The Outpatient Management of Pain

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"Well, it was a sort of white hot agony searing my whole being to the point of unconsciousness. Now it's receding like a purple curtain of pain, a sweeping tide of physical discomfort, reforming, preparing for the next awful onslaught."
The Magnitude of the Problem

- Approximately 1/3 of the US population has some sort of chronic pain
- Billions are spent yearly on lost work days and health care for chronic pain
- Lifetime prevalence rates of low back pain are 48.4 to 69.9%
- Cost $26.8 to $56 Billion
Pain is a public health problem

• 85% of patients present for health care because of pain
• Pain is the number one reason for unscheduled hospital admissions
• Over 40% of acute care patients report poor pain control
• 26% of nursing home residents with daily cancer pain received NO pain medications
What do Physicians Know

• At a recent CME program up to 56% did not know how to interpret unexpected Urine Drug screen results

• When faced with clinical scenarios of aberrant behavior, over 90% struggled to differentiate between pseudoaddiction, tolerance and dependence.

• Did not appreciate the broad differential of for the behavior
Put into perspective

• About 1% of the US population exhibits opioid addiction
• The prevalence of addiction in opioid treated chronic pain patients is 2-5%
• Only about half the patients who display one aberrant behavior regarding their medication can be classified as abusers.
Put into perspective

• Of the total pain population, about 20% can be diagnosed as abusers.
• About 40% of the total pain population show some aberrant behavior.
• Aberrant behavior ranges from early refills, loss of prescriptions, hoarding meds, unsanctioned dose escalations, to selling drugs, or forgery.
Start at the very beginning

- Not every patient with a pain problem is a chronic pain patient
- Not all chronic pain patients will have the same set of issues
- Not all chronic users of opiates are substance abusers
- Not everyone presents with a clear situation
Tailor your approach to the situation

• A one-size-fits-all treatment plan will be ineffective on both ends of the spectrum.
• The same drug, dose, frequency will NOT be the best approach.
• (20mg oxycodone extended release twice a day will be too much for many, too little for others just right for a few)
Agree on the plan at the beginning

• Describe what exams you will need to have
• Ask for all pertinent records to be sent from the previous providers (NOT hand carried, although these may be helpful until others available)
• Sign an opioid agreement
Opioid Agreements

• NOT legally “binding”
• DO establish the “rules” for chronic prescribing
• Should cover risks in chronic therapy, how to get prescriptions, frequency of visits, need for monitoring procedures, importance of protecting prescribed medications
Sample opioid agreement

• This voluntary agreement is made between __________________________ (patient name) and his/her health care providers at the General Internal Medicine Clinic at KU Medical Center to outline specific patient responsibilities when using controlled substance medications for the treatment of chronic non-malignant pain or other medical conditions.

• I understand that controlled substance medications (for example, narcotics, sedatives, stimulants, benzodiazepines, and barbiturates) can be helpful in my care but have a high potential for misuse. These substances are closely controlled by local, state and federal government regulations. When used properly, they can be very effective in the management of pain and other specific medical conditions, but if used excessively or inappropriately, they can cause adverse effects such as vomiting, constipation, lethargy, or even death.

• I understand that prolonged use can lead to dependence on the medication. I understand that withdrawal will occur if I stop the medication abruptly (all at once). I may develop tolerance (a need for more medication to produce the same effect).

• I understand that the goal for the use of these medications is to improve my ability to function and/or work. It is also important that I help myself by following better health habits; for example, exercise, weight control, and refraining from alcohol or tobacco use.

