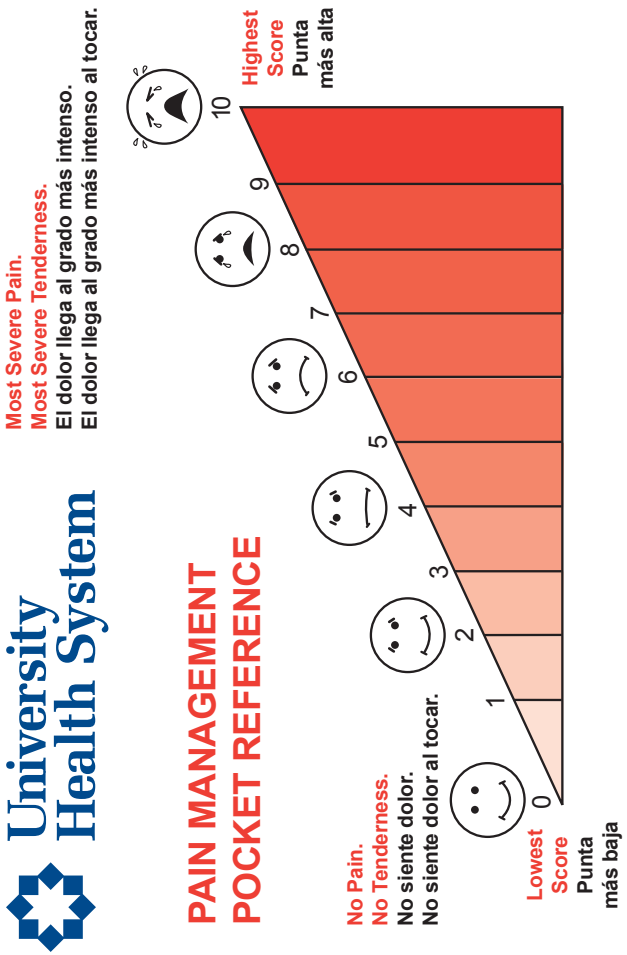
PAIN RATING SCALE
ESCALA DE CLASIFICACIÓN DE DOLOR



University Health System

PAIN MANAGEMENT POCKET REFERENCE

FOR PATIENTS UNABLE TO USE VISUALS 1 THROUGH 10 OR FACES SCALE, REFER TO THE BEHAVIORAL SCALES FOR CHILDREN/ADULTS.

OPIOID RISK SCREENING TOOL

All patients on opiates are at risk for respiratory depression. The following are patients who are at greater risk for respiratory depression so closer monitoring may be needed.

- Morbid obesity (BMI> 35)
- History of Obstructive Sleep Apnea
- History of moderate-severe respiratory disease (COPD, etc.)
- Anesthesia history of respiratory depression
- Age > 70
- Major renal or hepatic disease
- Upper abdominal or thoracic surgery or trauma
- Opioid naïve patients

EtCO2 monitoring is recommended for appropriate high-risk patients.

OPIOID INDUCED CONSTIPATION

- With few exceptions, all patients on opioid therapy need an individualized bowel regimen. Manage constipation prophylactically.
- Maintain a high index of suspicion for the possibility of bowel obstruction/fecal impaction.
- Rule out impaction.
- Rectal disimpaction must occur before treating constipation with an oral laxative regimen.
- If no BM in 3 days, administer enema (Sodium Phosphate/BiPhosphate).
- Continue an effective regimen for the duration of opioid therapy.

Bowel Regimen Recommendations: If the patient has not been on a bowel regimen then step 1 should be started. If there is no response in 24 hrs, add next step.

1. Docusate capsule 240mg BID + Senna 2 tabs (17.6 mg) qd
2. Miralax daily or bid (choice for opioid induced)

NON-VERBAL ADULT/CHILD PAIN ASSESSMENT SCALE

PAIN BEHAVIORS	0	1	2	3
Restlessness	Quiet	Slightly restless	Moderately restless	Very restless
Tense muscles	Relaxed	Slight tenseness	Moderate tenseness	Extreme tenseness
Frowning or Grimacing	No frowning or grimacing	Slight frowning or grimacing	Moderate frowning or grimacing	Constant frowning or grimacing
Patient sounds	Talking in normal tone or no sound	Sighs, groans, or moans softly	Groans or moans loudly	Cries out or sobs

Observe the patient and select which column best describes the patient's overall behaviors.

A score of:	**0**	**No pain**	**5-8**	**Moderate pain**
	1-4	**Mild pain**	**9-12**	**Severe pain**

Intervention is required for pain scores between 4 - 12.

