Best Efforts to Control Excessive Narcotics Prescribing

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REHABILITATION
HOSPITAL

Disclosure

- **Nothing to disclose**

Learning Objectives

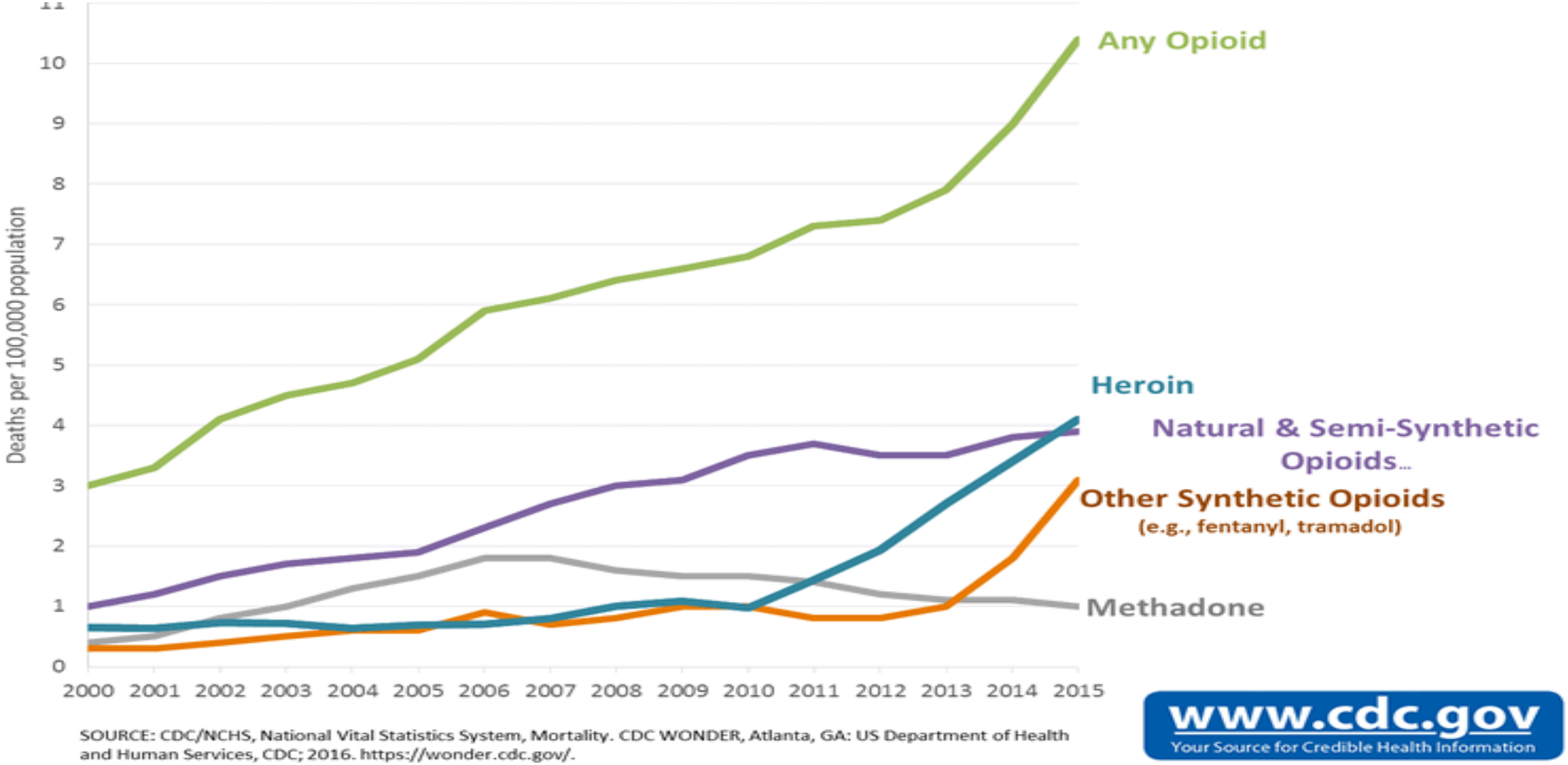
- **Identify prevalence and financial impact of the opioid epidemic**
- **Describe the surveillance opportunities present in the Prescription Drug Monitoring Program for Pennsylvania (PA-PDMP)**
- **Discuss strategies to manage pain and reduce opioid use**

Magnitude of the Problem

- From 2000 to 2015 more than half a million people died from drug overdoses[1]
- Overdose deaths involving prescription opioids have quadrupled since 1999[2]
- From 1999 to 2014, more than 165,000 people have died in the US from overdoses related to prescription opioids[2]
- In 2014 more than 14,000 people died from overdoses involving prescription opioids[2]

1. Rudd RA, et al MMWR Morb Mortal Wkly Rep. ePub: 16 December 2016. DOI: http://dx.doi.org/10.15585/mmwr.mm6550e1.
2. CDC. Wide-ranging online data for epidemiologic research (WONDER). Atlanta, GA: CDC, National Center for Health Statistics; 2016. Available at http://wonder.cdc.gov.