• Because my physician is prescribing such medication for me to help manage my pain or other medical condition, I agree to the following conditions:
Sample opioid agreement

• I am responsible for my controlled substance medications. If the prescription or medication is lost, misplaced or stolen, or if I use it up sooner than prescribed, I understand that it will NOT be replaced, except when a police report is provided to the clinic.
• I will not request or accept controlled substance medications from any other physician or individual, aside from the physicians in the General Internal Medicine Clinic, as this may endanger my health. The only exceptions are while I am admitted into a hospital or being treated in the Emergency Room. I will then inform the clinic of any new prescriptions that I have received in the hospital or Emergency Room as soon as possible.
• I will not consume alcohol or recreational drugs while taking a controlled substance medication.
• I will take my medications only as prescribed. I will inform the clinic if changes in dosing are required. I understand that this will require an appointment for re-evaluation.
• I will bring in the container of all controlled substance medications prescribed by the physicians of the General Internal Medicine Clinic each time I return for my appointment.
• I will bring in written proof of care by consultants (other physicians or providers), as requested by my physician. These may include physical therapy reports, reports of evaluation for surgery, reports of psychological and/or substance abuse counseling.
• I will not sell or share my medications with other people.
Sample opioid agreement

• I understand that a renewal of a controlled substance prescription:
  – Will be made **only during regular office hours**, (8:00 AM-4:30 PM, Monday through Friday), during a scheduled office visit. Refills will not be made at night, on holidays or weekends.
  – Will require me to have an appointment for evaluation at least every 3 months, or more frequently if recommended by my physician
  – Will **not be made** if I “run out early” or “lose a prescription” or “spill or misplace” my medication.
• I understand that NO WALK-IN REFILLS WILL BE ACCEPTED. (I will be asked to make an appointment.)
• I understand that my doctor may require frequent visits while the most appropriate dose of medication is being determined.
• I understand that it may be necessary for me to see a medication use specialist (or pain management specialist) at any time I am receiving controlled substances. I understand that if I do not attend this appointment, or this specialist determines that I am at risk for psychological dependence (addiction), my medications will no longer be filled by the General Internal Medicine Clinic, other than a tapering (gradually decreasing) dose until finished. I may need to enter a chemical dependence program to avoid withdrawal.
• I understand that there is potential for cognitive impairment with narcotics alone, in combination with sedatives and/or hypnotics and alcohol. I will inform the clinic of any current or prior use of alcohol, illegal drugs, and prescription drugs.
• I will not hold the clinic responsible for any harmful act that I may commit or error in judgment that may result from controlled substance therapy.
• I understand that in the case of reproductive age females, children born when the mother is on narcotic maintenance therapy can be physically dependent at birth. I will inform the clinic immediately if I learn that I am pregnant.
Sample opioid agreement

• I authorize the clinic to communicate with any of my other providers, including pharmacies, about the use of my controlled substance medications.
• I authorize random blood and/or urine samples to be taken to confirm that I am taking these medications. I release the physicians of the General Internal Medicine Clinic Revised 3/06
• from any and all liability for these actions based on the results of these tests. Refusing to complete these tests will be cause for termination from this practice.
• I understand that the long-term advantages and disadvantages of chronic controlled substance use have yet to be determined, and that treatment may change throughout my time at the General Internal Medicine Clinic. I understand that there may be unknown risks associated with the long-term use of controlled substances and that my physician will advise me as knowledge and training advances and will make appropriate treatment changes.
• I will refrain from any abusive, threatening or inappropriate behavior with any clinic staff or patients.
Sample opioid agreement

- I understand that by signing this document, I am giving informed consent to controlled substance therapy.
- I understand that if I fail to meet all of the agreements of this agreement that the General Internal Medicine clinic may stop prescribing any controlled substance medication for me and that I may need to enter a chemical dependence program or other pain management program to avoid withdrawal.
- I understand that a copy of this contract may be sent to my pharmacy, to the Kansas State Medical Board and the Drug Enforcement Agency.
- I agree that only one pharmacy will be used for these prescriptions. Should I wish to change pharmacies, I must notify the clinic so that the change can be documented. I will not change my pharmacy unless absolutely necessary.
- My pharmacy is ____________________________________________
- Brief address ________________________________________________
- Phone number ________________________________________________
- We appreciate your careful attention to this agreement, and to your overall health. Your health care providers at the General Internal Medicine Clinic are committed to working hard with you to advance your health and improve the quality of your life. We appreciate any feedback that you may have on this document or on your health care in general.
- Please sign below.
- DATE __________________________
- PATIENT SIGNATURE ______________________________
- PHYSICIAN SIGNATURE ______________________________
- WITNESS SIGNATURE ________________________________
But don’t fall into a trap!

