The Opioid Crisis: Effective Strategies to Turn the Tide

Adam Bursua, Pharm.D., BCPS
Laura Meyer-Junco, Pharm.D., BCPS, CPE
Mary Lynn Moody, BSPharm
Annette Hays, Pharm.D., BCPS
Kevin O. Rynn, Pharm.D., FCCP, DBAT
Christopher Shriever, MS, Pharm.D.

The speakers have no conflicts of interest to disclose

Responsible Opioid Prescribing

Laura Meyer-Junco, PharmD, BCPS, CPE
Clinical Assistant Professor, UIC College of Pharmacy at Rockford
Clinical Pharmacist, MercyHealth and Hospice Care of America

Learning Objectives – Pharmacists and Technicians

1. ***Develop an approach to responsible opioid prescribing, reducing the risk of misuse, abuse, and diversion of opioids.***
2. Evaluate the role prescription drug monitoring programs play in decreasing opioid misuse and abuse.
3. Order the effectiveness of various types of interventions to ensure the safe use of opioid therapy.
4. Formulate effective strategies to influence positive changes in the opioid medication use process in a health care organization.

Definitions

Webster L, et al. *Avoiding opioid abuse will managing pain.* North Branch, MN: Sunrise River Press; 2007.
Am J Psychiatry 2016; 173(1): 18-26
Mayo Clin Proc 2009; 84 (7): 593-601

01
Aberrant Drug Behavior
Any drug-related deviation from the medical plan

Abuse 02
Use of an opioid for a non-therapeutic intent

03 **Misuse**
Inappropriate use of a drug, whether deliberate or unintentional (therapeutic intent)

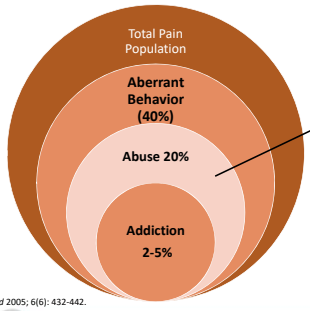
Pseudoaddiction 04
Drug-seeking behavior from undertreatment of pain

05 **Chemical Coping**
Reliance on a drug for psychological stability

Diversion 06
Transfer of a prescription from a lawful to unlawful method of distribution

07 **Addiction**
("Substance Use Disorder")
Out-of-control, compulsive drug use despite harm to health, relationships, finances

"All addicted people are abusers, but not all abusers are addicted"

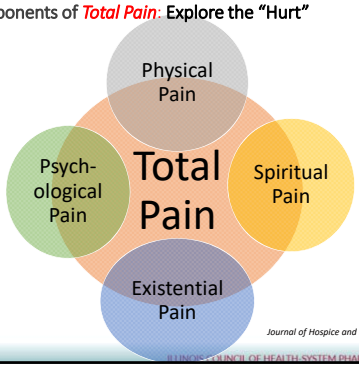


What is driving the abuse or misuse?
- Chemical coping
- Uncontrolled pain
- Misunderstanding of treatment plan

Pain Med 2005; 6(6): 432-442.

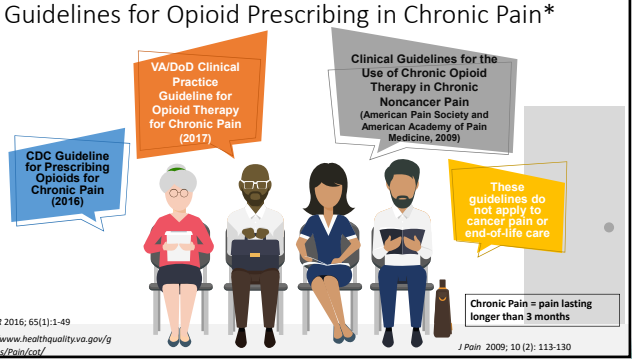
Webster L, et al. *Avoiding opioid abuse will managing pain.* North Branch, MN: Sunrise River Press; 2007.

Recognize Components of *Total Pain*: Explore the "Hurt"



Journal of Hospice and Palliative Nursing 2008; 10(1): 26-32.

Guidelines for Opioid Prescribing in Chronic Pain*



Chronic Pain = pain lasting longer than 3 months

MMWR 2016; 65(1):1-49

https://www.healthquality.va.gov/guidelines/Pain/cot/

J Pain 2009; 10 (2): 113-130

Guideline Consensus: Non-Opioids *First*

CDC #1

"**Nonpharmacologic therapy and nonopioid pharmacologic therapy are preferred for chronic pain**. Clinicians should *consider opioid therapy only* if expected benefits for both pain and function are anticipated to outweigh risks to the patient.

- Evidence for **short-term** use of opioids (**trials < 12 weeks)**
- **Insufficient evidence** to determine if pain relief is sustained and function improves with **long term opioid therapy.**
- **Risks** of long term therapy are **known**

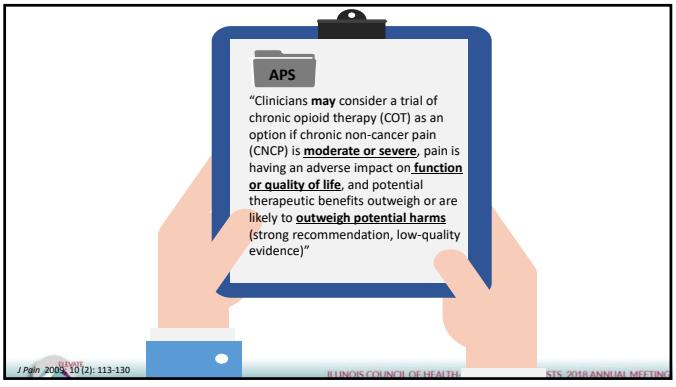
VA #1

a) "We recommend **against initiation of long-term opioid therapy for chronic pain**
b) We recommend alternatives to opioid therapy such as self-management strategies and other non-pharmacological treatments
c) When pharmacologic therapies are used, we recommend non-opioids over opioids."

