

# Transitioning Pain Management From the Hospital to the Office

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# Objectives

- At the end of this presentation the participants will be able to
  - Discuss the safe use of opioids in severe pain
  - Explain equi-analgesic dosing of opioids
  - Describe opioid risks and mitigation strategies
  - Distinguish the different etiologic categories of pain and implications for management

# OARRS Opioid Conversion Table

MEM = Morphine Equivalent Multiplier

	<b>MEM</b>		<b>MEM</b>
Hydrocodone	1	Tramadol	0.1
Oxycodone	1.5	Fentanyl	7.2
Codeine	0.15	Methadone	3
Morphine	1	Hydromorphone	4
Buprenorphine	10	Oxymorphone	3
Buprenorphine patch	12.6	Tapentadol	0.4

# OSU Palliative Med Opioid Conversion Table

<b>Drug</b>	<b>IV/SQ dose</b>	<b>PO dose</b>
<b>Morphine</b>	<b>10</b>	<b>30</b>
<b>Hydromorphone</b>	<b>1.5</b>	<b>6-7.5</b>
<b>Oxycodone</b>	<b>----</b>	<b>20</b>
<b>Hydrocodone</b>	<b>----</b>	<b>30</b>
Codeine	120	200

**CAUTION WITH MEDS CONTAINING ACETIMENOPHEN**

# OSU Palliative Med

## Fentanyl Patch Conversion Table

### **TD Fentanyl Patch**

### **Oral MED / OME**

12 mcg

30 mg/day

25 mcg

60 mg/day

50 mcg

120 mg/day

75 mcg

180 mg/day

100 mcg

240 mg/day

TD = Transdermal

MED = Morphine Equivalent Dose

OME = Oral Morphine Equivalent

# OSU Palliative Med

## Methadone Conversion Table

**OME**

**Morphine : Methadone ratio (PO)**

< 90 mg/d	4:1	(40 mg → 10 mg)
90 - 300 mg/d	8:1	(160 mg → 20 mg)
> 300 mg/d	12:1	(360 mg → 30 mg) ( <u>≥720 mg → 60 mg*</u> )

**Max starting methadone dose = 60 mg/d**

**Methadone reaches steady state after about 5-7 days**

Oral to IV methadone ratio is 2:1

**USE METHADONE WITH CAUTION**

# Opioid Prescribing Considerations

- Prior history of drug abuse?
- **What to monitor**
  - Response to Treatment – the 4 A's
    - Analgesia – how is the pain?
    - Adverse effects – presence and severity?
    - **ADL's – what is the patient's level of function?**
    - **Aberrant behaviors – see next slide**
  - OARRS
  - UDT

# Aberrant Behaviors

Steven D. Passik, PhD

## Probably more predictive of abuse

- Selling prescription drugs
- Prescription forgery
- Stealing or borrowing another patient's drugs
- Injecting oral formulation
- Obtaining prescription drugs from non-medical sources
- Concurrent abuse of related illicit drugs
- Multiple unsanctioned dose escalations
- Recurrent prescription losses

## Probably less predictive of abuse

- Aggressive complaining about need for higher doses
- Drug hoarding during periods of reduced symptoms
- Requesting specific drugs
- Acquisition of similar drugs from other medical sources
- Unsanctioned dose escalation 1-2 times
- Unapproved use of the drug to treat another symptom
- Reporting psychic effects not intended by the clinician



# Considerations for transitioning pain medications from inpatient to outpatient

- What is the etiology of the pain?
  - Is the pain related to malignancy?
- What is the mechanism of the pain?
  - E.g. somatic, visceral, neuropathic
- What is the expected course of the pain?
  - Will it likely improve over time? How quickly?
  - Will it likely remain constant?
  - Is it likely to get worse over time? How quickly?
- Allow for possible “cross-tolerance”

# When to request an OARRS report

- In general, **Ohio law** requires prescribers to request and review an OARRS report before initially prescribing or personally furnishing an opioid analgesic or a benzodiazepine.
- Detailed information, including exceptions to this requirement, is available on the OARRS website: [oarrs.pharmacy.ohio.gov](http://oarrs.pharmacy.ohio.gov).
  - **Google “OARRS”**

# How to Dispose of Unused Medicines

**I**s your medicine cabinet filled with expired drugs or medications you no longer use? How should you dispose of them?

Most drugs can be thrown in the household trash, but consumers should take certain precautions before tossing them out, according to the Food and Drug Administration (FDA). A few drugs should be flushed down the toilet. And a growing number of community-based "take-back" programs offer another safe disposal alternative.