• Don’t let your first impression of the patient be your guide to appropriateness of chronic therapy, but neither should you ignore “red flags”

• You may be surprised who is using appropriately, who is “sharing” or using erratically
How do you tell who is who?

• Take the time to carefully evaluate what you know about the patient.
• Listen carefully to the description of their pain and previous treatment regimens
• Talk openly about how pain influences their life. This should include ability to work, pursue hobbies, do housework, and have sex.
How do you tell who is who?

- Always obtain old records and communicate with other providers.
- Have a clear plan of treatment at the outset, and communicate it clearly to your patient.
Behaviors LESS predictive of Addiction

• Complaints about need for escalation
• Hoarding when pain is stable
• Requesting specific drugs
• Getting meds from other providers
• Unsanctioned dose escalation a couple of times
• Use to treat another symptom
• Psychiatric side effects
Behaviors MORE predictive of Addiction

• Selling prescriptions
• Forgery
• Stealing or “borrowing” drugs
• Injecting oral formulations
• Buying on the street
• Multiple episodes of prescription loss or dose escalations,
• Use of illicit drugs
Use Available Resources

• Screening tools for substance abuse or psychiatric disorders
  – SOAPP (Screener and Opioid Assessment for Patients in Pain) 24 items which review patients perception of their pain control and the effect of the medications on their lives. Patient rated, practitioner scored. 16 of the 24 items are scored and a score of over 7 is predictive.
Use Available Resources

• Urine Drug testing
  – Know your facility’s tests
    • Understand the meaning of a positive or a negative result
      – Negative result has a broad differential
    • Have a plan for response
      – Education of the patient, more controlled prescribing, referral to substance abuse treatment
  • Obtain randomly, or if indicated
Types of Pain

- Somatic
- Visceral
Types of Pain: Nociceptive Somatic

– Well-localized
– Dull, achy in quality
– Usually musculoskeletal in origin
– Usually responsive to opioids
– May also respond to NSAIDs, steroids, muscle relaxants, antispasmodics, some antidepressants
– Examples: Post-operative pain, Sprains, Broken bones, Bone metastasis, Arthritis, Muscle strains,
Types of Pain: Nociceptive Visceral

– Involves solid organs
– Poorly localized
– Dull, achy, crampy in nature
– May refer to other areas
– Usually responds to opioids
– May respond to NSAIDs, steroids, antispasmodics
– Examples: Pancreatitis, Constipation-related, Bowel obstruction, Cancer in the liver or brain
Types of Pain: Neuropathic

• May be peripheral, central, sympathetically-maintained
• Sharp, shooting, stabbing, burning in nature
• Poorly responsive to opioids
• May respond to TCAs, anticonvulsants, systemic local anesthetics, topical local anesthetics
• Examples: Post-herpetic neuralgia (shingles), Sciatica, Pain from strokes, Trigeminal neuralgia, Phantom limb pain, Peripheral neuropathy from diabetes, chemotherapy
# Pharmacotherapy Goals

<table>
<thead>
<tr>
<th></th>
<th>Acute</th>
<th>Chronic</th>
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<tbody>
<tr>
<td>Therapeutic goal</td>
<td>Pain relief</td>
<td>Pain prevention</td>
</tr>
<tr>
<td>Sedation</td>
<td>Often desirable</td>
<td>Undesirable</td>
</tr>
<tr>
<td>Rapid onset</td>
<td>Important</td>
<td>Unnecessary</td>
</tr>
<tr>
<td>Duration</td>
<td>2-4 hours</td>
<td>As long as possible</td>
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<tr>
<td>Timing</td>
<td>PRN</td>
<td>ATC</td>
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<tr>
<td>Dose</td>
<td>Initially standard</td>
<td>Individually titrated</td>
</tr>
<tr>
<td>Route</td>
<td>Parenteral / Oral</td>
<td>Oral / Transdermal</td>
</tr>
<tr>
<td>Adjuvants</td>
<td>Uncommon</td>
<td>Common</td>
</tr>
</tbody>
</table>
Adjuvant/Coanalgesic Medications