- Literature review conducted found **no studies** evaluating opioid therapy **> 16 weeks**

MMWR 2016; 65(1):1-49

https://www.healthquality.va.gov/guidelines/Pain/cot/

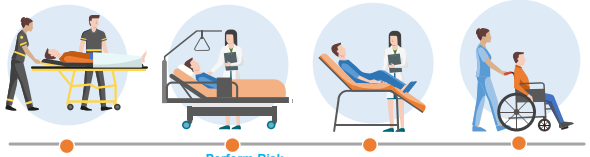


J Pain 2009; 10 (2): 113-130

Guidelines Consensus: Risk Assessment *before* Opioid Initiation

CDC #3 #8-10	VA #7-8	APS #1-2
Discuss known risks and realistic benefits of opioid therapy AND patient/clinician responsibilities ***(Recommendation #3)***	Have an informed consent conversation covering the risks and benefits of opioid therapy as well as alternative therapies. ***(Recommendation 7)***	Conduct an assessment of risk of substance abuse, misuse, or addiction ***(Recommendation 1.1)***
Evaluate risk factors for opioid-related harms ***(Recommendation 8)***	Assess suicide risk when considering initiating long term opioid therapy ***(Recommendation 8)***	Evaluate benefit and harms of opioid therapy ***(Recommendation 1.3)***
Review state prescription drug monitoring program (PDMP) data ***(Recommendation 9)***		Informed consent should be obtained and contain goals, expectations, risks, and responsibilities of patient and clinician ***(Recommendation 2.1)***
Use urine drug testing before starting opioid ***(Recommendation 10)***		

The Ideal *First* Visit



Obtain a Good History

Pain Assessment Plus:
- All drug/ non-drug interventions tried
- Substance-abuse history
- Comorbid conditions (mood and sleep disorders)
- **Pain impact on function!**
- **Social functioning (work, relationships, social activities)**
- **Home Environment**

Perform Risk Assessments
- Assess risk of suicide
- Assess risk of opioid harm
- Use validated tools to determine risk of developing aberrant behaviors
- Stratify patient into low, moderate, or high risk groups

Collect Additional Data
- Review PDMP
- Urine Drug Test

Individualize Treatment Plan
- Realistic treatment goals
- Informed Consent
- Opioid Agreement

Mayo Clin Proc 2009; 84 (7): 593-601

Webster L, et al. *Avoiding opioid abuse will managing pain.* North Branch, MN: Sunrise River Press; 2007.

Opioid Risk Tool (ORT)

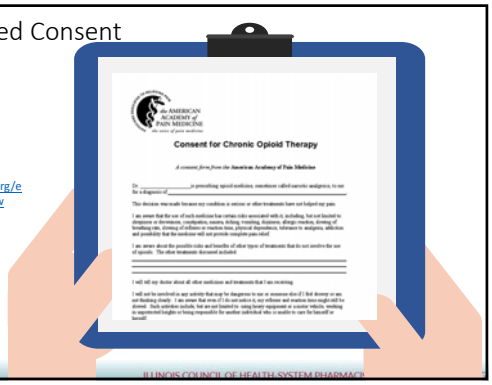
Family History of Substance Abuse	Female	Male
Alcohol	1 point	3 points
Illegal Drugs	2 points	3 points
Prescription Drugs	4 points	4 points
Personal History of Substance Abuse	**Female**	**Male**
Alcohol	3 points	3 points
Illegal Drugs	4 points	4 points
Prescription Drugs	5 points	5 points
Age (16 to 45 years old)	1 point	1 point
Preadolescent sexual abuse	3 points	0 points
Depression	1 point	1 point
ADD, OCD, Bipolar or Schizophrenia	2 points	2 points

Low Risk: 0-3 points **Moderate Risk 4-7 points** **High Risk ≥ 8 points**

Pain Med 2005; 6(6): 432-442.

Sample Informed Consent

Available at:
http://americanpainsociety.org/education/guidelines/overview

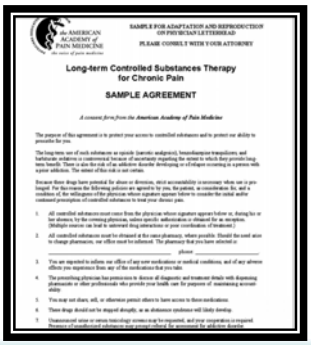


Opioid Agreement (or Contract)

Key features may include:

- Goals of opioid treatment
- Clear explanation that **opioid treatment is a trial** and will be continued or discontinued based on progress toward goals, benefits, and harms/risks
- Specification of 1 physician and 1 pharmacy
- Random urine drug tests
- Office visits at a minimum interval
- Use of pill counts
- Limited prescriptions (i.e. biweekly, monthly)
- Safe storage requirements and disposal
- If medication stolen, must file police report
- Behaviors that constitute non-adherence
- Consequences of non-adherence

J Pain 2009; 10 (2): 113-130



What are our treatment *goals?*

CDC #2

"Before starting opioid therapy for chronic pain, clinicians should **establish treatment goals** with all patients, including realistic goals for pain and function, and should consider how therapy will be discontinued if benefits do not outweigh risks. Clinicians should continue opioid therapy only if there is clinically meaningful improvement in pain and **function** that outweighs risks to patient safety"

P E G

Pain Average **Enjoyment of Life** **General Activity**

J Pain 2009; 10 (2): 113-130

What are *realistic* goals?

