PAIN MANAGEMENT GUIDELINES

1. **Use a multi-modal drug approach. Combine opioids with non-opioids and adjuvant analgesics as indicated. Integrate nonpharmacological approaches when feasible.**
2. **Base administration schedule on the analgesic's duration of effect. Best to use sustained release opioids for scheduled dosing and immediate release opioids for rescue or breakthrough dosing. Do not cut, crush or chew extended-release preparations. Some preparations include capsules that can be opened; sprinkles can be put in food/enteral feedings (check package insert).**
3. **In opioid naïve patients start with low dose, short acting opioids and titrate for effect.**
4. **Acetaminophen (APAP): Do not exceed 3000 mg q 24 hours for adults; for older adults do not exceed 2000 mg q 24 hrs. Omit APAP if liver disease. Review prescribed combination products as well as over the counter (OTC) medications for APAP.**
5. **NSAIDS: can cause GI ulcers, renal dysfunction, increased risk of MI/CVA. The risk increases when taking with corticosteroids.**
6. **Non-invasive routes preferred. For severe or rapidly escalating pain, intravenous analgesics may be needed 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: Start with simple analgesics; acetaminophen (APAP) or NSAIDs, with adjuvant analgesics as appropriate [for neuropathic pain].**
8. **Moderate to Severe Pain: When pain does not respond to non-opioid analgesics and adjuvants, consider adding an opioid. Drugs with APAP, acetylsalicylic acid (ASA) or NSAIDs in combination with opioids limit flexibility of dosing.**
9. **Titration: Minimum dose increase is 25 to 50%: consider patient factors such as frailty, comorbidities, organ function.**
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 [generally more than 4 doses/24 hours] breakthrough dosing requires a change in the scheduled sustained release drug dose. Oral breakthrough dose is ≈ 5-20% of the oral 24-hour baseline dose. Peak effect of immediate-release oral opioid is ≈ one hour. IV/SQ breakthrough dose is ≈ 50 to 100% of the hourly IV/SQ rate. Peak effect of IV opioids is ≈ 10-15 minutes. Peak effect of SQ opioids is ≈ 30 minutes. IM dosing not recommended.**
11. **Opioid rotation may be warranted when escalating doses are ineffective in relieving pain or when adverse effects persist despite aggressive management. When changing drug or route of administration, use equianalgesic doses. See drug chart on other side – REMEMBER THESE ARE APPROXIMATIONS. If changing from one drug to another, the new drug may be more effective, because of differences in potency or drug bioavailability. Start at 50-75% 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. **Prevent and manage opioid side effects aggressively.**
13. **To discontinue opioids after long term use, taper gradually (10% per week reduction or slower) to patient response to avoid withdrawal symptoms.**
14. **Always educate patients and caregivers about all pain medications, side effect management, safe storage, disposal including the use of nasal naloxone.**

PAIN SOURCES	PAIN CHARACTER	DRUG CLASS/EXAMPLES
Nociceptive or Somatic Pain	Well localized. Aching, throbbing	— Acetaminophen/NSAIDs — Opioids
Visceral Pain	Injury to sympathetically innervated organs. Pain location diffuse. Deep, dull, aching, squeezing, cramping. Referred pain.	— NSAIDs — Corticosteroids — Opioids
Neuropathic Pain	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®), pregabalin (Lyrica®) — Tricyclic Antidepressants: nortriptyline (Pamelor®), desipramine (Norpramin®) — SNRI Antidepressants: duloxetine (Cymbalta®), venlafaxine (Effexor®) — Corticosteroids — Topical Anesthetic, lidocaine Patch 5% (Lidoderm®) or OTC lidocaine patch 4% Opioids

SIDE EFFECT	OPIOID SIDE EFFECT MANAGEMENT (See NRE Symptom Card)
Constipation	Tolerance to opioid related constipation does not occur. Start with combined senna as stimulant and docusate (Colace®) as softener. Max 8/day. If no BM in 2 days, add a laxative [bisacodyl, lactulose, magnesium hydroxide (Milk of Magnesia®), polyethylene glycol]. Methylnaltrexone (Relistor®) SQ or PO q 48 hours or naloxegol (Movantik®) PO QD or naldemedine (Symproic®) PO QD (for noncancer pain) if other measures ineffective [only for opioid-induced constipation].
Nausea/ Vomiting	Rule out reversible causes, e.g. constipation. Metoclopramide (Reglan®) 10 mg po QID considered first-line (also helpful for early satiety and constipation). Other options 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. 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 in opioid tolerant people as tolerance develops to sedation/drowsiness- closely monitor in opioid-naïve patients. Increased risk with obstructive sleep apnea, obesity, on benzodiazepines, or in those with respiratory compromise.

References:

Ferrell, B., & Paice, J. (Eds). (2019). *Oxford textbook of palliative nursing*, 5th edition. New York, NY: Oxford University Press.

Dahlin, C., & Coyne, P. (Eds). (2023). *Advanced practice palliative nursing*, 2nd edition. New York, NY: Oxford University Press.

Paice, J.A., et al. (2023). Use of opioids for adults with pain from cancer or cancer treatments: ASCO guideline. *J Clin Oncol, 41*:914-930.