• Do not directly provide analgesia
• Used more extensively in chronic pain than acute pain
• Caution with the addition of sedating effects

• Selected Examples
  – Antidepressants
  – Anticonvulsants
  – Benzodiazepines
  – Muscle relaxants
Non-opioids

- Acetaminophen
- Aspirin
- NSAIDs/Cox-2

“Unless contraindicated, any analgesic regimen should include a nonopioid drug, even if pain is severe enough to require the addition of an opioid”

Antidepressants

- Indications: depression, neuropathic pain; post-herpetic neuralgia, polyneuropathies r/t chemo, diabetic neuropathy, sciatic pain, RSD/CRPS
- Examples:
  - TCA (Amitriptyline-Elavil, Nortriptyline-Pamelor)
  - SSRI (Fluoxetine-Prozac, Paroxetine-Paxil, Citalopram-Celexa, Escitalopram-Lexapro)
  - SNRI (Duloxetine-Cymbalta, Venlafaxine-Effexor, *Milnacipran-Savella)
  - Atypical (Bupropion-Wellbutrin)
Anticonvulsants

• Indications: migraines, neuropathic pain; trigeminal neuralgia, post-herpetic neuralgia, lancinating pain, phantom-limb pain

• Side effects: somnolence, ataxia, weight gain/loss

• Examples: Gabapentin (Neurontin), Carbamazepine (Tegretol), Valproate (Depakote), Clonazepam (Klonopin), Phenytoin (Dilantin), Tigabine (Gabatril), Topiramate (Topamax), Lamotrigine (Lamictal), Zonisamide (Zonegran), Pregabalin (Lyrica)
Benzodiazepines

• Indications: muscle spasms, anxiety, panic, insomnia, anticipatory nausea
• Side effects: drowsiness, sedation, dizziness
• Examples: Diazepam (Valium), Lorazepam (Ativan), Alprazolam (Xanax), Temazepam (Restoril), Clonazepam (*Klonopin)

*Possesses some analgesic properties for certain types of pain
Skeletal Muscle Relaxants

- Indications: muscle spasms
- Side effect: sedation, weakness, confusion
- Examples: Diazepam (Valium), Methocarbamol (Robaxin), Cyclobenzaprine (Flexeril), Carisoprodol (Soma), Orphenadrine (Norflex), Metaxalone (Skelaxin), Tizanidine (*Zanaflex), Lioresal (*Baclofen)

*short-term use only in most chronic pain patients
*can be used long-term for spasticity
Miscellaneous

• Examples:
  – Lidoderm patch - post-herpetic neuralgia
  – Capsaicin - post-herpetic neuralgia
  – Emu oil – arthritis, joint pain
Combination (Weak) Opioids for Mild to Moderate Pain

- Used for mild to moderate pain
- Doses are limited due to non-opioid component (acetaminophen, ASA)
- Limited use in post-op/chronic pain

- Codeine (Tylenol #3, Fioricet)
- Hydrocodone (Lortab, Vicodin)
- Oxycodone (Percocet, Percodan)
- Tramadol (Ultram, Ultracet)
Codeine

• Resembles morphine pharmacologically
• Highly constipating used as an antidiarrheal
• Antitussive at low doses
• Extremely mild analgesic
• ~10 % of people lack the enzyme needed to make codeine active
Codeine Combinations