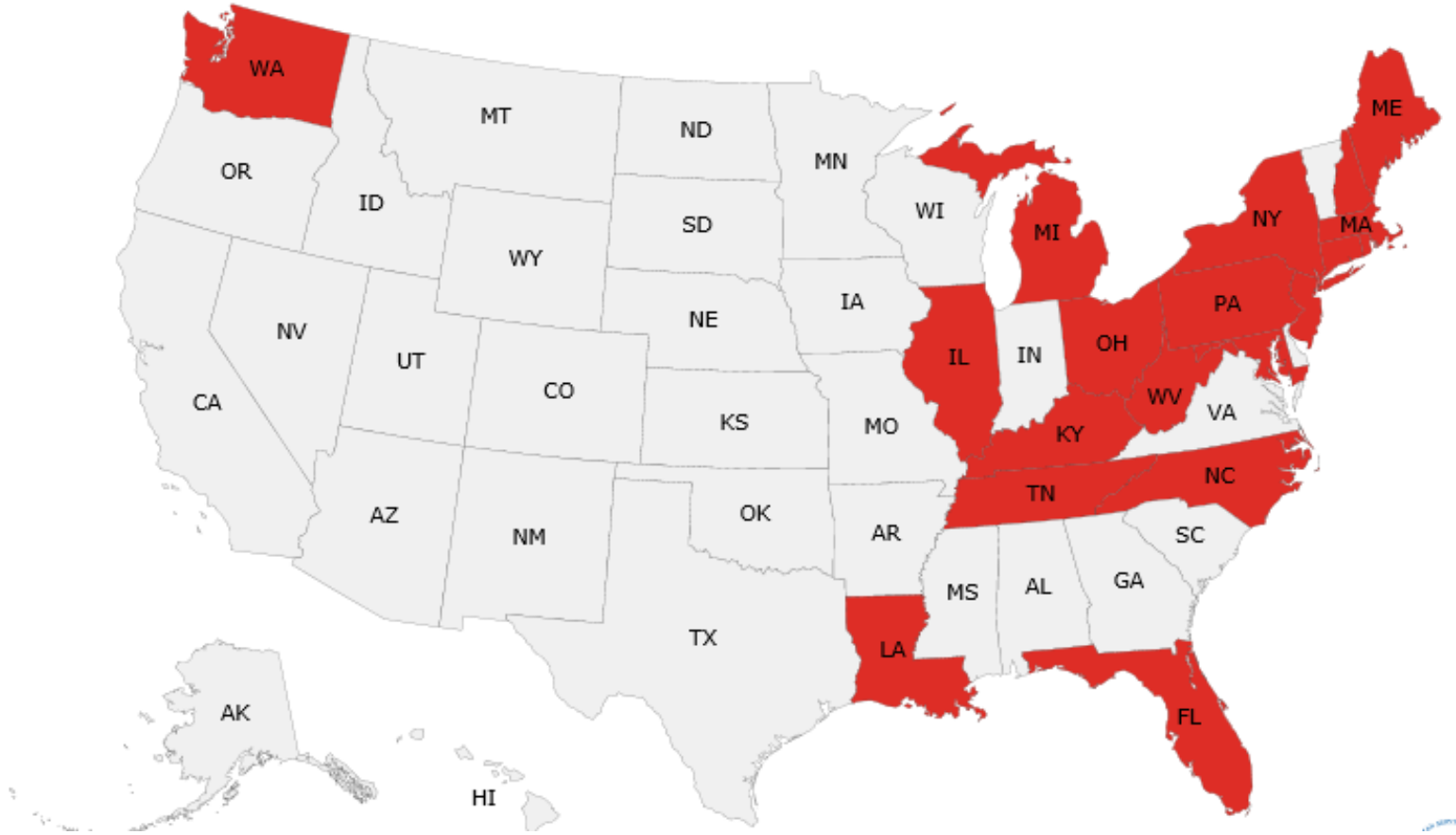
Overdose Deaths Involving Opioids, by Type of Opioid, United States, 2000-2015



SOURCE: CDC/NCHS, National Vital Statistics System, Mortality. CDC WONDER, Atlanta, GA: US Department of Health and Human Services, CDC; 2016. https://wonder.cdc.gov/.

www.cdc.gov
Your Source for Credible Health Information

Drug Overdose Death Rate Increase
United States, 2014 to 2015



State	% Change
ND	36.5
MA	35.3
DC	31
NH	30.9
ME	26.2
CT	25.6
FL	22.7
OH	21.5
KY	21.1
RI	20.5
NY	20.4
MD	20.1
PA	**20.1**
VT	20.1

Statically significant increase from 2014 to 2015

Age-adjusted death rates were calculated as deaths per 100,000 population using the direct method and the 2000 standard population.

SOURCE: CDC/NCHS, National Vital Statistics System, Mortality

Prescribing Data

- Prescription opioids sales in the U.S. nearly quadrupled from 1999 to 2014[1], without an overall change in the amount of pain Americans report.[2,3]
- The supply of prescription opioids remains high in the U.S.[4]
  - In 2012, prescribers wrote 82.5 opioid pain relievers and 37.6 benzodiazepine prescriptions per 100 persons in the United States.
- ~1 of 5 patients with non-cancer pain or pain-related diagnoses are prescribed opioids in office-based settings.[3]
- From 2007 – 2012, the rate of opioid prescribing has steadily increased among specialists more likely to manage acute and chronic pain
  - Prescribing rates: pain medicine (49%), surgery (37%), physical medicine/rehabilitation (36%).
  - However, primary care providers account for about half of opioid pain relievers dispensed. [3]

1. CDC. Vital Signs: Overdoses of Prescription Opioid Pain Relievers --- United States, 1999—2008. MMWR 2011; 60(43);1487-1492.
2. Chang et al Amer J of Emergency Med 2014; 32(5): 421-31.
3. Daubresse et al Medical Care 2013; 51(10): 870-878.
4. CDC. Variation Among States in Prescribing of Opioid Pain Relievers and Benzodiazepines — United States, 2012. MMWR 2014; 63(26):563-568.

Recent Headlines

Arkansas Committee Recommends Limiting Opioid Coverage For Teachers, State Employees.

The Arkansas Democrat Gazette (4/4, Davis) reports the Arkansas State and Public School Life and Health Insurance Board's Drug Utilization and Evaluation Committee approved recommendations Monday that would limit coverage of opioid prescriptions for teachers and state employees "to a maximum dose of 50 morphine milligram equivalents per day," for a seven day supply. The recommendation is "based on guidelines issued last year by the U.S. Centers for Disease Control and Prevention," but would not apply to patients already using opioids as well as those "who have cancer or who are receiving care for a terminal illness."

New Jersey Passes Nation's Strictest Opioid Prescribing Law

New Jersey has passed a law limiting initial opioid prescriptions for acute pain to 5 days. However, it also requires insurers to cover up to 6 months of treatment for substance use disorders without preauthorization.

The law, which went into effect immediately upon being signed by Gov. Chris Christie (R-NJ) on February 15, is drawing mixed reactions. New Jersey's 5-day limit is the strictest in the nation.

New Law to Curb Opioid Abuse and Diversion Passed in Maine, Strengthens Prescription Drug Monitoring Program

April 20th, 2016 Governor Paul LePage signed into law "An Act to Prevent Opiate Abuse by Strengthening the Controlled Substances Prescription Monitoring Program" (now PL 2015, c. 488) on April 19, 2016, making Maine the second state to pass legislation on the issue this year. Maine's bill introduces new language into the state laws governing licensure of physicians, nurses, podiatrists, dentists, and veterinarians. Beginning January 1, 2017, providers will not be allowed to prescribe more than a seven-day supply of opioids within a seven-day period for acute pain or a 30-day supply within a 30-day period for chronic pain. The daily supply is limited to 100 morphine milligram equivalents (MME) of medication per day, which is an aggregated total in cases where an individual receives a combination of opioids. The language originally filed by Gov. LePage would have set the caps at three days for acute pain and 15 days for chronic pain.