CDC #3

"Before starting and periodically during opioid therapy, clinicians should discuss with patients known **risks and realistic benefits** of opioid therapy and patient and clinician responsibilities for managing therapy"

30% - 50%

Reduction in pain demonstrated in well controlled randomized trials

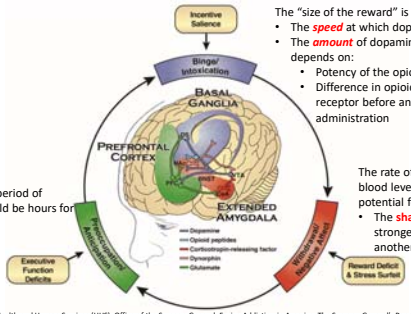
J Pain 2009; 10 (2): 113-130

Herdon C, et al *Principles of Analgesic Use.* 7th edition. Chicago, IL; American Pain Society: 2016, p. 40

Guideline Recommendations for *Initiating* Opioid Therapy for Chronic Pain

CDC #4 #5	VA #10 #13	APS #3
"…prescribe **immediate-release opioids** instead of extended-release/long-acting (ER/LA) opioids" ***(Recommendation 4)***	"We recommend **against** prescribing **long-acting opioids** for acute pain, as an as-needed medication, or on ***initiation*** of long-term opioid therapy." ***(Recommendation 13)***	"Clinicians and patients should regard **initial treatment with opioids as a therapeutic trial** to determine chronic opioid therapy is appropriate." ***(Recommendation 3.1)***
Prescribe the lowest effective dose ***(Recommendation 5)***	Prescribe the lowest effective dose ***(Recommendation 10)***	

Consider Impact of Opioid *Pharmacokinetics* on the Addiction Cycle



Craving after a period of abstinence (could be hours for some).

The "size of the reward" is based on two factors:

- The ***speed*** at which dopamine is released
- The ***amount*** of dopamine released, which depends on:
  - Potency of the opioid
  - Difference in opioid concentration at the receptor before and after drug administration

The rate of decline in opioid blood levels is associated with potential for abuse

- The **sharper the decline**, the stronger the motivation for another dose.

U.S. Department of Health and Human Services (HHS), Office of the Surgeon General, Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health. Washington, DC: HHS, November 2016. Available at: https://addiction.surgeongeneral.gov

Webster L, et al. *Avoiding opioid abuse will managing pain.*

Guideline Recommendations for *Monitoring* Opioid Therapy for Chronic Pain

CDC #9-10	VA #7	APS #5
-Check PDMP at least every 3 months -Consider annual urine drug screen ***(Recommendation 9 and 10)***	***Frequency based on risk:*** • Ongoing, random urine drug testing (including appropriate confirmatory testing) • Checking PDMP • Monitoring for overdose potential and suicidality • Providing overdose education • Prescribing of naloxone ***(Recommendation 7)***	Monitor urine drug screens periodically in patients at high risk of abuse ***(Recommendation 5.2)***

Match Monitoring to the Level of Risk of Aberrant Opioid Behaviors

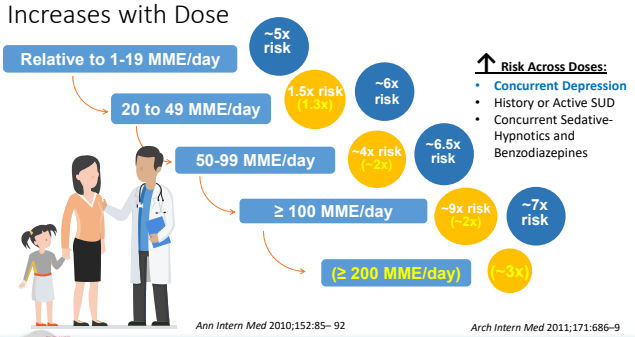
	Low Risk (ORT 0-3)	Moderate Risk (ORT 4-7)	High Risk (ORT ≥ 8)
Patient Visits	Every 1-3 months	Every 2 to 4 weeks	Every 1-2 weeks
Informed Consent or Opioid Agreement	Informed Consent	Opioid Agreement	Opioid Agreement
Random Urine Drug Screen	Initial and Annual	Initial and every 3-6 months	Initial and monthly
Prescription Database Check	Initial and Annual	Initial and every 3 months	Initial and every month
Pill Counts	Annually	Every 6 months	Every 1-3 months
Medication Choice	Adequate analgesia, no restrictions	Limit Rapid Onset Opioids	Limit Rapid-Onset and Short Acting Opioids
Family/Third Party Involvement	Not necessary	Verify patient's adherence and assess for environmental influences	Enlist family member/caregiver to manage medication
Progress Toward Therapeutic Goals	Every visit	Every visit	Every visit
Risk vs. Benefit	Every visit	Every visit	Every visit

Webster L, et al. *Avoiding opioid abuse will managing pain.* 2007.