- **Empirin** (ASA 325 mg & Codeine)
  - #3 Codeine 30 mg
  - #4 Codeine 60 mg

- **Fiorinal** (ASA 325 mg & Butalbital 50 mg & Caffeine 40 mg & Codeine)
  - #1 Codeine 7.5 mg
  - #2 Codeine 15 mg
  - #3 Codeine 30 mg

- **Tylenol with Codeine**
  - Tablets (Acetaminophen 300 mg & Codeine)
    - #2 Codeine 15 mg
    - #3 Codeine 30 mg
    - #4 Codeine 60 mg
  - Elixir (Acetaminophen 120 mg/5ml)
    - Codeine 12 mg/5ml
Hydrocodone

• The number one overused and abused opioid in US
  – Schedule III
  – Refillable

• Not available as single agent

• Equal in analgesic effect to morphine
# Hydrocodone

<table>
<thead>
<tr>
<th>Brand Name</th>
<th>Hydrocodone</th>
<th>Acetaminophen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lortab 2.5/500</td>
<td>2.5 - 7.5 mg</td>
<td>500 mg</td>
</tr>
<tr>
<td>Vicodin</td>
<td>5 mg</td>
<td>500 mg</td>
</tr>
<tr>
<td>Vicodin ES</td>
<td>7.5 mg</td>
<td>750 mg</td>
</tr>
<tr>
<td>Lorcet Plus</td>
<td>7.5 mg</td>
<td>650 mg</td>
</tr>
<tr>
<td>Lortab 10/500</td>
<td>10 mg</td>
<td>500 mg</td>
</tr>
<tr>
<td>Lortab 10/650</td>
<td>10 mg</td>
<td>650 mg</td>
</tr>
<tr>
<td>Lorcet 10/650</td>
<td>10 mg</td>
<td>660 mg</td>
</tr>
<tr>
<td>Vicodin HP</td>
<td>10 mg</td>
<td>660 mg</td>
</tr>
<tr>
<td>Norco</td>
<td>10 mg</td>
<td>325 mg</td>
</tr>
<tr>
<td>Zydome</td>
<td>5 - 10 mg</td>
<td>400 mg</td>
</tr>
</tbody>
</table>

Vicoprofen - Hydrocodone 7.5 mg and Ibuprofen 200 mg
Oxycodone

• Only combination opioid that is a schedule II (must have a written prescription)

• Available combined with ASA, Acetaminophen or Ibuprofen
Oxycodone Combinations

- Oxycodone 5 mg and Acetaminophen 325 mg (*Percocet, Endocet, Roxicet*)
- Oxycodone 2.5 (325), 5 (325), 7.5 (325), 10 (325)
- Oxycodone 5 mg and Acetaminophen 500 mg (*Tylox*)
- Solution (Oxycodone 5 mg and Acetaminophen 325 in 5 ml)
- Oxycodone 5 mg and Ibuprofen 400 mg (*Combunox*)
- Oxycodone 4.5 mg, Terephthalate 0.38 mg and ASA 325 mg (*Percodan*)
Tramadol

- Opioid and nonopioid modes of action
  - Classified as Non-narcotic analgesic
  - Centrally acting analgesic (mu receptor site)
  - Weakly inhibits the reuptake of serotonin and norepinephrine, similar to TCA
- Only partially antagonized by naloxone
- May cause withdrawal symptoms if given to a patient on other opioids
- Lowers seizure threshold

Tramadol

• Ultram (50 mg Tramadol)
• Ultracet (37.5 mg Tramadol and 325 Acetaminophen)
• Ultram ER or Ryzolt
  – Once daily dosing
  – 100, 200, 300 mg

• Do not exceed 400 mg of Tramadol per day
• 50 mg ~ to Tylenol #3

Single-Agent (Strong) Opioids

- Used for moderate to severe pain
- No maximum dose
- Can be given by many different routes
- Long-acting forms available for chronic/persistent pain

- Morphine
- Hydromorphone
- ***Meperidine
- Methadone
- Oxycodone
- Fentanyl
- Oxymorphone
- Tapentadol
Morphine

