PAIN MANAGEMENT GUIDELINES

1. Use a multi-modal drug approach. Combine opioids with non-opioids and adjuvant analgesics as indicated.
2. Base administration schedule on the analgesic's duration of effect. Best to use sustained release opioids for scheduled dosing and always use immediate release opioids for rescue or breakthrough dosing. Do not crush or chew extended-release preparations.
3. In opioid naïve patients start with low dose, short acting opioids and titrate for effect.
4. Avoid meperidine (Demerol) and the mixed agonist-antagonist opioids (e.g. Stadol, Nubain, and Talwin).
5. Acetaminophen (APAP): Do not exceed 2000-4000 mg in 24 hours, check current guidelines.
6. Non-invasive routes preferred. For severe pain or rapidly escalating pain, it may be necessary to provide intravenous analgesics until the pain is managed. If oral, rectal, or transdermal dosing is no longer practical or appropriate, continuous subcutaneous or intravenous infusions are indicated.
7. Mild Pain (rating 1-3) Start with simple analgesics; acetaminophen (APAP) or NSAIDs, with adjuvant analgesics as appropriate.
8. Moderate to Severe Pain (rating 4-10) When pain does not respond to non-opioid analgesics and adjuvants, consider adding an opioid. Drugs with APAP, ASA or NSAIDs in combination with opioids limit flexibility of dosing and should be used for mild to moderate pain only.
9. Titration: Increase by 25 to 50% for moderate pain; increase by 50 to 100% for severe pain. Calculate amount of opioid taken in last 24 hours (add breakthrough + maintenance doses) and administer as new 24-hour maintenance dose; calculate new breakthrough dose.
10. Breakthrough Pain Dosing: Scheduled dosing will maintain stable serum drug levels and provide consistent relief. Patients on long acting opioids or continuous parenteral infusions must have an order for breakthrough pain medication. Frequent breakthrough dosing requires a change in the scheduled sustained release drug dose. Oral breakthrough dose is ≈ 10-20% of the oral 24 hour baseline dose. Peak effect of immediate-release opioid is ≈ one hour; may repeat dose every one hour if patient is not overly sedated. IV/SubQ breakthrough dose is ≈ 50 to 100% of the hourly IV/SubQ rate. Peak effect of IV opioids is ≈ 10-15 minutes; may repeat dose every 15 minutes if patient not overly sedated. Peak effect of SubQ opioids is ≈ 30 minutes; may repeat dose every 30 minutes if patient not overly sedated. IM dosing not recommended.
11. When changing drug or route of administration, use equianalgesic doses. See drug chart on other side. If changing from one drug to another, the new drug may be more effective, because of differences in potency or drug bioavailability. Start at 1/4 to 1/2 of the amount calculated using the equianalgesic tables. Make sure breakthrough medication is available and titrate dose according to individual patient response. Consult pain or palliative specialist when switching to and from methadone.
12. Manage opioid side effects aggressively. Patients never become tolerant to the constipating effects of opioids. Always start stimulant laxative/softener combination with opioids.
13. To discontinue opioids taper gradually to patient response to avoid withdrawal symptoms.
14. Always educate patients and caregivers about pain medications, side effect management and safe storage.

