



The Opioid Epidemic: Health-Systems Approach to Curtailing Opioid Use

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Disclosures

Kendrea Jones, Pharm.D, BCPS

Have no relevant financial relationships to disclose for this presentation



Objectives

Participants will be able to

- describe contributors to the opioid epidemic.
- explain the most recent regulatory standards related to opioid stewardship.
- list common goals of opioid stewardship programs.
- discuss key elements in a health-system opioid stewardship programs.



Opioid Vs Nonopioid

- Morphine
- Acetaminophen
- Methadone
- Fentanyl
- Cyclobenzaprine
- Oxycodone
- Gabapentin
- Hydrocodone
- Pregabalin
- Nortriptyline



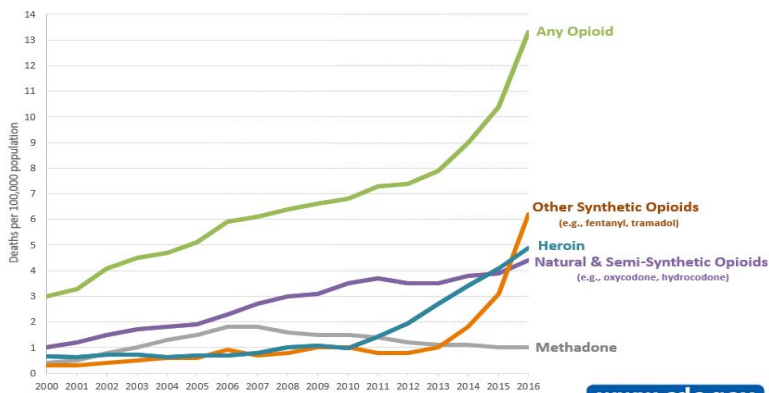
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An Epidemic

Overdose Deaths Involving Opioids, by Type of Opioid, United States, 2000-2016



Opioid overdoses went up 30% from July 2016 through September 2017 in 52 areas in 45 states

SOURCE: CDC/NCHS, National Vital Statistics System, Mortality, CDC WONDER, Atlanta, GA: US Department of Health and Human Services, CDC, 2017. <https://wonder.cdc.gov/>.





THE OPIOID EPIDEMIC BY THE NUMBERS

IN 2016...



116
People died every day from opioid-related drug overdoses



11.5 m
People misused prescription opioids¹



42,249
People died from overdosing on opioids²



2.1 million
People had an opioid use disorder¹



948,000
People used heroin¹



170,000
People used heroin for the first time¹



2.1 million
People misused prescription opioids for the first time¹



17,087
Deaths attributed to overdosing on commonly prescribed opioids²



19,413
Deaths attributed to overdosing on synthetic opioids other than methadone²



15,469
Deaths attributed to overdosing on heroin²

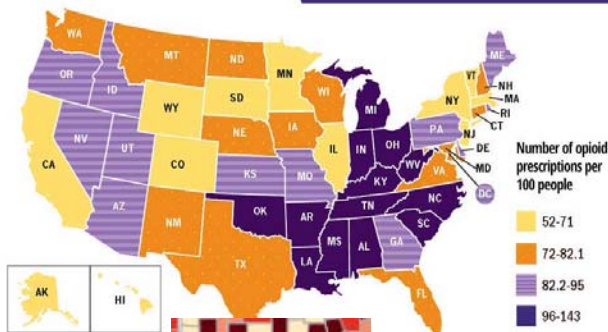


504 billion
In economic costs²

Sources: ¹ 2016 National Survey on Drug Use and Health, ² Mortality in the United States, 2016 NCHS Data Brief No. 293, December 2017, ³ CEA Report: The underestimated cost of the opioid crisis, 2017

Call for Opioid Stewardship

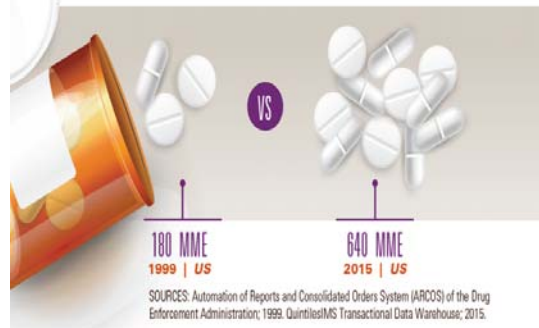
Some states have more opioid prescriptions per person than others.



SOURCE: IMS, National Prescription Audit (NPA™), 2012.

Arkansas: 2nd in the nation with 114.6 Rx per 100 persons

The amount of opioids prescribed per person was three times higher in 2015 than in 1999.