For additional resources, refer to:

City of Hope Nursing Research and Education Resources www.cityofhope.org/NRE; and
ELNEC: End-of-Life Nursing Education Consortium www.aacnnursing.org/ELNEC

OPIOID "EQUIANALGESIC" TABLE

DRUG	DOSAGE FORM/STRENGTHS	APPROXIMATE EQUIVALENCE	
		IV/SQ	ORAL
Buprenorphine	**Transdermal:** Butrans 5, 7.5, 10, 15, 20 mcg/h **Buccal Film:** Belbuca™ 75,150, 300, 450, 600, 750, 900 mcg — Q 12 – 24 hours **Injection:** 300 mcg/ml Sublinguql tablets and film (buprenorphine/naloxone: Suboxone®, Subutex®, Zubsolve® indicated for opioid use disorder but can be used for pain off-label)	0.3-0.4 mg	See package insert
Codeine	**Rarely recommended:** a pro-drug dependent on CYP2D6 – (significant percentage of people are poor metabolizers and cannot obtain relief)		200 mg
Fentanyl Parenteral		100 mcg	
Fentanyl Transdermal Long acting; Not for opioid naïve patients	**Fentanyl Transdermal:** Generic - 12, 25, 37.5, 50, 62.5, 75, 87.5, 100 mcg/hr — Not for post op/acute pain — 12-24 hours for full onset — 12-24 hours to leave system		100 mcg patch q 3 days ≈ 200 mg oral Morphine q 24 hrs
Fentanyl Transmucosal Immediate Release Fentanyl (TIRF) Not for opioid naïve patients Requires TIRF-REMS compliance **https://www.tirfremsaccess.com/TirfUI/rems/home.action**	**Buccal Oral Lozenge:** — Actiq® and generic – 200, 400, 600, 800, 1200, 1600 mcg **Buccal Oral Tablet:** — Fentora® – 100, 200, 400, 600, 800 mcg **Sublingual Tablet:** — Abstral® Fentanyl SL –100, 200, 400, 800 mcg **Sublingual Spray:** — Subsys® – 100, 200, 400, 600, 800 mcg spray **Nasal Spray:** — Lazanda® –100, 300, 400 mcg	– – –	See package inserts
Hydrocodone	**Hydrocodone/Acetaminophen❖ Tablets:** — All are generic except for ER formulation, — 2.5/325 mg, 5/300 mg, 5/325 mg, 7.5/300 mg, 7.5/325 mg, 10 mg/300 mg, 10/325 mg **Liquid❖:** 7.5/325/15 mL or 10/325/15 mL **Hydrocodone/Ibuprofen Tablets:** Generic – 2.5/200 mg, 5/200 mg, 7.5/200 mg, 10/200 mg **Extended Release:** Hysingla®ER***** 20, 30, 40, 50, 60, 80, 100, 120 mg q 24 or	– – –	20-30 mg
Hydromorphone	**Tablets:** Hydromorphone – 2, 4, 8 mg **Liquid:** Hydromorphone– 1 mg/ml **Extended Release:** Exalgo®***** – 8, 12, 16, 32 mg q 24 hrs **Injection:** 1, 2, 4, 10 mg/ml **Suppository:** Hydromorphone – 3 mg	1.5 mg	7.5 mg
Methadone	Equivalency ratios for methadone are complex because of its long half-life, potency, and individual variations in pharmacokinetics.	– – –	Consult with Pain/Palliative Care Specialist
Morphine	**Immediate Release Tablets:** — Morphine Sulfate Immediate Release - 15, 30 mg **Liquid:** — Morphine Sulfate Immediate Release Solution – 2 mg/ml, 4 mg/ml, 20 mg/ml **Extended or Sustained Release Tablet:** — Generic – 10, 15, 20, 30, 45, 50, 60, 75, 80, 90, 100, 120, 200 mg q 12 hrs — MS Contin® – 15, 30, 60, 100, 200 mg q 8 or 12 hrs **Injection:** 2, 4, 5, 8, 10 mg/ml **Suppository:** Rectal Morphine Sulfate (RMS) – 5, 10, 20, 30 mg	10 mg	30 mg
Oxycodone	**Immediate Release Tablets:** — Oxycodone IR – 5, 10, 15, 20, 30 mg — Oxaydo – 5, 7.5 mg — Roxibond***** – 5, 15, 30 mg — Roxicodone® – 5, 15, 30 mg **Oxycodone/Acetaminophen Tablets❖:** — Generics– 2.5/325, 5/325, 7.5/325, 10/325 mg **Extended or Sustained Release Tablets:** — Oxycodone ER –10, 20, 40, 80 mg q 12 hrs — OxyContin®***** – 10, 15, 20, 30, 40, 60, 80 mg — Xtampza® ER***** – 9, 13.5, 18, 27, 36 mg q 12 hrs **Liquid:** Oxycodone – 5 mg/5ml; 20 mg/1ml; oxycodone/acetaminophen 5 mg/325 mg per 5 ML	– – –	20 mg
Oxymorphone	**Tablets:** — Oxymorphone IR – 5, 10 mg — Generic ER –7.5, 10, 15, 20, 30, 40 mg **Injection:** 1 mg/ml	1 mg	10 mg
Tapentadol (opioid and NE reuptake inhibitor)	**Tapentadol Tablets**:** Nucynta® – 50, 75, 100 mg **Extended Release:** Nucynta®ER– 50, 100, 150, 200, 250 mg q 12 hrs		150 mg
Tramadol (opioid and SNRI reuptake inhibitor)	**Tramadol Tablets***:** — Generic – 50, 100 mg — Generic– 37.5/325 mg acetaminophen❖ **Extended Release:** — ConZip and generic – 100, 200, 300 mg q 24 hrs **Liquid:** — Qdolo™ –5 mg/ml	– – –	300 mg

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Legend:

❖ See recommendations regarding acetaminophen on previous page
* Abuse Deterrent Opioid
** Maximum dose 700 mg/24 hrs
*** Maximum dose 300-400 mg q 24 hrs; age > 75 is 300 mg q 24 hrs; avoid in seizure disorder