Pain Sources	Pain Character	Drug Class/Examples
Myofascial Somatic Pain	Constant and well localized.	- Acetaminophen/NSAIDs: Celecoxib (Celebrex), Ibuprofen, (Motrin, Advil, Caldolor), Naproxen (Aleve) - Opioids
Visceral Pain	Injury to sympathetically innervated organs. Pain is vague in quality. Deep, dull, aching. Referred pain.	- NSAIDs - Corticosteroids - Opioids
Bone Pain	Axial skeleton with thoracic and lumbar spine most common.	- NSAIDs: Celecoxib (Celebrex), Ibuprofen, (Motrin, Advil, Caldolor), Naproxen (Aleve), Ketorolac (Toradol), and others - Corticosteroids/Bisphosphonates - Radiation Therapy, Radionuclides - Opioids
Neuropathic Pain **Nerve Damage** **Dysesthesia**	Results from damage to peripheral or central nervous system or both. Dysesthesia, burning, tingling, numbing, shooting electrical pain. May require higher doses of opioids.	Adjuvants - Anticonvulsants: Gabapentin (Neurontin), Carbamazepine (Tegretol), Clonazepam, (Klonopin), Pregabalin (Lyrica) -Tricyclic Antidepressants: Nortriptyline (Pamelor), Desipramine (Norpramin) - SNRI Antidepressants: Duloxetine (Cymbalta), Venlafaxine (Effexor) - Corticosteroids - Topical Anesthetic, Lidocaine Patch 5% (Lidoderm) - Opioids

SIDE EFFECT	OPIOID SIDE EFFECT MANAGEMENT
Constipation	Tolerance to opioid related constipation does not occur. Start with combined senna as stimulant and docusate (Colace) as softener. May increase to 4 tabs bid. If no BM in 2 days add a laxative (Dulcolax, Lactulose, Milk of Magnesia, polyethylene glycol). Increase fluids, activity, adjust to effect.
Nausea/ Vomiting	Rule out reversible causes, e.g. constipation. Prochlorperazine (Compazine) 10 mg PO q 6 hr PRN or 25 mg suppository PR q 6 hr PRN. May add Lorazepam (Ativan) 0.5 mg q 6 hr PO/SL, PRN or Metoclopramide (Reglan) (also helpful for early satiety and constipation) 10 mg PO QID. Scopolamine TD (Transderm-Scop) patch 1.5 mg q 3 days is effective for movement related nausea q 72 hrs. Haloperidol (Haldol) 0.5 - 4 mg PO or IV/SQ q 6 hrs.
Respiratory Depression	Rare - closely monitor in opioid-naïve patients. Increased risk with obstructive sleep apnea, obesity, on benzodiazepines, or in those with respiratory compromise. Tolerance develops.

SCCPI CANCER PAIN MANAGEMENT REFERENCE CARD

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Duarte, California 91010
626.256.4463 Ext. 63202
Fax: 626.301.8941
Email: sccpi@coh.org

Download or Order Laminated Card on SCCPI website
http://sccpi.coh.org

SCCPI Mission: To promote optimum pain relief for all people with cancer.

EQUIANALGESIC TABLE GUIDELINES

Dosing is always dependent on individual patient characteristics and response.
Verify dosing for pediatric and geriatric patients.