- The “Gold Standard” in clinical practice for more than 200 years
- Has Glucuronide metabolites M3G & M6G
- IV
  - Onset of action – 8-12 minutes
  - Duration of action 3-4 hours
  - More sedating than Fentanyl or Dilaudid
# Morphine

## Oral Short-Acting

<table>
<thead>
<tr>
<th>Brand</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSIR</td>
<td>15, 30 mg</td>
</tr>
<tr>
<td>Roxanol-T</td>
<td>20 mg/ml 30, 120 ml bottles, fruity-mint flavor</td>
</tr>
</tbody>
</table>

## Oral Long-Acting

<table>
<thead>
<tr>
<th>Brand</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS Contin</td>
<td>15, 30, 60, 100, 200 mg q 8-12 hours</td>
</tr>
<tr>
<td>Oramorph-SR</td>
<td>15, 30, 60, 100 mg q 8-12 hours</td>
</tr>
<tr>
<td>Avinza</td>
<td>30, 60, 90, 120 mg q 12-24 hours</td>
</tr>
<tr>
<td>Kadian</td>
<td>20, 30, 50, 60, 100 mg q 12-24 hours</td>
</tr>
</tbody>
</table>
Hydromorphone

• Less sedating than other opioids
• Less nausea and vomiting
• No problematic byproducts
• Slightly shorter duration than Morphine
  – IV 7 X stronger than Morphine (1.5 =10)
  – PO 4 X stronger than Morphine (7.5 = 30)
Hydromorphone

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  – IV 7 X stronger than Morphine (1.5 =10)
  – PO 4 X stronger than Morphine (7.5 = 30)
Hydromorphone

• Dilaudid
• IV
  – 1, 2, 3, 4 mg per ml
  – Dilaudid-HP 10 mg per ml
• Oral
  – Liquid 1mg per ml
  – Tablets 1, 2, 4, 8 mg
• Oral long-acting - Exalго
• Suppository 3 mg
Methadone

- Terminal half-life up to 120 hours
- Can be dosed q 4, 6, 8, 12, 24 hours
- Call Pain Resource for dosing guidelines
- Very inexpensive
- Use with great caution in elderly
- Must write “for pain” on prescription
- Oral preparations
  - Dolophine
  - Solution
  - Tablets, 5, 10, *40 mg
Oxycodone

- Only available in oral formulations in US
- Active metabolite Oxymorphone
- Possible kappa receptor site activity, better for visceral pain
- Equal in analgesic effect with morphine
Oxycodone

• Long-acting (controlled release)
  – Biphasic delivery system
  – 10, 15, 20, 30, 40, 60, 80 mg OxyContin, q 8-12 hours

• Short-acting (immediate release)
  – 5, 10, 15 or 30 mg tablets
  – 20 mg/ml concentration, OxyFast
  – 1 mg/ml solution
Fentanyl

• Faster-acting and of shorter duration than other opioids
• Only opioid available in transdermal and transmucosal formulations
• Rarely causes histamine release.
• Approximately 100 times stronger than Morphine
• Well-tolerated in all populations
Fentanyl Transdermal

• For *persistent or chronic pain* only
• 12, 25, 50, 75, 100 mcg q 72 hrs
• Reservoir delivery system – *Duragesic*
  – Onset of action approximately 12 hours after initial application
• Matrix delivery system
  – Analgesia decreases dramatically at 36-48 hours
  – Difficulty staying on for 72 hours
• Less constipation than other opioids
• Avoids first pass effect through liver
Fentanyl

- **IV**
  - Duration of analgesia 30-60 minutes
  - Onset 4-5 minutes
  - Rigid chest syndrome – with large doses

- **Transmucosal - Actiq**
  - For severe breakthrough pain
  - 200, 400, 600, 800, 1600 mcg

- **Newer on the market**
  - FBT (Fentanyl Buccal Tablet) - *Fentora*
  - BEMA (Bioerodible Mucoadhesive) - *Onsolis*
Oxymorphone

