



**General Medicine:  
PAIN MANAGEMENT  
Medical Protocol**

**Patient Care Goals:**  
 1. Compassionately manage all patients with pain.  
 2. Minimize adverse events in the treatment of pain.

**Patient Presentation:**  
**Inclusion Criteria**  
 All patients with pain may benefit from non-pharmacological intervention.  
 All patients with acute traumatic pain, cancer related pain, or sickle cell crisis with moderate or severe pain should be screened for analgesia administration.  
 Paramedic clinical judgment for other conditions or situations.  
**Exclusion Criteria**  
 None

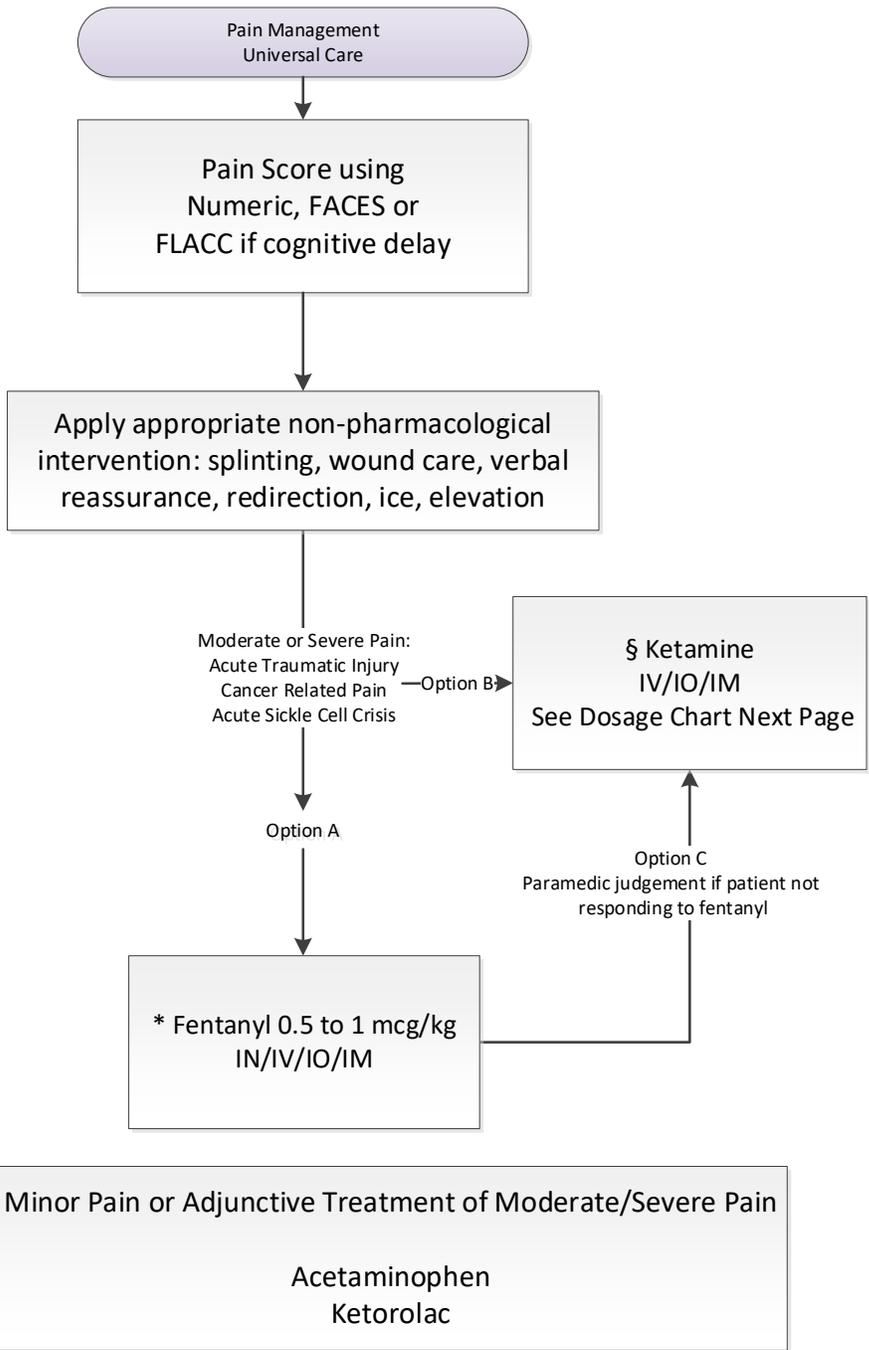
**\* Fentanyl Treatment:**  
 0.5 to 1 mcg/kg to a maximum initial single dose of 100 mcg. Repeat dosing up to a maximum subsequent dose of 100 mcg can be given every 10 minutes.  
 Maximum cumulative dose of 300 mcg over duration of transport if needed.  
 Provider judgement and patient response should guide dosing strategy; caution with hypotension.

**§ Ketamine Treatment:**  
 0.1 mg/kg for IV/IO (dilute 100mg in 100mL; max dose 10mg)  
 0.5 mg/kg for IM (do not dilute; max dose 50mg)  
 Dosing chart next page below for ease of dosing.  
 May repeat q 10mins for a total of 3 doses.  
 Ideal for painful EMS procedure, patients with hypotension or at risk for hypoventilation; PRN alternative to opioids.