Mateo, O.M. and Dresziechek, D.A. (1992). Pilot study to assess the relationship between behavioral manifestations and self reporting pain in postanesthesia care unit patients. *Journal of Anesthesia Nursing.* 7 (1), 15-21.

RICHMOND AGITATION SEDATION SCALE (RASS) *

SCORE	TERM	DESCRIPTION
+4	**Combative**	Overtly combative, violent, immediate danger to staff
+3	**Very agitated**	Pulls or removes tube(s) or catheter(s); aggressive
+2	**Agitated**	Frequent, non-purposeful movement, fights ventilator
+1	**Restless**	Anxious but movements not aggressive vigorous
0	**Alert and calm**	
-1	**Drowsy**	Not fully alert, but has sustained awakening (eye-opening/eye contact) to voice (>10 seconds)
-2	**Light sedation**	Briefly awakens with eye contact to voice (<10 seconds)
-3	**Moderate sedation**	Movement or eye opening to voice (but no eye contact)
-4	**Deep sedation**	No response to voice, but movement or eye opening to physical stimulation
-5	**Unarousable**	No response to voice or physical stimulation

The sedation/Agitiation Scale is used to assess the depth of pharmacological sedation incurred with the use of pharmacological pain relief agent administration. An optimal level is 0 to -1. A sedation level of -4 or -5 requires notification of the physician for immediate intervention.

NARCAN (Adult): To reverse clinically significant respiratory depression, Narcan may be administered. A standard 0.4 mg ampule is diluted in 10 ml saline and administered IV push at 0.5 ml every 2 minutes until the patient is responsive. Repeated doses may be needed because the duration of Narcan is shorter than the duration of most opioids.

This careful titration will reverse respiratory depression and minimize opioid symptoms.

PAIN MANAGEMENT RESOURCES

Acute Pain Resident/Consult	(210) 203-5538 (pager)
Acute Pain Service Office	(210) 358-8203
APS Nursing Coordinator	(210) 203-7746
APS Nurse	(210) 203-4094 (pager)
UT Chronic Pain Clinic	(210) 450-9850 appointments
UT Chronic Pain Fellow/Consult	(210) 553-2919 (on call pager)
Palliative Care Consult*	(210) 203-9188 (pager)
Palliative Care Office	(210) 358-2311

Rev 3/13

PEDIATRIC RECOMMENDED DOSING INFORMATION

	DRUG	DOSAGE	COMMENTS
NON-OPIOID AGENTS	Acetaminophen	10 - 15mg/kg/dose, q 4 - 6 hrs, PO/PR	Max dose: 75mg/kg/day up to 4gm/day Use adult dosing schedule for patient weighing > 50 kg
	Ibuprofen	5 - 10mg/kg/dose, q 6 - 8 hrs, PO	Max dose: 40mg/kg/day up to 3.2gm/day for patients >6 mo Supplied: Susp. 100mg/5ml Tabs: 400mg, 600mg, 800mg
	Naproxen	5mg/kg/dose. q 12 hrs, PO	See cautions in Lexicomp Drug Book Max dose: 10mg/kg/day up to 1000mg/day for children >2 yrs Supplied: Susp 125mg/5ml Tabs: 250mg, 375mg, 500mg
	Ketorolac	2 -16 yrs: 0.5mg/kg/dose, q 6 hrs, IV/IM **Do Not Exceed Adult Doses**	Max dose: 40mg/day oral or 120mg/day IV; Not recommended for patients < age 16 yrs. Takes 30 min. to work with any route; Use ≤ 3 days.
OPIOID AGENTS	Morphine	0.05 - 0.1 mg/kg/dose, q 2 - 4 hrs, IV/IM/SC 0.3 - 0.5mg/kg/dose, every 4 - 6 hrs, PO	Max IV dose: 15mg/dose; Titrate to effect Max PO dose: 30mg/dose Syrup available in 10mg/5ml
	Hydromorphone	0.03 - 0.08mg/kg/dose, q 4 - 6 hrs, PO 0.015mg/kg/dose, q 4 - 6 hrs, IV	Max PO dose: 5mg/dose Max IV dose: 2mg/dose; Titrate to effect Tablet 2mg, 4mg (formulary)
	Hydrocodone with Acetaminophen	0.1 - 0.2mg/kg/dose q 4 - 6 hrs PO dose based on Hydrocodone. Do not exceed max Acetaminophen dose.	Max Doses:<2yrs – 1.25mg/dose (2.5ml); 2 - 12 yrs – 2.5-5mg/dose (5-10ml); >12 yrs – 10mg/dose (20ml) Supplied: Lortab Elixir: 2.5mg Hydrocodone & 167mg Acetaminophen /5ml Tablets: 5mg/325mg, 7.5mg/325 & 10mg/325mg
	Oxycodone with Acetaminophen	0.05 - 0.15mg/kg/dose, q 4 - 6 hrs, PO Dose based on Oxycodone. Do not exceed max Acetaminophen dose.	Max dose: 5mg/dose Capsule: 5mg/500mg No longer carry on formulary as of April 2011.
	Acetaminophen with Codeine	0.5 - 1mg/kg/dose, q 4 - 6 hrs, PO, Dose based on Codeine Not as effective in Mexican Americans. Do not exceed max Acetaminophen dose.	Max dose: 60mg/dose or 360mg/24 hrs Supplied: Elixir 120mg Acetaminophen +12mg; Codeine/5ml; Elixir Dose: 3 - 4 doses/day: 3 - 6 yrs : 5ml 7 -12 yrs : 10ml >12 yrs : 15ml #2 300mg Acetaminophen + 15mg Codeine #3 300mg Acetaminophen + 30mg Codeine 12.5 cc Elixir = 1 tab #3
	Methadone	0.1mg/kg/dose, q 6 - 8 hr days 1-4, then q 12 hrs IV/IM/SC/PO	Max Dose: 10mg/dose; Consult APS if larger dose needed. Repeated doses causes accumulation; increase dose interval if needed