Demographics

- 2016 prescription opioid overdose patient characteristics
 - Highest among people aged 25 to 54 y/o
 - Higher among non-Hispanic whites
 - Higher rate in men than women (6.2 vs 4.3)



Organizational Oversight

- CDC Guideline for Prescribing Opioids for Chronic Pain (2016)
- The Joint Commission
 - New and revised pain assessment and management standards (effective Jan 2018)
 - Sentinel Event Alert: Safe use of opioids in hospitals (2012)
- Federal and State Regulation
- Payers
- Community Pharmacies



2016 CDC Recommendations

- Intent
 - Guide for primary care practitioners treating adult chronic pain outside of active cancer, palliative care, or end-of-life
 - 12 major recommendations

US Dept HHS/CDC, MMWR/March 18, 2016, Vol 65 No 1



2016 CDC Recommendations

1. Nonpharmacologic and nonopioids preferred
2. Establish treatment goals prior to initiation of therapy
3. Patient education on risk and realistic benefits of opioid therapy
4. Use immediate release/short acting agents. Avoid extended release/long-acting agents.
5. Use the lowest effective dose
 - Risk vs benefit at doses of 50 morphine milligram equivalents (MME) per day
 - Implement additional precautionary measures at doses > 50 MME
 - Avoid doses of 90 MME or more per day
6. Acute pain management
 - Lowest effective dose
 - 3 days or less; no more than 7 days
7. Frequent monitoring to determine potential harm or ability to taper or discontinue
8. Evaluate potential risk factors for opioid-related harm
 - History of drug abuse/overdose
 - Higher doses
 - Concurrent drugs (benzodiazepines)
9. Review patient's history of controlled substance prescriptions using state prescription drug monitoring programs (PDMP)
10. Consider using urine drug screening
11. Avoid using opioids and benzodiazepines together
12. Arrange evidence-based treatment for patients with opioid use disorders

US Dept HHS/CDC, MMWR/March 18, 2016, Vol 65 No 1



Higher Doses, Higher Risk

Calculating morphine milligram equivalents (MME)

OPIOID (Doses in mg/day except where noted)	CONVERSION FACTOR
Codeine	0.15
Fentanyl transdermal (in mcg/hr)	2.4
Hydrocodone	1
Hydromorphone	4
Methadone	
1-20 mg/day	4
21-40 mg/day	8
41-60 mg/day	10
≥ 61-80 mg/day	12
Morphine	1
Oxycodone	1.5
Oxymorphone	3

These dose conversions are estimated and cannot account for all individual differences in genetics and pharmacokinetics.

50 MME/Day

- Hydrocodone/acetaminophen 10 mg X 5 tabs
- Oxycodone/acetaminophen 10 mg X 3 tabs
- Hydromorphone 4 mg X 3 tabs



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JAMA | Original Investigation

Effect of Opioid vs Nonopioid Medications on Pain-Related Function in Patients With Chronic Back Pain or Hip or Knee Osteoarthritis Pain The SPACE Randomized Clinical Trial

Erin E. Krebs, MD, MPH; Amy Gravely, MA; Sean Nugent, BA; Agnes C. Jensen, MPH; Beth DeRonne, PharmD; Elizabeth S. Goldsmith, MD, MS; Kurt Kroenke, MD; Matthew J. Bair; Siamak Nooraloochi, PhD

- No difference in pain related function ($p=0.58$)
- Pain intensity was significantly better in nonopioid group ($p=0.03$)
- Significantly more adverse-related medication symptoms with opioids ($p=0.03$)

Opioid therapy should not be initiated for moderate to severe chronic back, hip, or knee pain

Krebs EE, et al. JAMA 2018;319(9):872-882



The Joint Commission

- Major changes
 - Identify a leader or leadership team that is responsible for pain management and safe prescribing
 - Clinicians
 - Facilitate access to PDMP databases
 - Education
 - Active involvement in assessing and treating pain
 - Protocol development
 - Quality metrics
 - Identification and monitoring of high risk patients
 - Involving patients in developing their treatment plans and setting realistic expectations and measurable goals
 - Education
 - Safe use, storage, and disposal of opioids
 - Performance improvement: collects and analyzes data on pain assessment and management to improve safety and quality
 - Adverse events, use of naloxone, high doses, duration

The Joint Commission Perspectives/July 2017, Vol 37 No 7



Federal

- 2019 budget calls for 13 billion to fight opioid crisis
- Tackling Opioid and Substance Use Disorders in Medicare, Medicaid, and Human Services Program - April 2018
- Comprehensive Addiction and Recovery Act (CARA) – 2016
 - Expansion of diversion programs
 - Expansion of provision of buprenorphine, methadone, and other medication-assisted treatment
 - Expansion of naloxone use by first responders and community members