Prescription Drug Monitoring Programs or PDMP

- Statewide database collects designated data on substances dispensed in the state
- Authorized users identified to enhance patient care and patient safety
- Disclose proactively all information to be made available to prescribers, dispensers, law enforcement and occupational licensing individuals
- Confidentially protection
- De-identified information be made available for analysis, education and research purposes
- Inform public health initiatives through outlining medication use and abuse trends
- Evaluation component to determine cost benefit of the program
- Interstate sharing of PDMP data

1. National Alliance for Modern State Drugs Laws. Compilation of State Prescription Monitoring Program http://www.namsdl.org/library/6D4C4D9F-65BE-F4BB-A428B392538E0663/ Accessed April 15, 2017

Prescription Drug Monitoring Programs

- Medications monitored are those with a high abuse potential
- Support access to legitimate medical use of controlled substances
- Educate individuals about PDMPs and the use, abuse and diversion of, and addiction to prescription drugs
- Facilitate and encourage the identification of persons potentially involved in medication abuse, misuse or diversion
  - Training and education to decrease use and abuse of the system
  - Either prevent or identify and deter drug abuse and diversion
- Linkage to addiction treatment professionals

PDMP = prescription drug monitoring program

1. National Alliance for Modern State Drugs Laws. Compilation of State Prescription Monitoring Program http://www.namsdl.org/library/6D4C4D9F-65BE-F4BB-A428B392538E0663/ Accessed April 15, 2017

Prescription Drug Monitoring Programs
Promising Features

Universal Use

- Health care providers see patients' prescribing histories supporting prescribing decisions

Real-Time

- Pharmacists dispense controlled substances and enter data into the state PDMP
- Timely data, like in a "real-time" PDMP, maximizes the utility of the prescription history data, with significant implications for patient safety and public health

Actively Managed

- PDMPs can also be used to send "proactive" reports to authorized users to protect patients at the highest risk and identify inappropriate prescribing trends

Easy to Use and Access

- Integrating PDMPs into electronic health record (EHR) systems
- Permitting physicians to delegate PDMP access to other allied health professionals in their office

Continued state-level evaluation of PDMPs can lead to greater identification and implementation of promising practices

Pennsylvania
Prescription Drug Monitoring Program

PA-PDMP Portal Registration

- As of January 1, 2017, all individuals lawfully authorized to dispense in the Commonwealth of Pennsylvania, including mail order and internet sales of pharmaceuticals, must register with the program.

PA-PDMP Portal Query Mandate

- As of January 1, 2017, dispensers shall query the PDMP before dispensing an opioid drug product or a benzodiazepine prescribed to a patient if any of the following apply:
  - The patient is a new patient of the dispenser.
  - The patient pays cash when they have insurance.
  - The patient requests a refill early.
  - The patient is getting opioid drug products or benzodiazepines from more than one prescriber.

Change to the PA-PDMP Data Collection Frequency (1/1/2017)

- On January 1, 2017, the data collection frequency for the PA-PDMP system (PMP AWARxE) that is facilitated via PMP Clearinghouse changed from within 72 hours to no later than the close of the subsequent business day of dispensing the controlled substances.

PA-PDMP = Pennsylvania prescription drug monitoring program

PRESCRIPTION DRUG MONITORING PROGRAM

LATEST UPDATES

Dispensers

- As of January 1, 2017, all Schedule II-V dispensed prescriptions must be reported to the PDMP system no later than the close of the subsequent business day. Learn more.
- The Dispenser Q&A was updated on 1/6/2017.

Prescribers

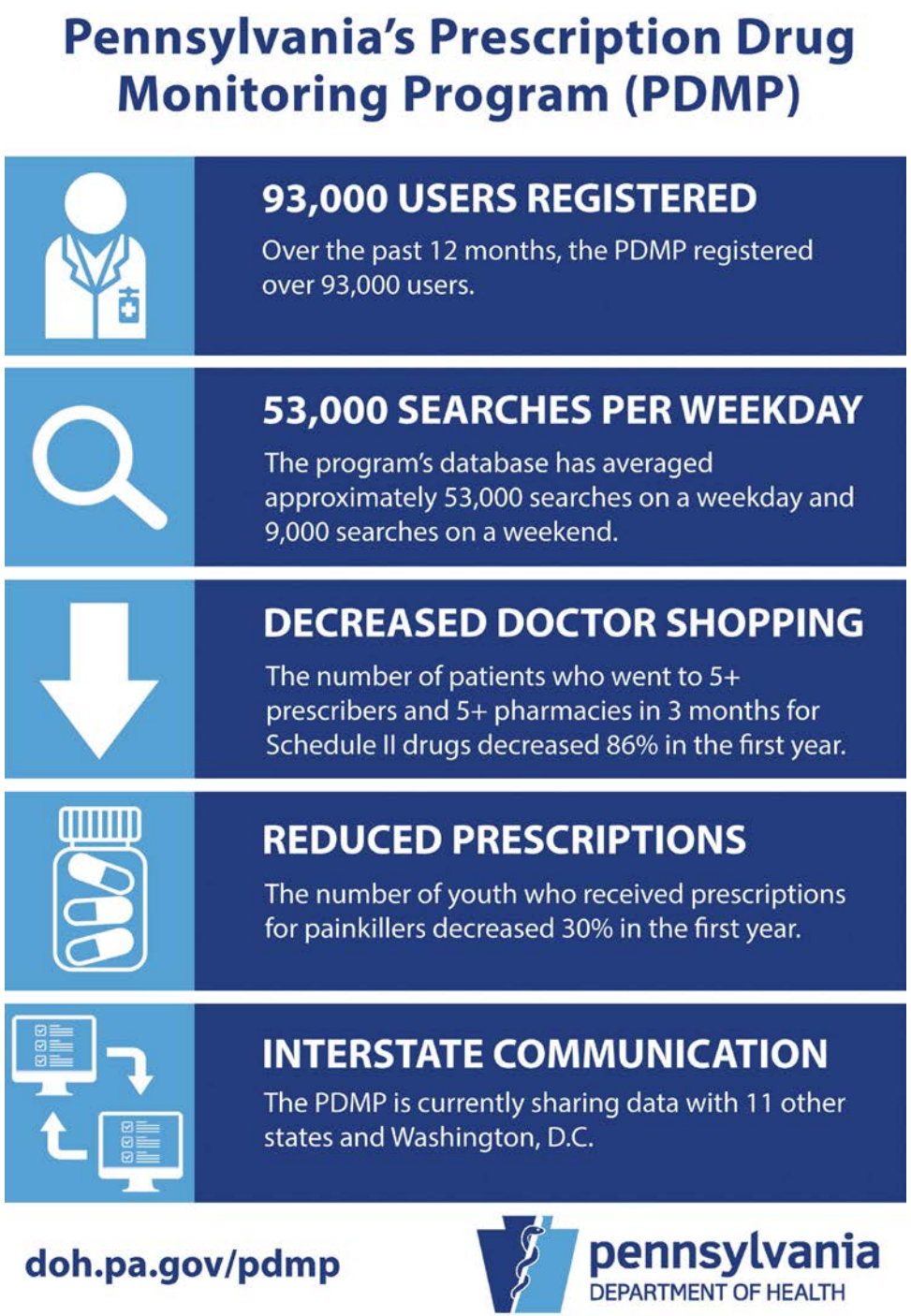
- The Prescriber Q&A was updated on 2/7/2017.