Guideline Recommendations for *'Maximum'* Opioid Dosage in Chronic Pain

CDC #5, cont.	VA #11-12	APS #7
"…Clinicians should use caution when prescribing opioids at any dosage, should carefully reassess evidence of individual benefits and risks when **increasing dosage to 50 morphine milligram equivalents (MME) or more per day**, and should **avoid increasing to 90 MME or more per day** or carefully *justify* a decision to titrate dosage to 90 MME or more per day. ***(Recommendation 5)***	**"…**Risks for overdose and death significantly **increase** at a range of **20-50 mg morphine** equivalent daily dose**"** ***(Recommendation 11)*** **"**We recommend **against** opioid doses **over 90 mg morphine equivalent daily dose** for treating chronic pain." At this dose, "evaluate for tapering to reduce dose or discontinue" ***(Recommendation 12)***	"There is **no standardized definition for what constitutes a "high" dose**. By panel consensus, a reasonable definition for high dose opioid therapy is **>200 mg daily of oral morphine (or equivalent)**, based on maximum opioid doses studied in randomized trials and average opioid doses observed in observational studies." ***(Discussion following recommendation 7)***

Nonfatal Opioid Overdose (and Overdose Death) Increases with Dose



Ann Intern Med 2010;152:85– 92

Arch Intern Med 2011;171:686–9

Opioid Guidelines *Against* Concurrent Benzodiazepines (and CNS depressants)

CDC #11	VA #5	APS
"Clinicians should **avoid** prescribing **opioid pain medication and benzodiazepines concurrently**" ***(Recommendation 11)***	"We recommend **against** the **concurrent use of benzodiazepines and opioids**" **(Recommendation 5)**	**No Recommendation**
Also advises: "In addition, the **central nervous system depressants (e.g. muscle relaxants, hypnotics**) can potentiate central nervous system depression associated with opioids"	**Also advises:** "We suggest **not prescribing Z-drugs** to patients who are on chronic opioids…"	**Advises:** "Respiratory depression may occur when…opioids are combined with other drugs that are associated with respiratory depression or potentiate opioid-induced respiratory depression **(such as benzodiazepines)**"

Guideline Recommendations for Opioid Therapy for *Acute* Pain

CDC #6	VA #18	APS
"**Three days or less** will often be sufficient; more than seven days ***will rarely be needed.***" ***(Recommendation 6)***	If opioids are prescribed, use **immediate release** opioids and reassess **"no later than 3-5 days** to determine if adjustments or continuing opioid therapy is indicated." ***(Recommendation 18)***	***No recommendation***

Reduce Opioid ***Left-overs***!

Summary

- Limited evidence for efficacy of long term opioid therapy. However, considerable evidence for harm.
- Current guidelines agree that non-opioids/non-pharmacological therapy should be first and foremost in non cancer pain and non end of life pain.
- *Before considering* opioids, evaluate benefits/harms for individual patient and assess risk for opioid related misuse, abuse, and addiction.
- Set *realistic* expectations for opioid therapy, and monitor *function* (as a measure of opioid efficacy but also as a measure of opioid misuse, abuse, or addiction).
- Perform ongoing opioid stewardship activities/monitoring (UDT, PDMP, opioid agreements, pill counts, etc).
- Evaluate "total pain" before opioid initiation, when chemical coping is suspected, with vague descriptions of pain, and when pain increases despite increased analgesic use.
- Take back the opioids and the benzodiazepines (limit prescribing and dispose of leftovers!)

We can *palliate* pain while *avoiding* abuse

Additional Slides

For your reference

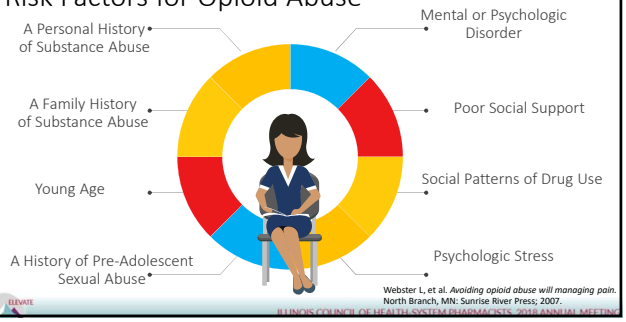
Look for Aberrant Drug-Related Behavior

- Definition: behaviors during treatment with a controlled substance that raise concern about addiction, abuse, or diversion

More Serious	Less Serious
Selling prescription drugs	Aggressive complaining about need for higher doses
Forging prescriptions	Drug hoarding
Stealing or borrowing another person's medications	Requesting specific drugs
Injecting oral formulation	Acquiring similar medications from other medical sources
Obtaining prescription drugs from nonmedical sources	Unapproved dose escalation 1-2 times
Concurrent use of illicit drugs	Unapproved use of medication to treat another symptom (i.e. insomnia, anxiety)
Multiple unapproved dose escalations	Reporting effects (i.e. euphoria) not intended by the clinician
Recurrent loss of prescription	Occasional impairment

Passik SD, Portenoy RK: In Holland J, et al: Handbook of Psycho-oncology, 2nd ed, 1998; pp 576-586

Risk Factors for Opioid Abuse



Webster L, et al. *Avoiding opioid abuse will managing pain.* North Branch, MN: Sunrise River Press; 2007.

Risk Assessment Tools *(perform at initial visit)*

Tool*	# of items	Administered by:
Opioid Risk Tool **(ORT)**	5	Patient
Screener & Opioid Assessment for Patients with Pain **(SOAPP)**	24, 14, and 5 (3 versions)	Patient
Diagnosis, Intractability, Risk, & Efficacy Score **(DIRE)**	7	Clinician

* Predicts risk of developing opioid-related aberrant behavior, but does NOT diagnosis addiction or opioid use disorder

Webster L, et al. *Avoiding opioid abuse will managing pain.* North Branch, MN: Sunrise River Press; 2007.

