# Pain Management & Dosing Guide

## Pain Management and Dosing Guide Includes:

- Stepwise Approach to Pain Management and Procedural Sedation
- Non-opioid Analgesics, Opioid Prescribing and Equianalgesic Chart, and Opioid Cross-Sensitivities
- Intranasal and Nebulized Medications
- Procedural Sedation and Analgesia (PSA) Medications
- Pain Management, Discharge and Patient Safety Considerations
- Nerve Blocks, Neuropathic and Muscle Relaxer Medications
- Ketamine Indications and Dosing
- Topical and Transdermal Medications
- Nonpharmacologic and other Interventions

Take a tour of the dosing guide here!

## 7. Monitoring & Discharge Checkpoint

<table>
<thead>
<tr>
<th>Joint Commission standards, reevaluation, patient safety, discharge and transportation considerations</th>
</tr>
</thead>
</table>

## 5. Patient Assessment Checkpoint

Review patient's risk factors and contraindications

## 4. Facility Checkpoint

Type of staffing and setting, team experience, patient volume, etc.

## 3. Family Dynamic Checkpoint

Who is caring for the patient? Who are the family dynamics?

## 1. Situation Checkpoint

What are you trying to accomplish? anaphylaxis, anasthesia, sedation, or procedure.

## Pain Management

### Pain Management Considerations

- **Type of pain**: nociceptive, neuropathic, inflammatory
- **Nociceptive chronic**: vs. acute chronic pain
- **Neuropathic chronic**: vs. acute neuropathic pain
- **Inflammatory**: vs. acute inflammatory
- **Type of medication**: oral, transdermal, systemic, topical
- **Type of intervention**: pharmacologic, nonpharmacologic

### Procedure Sedation and Analgesia Medications

<table>
<thead>
<tr>
<th>Medication</th>
<th>Dosage</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ketamine</td>
<td>0.5-1 mg/kg</td>
<td>Intravenous bolus or continuous infusion</td>
</tr>
<tr>
<td>Midazolam</td>
<td>0.5-2 mg/kg</td>
<td>Intravenous or oral administration</td>
</tr>
<tr>
<td>Opioids</td>
<td>10-100 mcg/kg</td>
<td>Intravenous or oral administration</td>
</tr>
<tr>
<td>benzodiazepines</td>
<td>0.05-0.2 mg/kg</td>
<td>Intravenous or oral administration</td>
</tr>
</tbody>
</table>

### Nerve Blocks

- **Topical and Transdermal Medications**
  - Lidocaine
  - Mepivacaine
  - Bupivacaine
  - ropivacaine
- **Nerve Blocks, Neuropathic and Muscle Relaxer Medications**
  - Capsaicin
  - Lidocaine
  - Bupivacaine

### Non-Opoid Analgesics

<table>
<thead>
<tr>
<th>Medication</th>
<th>Dosage</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetaminophen</td>
<td>10-15 mg/kg</td>
<td>Oral administration</td>
</tr>
<tr>
<td>Ketamine + Propofol</td>
<td>Dose varies based on patient's weight</td>
<td>Intravenous administration</td>
</tr>
</tbody>
</table>

### Other Interventions

- **Additives to help manage pain**
  - Antiemetics
  - vasoconstrictors
- **Relaxation techniques**
  - Guided imagery
  - Music and singing

### Neuropharmacological Interventions (pediatric and adult)*

- **Cognitive-Behavioral Interventions**
  - Distraction tools
  - Cognitive behavioral therapy
  - Relaxation techniques

### Educational Video Pain Guides

- **Send your feedback on all PAMI materials and how you improved your patient safety and clinical care to**
  - emergency.med.jax.ufl.edu/resources/PANEL | Access and adaptable to your institution.
  - emergency.med.jax.ufl.edu/resources/PANEL | All PAMI materials are free access and adaptable to your individual institution.

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For more information on nonpharmacological interventions and nonpharmacological intervention toolkit, visit: [emergency.med.jax.ufl.edu/resources/PANEL](http://emergency.med.jax.ufl.edu/resources/PANEL)

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*Use only if not contraindicated (risk of respiratory compromise)*

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*Requires dose adjustment based on renal function**

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**Varies depending on indication and patient response at time of disposition**

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*Side effects dependent on route of administration*