ABOUT

To help prevent prescription drug abuse and protect the health and safety of our community, Pennsylvania's Prescription Drug Monitoring Program (PA PDMP) collects information on all filled prescriptions for controlled substances. This information helps health care providers safely prescribe controlled substances and helps patients get the treatment they need.

NAVIGATION
HOME
QUESTIONS & ANSWERS
CONTACT
FOR DISPENSERS
FOR PRESCRIBERS
FOR PATIENTS
MEDIA ROOM
PDMP PORTAL

REGISTER NOW



Interstate Communication

1. Connecticut
2. District of Columbia
3. Illinois
4. Louisiana
5. Maine
6. Massachusetts
7. New Jersey
8. New York
9. Ohio
10. South Carolina
11. Texas
12. Virginia
13. West Virginia

Definitions

Term	Definition
Misuse[1]	• Intentional therapeutic use of a drug product in an inappropriate way • Specifically excludes the definition of abuse
Abuse[1]	• Intentional nontherapeutic use of a drug product or substance, even once, to achieve a desirable psychological or physiological effect
Diversion[2]	• Intentional removal of a medication from legitimate distribution and dispensing channels • Also involves sharing or purchasing of drugs between family and friends or individual theft from family and friends

1. FDA Guidance for Industry: Abuse Deterrent Opioids—Evaluation and Labelling. Rockville MD FDA 2015
2. Webster L et Al. J Opioid Manag. 2011;7(3): 235-245

Definitions

Controlled Substances[1]

- A drug or chemical whose manufacture, possession or use is regulated by a government and whose general availability is restricted
- Includes prescription medications and drugs or other substances that are strictly regulated or outlawed because of their potential for abuse or addiction

DEA Drug Schedules[2]

- Drugs, substances, and certain chemicals used to make drugs are classified into five (5) distinct categories or schedules depending upon the drug's acceptable medical use and the drug's abuse or dependency potential.
- Schedule I drugs have a high potential for abuse and the potential to create severe psychological and/or physical dependence. As the drug schedule changes-- Schedule II, Schedule III, etc., so does the abuse potential-- Schedule V drugs represents the least potential for abuse.

DEA = Drug Enforcement Agency

1. National Alliance for Modern State Drugs Laws. Compilation of State Prescription Monitoring Program http://www.namsdl.org/library/6D4C4D9F-65BE-F4BB-A428B392538E0663/ Accessed April 15, 2017
2. DEA Drug Schedules https://www.dea.gov/druginfo/ds.shtml Accessed April 15, 2017

DEA Drug Schedules

Schedule	Definition	Examples
Schedule I	Drugs with no currently accepted medical use and a high potential for abuse	heroin, lysergic acid diethylamide (LSD), marijuana (cannabis), 3,4-methylenedioxymethamphetamine (ecstasy), methaqualone, and peyote
Schedule II	Drugs with a high potential for abuse, with use potentially leading to severe psychological or physical dependence. These drugs are also considered dangerous	Combination products with less than 15 milligrams of hydrocodone per dosage unit (Vicodin), cocaine, methamphetamine, methadone, hydromorphone (Dilaudid), meperidine (Demerol), oxycodone (OxyContin), fentanyl, Dexedrine, Adderall, and Ritalin
Schedule III	Drugs with a moderate to low potential for physical and psychological dependence. Schedule III drugs abuse potential is less than Schedule I and Schedule II drugs but more than Schedule IV.	Products containing less than 90 milligrams of codeine per dosage unit (Tylenol with codeine), ketamine, anabolic steroids, testosterone
Schedule IV	Drugs with a low potential for abuse and low risk of dependence	Xanax, Soma, ~~Darvon, Darvocet~~, Valium, Ativan, Talwin, Ambien, Tramadol
Schedule V	Drugs with lower potential for abuse than Schedule IV and consist of preparations containing limited quantities of certain narcotics. Schedule V drugs are generally used for antidiarrheal, antitussive, and analgesic purposes	Cough preparations with less than 200 milligrams of codeine or per 100 milliliters (Robitussin AC), Lomotil, Motofen, Lyrica, Parepectolin

DEA = Drug Enforcement Agency

DEA Drug Schedules https://www.dea.gov/druginfo/ds.shtml Accessed April 15, 2017

Tramadol to Schedule IV

Final ruling from the Drug Enforcement Administration, Department of Justice, on changing the classification of tramadol (Ultram) and tramadol containing products to C-IV status.

- **Drugs with a low potential for abuse and low risk of dependence**

Prescriptions for Schedule IV drugs

- **May be refilled up to five times within a six-month period**
- **A prescription for controlled substances in Schedules III, IV, and V issued by a practitioner**
  - **May be communicated either orally, in writing, or by facsimile to the pharmacist, and**
  - **May be refilled if so authorized on the prescription or by call-in.**

DEA implementation date of this change was August 18, 2014.

Hydrocodone to Schedule II

Final ruling from the Drug Enforcement Administration, Department of Justice, on changing the classification of hydrocodone containing products to C-II status.
C-II status.

- **Drugs with a high potential for abuse, with use potentially leading to severe psychological or physical dependence. These drugs are also considered dangerous**
- **Prescriptions for Schedule II drugs may not be refilled**
- **Hydocodone Combination products include: Lortab, Lorcet, Norco, Vicodin, Vicodin-ES, Vicodin HP, Xodol and Zydone**

DEA implementation date of this change was October 6, 2014.

Acute Pain vs Chronic Pain

Acute Pain	Chronic Pain

• Relatively brief duration
  • Hours to weeks
• Resolves upon healing
• Post surgical pain, trauma, disease process
	• Longer duration
	  • >3 months past the normal tissue healing
	• Usually accompanies and underlying disease process or injury
	• Rheumatoid arthritis, osteoarthritis, low back pain, pain associated with malignancy

Classification of chronic pain. Pain Suppl. 1986;3:S1-226. PubMed PMID: 3461421
IOM. Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research. Washington (DC): National Academies Press (US); 2011.

