RN
Designated Clinical Areas: All

Administration of a Benzodiazepine Using Continuous Intravenous Infusion

Midazolam

Standard Concentration: 100mg/100ml D5W or NS glass bottle
250mg/250ml D5W or NS glass bottle

1. For a benzodiazepine-naïve patient, a loading dose of 0.03 to 0.05 mg/kg or should be given via slow IV push (over 2 to 5 minutes). The loading dose may be repeated every 5 minutes to achieve desired effect.
2. During loading dosing, a physician must be present at the bedside and remain there for 10 minutes after the final loading dose to observe the effect.
3. Continuous infusion should be started at the time of the loading dose. The recommended starting dose for continuous infusion is 0.02 to 0.1 mg/kg/hr or 1-7 mg/hr. The ideal starting dose for continuous infusion will depend on the patient’s prior exposure to and tolerance for benzodiazepines. The infusion rate should be titrated to the desired level of sedation. A bolus equal to the hourly rate may be given up to every 15 minutes.
4. The IV preparation specified above is stable for 24° at room temperature.
5. Pure drug may be infused when necessary. The floor pharmacist should be consulted for direction.
6. Tachyphylaxis may be seen with prolonged administration and may require the addition of a longer acting benzodiazepine.

Lorazepam

Standard Concentration: 100mg/100ml D5W or NS glass bottle
250mg/250ml D5W or NS glass bottle
(Use 2mg/ml concentration lorazepam for preparation)

1. For a benzodiazepine-naïve patient, a loading dose of up to 0.05 mg/kg (maximum 4 mg) should be given via slow IV push (maximum rate 2 mg/minute). The loading dose may be repeated every 30 minutes to achieve desired effect.
2. During loading dosing, a physician must be present at the bedside and remain there for 15 minutes or until the desired level of sedation is achieved.
3. Continuous infusion should be started at the time of the loading dose. The ideal starting dose for continuous infusion will depend on the patient’s prior exposure to and tolerance
for benzodiazepines. The infusion rate should be titrated to the desired level of sedation. A bolus equal to the hourly rate may be given up to every 30 minutes.

4. The IV preparation specified above is stable for 24° at room temperature.

5. A filter is required.

6. Pure drug may be infused when necessary. The floor pharmacist should be consulted for direction.

7. Prolonged infusions have been associated with propylene glycol toxicity, resulting in hyperosmolality, lactic acidosis, and renal dysfunction. Monitoring of serum osmolality should be considered in patients receiving high doses of lorazepam for prolonged times.

Contact: Constance Dahlin, NP, Palliative Care Service

Approved: Nursing Practice Committee: 6/06
MESAC: 4/07