Urine Drug Tests (UDT): Know Your *Metabolites*

Opioid Prescribed (or using non-medically)	Screening: Opioid Immunoassay	Confirmatory Test with GC/MS (*Metabolite)
Morphine	Positive	Morphine Hydromorphone*
Heroin	Positive	Morphine*
Codeine	Positive	Codeine Morphine* Hydrocodone*
Hydrocodone	Positive/negative (varies among assays)	Hydrocodone Hydromorphone*
Hydromorphone	Positive/negative (varies among assays)	Hydromorphone
Oxycodone	Positive/negative (varies among assays)	Oxycodone Oxymorphone* ?Hydrocodone*
Oxymorphone	Negative	Oxymorphone
Fentanyl	Negative	Fentanyl
Methadone	Negative	Methadone

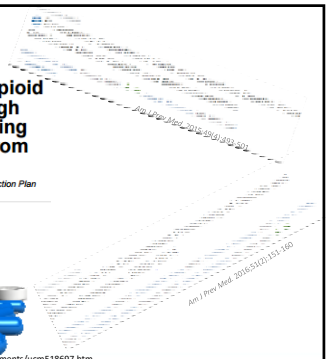
FDA News Release

FDA requires strong warnings for opioid analgesics, prescription opioid cough products, and benzodiazepine labeling related to serious risks and death from combined use

Action to better inform prescribers and protect patients as part of Agency's Opioids Action Plan

For Immediate Release

August 31, 2016



https://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm518697.htm

Opioid *Tapers* courtsey of the VA/DoD

Speed of Taper

Determine speed of taper based on opioid dose, duration of therapy, type of opioid formulation, and risk factors such as co-occurring psychiatric, medical and substance use conditions.

Gradual taper considerations	More rapid taper considerations
Higher opioid dose	Non-adherence to treatment plan
Longer opioid therapy duration – the longer the duration of previous opioid therapy, the longer the taper may take	Escalating high-risk medication-related behaviors
When safety permits, gradual taper is more often tolerated	Drug diversion or illegal activities
Can be completed over several months to years	Risks too high to consider gradual taper
Suggested taper	**Suggested taper**
5 – 20% every 4 weeks	5 – 20% per week

*For patients on LOT, consider changing patient's prescription to an equivalent dose of a long-acting opioid (i.e. methadone) then taper methadone accordingly.

https://www.qmo.amedd.army.mil/OT/OpioidTaperingBooklet_FINAL_508.pdf

Opioid *Left-overs*: Take Back the Opioids

- Medication Take Back Programs
  - https://www.deadiversion.usdoj.gov/drug_disposal/takeback/index.html
  - **DEA National Take Back Day: April 28, 2018 - 10AM to 2PM**
    - **Cub Foods Parking Lot 1512 S. West Ave Freeport, IL 6103**
- DEA Authorized Collector:
  - https://apps.deadiversion.usdoj.gov/pubdispsearch/spring/main?execution=e s1
  - OSF Healthcare System 5666 E. State Street, Rockford, IL
  - CVS 110 S. Alpine Rd, Rockford, IL
  - Walgreens 5065 Hononegah Rd, Roscoe, IL
- Dispose in Household Trash
  - Mix in unpalatable substance, place in sealable bag, and put in trash
- Flush in Toilet
- Walmart Dispose Rx

https://www.fda.gov/Drugs/ResourcesForYou/Consumers/BuyingUsingMedicineSafely/EnsuringSafeUseofMedicine/SafeDisposalofMedicines/ucm186187.htm

https://www.deadiversion.usdoj.gov/drug_disposal/index.html

Opioid Disposal: FDA recommendations for *Flushing?*

Opioids recommended for disposal by flushing by the FDA:

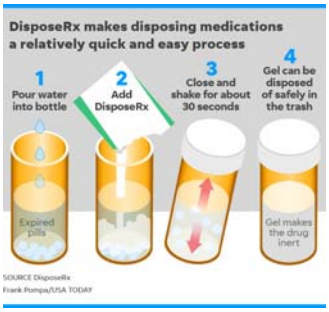
- All fentanyl products—transmucosal and transdermal
- All buprenorphine products—buccal/sublingual, transdermal (includes combination naloxone products)

Basically all opioid products are on the flush list except:

- **Hydrocodone/acetaminophen**
- **Tramadol**
- **Codeine products**

https://www.fda.gov/Drugs/ResourcesForYou/Consumers/BuyingUsingMedicineSafely/EnsuringSafeUseofMedicine/SafeDisposalofMedicines/ucm576167.htm

Opioid Disposal: the *Walmart method*

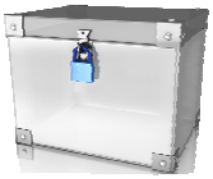


https://www.usatoday.com/story/money/2018/01/17/walmart-takes-opioid-crisis-offering-free-solution-safely-dispose-unused-meds/1039548001/

Opioid *Safe Storage*

- Remind patients that medications should be stored out reach of children
- In a safe place—preferably locked

Per the CDC, prescribers should "discuss risks to household members and other individuals if opioids are intentionally or unintentionally shared with others for whom they are not prescribed, including the possibility that others might experience overdose at the same or at lower dosage than prescribed for the patient."



https://www.end-opioid-epidemic.org/storage-and-disposal/

Supplemental Resources (*referenced during talk also)*

Guidelines (Freely Available):