Chronic Pain: A Serious Public Health Issue

- **Chronic pain is a major concern for individuals families and society with an increasing prevalence, cost, and impact on quality of life**
  - **Millions of Americans are affected by chronic pain[1]**
  - **Estimated annual cost of $560-635 billion[2]**
- **While the use of prescription opioids has been linked to abuse, misuse, diversion, these medications still serve as an efficacious treatment option for patients in the management of chronic pain[3-5]**
- **However clinical guidelines for chronic pain recommend that opioids be considered only after an adequate trial on non-opioid options**

1. IOM. Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research. Washington (DC): National Academies Press (US); 2011.
2. Gaskin DJ et al. J Pain. 2012;13(8):714-724
3. Moore RA et al. Arthr Res Ther. 2005;7(5):R1046-1051
4. Noble M et al. J Pain Symptom Manage. 2008;35:214-228
5. Fine et all. Topics in Pain Management. 2008;23(10):1-8.

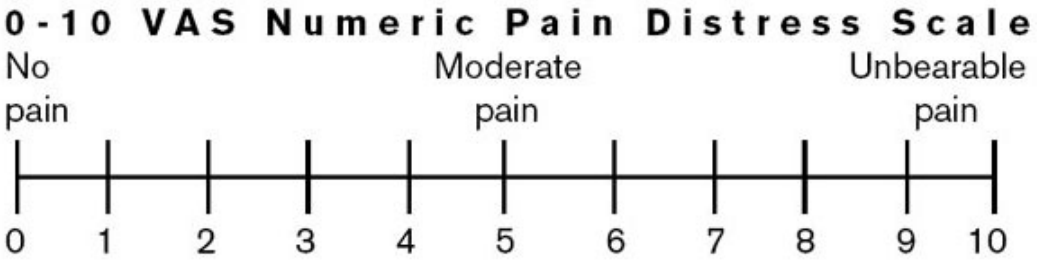
Goals of Pain Management

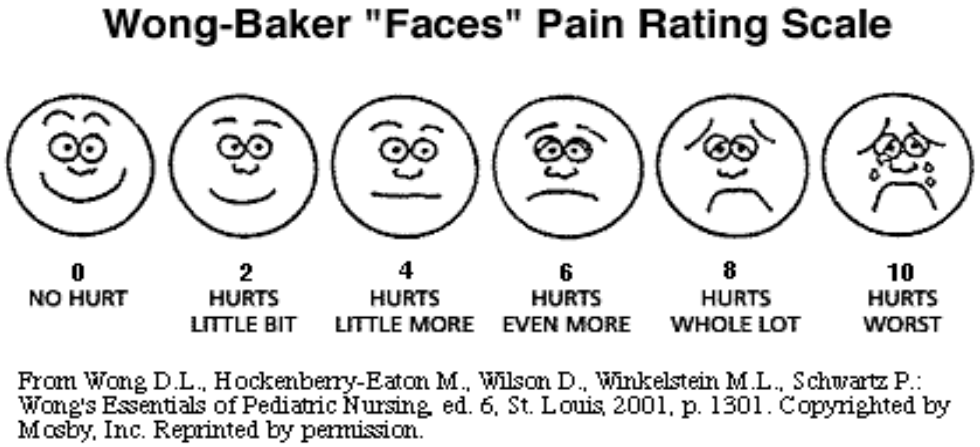
Acute Pain	Chronic Pain
• Remove the cause • Provide rapid onset of analgesia • Provide sufficient magnitude and duration of analgesia • Provide patient satisfaction and comfort	• Reduce pain • Improve functionality, sleep and mood • Maintain or improve joint mobility in musculoskeletal conditions • Recondition

Minimize harm associated when prescribing pain medication

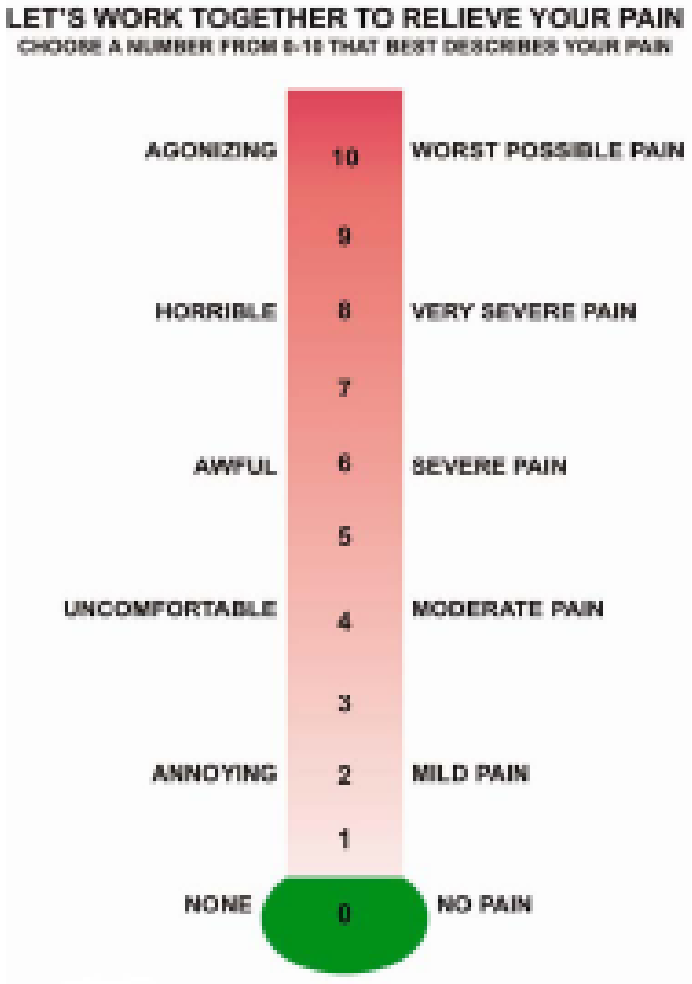
Fields HL et al Harrison's Principles of Internal Medicine. 1998:53-8
Marcus DA. AM Fam Physician. 2000;61:1331-8