DRUG	DOSAGE FORM/STRENGTHS	APPROXIMATE EQUIVALENCE IV/SubQ	ORAL
Morphine	**Immediate Release Tablets** Morphine Sulfate Immediate Release - 15, 30 mg **Sustained Release Tablets** MS Contin – 15, 30, 60, 100, 200 mg q 8 or 12 hrs Oramorph SR - 15, 30, 60, 100 mg q 8 or 12 hrs Avinza – 30, 45, 60, 75, 90, 120 mg q 24 hrs Kadian –10, 20, 30, 50, 60, 80, 100, 200 mg q 12-24 hrs **Generics – Oral Liquid** Morphine Sulfate Immediate Release Solution – 2 mg/ml, 4 mg/ml, 20 mg/ml **Suppository** Rectal Morphine Sulfate (RMS) – 5, 10, 20, 30 mg	10 mg	30 mg
Hydromorphone	**Tablets** Hydromorphone (Dilaudid) – 2, 4, 8 mg **Liquid** Hydromorphone (Dilaudid) – 5 mg/5ml **Injection** – 1, 2, 4 mg/ml Dilaudid HP – 10 mg/ml **Suppository** Hydromorphone (Dilaudid) – 3 mg **Extended Release** (Exalgo*) – 8,12,16 mg q 24 hrs *Consult drug insert for conversion	1.5 mg – – –	7.5 mg – – –
Oxycodone	**Immediate Release Tablets** Oxycodone IR – 5, 10, 15, 20, 30 mg Roxicodone – 5, 15, 30 mg **Oxycodone/Acetaminophen Tablets*** Percocet – 2.5/325, 5/325, 7.5/325, 7.5/500, 10/325 mg Roxicet – 5/325, 5/500 mg, 10/650 **Sustained Release Tablets** Oxycontin – 10, 15, 20, 30, 40, 60, 80 mg **Liquid** Oxycodone – 20 mg/ml Roxicet Oxycodone HCL 5mg/325 APAP/5ml * Do not exceed 2000-4000 mg Acetaminophen q 24 hrs	– – –	20 mg
Oxymorphone	**Tablets** Opana – 5, 10 mg Opana ER – 5, 10, 20, 30, 40 mg q 12 hrs	– – –	10 mg
Hydrocodone	**Hydrocodone/Acetaminophen* Tablets** Examples: Vicodin – 5/500 mg; Vicodin ES – 7.5/750 mg Lorcet or Vicodin HP – 10 mg/650 mg Lortab – 2.5/500 mg, 5/500 mg 7.5/500 mg, 10/500 mg Norco – 5/325 mg, 7.5/325 mg, 10/325 mg **Hydrocodone/Ibuprofen Tablets** Vicoprofen – 7.5/200 mg * Do not exceed 2000-4000 mg Acetaminophen q 24 hrs	– – –	1 mg Hydrocodone = 1 mg oral Morphine
Dual Action Analgesics	**Tramadol Hydrochloride** Tablets** Ultram – 50 mg Ultracet – 37.5/325 mg (Acetaminophen*) * Do not exceed 2000-4000 mg Acetaminophen q 24 hrs **Extended Release*** Ultram ER – 100, 200, 300 mg q 24 hrs Ryzolt –100, 200, 300 mg q 24 hrs **Maximum dose 400 mg q 24 hrs **Ages > 75 is 300 mg q 24 hrs **Tapentadol Tablets** Nucynta – 50, 75, 100 mg *Do not exceed 500 mg q 24 hrs	– – –	5 mg oral Morphine ≈ 50 mg oral Tramadol No equianalgesia See package inserts
Fentanyl Transdermal Long acting Not for opioid naïve patients	**Skin Patch** 12, 25, 50, 75, 100 mcg/hr *Not for post op/acute pain *12-24 hours for full onset *12-24 hours to leave system	100 mcg Transdermal Fentanyl ≈ 2 to 4 mg IV Morphine q 1 hr	100 mcg patch q 2-3 days ≈ 200 mg oral Morphine q 24 hrs
Fentanyl Breakthrough Pain Not for opioid naïve patients	**Transmucosal-Buccal Oral Lozenge** Actiq – 200, 400, 600, 800, 1200, 1600 mcg Fentora – 100, 200, 400, 600, 800 mcg **Fentanyl Buccal Strip** Onsolis – 200, 400, 600,800, 1200 mcg **Sublingual** Abstral Fentanyl SL –100, 200, 300, 400, 600, 800 mcg **Fentanyl Nasal Spray** Lazanda –100, 200, 400, 800 mcg	– – –	See package inserts
Methadone	Equivalency ratios for methadone are complex because of its long half-life, potency, and individual variations in pharmacokinetics. Consult American Pain Society Guidelines and/or pain specialist.	– – –	Consult with Pain/Palliative Care Specialist

References:

American Pain Society. (2008*). Principles of Analgesic Use in the Treatment of Acute Pain and Cancer Pain*. 6th Edition. www.ampainsoc.org.

Pasero, C. & McCaffery, M. (2011). *Pain Assessment and Pharmacologic Management*. MO: Elsevier Mosby.

For more resources, see the City of Hope Pain & Palliative Care Resource Center at http://prc.coh.org.

****Davis, M., Glare, P., & Hardy, J. (2005). Opioids in Cancer Pain. NY: Oxford University Press.**

Pain Scale