**Minor Pain or Adjunctive Treatment:**  
**Acetaminophen**  
 10 to 15 mg/kg max of 1,000 mg PO (can use tablets for larger patients)  
**Ketorolac**  
 Adult dose: 15 mg IV/IO slow push  
 1 mg/kg IM, max dose 60 mg  
 Pediatric dose: 0.5 mg/kg IV/IO slow push, max of 15 mg  
 1 mg/kg IM, max dose 60 mg

**Quality Improvement:**  
 Key Documentation Elements  
 1. Initial and re-occurring pain score (numeric, FACES or FLACC)  
 2. Pulse Oximetry  
 3. ETCO2 as directed  
 4. Subsequent need for BVM or naloxone

**Patient Safety Considerations:**  
 Non-invasive capnography to assess for hypoventilation as needed or directed; use escalation of stimulation, NPA/OPA airway adjunct, BVM and/or naloxone if hypoventilation occurs/continues.



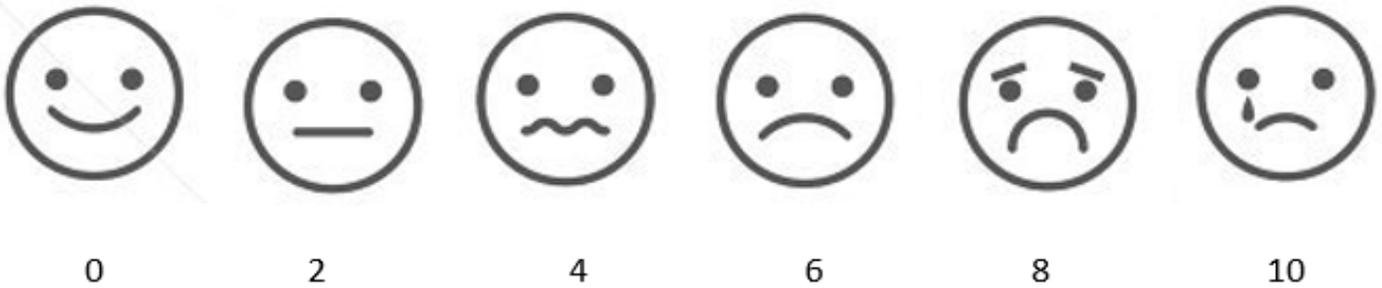


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KETAMINE														
KETAMINE	ADULT DOSE	PEDIATRIC DOSE			ADMINISTRATION GUIDELINE	INDICATIONS	CONTRAINDICATIONS					NOTES		
Weight (kg)	5	10	15	20	25	30	35	40	50	60	70	80	90	100
Dose (mg)	1.5	3	4.5	6	7.5	9	10.5	12	15	18	21	24	27	30
Post Airway Sedation (0.3mg/kg)	1.5 mL	3 mL	4.5 mL	6 mL	7.5 mL	9 mL	10.5 mL	12 mL	15 mL	18 mL	21 mL	24 mL	27 mL	30 mL
<b>Analgesia IM</b>	<b>0.5 mg/kg</b> Max Dose 50 mg			Do not dilute	Pain Control									
	Concentration: 500 mg in 5 mL													
Weight (kg)	5	10	15	20	25	30	35	40	50	60	70	80	90	100
Dose (mg)	0	5	8	10	13	15	18	20	25	30	35	40	45	50
Analgesia (0.5mg/kg)	0 mL	0.1 mL	0.1 mL	0.1 mL	0.1 mL	0.2 mL	0.2 mL	0.2 mL	0.3 mL	0.3 mL	0.4 mL	0.4 mL	0.5 mL	0.5 mL
<b>Analgesia IV/IO SLOW PUSH</b>	<b>0.1 mg/kg</b> Max Dose 10 mg			Dilute 100 mg into 100 mL bag	Pain Control									
	Concentration: Dilute: 100 mg in 100 mL													
Weight (kg)	5	10	15	20	25	30	35	40	50	60	70	80	90	100
Dose (mg)	0.5	1	1.5	2	2.5	3	3.5	4	5	6	7	8	9	10
Analgesia (0.1mg/kg)	0.5 mL	1 mL	1.5 mL	2 mL	2.5 mL	3 mL	3.5 mL	4 mL	5 mL	6 mL	7 mL	8 mL	9 mL	10 mL

Initiated: 02/13/2008  
Reviewed/Revised: 09/18/2018  
Revision 8

Approved: M. Riccardo Colella, DO, MPH, FACEP  
WI DHS EMS Approval: 03/01/2018



**FLACC Pain Scale**

Criteria	Score = 0	Score = 1	Score = 2
Face	No particular expression or smile	Occasional grimace or frown, withdrawn, uninterested	Frequent to constant quivering chin, clenched jaw
Legs	Normal position or relaxed	Uneasy, restless, tense	Kicking, or legs drawn up
Activity	Lying quietly, normal position, moves easily	Squirming, shifting, back and forth, tense	Arched, rigid or jerking
Cry	No cry (awake or asleep)	Moans or whimpers, occasional complaint	Crying steadily, screams or sobs, frequent complaints
Consolability	Content, relaxed	Reassured by occasional touching, hugging, or being talked to, distractible	Difficult to console or comfort

**Numeric Pain Scale**