Measuring Pain
Unidimensional Scales





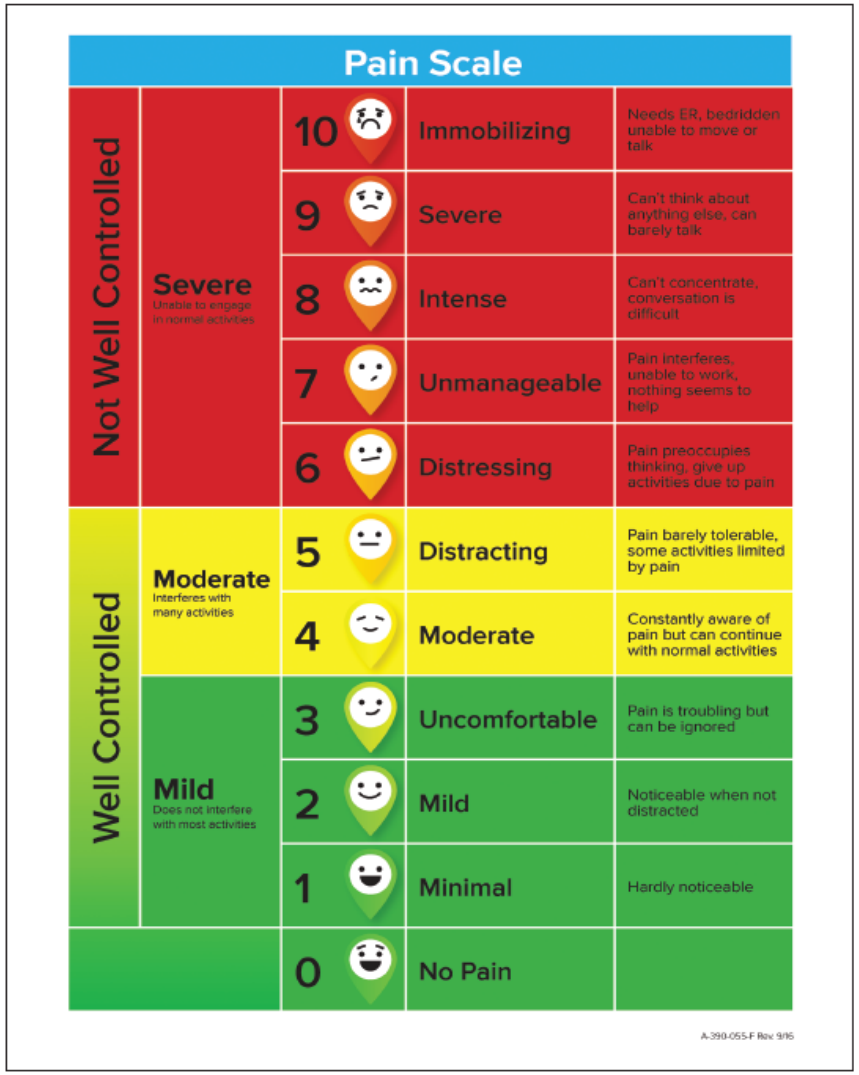
From Wong D.L., Hockenberry-Eaton M., Wilson D., Winkelstein M.L., Schwartz P.: Wong's Essentials of Pediatric Nursing, ed. 6, St. Louis, 2001, p. 1301. Copyrighted by Mosby, Inc. Reprinted by permission.



Chapman CR et al. In*: Bonica's Management of Pain*. 2001:310-28.

Measuring Pain
Modified Pain Scale

Figure 1. The Geisinger Pain Scale.



- Less emphasis on the pain score
- Emphasis on dialog with the patient
- Sets expectations
- Assess patient
- Treating pain

Medico et al. Am J Health-Syst Pharm. 74(7):528-533; 2017

Non Pharmacologic Interventions

- Non-pharmacologic options
- Interdisciplinary approach
  - Physician
  - Nursing
  - Therapy
  - Performance Improvement
  - Pharmacy
  - Patient Representative

Classifying Pain Types

Classification of a patients pain according to the type of pathophysiology can help in the selection of appropriate therapy

Three main type of pain pathophysiology, separately or together, are believed to be responsible for the majority of presentations of chronic pain

Nociceptive Pain	Neuropathic Pain	Sensory Hypersensitivity
Pain related to damage of somatic or visceral tissue due to trauma or inflammation	**Pain related to damage or peripheral or central nerves**	**Pain without identifiable nerve or tissue damage**
Rheumatoid arthritis; osteoarthritis	**Diabetic peripheral neuropathy Postherptic neuralgia**	**Fibromyalgia**

Phillips et al. Best Pract Res Clin Rheumatol. 2011;25(2):141-154

Medication Recommendations for Pain Types

Nociceptive Pain	Neuropathic Pain	Sensory Hypersensitivity
Pain related to damage of somatic or visceral tissue due to trauma or inflammation	Pain related to damage or peripheral or central nerves	Pain without identifiable nerve or tissue damage
Rheumatoid arthritis; osteoarthritis	Diabetic peripheral neuropathy Postherptic neuralgia	Fibromyalgia
NSAIDS and acetaminophen	AEDs, SNRIs, TCAs	
Opioid use when other treatment options are inadequate		Opioids should be avoided

NSAIDs=nonsteroidal anti-inflammatory drugs
- Ibuprofen (Motrin), naproxen (Naprosyn, Aleve), meloxicam (Mobic)

AEDs=anti epileptic drugs
- Gabapentin (Neurontin), pregabalin (Lyrica)

SNRI=serotonin-norepinephrine reuptake inhibitors
- Duloxetine (Cymbalta), venlafaxine (Effexor)

TCAs=Tricyclic antidepressants
- Amitriptyline (Elavil)