Arkansas Regulations

- Arkansas State Medical Board (2018)
 - Added requirements for physicians who prescribe high doses of opioids
- Act 284 (2017)
 - Authorizes pharmacists to initiate therapy and administer and/or dispense naloxone
- Act 820 (2017)
 - requires prescribers to check the PDMP each time a prescription for a Schedule II or III opioid is written and first time for a benzodiazepine
- Arkansas Prescription Drug Abuse Act (2015)
 - Delegation of access to PDMP
 - Require opioid prescribing guidelines for EDs
 - Department of Health algorithms
- PDMP (2011) – established

Arkansas Emergency Department Opioid Prescribing Guidelines

1. One medical provider will be the only one who will be responsible for the ED's opioid prescribing.
2. The administration of intravenous and intramuscular opioids in the ED for the relief of acute moderate to severe pain is discouraged.
3. Emergency medical providers will not be able to implement prescriptions for controlled substances that have not been prescribed.
4. Emergency medical providers will not
5. EDs will not maintain a list of patients that provide pain management prescriptions of all types.
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7. The administration of Demerol
8. EDs will not maintain a list of patients that provide pain management prescriptions of all types.
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Arkansas AG files suit against three drug companies for misleading public on opioids

Posted By Benjamin Hardy on Thu, Mar 29, 2018 at 2:35 PM

1. The emergency physician is required by law to conduct an ED patient who requires pain. The law also requires the emergency physician to use their clinical judgment when treating pain and does not require the use of opioids.
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Payers/Pharmacies

BCBS Association: Use Alternative Pain Therapies Before Opioids

The BlueCross Blue Shield Association has announced a plan to end the use of opioids as a primary pain therapy.

CVS will limit opioid prescriptions to 7 days

By Susan Scutti and Nadia Kounang, CNN
 Updated 3:42 PM ET, Fri September 22, 2017

Aetna to Waive Narcan Co-Pays, Combat Opioid Overprescribing

Aetna added new measures to address the nation's opioid crisis which include eliminating Narcan co-pays for fully insured members and managing oversprescribing risks.

By KATE GIBSON | MONEYWATCH | May 7, 2018, 2:35 PM

Walmart to restrict opioids to 7-day supply for some

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Last Updated May 7, 2018 3:05 PM EDT



Opioid Epidemic: Contributing Factors

- Lack of coordination of approaches and resources
- Lack of effective implementation of promising practices
- Failure to engage with local communities and across multiple stakeholders
- Failure to spread promising practices
- Direct and indirect counter-forces by the pharmaceutical industry
- Lack of awareness among patients and consumers of the danger of prescription opioids

Martin L, et al. *Addressing the Opioid Crisis in the United States*. IHI Innovation Report. Cambridge, Massachusetts: Institute for Healthcare Improvement; April 2016. (Available at ihi.org)



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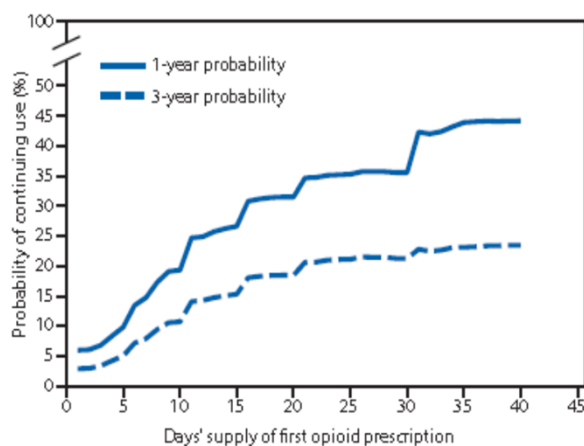
US Dept HHS/CDC, MMWR/March 18, 2016, Vol 65 No 1



Characteristics of Initial Prescription Episodes and Likelihood of Long-Term Opioid Use — United States, 2006–2015

Anuj Shah¹; Corey J. Hayes, PharmD^{1,2}; Bradley C. Martin, PharmD, PhD¹

- Opioid naïve, cancer free adults who received an opioid prescription were evaluated to determine likelihood of chronic use
- Factors
 - Starting with day 3, each additional day of med supplied increased risk
 - 2nd RX or refilled doubled the risk of use at 1 year
 - ≥ 700 morphine mg equivalent cumulative dose
 - Long-acting opioid and tramadol use



US Dept HHS/CDC, MMWR/March 17, 2017 Vol 66 No 10



Opioid Stewardship

- System of care that strategically organizes efforts to optimize opioid stewardship and patient outcomes
 - Multifaceted
 - Appropriate and rational prescribing
 - Patient outcome driven – improved efficacy and safety
 - Collaborative effort between organizations, patients, and communities