EQUIANALGESIC DOSE CHART

A Guide to Using Equianalgesic Dose Chart

- Equianalgesic means approximately the same pain relief.
- This chart is a guideline. Doses and intervals between doses are titrated to individual's response.
- This chart is helpful when switching from one drug to another or from one route of administration to another.
- Dosages in this chart are not necessarily starting doses. They suggest a ratio for comparing the analgesia of one drug to another.
- The longer the patient has been receiving opioids, the more conservative the starting doses of a new opioid.

OPIOID ANALGESICS	PARENTERAL (IM/SQ/IV) OVER~4 HRS	ORAL (PO) OVER~4 HRS	ONSET (MINUTES)	PEAK (MINUTES)	DURATION (HOURS)	HALF-LIFE (HOURS)	COMMENTS
Morphine	10mg	30mg	5 -10 (IV) 10 -20 (IM/SQ) 30 -60 (PO)	15 -30 (IV) 30 -60 (IM/SQ) 60 -90 (PO)	3 -4 (IV) 3 -4 (IM/SQ) 3 -4 (PO)	2 -4	Active metabolite M6G can accumulate with repeated dosing in pts. with renal failure.
Codeine		200mg NR	30 -60 (PO)	60 -90 (PO)	3 -4 (PO)	2 -4	Usually compounded with non-opioid e.g., Tylenol #3.
Fentanyl	100µg/hr IV & transdermal (TD) = 4mg/hr Morphine IV/IM/SQ; 1µg/hr TD = Morphine 2 mg/24hr PO		1 -5 (IV) 7 -15 (IM) 12 -16 (TD)	3 -5 (IV) 10 -20 (IM) 24 hrs (TD)	0.5 -4 (IV) 0.5 -4 (IM) 48 -72 (TD)	3 -4 (IV/IM) 13 -24 (TD)	A steady state, slow release of Fentanyl from storage in tissues can result in a prolonged half-life of up to 12 hours.
Hydrocodone (Vicodin or Lortab)		30mg NR	30 -60 (PO)	60 -90 (PO)	4 -6 (PO)	4	
Hydromorphone (Dilaudid)	1.5mg	7.5mg	5 (IV) 10 -20 (IM) 15 -30 (PO)	10 -20 (IV) 30 -90 (IM) 30 -90 (PO)	3 -4 (IV) 3 -4 (IM) 3 -4 (PO)	2 -3	Useful alternative to Morphine.
Methadone (Dolophine)	10mg	See Comments column	10 (IV) 10 -20 (IM/SQ) 30 -60 (PO)	Unknown (IV) 60 -120 (IM/SQ) 60 -120 (PO)	4 -8 (IV) 4 -8 (IM/SQ) 4 -8 (PO)	12 -190	Complex conversion Consult pharmacy or APS
Oxycodone (Percocet, Tylox)		20mg	30 -60 (PO)	60 -90 (PO)	3 -4 (PO)	2 -3	
Buprenorphine (Buprenex)	0.4mg		5 (IV) 10 -20 (IM)	10 -20 (IV) 30 -60 (IM)	3 -4 (IV) 3 -6 (IM)	2 -3	
Butorphanol (Stadol)	2mg		5 (IV) 10 -20 (IM)	10 -20 (IV) 30 -60 (IM)	3 -4 (IV) 3 -4 (IM)	3 -4	
Nalbuphine (Nubain)	10mg		5 (IV) <15 (IM/SQ)	10 -20 (IV) 30 -60 (IM)	3 -4 (IV) 3 -4 (IM/SQ)	5	
Pentazocine (Talwin)	30mg	90mg	5 (IV) 15 -20 (IM/SQ) 15 -30 (PO)	15 (IV) 60 (IM/SQ) 60 -180 (PO)	3 -4 (IV) 3 -4 (IM/SQ) 3 -4 (PO)	2 -3	Adjust dose for renal or hepatic impairments