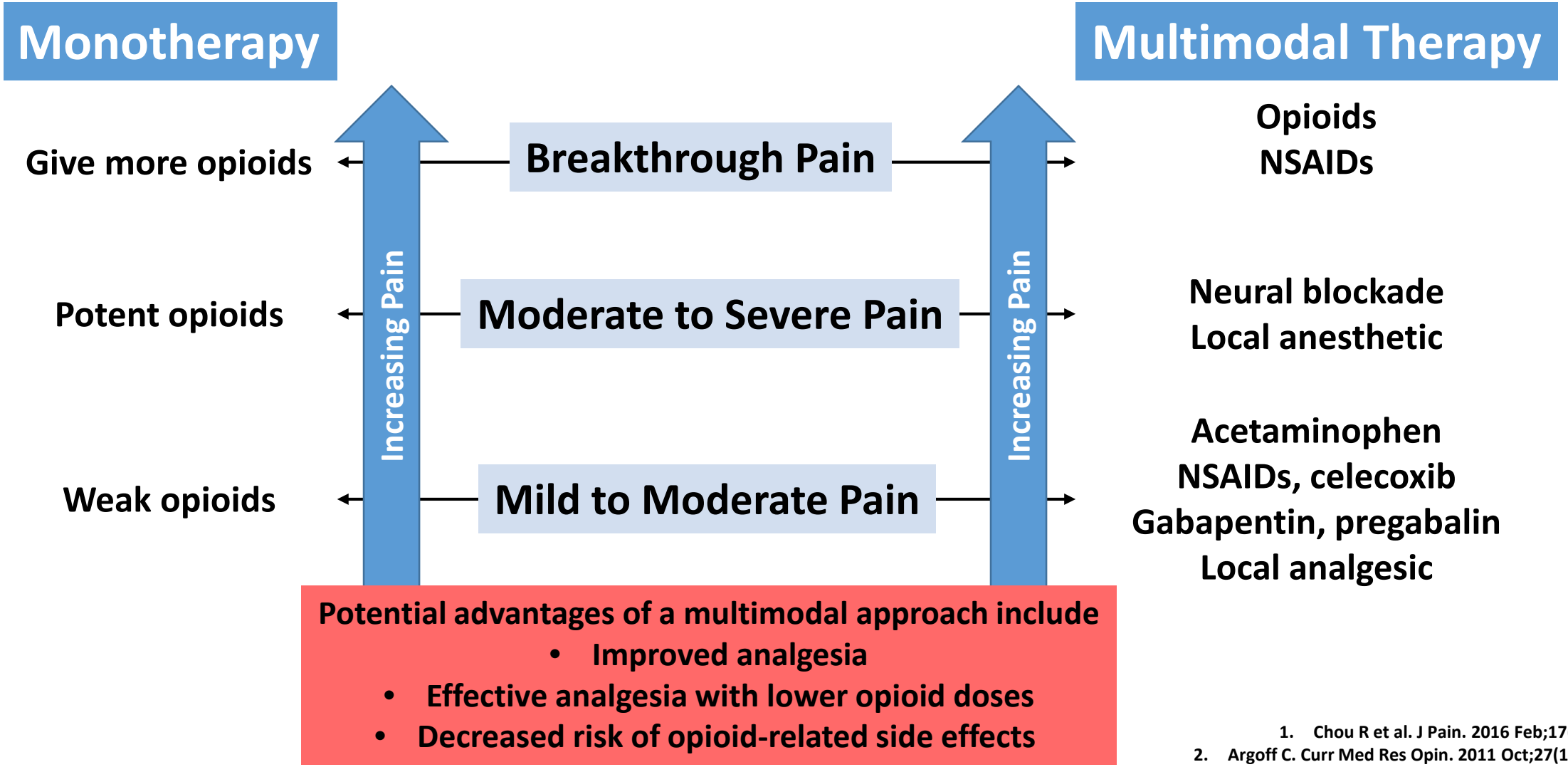
References available upon request

Multimodal Therapy

- Uses more than one method of pain management[1]
- Can reduce the amount of medications necessary to relieve pain
- Minimize uncomfortable side-effects
- Combines analgesics and techniques, each with a different mechanism of action within the peripheral or central nervous systems
- May include opioid analgesics, nonopioid analgesics, regional anesthesia, and other adjuncts
- Individualized based on the specific source and severity of pain in the patient[2-4]

1. Chou R et al. J Pain. 2016 Feb;17(2):131-57
2. Argoff C. Curr Med Res Opin. 2011 Oct;27(10)2019-31
3. Kelly DJ et al. Can J Anesth. 2001;48(10):1000
4. Costantini R et al. Int J Clin Pharmacol Ther. 2011 Feb;49(2):116-27

Multimodal Therapy



1. Chou R et al. J Pain. 2016 Feb;17(2):131-57
2. Argoff C. Curr Med Res Opin. 2011 Oct;27(10)2019-31
3. Kelly DJ et al. Can J Anesth. 2001;48(10):1000
4. Costantini R et al. Int J Clin Pharmacol Ther. 2011 Feb;49(2):116-27

Morphine Milligram Equivalents
For Commonly Prescribed Opioids

Opioid	Morphine equivalent conversion factor per mg of opioid
Tramadol	0.10
Codeine	0.15
Hydrocodone (Vicodin)	1
Morphine†	1
Oxycodone†	1.5
Fentanyl transdermal	2.4
Hydromorphone (Dilaudid)	4.0

Multiply the dose for each opioid by the conversion factor to determine the dose in MMEs

† Includes immediate and controlled release formulations
MME = morphine milligram equivalents

Adapted from VonKorffL et al. Clin J Pain 2008;24:521-7

MME Calculation

Patient JQ discharged from the hospital after a 12 day admission following their work related injury. Pain management on discharge is as follows:

- **Oxycodone extended release 20mg PO q12h #60**
  - **30 day supply**
- **Acetaminophen 650mg PO q6h PRN breakthrough pain #1 bottle**
- **Oxycodone immediate release 10mg PO q4h PRN pain unrelieved by acetaminophen #100**
  - **17 day supply**

MME = morphine milligram equivalents

MME Calculation

Opioid	Total mg per day	Morphine equivalent conversion factor per mg of opioid	MME per day
Oxycodone extended release 20mg q12h	40mg	1.5	60mg
Oxycodone immediate release 10mg q4h prn • Assume 5 doses per day	50mg	1.5	75mg
		Total Daily MME	135mg

Patient is taking more than 100 MME/day

MME = morphine milligram equivalents

MME as a Predictor of Risk

Dose Dependent Association with Risk for Opioid Overdose[1]

MME	Adjusted OR (95% CI)
>200	2.33 (1.79-4.63)
100-199	2.04 (1.23-3.24)
50-99	1.92 (1.30-2.85)
20-49	1.32 (0.94-1.84)

Reference 1-19 MME

Patient prescribed higher opioid dosages are at higher risk of overdose death

MME Examples[2]

50 MME/day

- 50mg hydrocodone
  - 10 tablets hydrocodone/acetaminophen 5/300
- 33mg oxycodone
  - ~2 tablets oxycodone SR 15mg

90 MME/day

- 90mg hydrocodone
  - 9 tablets hydrocodone/acetaminophen 10/325
- 60 mg oxycodone
  - ~2 tablets oxycodone SR 30mg

1. Gomes T et al. Arch Intern Med. 2011;17(7):686-691
2. www.cdc.gov/drugoverdose/prescribing/guideline.html

Prescribing Opioids

- Check State's PDMP
- Baseline pain measure and interference with function
- Set expectations
- Explore non-opioid strategies
- Use caution when prescribing opioids at any dosage
- Prescribe the lowest effective dose
- Prescribe for short durations --7 day supply -- for acute pain
    - Avoid running out on the weekend

