America Wakes Up

The Opioid Crisis and its Impact on our Country

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1 in 16

PEOPLE PRESCRIBED OPIOIDS BECOME ADDICTED

(Source: AMA)
7 days

HOW LONG IT TAKES TO BECOME ADDICTED

(Source: AMA)
Opioids & Addiction

- Opioids are a class of drugs that include the illicit drug heroin as well as the licit prescription pain relievers oxycodone, hydrocodone, codeine, morphine, fentanyl and others.

- Opioids are chemically related and interact with opioid receptors on nerve cells in the brain and nervous system to produce pleasurable effects and relieve pain.

- Addiction is a primary, chronic and relapsing brain disease characterized by an individual pathologically pursuing reward and/or relief by substance use and other behaviors.

- 21.5 million Americans age 12 years or older had a substance use disorder in 2014
  - 1.9 million had a substance use disorder involving prescription pain relievers
  - 586,000 had a substance use disorder involving heroin.

- It is estimated that 23% of individuals who use heroin develop opioid addiction.

(Source: ASAM Opioid Addiction 2016 Facts and Figures, NIDA, SAMHSA)
Fentanyl

- Schedule II narcotic used as an analgesic and anesthetic.
- *Most potent opioid available for use in medical treatment – 50 to 100 times more potent than morphine and 30 to 50 times more potent than heroin.*
- Potentially lethal, even at very low levels. Doses as small as 0.25 mg can be fatal.
- Euphoric effects are indistinguishable from morphine or heroin.
- Often laced in heroin.
- Fentanyl and fentanyl analogues are easily produced in illicit clandestine labs.
- Significant resurgence in fentanyl-related seizures.

Carfentanil (Wildnil)

- *Analogue of fentanyl with an analgesic potency 10,000 times that of morphine.*
- Used in veterinary practice to immobilize large animals.

(Source: DEA)
“At some point in the 1980s and 1990s, the medical profession came together to discuss how best to treat pain. There was post-operative pain, pain from dental procedures, and pain from accidental injuries. The world’s economies had just fired up and downtime was frowned upon. Doctors became time constrained with their patients and pharmaceutical companies had just discovered new markets for new drugs. The solution? Prescribe opioids freely and widely for all pain. Opioids began to snowball and the problem got bigger. The cure was overplayed, the consequence less considered.”

(Source: RealLeaders.com June 2017)
“We started on this whole thing because we were on a mission to help people in pain,” states Dr. Jane C. Ballantyne, a Seattle pain expert. “But the long-term outcomes for many of these patients are appalling, and it is ending up destroying lives.”

“But my doctor prescribed it, so it can’t be bad.”

The use, overuse and misuse of prescription opioids continued to rise through 2012.

A Pill for Your Pain

• 2014 the **CDC** issued a report headlined **PHYSICIANS ARE FUELING PRESCRIPTION PAINKILLER OVERDOSES.**

• The study found that doctors were engaging in "dangerous" and "inappropriate" prescription practices.

• Physicians lack understanding of opiates and their addictive tendencies.

(Source: CDC, 2014)
Many Physicians Don’t Understand Key Facts about Prescription Opioid Addictions

• Surveyed physicians do not understand the addictive nature of the opioids they prescribe or how people become addicted to them.

• Doctors continue to overestimate the effectiveness of prescription pain medications and underestimate their risks.

• One-third of the doctors erroneously believed that most prescription drug abuse is by means other than swallowing the pills as intended. Ingestion accounts up to 97%, followed by snorting and injection.

• Physicians and patients often mistakenly view these medicines as safe in one form and dangerous in another.

(Source: Johns Hopkins Bloomberg School of Public Health, June, 2015)
While cumulative pain levels remained constant among Americans, prescriptions for pain medications quadrupled between 1999 and 2010.

(Source CBS News October 10, 2014)
In our attempt to relieve our pain, the U.S. is leading the world in popping prescription painkillers, and more and more people are dying. According to the National Institute on Drug Abuse, the U.S. accounts for 5% percent of the world's population, yet we consume 75% percent of the world's prescription drugs.