• Long-acting - *Opana ER*
  – Dose every 12 hours
  – Do not take with alcohol
  – Take one hour before meals or two hours after
  – 5, 10, 20, 40 mg doses

• Short-acting – *Opana*
  – 5, 10 mg doses

  10 mg po Oxymorphone = 30 mg Morphine po
Tapentadol

• Works primarily on ascending pathways to inhibit transmission of pain impulses
• Norepinephrine reuptake inhibition works primarily on the descending pathways
• The exact mechanism of action of is unknown
• Better side effect profile than other mu agonist opioids
  – Decreased incidence of nausea & vomiting
  – Decreased incidence of constipation
Tapentadol

- *Nucynta* – 50, 75, 100 mg
  - Q 4 hour dosing
- Dose limit of 700 mg day one and 600 mg every day thereafter
- Schedule II
Equianalgesic Dosing

• All based on comparison to Oral Morphine Equivalent – top of chart
• Morphine 30 mg PO ~ 10 mg IV Morphine
• Morphine 30 mg PO ~ 7.5 mg PO Dilaudid
• Morphine 30 mg PO ~ 1.5 mg IV Dilaudid
• Morphine 30 mg PO ~ 30 mg PO Oxycodone
• Morphine 30 mg PO ~ 100 mcg IV Fentanyl**
Fentanyl

• 100 X stronger than morphine
• 100 mcg IV ~ 10 mg IV Morphine
  – For 1 hour

<table>
<thead>
<tr>
<th>9 am</th>
<th>10 am</th>
<th>11 am</th>
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<tbody>
<tr>
<td>10 mg IV MS</td>
<td>100 mcg IV</td>
<td>100 mcg IV</td>
</tr>
<tr>
<td>Fentanyl</td>
<td>Fentanyl</td>
<td>Fentanyl</td>
</tr>
</tbody>
</table>

Total 10 mg
Total 300 mcg
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<thead>
<tr>
<th>Opioid</th>
<th>Short Acting</th>
<th>Long Acting</th>
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<tbody>
<tr>
<td><strong>Equianalgesic Dosing Guide</strong></td>
<td></td>
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<tr>
<td><strong>Opioid</strong></td>
<td><strong>Selected Forms Available</strong></td>
<td><strong>Equianalgesic Dose</strong></td>
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<tr>
<td>Morphone</td>
<td>Tablets - MCR: 15, 30 mg</td>
<td>PO/PR: 30 mg</td>
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<tr>
<td></td>
<td>Liquid</td>
<td>IV: 10 mg</td>
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<tr>
<td>Hydromorphone</td>
<td>Tablets - Oral: (1), (2-4), (9) mg</td>
<td>PO/PR: 2.5 mg</td>
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<tr>
<td></td>
<td>Liquid - Oral: (1) mg/mL</td>
<td>IV: 1.5 mg</td>
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<tr>
<td>Oxycodone</td>
<td>Tablets</td>
<td>PO: 30 mg</td>
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<td></td>
<td>Oral Transmucosal</td>
<td>IV: 100 mg</td>
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<tr>
<td></td>
<td>Tablets</td>
<td>PO: 10 mg</td>
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<tr>
<td>Hydrocodone</td>
<td>Tablets - Hydrocodone/Acetaminophen</td>
<td>PO: 30 mg</td>
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<td></td>
<td>Oral Transmucosal</td>
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<td></td>
<td>Tablets</td>
<td>PO: 200 mg</td>
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<tr>
<td></td>
<td>Dose: (50, 100 mg)</td>
<td>IV: 75 mg</td>
</tr>
<tr>
<td></td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Morphine</td>
<td>Tablets</td>
<td>PO: 30 mg</td>
</tr>
<tr>
<td></td>
<td>Oral: (30, 60, 100, 140 mg)</td>
<td>IV: 100 mg</td>
</tr>
<tr>
<td>Oxycodeone</td>
<td>Tablets</td>
<td>PO: 30 mg</td>
</tr>
<tr>
<td></td>
<td>Oral Transmucosal</td>
<td>PO: 10 mg</td>
</tr>
<tr>
<td>Methadone</td>
<td>Tablets</td>
<td>Consult Pain Service</td>
</tr>
</tbody>
</table>