## Guidelines for Drug Disposal

FDA worked with the White House Office of National Drug Control Policy (ONDCP) to develop the first consumer guidance for proper disposal of prescription drugs. Issued by ONDCP in February 2007 and updated in October 2009, the federal guidelines are summarized here:

- Follow any specific disposal instructions on the drug label or patient information that accompanies the medication. Do not flush prescription drugs down the toilet unless this information specifically instructs you to do so.
- Take advantage of community drug take-back programs that allow the public to bring unused drugs to a central location for proper disposal. Call your city or county government's household trash and recycling service (see blue pages in phone book) to see if a take-back program is available in your community. The Drug Enforcement Administration, working with state and local law enforcement agencies, is sponsoring National Prescription Drug Take Back Days ([www.deadiversion.usdoj.gov](http://www.deadiversion.usdoj.gov)) throughout the United States.
- If no instructions are given on the drug label and no



*Take drugs out of their original containers and mix them with an undesirable substance, such as used coffee grounds ...*

take-back program is available in your area, throw the drugs in the household trash, but first:

- Take them out of their original containers and mix them with an undesirable substance, such as used coffee grounds or kitty litter. The medication will be less appealing to children and pets, and unrecognizable to people who may intentionally go through your trash.
- Put them in a sealable bag, empty can, or other container to prevent the medication from leaking or breaking out of a garbage bag.

FDA's Deputy Director of the Office of Compliance Ilisa Bernstein, Pharm.D., J.D., offers some additional tips:

- Before throwing out a medicine container, scratch out all identifying information on the prescription label to make it unreadable. This will help protect your identity and the privacy of your personal health information.
- Do not give medications to friends. Doctors prescribe drugs based on a person's specific symptoms and medical history. A drug that works for you could be dangerous for someone else.
- When in doubt about proper disposal, talk to your pharmacist.

Bernstein says the same disposal methods for prescription drugs could apply to over-the-counter drugs as well.

## Why the Precautions?

Disposal instructions on the label are part of FDA's "risk mitigation" strategy, says Capt. Jim Hunter, R.Ph., M.P.H., senior program manager on FDA's Controlled Substance Staff. When a drug contains instructions to flush it down the toilet, he says, it's because FDA, working with the manufacturer, has determined this method to be the most appropriate route of disposal that presents the least risk to safety.

Drugs such as powerful narcotic pain relievers and other controlled substances carry instructions for flushing to reduce the danger of unintentional use or overdose and illegal abuse.

For example, the fentanyl patch, an adhesive patch that delivers a potent pain medicine through the skin, comes with instructions to flush used or leftover patches. Too much fentanyl can cause severe breathing problems and lead to death in babies, children, pets, and even adults, especially those who have not been prescribed the drug. "Even after a patch is used, a lot of the drug remains in the patch," says Hunter, "so you wouldn't want to throw something in the trash that contains a powerful and potentially dangerous narcotic that could harm others."

## Environmental Concerns

Despite the safety reasons for flushing drugs, some people are questioning the practice because of concerns about trace levels of drug residues found in surface water, such as rivers and lakes, and in some community drinking water supplies. However, the main way drug residues enter water systems is by people taking medications and then naturally passing them through their bodies, says Raanan Bloom, Ph.D., an environmental assessment expert in FDA's Center for Drug Evaluation and Research. "Most drugs are not completely absorbed or metabolized by the body, and enter the environment after passing through waste water treatment plants."

A company that wants FDA to approve its drug must submit an application package to the agency. FDA requires, as part of the application package, an assessment of how the drug's use would affect the environment. Some drug applications are excluded from the assessment requirement, says Bloom, based on previous agency actions.

"For those drugs for which environmental assessments have been required, there has been no indication of environmental effects due to

flushing," says Bloom. In addition, according to the Environmental Protection Agency, scientists to date have found no evidence of adverse human health effects from pharmaceutical residues in the environment.

Nonetheless, FDA does not want to add drug residues into water systems unnecessarily, says Hunter. The agency reviewed its drug labels to identify products with disposal directions recommending flushing or disposal down the sink. This continuously revised listing can be found at FDA's Web page on Disposal of Unused Medicines ([www.fda.gov/Drugs/ResourcesForYou/Consumers/BuyingUsingMedicineSafely/EnsuringSafeUseofMedicine/SafeDisposalofMedicines/ucm186187.htm](http://www.fda.gov/Drugs/ResourcesForYou/Consumers/BuyingUsingMedicineSafely/EnsuringSafeUseofMedicine/SafeDisposalofMedicines/ucm186187.htm)).

Another environmental concern lies with inhalers used by people who have asthma or other breathing problems, such as chronic obstructive pulmonary disease. Traditionally, many inhalers have contained chlorofluorocarbons (CFC's), a propellant that damages the protective ozone layer. The CFC inhalers are being phased out and replaced with more environmentally friendly inhalers.

Depending on the type of product and where you live, inhalers and aerosol products may be thrown into household trash or recyclables, or may be considered hazardous waste and require special handling. Read the handling instructions on the label, as some inhalers should not be punctured or thrown into a fire or incinerator. To ensure safe disposal, contact your local trash and recycling facility. [FDA](#)

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**Google: "fda disposal of unused medicines"**

# How to Dispose of Unused Medicines

- Follow any specific disposal instructions on the drug label or patient information that accompanies the medication.
  - Do not flush prescription drugs down the toilet unless this information specifically instructs you to do so.
- Take them out of their original containers and mix them with an undesirable substance, such as used coffee grounds or kitty litter.
- Put them in a sealable bag, empty can, or other container to prevent the medication from leaking or breaking out of a garbage bag.