1. Mai et al. Phys Med Rehabil Clin N Am 26(3) 453-465 2015
2. www.cdc.gov/drugoverdose/prescribing/guideline.html

Prescribing Opioids

- Use extra precautions when increasing ≥ 50 MME per day
  - Monitor and assess pain and function more frequently
  - Discuss reducing dose or tapering and discontinuing opioids if benefits do not outweigh harms
  - Consider offering naloxone
- Avoid or carefully justify increasing dosage to ≥ 90 MME per day
- Consider consultation with a pain specialist for ≥ 120 MME per day
- Discuss storage and disposal of opioids and controlled substances

1. Mai et al. Phys Med Rehabil Clin N Am 26(3) 453-465 2015
2. www.cdc.gov/drugoverdose/prescribing/guideline.html

Naloxone (Narcan) for Opioid Reversal or Overdose

Patients may benefit:[1]

- Taking high dose opioids for long term chronic pain
- Discharged from emergency medical care following opioid intoxication
- High risk of overdose because of a legitimate medical need for analgesia
- Completing mandatory opioid detoxification or abstinence program
- Recently released from incarceration of past user or abuser of opioids

	Injectable naloxone[2]	Nasal Spray[3]	Auto-injector[4]
Trade Name	Naloxone	Narcan Nasal Spray	Evzio Auto-Injector
Strength	1mg/mL	4mg/0.1mL	0.4m/0.4mL
Total volume of kit/package	4mg/4mL	8mg/0.2mL	0.8mg/0.8mL
Dosing	Initial doses for opioid overdose: 0.4mg to 2mg may repeat at 2 to 3 minute intervals	Spray 0.1mL into 1 nostril; repeat with second device into other nostril after 2 to 3 minutes if no or minimal response	Inject into outer thigh as directed by voice prompt system. Place black side firmly on outer thigh and depress and hold for 5 seconds. Repeat with second device in 2 to 3 minutes if no or minimal response
Average Wholesale Price	$ 10.00	$ 125.00	$ 4100.00

Naloxone is an opioid antagonist (counters effects of opioids) typical dose 0.4 mg to 2 mg IV, IM, SC

IV=intravenous
IM=intramuscular
SC=subcutaneous

1. Role of Managed Care Pharmacy in Improving Access to Naloxone. AMCP Viepoint December 2016
2. Naloxone hydrochloride prescribing information Lake Forest, IL: Hospira Inc; September 2015
3. Narcan Nasal Spray prescribing information Radnor PA Adapt Pharma February 2017
4. Evzio prescribing information Richmond, VA; Kaleo Inc; April 2014

Access to Naloxone in Pennsylvania

Governor Wolf Announces Naloxone Standing Order to Combat Heroin Epidemic: October 28, 2015

“Making it possible for all Pennsylvania residents to access the life-saving drug naloxone is a huge victory in our battle against drug overdose deaths in the commonwealth,” said Physician General Dr. Rachel Levine. “I am proud to sign this standing order and continue the efforts of the Wolf Administration to protect the most vulnerable Pennsylvanians. This forward-thinking initiative gives people the tools they need to keep their communities and families intact”

- **Insurance coverage varies**
- **PA Medical Assistance requires a prior authorization for Evzio Auto-Injector**
- **No copay**

Drugs and Drug Combinations to Avoid

Do Not Use

- Meperidine for chronic pain
- Methadone for acute of breakthrough pain
- Long acting or extended release opioids for acute pain or post-op pain in the opioid naïve patient

Use is Not Recommended

- Any combination of opioids with benzodiazepines
  - Additive CNS depression may occur when benzodiapzeines are administered with other CNS depressants
  - Consideration for co-use in patients with spasticity

Use With Caution

- Over the counter acetaminophen with acetaminophen combination opioids
- Tramadol and meperidine in patients at risk for seizures
- Methadone for pain

Mai et al. Phys Med Rehabil Clin N Am 26(3) 453-465 2015

Meperidine and Methadone

Meperidine (Demerol)[1]

- Metabolized to normeperidine
- Associated with tremulousness, delirium and seizures
- Accumulation of the metabolite is most likely to occur during
  - Repeated administration
  - Dose escalation
  - In the setting of impaired elimination caused by renal insufficiency

Methadone[2]

Black Box Warning
Life threatening respiratory depression

- Nonlinear pharmacokinetics
- Unpredictable clearance
- Multiple drug interactions

1. Summary from Up to Date https://www.uptodate.com/contents/cancer-pain-management-with-opioids-optimizing-analgesia?source=search_result&search=meperidine&selectedTitle=5~128#H9 Accessed April 22, 2017
2. Summary from Lexi-Comp http://online.lexi.com/lco/action/doc/retrieve/docid/patch_f/7262 Accessed April 22, 2017

Abuse Deterrent Strategies

Technology	Description	
Physical/chemical barrier	• Physical barriers can prevent/deter manipulation • Chemical barriers can resist extraction of opioid • Physical and chemical barriers can change the physical form on an oral drug, rendering it less amenable to abuse	• Hydrocodone (Hysingla) • Hydrocodone (Vantrela ER, Zohydro ER)) • Morphine (Arymo ER, Morphabond) • Oxycodone (Oxaydo, Xtampza ER) • Oxycodone controlled release (OxyContin) • Oxymorphone (Opana ER)
Agonist/antagonist combination	• Antagonist added to interfere with, reduce, or defeat euphoria associated with abuse	• Buprenorphine/naloxone (Suboxone) • Morphine/naltrexone (Embeda) • Oxycodone/naloxone (Targiniq ER) • Oxycodone/naltrexone (Troxyca ER)
Delivery system	• Drug-release design or method of drug delivery offers resistance to abuse	• OROS hydromorphone (Exalgo)

Abuse deterrent technologies are

- **Defined as shown to meaningfully deter abuse**
- **Intended to make manipulation of opioid more difficult or make the effect of the manipulated opioid less attractive**

Products listed are subject to the prior approval process, non-coverage, or higher-tiered co-pays, which are all problematic in the highest -risk populations.

1. FDA Guidance for Industry: Abuse Deterrent Opioids—Evaluation and Labelling. Rockville MD FDA 2015
2. Moorman-Li et al. P&T 37(7) 412-421 2012

Thank You

Medication Recommendations for Pain Types Reference Slide

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10. US Department of Defense Va/DoD Clinical Practice Guideline for Management of Opioid Therapy for Chronic Pain US Department of Defense: 2010
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12. US Food and Drug Administration
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