NR = not recommended

Online opiate conversion calculator: www.globalrph.com/narcotic.cgi or www.globalrph.com/fentconv.htm

ADULT RECOMMENDED DOSING INFORMATION

	DRUG	DOSAGES	MAXIMUM DAILY DOSAGE
NON-OPIOID AGENTS	**Aspirin**	300 - 900mg, q 4 - 6 hrs, PO/PR 325-650 mg every 4-6 hrs (LEXI)	4gm
	Acetaminophen	500mg -1 gram, q 4 - 6 hrs, PO 650mg, q 4 - 6 hrs, PR (wt ≥ 50 kg) 1000 mg IV q 6 hrs or 650 mg IV q 4 hours prn	4gm (For Hepatic insufficiency: 2gm). (Ceiling effect analgesic dose = 1000mg)IV max: 1000mg/dose; min interval is 4 hrs
	Ibuprofen	400 - 800mg, q 6 - 8 hrs, PO	3.2gm (Ceiling effect analgesic dose = 400mg)
	Naproxen	250 - 500mg, q 12 hrs, PO (Naproxen Sodium 275mg =250mg Naproxen). Supplied as 250mg, 375mg and 550mg tabs	1.5gm
	Indomethacin	25 - 100mg, q 8 - 12 hrs, PO	200mg
	Ketorolac Not to exceed 5 days of treatment	30mg, q 6 hrs, IV/IM (6 - 8 hrs, if > 65 yrs)	120mg (for renal insufficiency +/ or age > 65 yrs: max dose 60mg)
	Celecoxib (Celebrex) (restricted for osteo/rheumatoid arthritis pathway)	200mg daily or 100mg, BID, PO	200mg
	Salsalate	500mg, q 6-12 hrs, PO	3gm
OPIOID AGENTS	**Codeine with Acetaminophen**	1 - 2 tabs q 4 - 6 hrs, PO (300mg Acetaminophen/ 30mg Codeine in Tylenol #3 tabs)	12 tablets
	Morphine	2.5 - 20mg, q 2 - 6 hrs, IV, IM, SC For immediate release formulations: 10 - 30mg, q 4 hrs, PO For controlled release formulations: 15 - 30mg, q 8 - 12 hrs, PO Syrup: 10mg/5ml	Titrate to effect
	Hydromorphone	1 - 4mg, q 4 - 6 hrs, PO/IV/IM/SC For opiate naive patients: 0.2 - 0.6mg IV q 2 - 3 hours initially	Titrate to effect
	Hydrocodone with Acetaminophen	1 - 2 tablets , q 4 - 6 hrs, PO (5mg Hydrocodone/325 mg Acetaminophen) (7.5mg Hydrocodone/325 mg Acetaminophen) (10mg Hydrocodone/325 mg Acetamiophen). Lortab elixir solution: 2.5 mg Hydrocodone & 167mg Acetaminophen/5ml	12 tablets 120 mls
	Methadone	5 - 20mg, q 8 - 12 hrs, IV/IM/PO/SC	Repeated doses cause accumulation - increase interval, if needed IV/IM 10mg/ml PO tabs 5mg, 10mg Elixir 10mg/10ml liquid
	Oxycodone with Acetaminophen	1 - 2 tabs/capsules q 4 - 6 hours. Dose based on Oxycodone. 1 capsule = Oxycodone 5 mg = Acetaminophen 500mg	8 capsules. DO NOT exceed max Acetaminophen content 4g/day. No longer carry on formulary as of April 2011.
	Tramadol (Ultram)	50 - 100mg q 4 - 6 hrs, PO	400mg (for renal insufficiency 200mg) Caution with TCA's, MAOI's, SSRI's and h/o seizures.