# Important Reminder

- Whenever prescribing chronic opioids, **ALWAYS prescribe a bowel regimen**
  - Senna 1-3 bid +/- docusate
  - Polyethylene glycol (Miralax) daily or prn
  - Lactulose daily or prn
- Monitor for BM at least qod in most patients
- Other options for severe constipation

# Pain Etiology Categories

- **Short term acute injury**
- **Chronic pain related to defined etiology**
- Chronic pain of uncertain etiology - caution
- **Malignant pain**
  - Persistent pain post treatment/cure
    - Similar to chronic pain of defined etiology
  - **Persistent pain with persistent malignancy**
  - **Progressive pain due to progressive malignancy**
  - Terminal malignancy / hospice

# Short term acute pain

- Determine current opioid need
  - Convert parenteral doses to PO dosing
- Estimate expected course and duration of pain
- Provide sufficient opioid to treat the expected course
- Anticipate that some patients will require additional opioids
- Consider referral if pain persists significantly beyond expected course

# Short term acute pain - example

- Patient s/p MVA with humerus fracture and ongoing pain, taking hydromorphone 1-2 mg IV q 3 hr prn, took 6-7 mg in past 24 hours
  - OME = 120 - 140 mg
  - Pain expected to improve/resolve over about 2 weeks



# Short term acute pain - example

- Prescribe morphine IR 15-30 mg po q hr prn
- Provide #60 tabs (+/-) for taper over 2 weeks
  - 9 tabs x 14 days = 126 tabs / 2 = 63 tabs
- Advise patient to contact your office during regular working hours if he/she anticipates running out
- Advise re discarding any unused opioids

# Chronic pain – defined etiology

- Convert IV dosing to equi-analgesic PO dose
- May treat with all short-acting or long-acting plus short-acting (for higher doses)
  - Typically provide about 50% of total as long-acting and remainder as short-acting
- Doses should remain fairly stable
- For increased pain, reassess clinically
  - If no etiology, consider opioid rotation

# Chronic pain – example

- Patient with severe burn with scarring affecting right side of neck, chest, shoulder, and arm, with severe persistent pain
- Ready to leave the hospital soon
- Taking hydromorphone 2 mg q 4 hr ATC and 1-2 mg q 1 hr prn for the past week
- Average daily dose is 18 mg/day

# Chronic pain – example

- OME = 360 mg (18 x 20)
- Prescribe long-acting opioid of about 50%
  - e.g. morphine SR total 180 mg/d = 60 mg q 8 hr
- Prescribe prn dose of at least 180 mg/d
  - Prescribe MSIR 30 mg q 3 hr prn
  - Could take up to additional 240 mg/d
  - Consider titrating doses to try to limit prn use to 3-4 doses/d

# Chronic pain – example

- Provide 30-day prescriptions for each medication
- Have a plan for providing monthly prescriptions
- Monitor for gradual pain improvement and possible dose reduction over time

# Malignant pain

- Convert IV dosing to equi-analgesic PO dose
- Typically provide long-acting plus short-acting
  - Typically provide about 50% of total as long-acting and remainder as short-acting
- Doses may increase as disease progresses
- For increased pain reassess clinically
  - Frequently reflects disease progression
  - If no new etiology, consider opioid rotation

# Malignant pain – example

- Patient with recurrent lung cancer, with mets to liver and bone; on chemotherapy and chronic opioid therapy
- Admitted with increased pain and weakness
  - Increased bone mets, pathologic rib fractures
  - Poor energy, fatigue, and anorexia,
  - Neuropathic pain due to chemotherapy

# Malignant pain – example

- Hydromorphone PCA, titrated to
  - 1 mg/hr continuous
  - 2 mg q 15 min PCA
  - Using 40 mg/d with acceptable pain control
  - OME = 800 mg
- Neurontin titrated to 600 mg q 8 hr



# Malignant pain – example

- Start long acting opioid for about 400 OME
  - Morphine SR 120 to 160 mg q 8h (360-480 OME)
  - Oxy SR 80 to 100 mg q 8 hr (360-450 OME)
- Provide short acting for about 400 OME
  - MSIR 60 mg q 3 hr prn (up to 480 OME)
  - Oxy IR 45 mg q 3 hr prn (up to 540 OME)
- Monitor for sedation, constipation
- Address code status

# Malignant pain – example

- After 2 months, the patient is progressively weaker with increased pain and SOB
- Unable to tolerate chemotherapy
  - Oncologist: prognosis is about 2-4 months survival
  - “Would you be surprised ...”
  - Address (or readdress) code status
- Advise referral to hospice for ongoing pain and symptom management and supportive care services (regardless of code status)

# Conclusions

- Sign up for OARRS and utilize the database
- Become familiar with commonly used opioids
  - Be aware of equi-analgesic doses when converting from one opioid to another
- Consider the pain syndrome natural history
- Assess opioid risk factors in every patient
  - Monitor the 4A's, OARRS, and UDTs
  - History of prior drug abuse
  - Monitor for functional status and aberrant behaviors in patients on chronic opioids
- Monitor for opioid side effects in all patients