- 2009 American Pain Society/American Academy of Pain Medicine Chronic Pain Guideline (samples of informed consent, opioid agreement, ORT in appendix)
  - http://www.jpain.org/article/S1526-5900(08)00831-6/abstract
- VA/DoD Clinical Practice Guidelines
  - https://www.healthquality.va.gov/
- VA/DoD Clinical Practice Guidelines on Pain (includes tapering resource)
  - https://www.healthquality.va.gov/guidelines/Pain/cot/
- CDC Guideline for Prescribing Opioids for Chronic Pain
  - https://www.cdc.gov/drugoverdose/prescribing/guideline.html

Books:

- Herndon CM, et al. Principles of Analgesic Use, 7th Ed from the American Pain Society, 2016 ($38)
  - http://americanpainsociety.org/education/principles-of-analgesic-use
- Webster LR. Avoiding Opioid Abuse While Managing Pain, 2007 ($16)
  - https://www.amazon.com

Supplemental Resources

Webinars:

- Treating Pain and Avoiding Opioid Use Disorders:
  - https://pcssnow.org/education-training/treating-chronic-pain-core-curriculum/
- ER/LA Opioid REMS program from the American Society of Addiction Medicine
  - https://www.asam.org/education/resources/Opioid-Prescribing

Websites:

- Opioid Information from the FDA (news, approved abuse deterrent formulations, opioid REMS, disposal information)
  - https://www.fda.gov/drugs/drugsafety/informationbydrugclass/ucm337066.htm
- Everything Pain Management! (and sign up for free monthly journal mailing)
  - https://www.practicalpainmanagement.com/

Illinois Prescription Drug Monitoring Program- 2018 Requirements

Mary Lynn Moody BSPharm
Assistant Dean, Business Development
Clinical Associate Professor
Department of Pharmacy Practice
University of Illinois at Chicago College of Pharmacy

Illinois Prescription Monitoring Program Overview

- The ILPMP receives Controlled Substance prescription data from retail pharmacies daily
- Allows Prescribers and Dispensers to view the historical data for current and prospective patients.

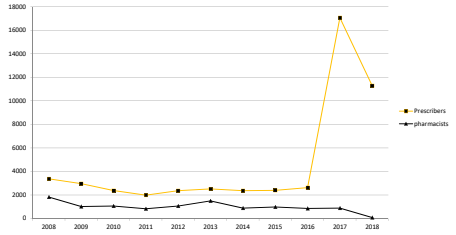
What is Public Act 100-0564?[1]

- Amends the current Controlled Substance Act to address concerns of doctor shopping
- Effective January 1, 2018
- Prescribers must register with the Illinois Prescription Monitoring Program
- Should review ILPMP with initial prescription of Schedule II narcotic

PMP Registrations

- 64,638 PMP Users (as of March 30th, 2018)
  - 53,548 Prescribers
  - 11,090 Dispensers
- 27,696 registrations since December, 2017

Registrations



PMP Searches by Year

Year	Searches
2013	1,431,538
2014	2,232,916
2015	2,713,137
2016	4,698,186
2017	13,377,213
2018 (Jan-Feb)	7,706,275

Public Act 100-0564[1]

- Each Prescriber (or their designee) shall document an attempt to access the PMP
- Assess the patient on initial prescription of a Schedule II narcotic (opioid)
- Documentation shall be in the patient's medical record;
  - Exceptions:
    - Oncology Treatment
    - Palliative Care
    - 7-Day or less supply provided by an Emergency Department (treating an acute, traumatic medical condition)

Public Act 100-0564[1]

- **Dispensing pharmacies will receive a copy of the 3:3:1 reports sent to a prescriber**
- **3 (or more) pharmacies, and/or 3 (or more) prescribers in a 1 month timeframe**
- **786 cases in March 2018**

Who can access the data contained in the ILPMP?[2]

- **Licensed prescribers and dispensers (pharmacists) of controlled substances AND THEIR DESIGNEES can view the ILPMP data for current and prospective patients only**
- **Law enforcement officers are allowed indirect access to prescription data during an active investigation**

How many designees can I have and who can they be?[3]

- Prescribers or dispensers may have up to 3 designees
- Only those listed below can serve as an authorized designee
  - registered nurse
  - licensed practical nurse
  - pharmacy technician
  - student pharmacist
  - certified medical assistant
- You must register your designees and agree to the terms and conditions

Designees[3]

- Each designee shall have an individual account that must be linked to the prescriber or dispenser.
- PMP staff shall verify the following information about each designee:
  - o license/certification number
  - o employer's phone number and address
  - o work email address
  - o If no work email is available, PMP staff shall contact the prescriber or dispenser to verify the designee
- PMP shall send out a notice for the prescriber or dispenser to ensure continued employment of their designees
- If the designee is no longer employed with the prescriber or dispenser, the prescriber or dispenser shall terminate the designee's access to the PMP by locking the designee's account or by notifying the PMP that the designee's account should be locked.