PDF: 200 mg | 3-4 hrs | Oxycodone for patients with renal or liver disease. Not for use in patients aged 65 years and older. |
| Meperidine  | Tablets      | PO: 30 mg | 2-3 hrs | Non-Farmacy |
|             | Dose: (50, 100 mg) | IV: 75 mg | 2-3 hrs | |
|            | Liquid       | |
| Morphine    | Tablets      | PO: 30 mg | 8-12 hrs | Narcotic agents may be used as an aid to pain and power of a dose. Administering immediately after injection is not appropriate. Do not use MS Contin patches. |
|             | Oral: (30, 60, 100, 140 mg) | IV: 100 mg | 8-12 hrs | Do not crush or cut tablets. |
| Oxycodeone  | Tablets      | PO: 30 mg | 8-12 hrs | Omit stat OTC if it is 5 mm. |
|             | Oral Transmucosal | PO: 10 mg | 12 hrs | Do not crush or cut tablets. |
| Methadone   | Tablets      | Consult Pain Service | --- | Long half-life (unpredictable). Accumulates with repeated dosing and maximum effect may not be seen until day 3rd. Pain management consult recommended. |

IV - intravenous; OTC - oral transmucosal fentanyl patch; PO - per os; PR - per rectum; TD - transdermal. | Indicates non-formulary at KU Med.
YOU CAN:

• Follow the patient long-term with occasional re-evaluation by a specialist
• Determine if a change is significant enough to warrant re-appraisal
• Prescribe methadone for pain
• Call pharmacies, other doctors to check up on what has been filled
• Set clear limits for your patients
YOU CAN:

• Use your local Prescription Drug Monitoring Program to verify what your patient has been prescribed, and by whom.

• In Kansas KTRACS can be found through pmpadmin@pharmacy.ks.gov

• Or call 785-296-6547
How to start

• Begin with a thorough physical and review of symptoms/records
• Obtain a baseline Urine Drug Screen
• Review the Opioid Agreement
• Determine your starting regimen
  – Consider treating the specific pain syndrome
  – This will require “balanced analgesia” with adjuvant medications
How to start

• Use your analgesic guide to determine doses and recommendations
• Chronic therapy typically consists of a long-acting agent plus a short-acting for breakthrough
• For pain ratings of over 7 or 8 despite use of breakthrough meds, an increase in long-acting agents is appropriate, till stabilized.
How to start

• Increases in long-acting should usually be 30 to 50% if pain is severe.
• Keep the breakthrough medication at about 15 to 20% of the total daily dose
• Always review potential side effects
• Never let a patient on chronic therapy leave your office without a laxative
Refer when necessary

- It is always appropriate to have a pain management clinic see the patients to consider if other therapies might be beneficial, and to validate chronic opioid prescribing

- There is no mandate for a pain specialist to routinely follow stable patients once treatment plan established
From time to time – take a fresh look

• Symptoms that worsen despite appropriate therapy warrant another look – repeat imaging, rheumatologic evaluation, etc.
• Pain at a level of 3 or lower for some months (depending on the patient) triggers the consideration for gradual taper (as tolerated)
• Availability of new treatments may offer a relief from chronic medications
REMS

• Risk Evaluation and Mitigation Strategy
  – Indicated to manage a known or potential serious risk associated with a drug
  – Could be a Medication Guide, a Patient Package Insert, a communication plan, elements to assure safe use.
  – Currently in place for transmucosal fentanyl
REMS

• TIRF REMS for transmucosal Fentanyl products includes online education (takes a few minutes), an agreement that is filled out online, then printed and signed by both prescriber and patient and must be filed in the patient chart and at the pharmacy before a prescription can be filled