Can I consult with prescribers and other dispensers listed on the ILPMP without patient authorization?[3]

- According to HIPAA, this type of consultation is permitted because consultation is within the HIPAA definition of "treatment"

Why can't I find prescriptions that I know were filled?[3]

There could be several reasons for this:

- **Dispensing pharmacy is not properly reporting their prescription data**
- **Search strategy-Names are ambiguous**

Example of ambiguous name

- A prescription written by a prescriber for a patient with the first name of "Jennifer" but the pharmacy filled it as "Jenifer“
- Enter the first few defining letters of the name up to the point where ambiguity may begin. For example, enter "Jen" as the patient’s first name

PMPnow[4]

- Allows seamless integration of PMP Data into the Electronic Health Record System
- No need to logon to PMP website
- 31 Connections-671 sites in Illinois, Missouri and Iowa
  - hospitals
  - clinics
  - pain clinics
  - FQHC

References

1. Illinois General Assembly. Public Act 100-0564. http://www.ilga.gov/legislation/publicacts/fulltext.asp?Name=100-0564. Accessed August 8, 2018.
2. Joint Committee on Administrative Rules. Administrative Code. Section 2080.210 Access to the Prescription Information Library (PIL). http://www.ilga.gov/commission/jcar/admincode/077/07702080000021000R.html. Accessed August 8, 2018.
3. Illinois Prescription Monitoring Program. https://www.ilpmp.org/QandA.php. Accessed August 8, 2018.
4. Illinois Department of Human Services. PMPnow Illinois prescription monitoring program-DHS 4198. http://www.dhs.state.il.us/page.aspx?item=97344. Accessed August 8, 2018.

UI Health | UIC

Improving Opioid Safety with Behavioral Economic Theory

Adam J. Bursua, PharmD, BCPS
Medication Safety and Quality Coordinator - UI Health Clinical
Assistant Professor – UIC College of Pharmacy

Solutions to the Opioid Crisis

- Awareness campaigns
- Clinical care guidelines
- Prescribers education
- Utilizing PMPs
- Screening for and treating opioid use disorders

- All of these interventions rely on traditional theories of decision making behavior:
  - Rationale operators making rational choices

The "Nudge" Theory of Decision Making

- Traditional economic theory:
  - Rational beings making rational decisions
- "Nudge theory":
  - People often choose what is easiest over what is wisest

What is a "Nudge"?

- A strategy to alter "people's behavior in a predictable way without forbidding any options or significantly changing their economic incentives."
- "Nudges are not mandates. Nudges do not impose material costs but instead alter the underlying choice architechture"

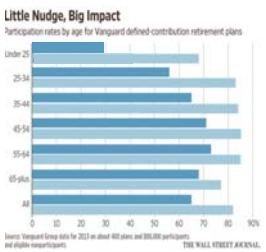
-Thaler & Sunstein

A Different Crisis

Image removed due to copyright

- Fueled by switch to defined contribution plans from defined benefit
- Workers don't enroll in 401k programs at high enough rates
- Even when they do enroll, they don't save enough

Nudge Theory - Applied



No Default Option

Default option = enroll

Nudge Theory - Applied

Nudge Theory - Applied

Image removed due to copyright

36% higher vaccination rates for E-mail 1 group

- Free flu shots are being offered
  - Email 1:
    - Your appointment for influenza vaccination has been scheduled for 10/01/2018 at 2pm
      - To change of modify your appointment, click here
  - Email 2:
    - To schedule an appointment for your vaccine click here

What About Opioid Prescribing?

"Rational beings making rational decisions."

"People often choose what is easiest over what is wisest"

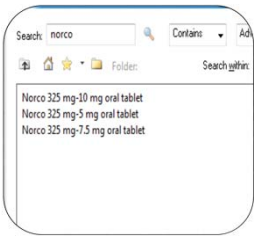
Traditional solutions

Develop guidelines
Educate prescribers
Awareness campaign
Academic detailing

Nudge solution

Modify choice architecture to nudge prescribers toward the desired behavior

Opioid Prescribing Choice Architecture

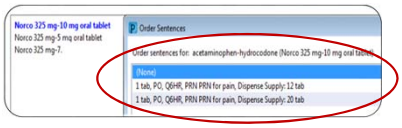


- 1 tab, po, q4H, prn for pain
- 1 tab, po, q6H, prn for pain
- 2 tab, po, q4H, prn for pain
- 2 tab, po, q6H, prn for pain

Nudging Theory - Applied

- 1 tab, po, q4H, prn for pain
- 1 tab, po, q6H, prn for pain
- 2 tab, po, q4H, prn for pain
- 2 tab, po, q6H, prn for pain

1 tab, Q6, PRN, Disp qty 12 tab
1 tab, Q6, PRN, Disp qty 20 tab

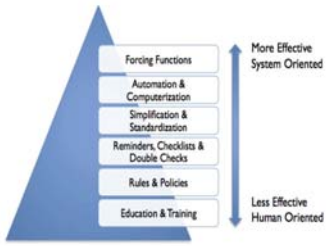


Before	**After**
Q4 hour orders = 33.1%	**Q4 hour orders = 11.7%**
2 tab orders = 3.85%	**2 tab orders = 2.46%**
3 day supply = 5.79%	**3 day supply = 11.6%**
Total tablets written/month = 88380	**Total tablets written/month = 67323**

On average ~ 21,000 thousand fewer tablets prescribed each month

Targeting the System

Target the System



Medication Event Case Report

A patient who was receiving an opioid for pain was found unable to be aroused. Naloxone was given, and the patient was successfully rescued.

Progress notes:
"Pain: Morphine 2mg Q2 as needed"

Order:
Morphine, IV Push, 2mg, Q2 hours

Nudged…the wrong way

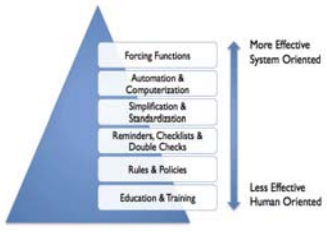
- During the RCA, it was noted that one of the order sentence defaults was:

Morphine, IV Push, 2mg, Q2 hours

Use Default Selections to Your Advantage

- People tend to exhibit inertia
- Expectation that defaults are screened by experts
- Defaults can then serve as reference points
- Defaults normalize behavior

Target the System



Target the System

Learning From Failure

Using Naloxone Utilization Data to Identify Improvement Opportunities

Naloxone Case Review

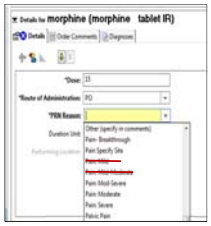
- Each case of naloxone administration is analyzed
  - Patient information
    - Opioid risk factors
    - Encounter characteristics (e.g., surgery vs. medical)
  - Medication information
    - Opioid(s) used
    - Concomitant sedatives

Common Themes

- Morphine use in renal dysfunction
- Opioid use for mild pain indications
- Substandard sedation assessment documentation

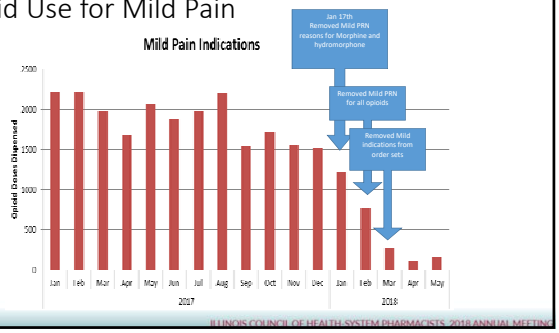
Modifying Choice Architecture

Before

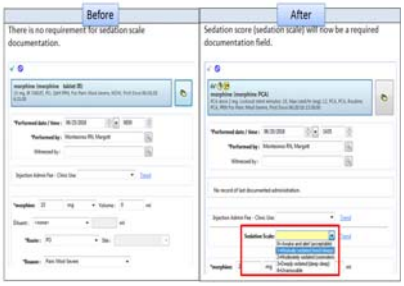


After

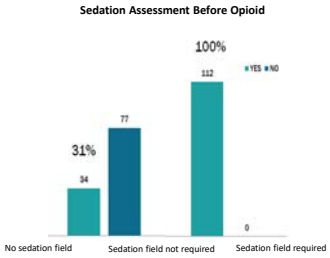
Opioid Use for Mild Pain



Target the System



Target the System



Questions?

Contact:
Adam Bursua, abursu1@uic.edu

Panel Discussion

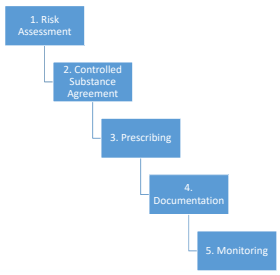
Any ideas??? What's our plan?

- Numerous local members convened to determine ideal location to initiate strategies to combat current opioid epidemic
- Participants identified a number of clinic-wide approaches to address the issue
- Region-wide tactics were developed attempting to tackle problem from a community standpoint
- End result is to provide multiple, adaptable approaches to control current epidemic

(Image removed due to copyright)

UI Health L.P. Johnson Family Health Center

- Family Medicine Clinic
  - 21 resident physician
  - 10 attending physicians
  - 4 registered nurses
  - 1 pharmacist
- Controlled Substance Policy
  - Five key components
  - Personnel accountability
  - Pre and post assessments



Regional Strategies

- Single-day, interprofessional Opioid Summit held at the Rockford Campus
- UIC drug take-back partnership with Keep Northern Illinois Beautiful
- Improved relationship with Winnebago County Health Department and alignment of initiatives
- Development of student-driven opioid crisis advertising and education
- Continuing education programs

Rank the top two opioid crisis strategies you would like to explore further (must go through pollev.com/ichp to respond)

- Improving access to naloxone for at-risk patients
- Improving patient education about opioid risks
- Changing opioid prescribing behavior for pain
- Better utilization of PMP data
- Tapering chronic pain patients off of opioids
- Increased utilization of medication assisted therapy for patients with opioid dependence

Questions/Discussion

The Opioid Crisis: Effective Strategies to Turn the Tide

Post Test Questions pertain to the following case:

Jane is a 42 year old female with chronic back pain from a motor vehicle accident 5 years ago and painful diabetic neuropathy. You are seeing her for the first time as her PCP retired.

- **Comorbid conditions include anxiety, depression, diabetes, insomnia, current smoker of 1 pack/day, and a remote history of alcohol use disorder**
- **Denies history of sexual or domestic abuse**
- **Family history of alcoholism**
- **Currently going through divorce from husband of 15 years**
- **Pertinent prescriptions include:**
    - **Oxycodone/acetaminophen 5 mg/325 mg 1 tablet q 4 hours as needed for pain**
    - **Gabapentin 300 mg TID**
    - **Lorazepam 1 mg TID**
    - **Cyclobenzaprine 5 mg BID**
    - **Zolpidem 5mg nightly**
- **Review of the prescription drug monitoring program reveals several early refills over the last three months.**
- **Today, she reports increasing diffuse pain that does not appear consistent with physical examination**
- **She reports that taking 2 tablets 5 times daily has really helped her pain, and she is wondering if her prescription could be increased**

1. ***Which term best describes Jane's recent oxycodone/acetaminophen use?***

A. **Tolerance**
B. **Addiction**
C. **Pseudoaddiction**
D. **Chemical Coping**
E. **Diversion**

2. ***How would you stratify Jane's risk of aberrant opioid taking behavior (using the Opioid Risk Tool)?***

A. Very Low

B. Low

C. Moderate

D. High

E. Very High

3. Which of the following can increase Jane's risk of respiratory depression from opioids?

A. Lorazepam
B. Cyclobenzaprine
C. Zolpidem
D. Gabapentin
E. All of the above