Death rates from prescription opioid pain reliever overdoses in this country quadrupled from 1999 to 2010, the CDC reports.
• Opioid pills prescribed per American:
  - 1992 – 22
  - 2011 – 72
  - 2017 – 52

• Opioids by the numbers…
  - Prescriptions peaked in 2011 and have declined by 29 percent since
  - High doses declined by 16% in 2017, helped by changes in regulation of opioid prescribing and in reimbursement policies from insurers
  - Number of patients getting new prescriptions dropped 7.8% in 2017

(Source: Iqvia Institute for Human Data Science, CNBC, April 19, 2018)
A Pill for Your Pain

• **Growth of new heroin users on the decline:**
  - 2016 – 170,000
  - 2017 – 81,000
  - Little decline among 18-25 year old heroin users, plus big jump in marijuana and methamphetamine use.

• **Young adults misusing RX opioids declining:**
  - 2016 – 8.5%
  - 2017 – 7.0%
  - Slight decline in prescription opioid misuse among 18-25 year olds.

(Source: National Survey on Drug Use and Health, NSDUH, 2018)
A Pill for Your Pain
Average days of opioid use per resident per year

<table>
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<tr>
<th>Country</th>
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Values are three-year rolling averages for 2013 to 2015.

Source: International Narcotics Control Board

(Source: Josh Katz, NY Times, 8-10-2017)
Opioids may be worse than Tylenol for chronic pain

After a year of observation, the researchers found no evidence that opioids were better than the non-opioid medications for the treatment of chronic pain.

(Source: JAMA, March 6, 2018)
Rx Pain Killers
$57 Billion Global Annual Sales

1 in 12 US doctors receive payments from opioid makers

(Source: IMS Health, 2015)
(Modern Healthcare, August 2017)
A Pill for Your Pain

• 1995: Purdue Pharmaceuticals begins manufacturing OxyContin, its “time-released, supposedly addiction-proof version of the painkiller oxycodone”

• Estimated U.S. sales since introduction: $35 billion (mostly from Oxy)

• In 2007, Purdue paid $635 million in fines after pleading guilty to false marketing charges by the Department of Justice; some states now suing

• OxyContin was reformulated in recent years, making it more difficult to abuse

(Source: Forbes.com, Alex Morrell, 7/1/2015)
Opioid Makers Sued for Stoking Addiction

- Ohio filed suit against five drug companies, alleging they fueled the opioid addiction crisis by misrepresenting the addictive risks of their painkillers.
- South Carolina filed suit against Purdue Pharma LP, which manufactures OxyContin.
- New Hampshire, Mississippi, Missouri, Oklahoma and West Virginia have filed similar suits.
- Cities of Cincinnati and Birmingham filed public nuisance suits against wholesale drug distributors for “dumping millions of dollars worth of prescription opioids into the communities.”

“We are obligated to take action as South Carolinians fall victim to Purdue’s deceptive marketing.” South Carolina Attorney General Alan Wilson

“The companies were dishonest with doctors and the public about their painkillers’ risks.” Ohio Attorney General Mike DeWine

On an average day…

- More than **650,000 opioid prescriptions** are dispensed\(^1\)
- **3,900 people** initiate nonmedical use of prescription opioids\(^2\)
- **580 people** initiate heroin use\(^2\)
- **115 people** die from an opioid-related overdose (42,200 year)\(^3\)

Economic Impact…

- **55 billion** in health and social costs related to prescription opioid abuse each year\(^1\)
- **20 billion** in emergency department and inpatient care for opioid poisonings \(^2\)

Source: 1. CDC, MMWR, 2015; 64;1-5; 2. CDC Vital Signs, 60(43);1487-1492; Pain Med. 2011;12(4):657-67.1 2013;14(10):1534-47.2 *Opioid-related overdoses include those involving prescription opioids and illicit opioids such as heroin Source: IMS Health National Prescription Audit1 / SAMHSA National Survey on Drug Use and Health2 / CDC National Vital Statistics System3
In 2016 overdoses killed more people than guns or car accidents, and are doing so at a pace faster than the H.I.V. epidemic at its peak.

In 2015, roughly 2 percent of deaths — one in 50 — in the United States were drug-related.

(Source: Josh Katz, NY Times, August 10, 2017)
It is estimated that 500,000 more people will die from opioid overdoses in the next decade. It will get worse before it gets better.

(Source: STAT, Max Blau, June 27, 2017)
Drug overdose is the leading cause of accidental death in the US

- 47,055 lethal drug overdoses in 2014
- 52,400 in 2015 (33,000 involved opioids)
- 63,600 in 2016 (42,200 involved opioids)
- 67,000 in 2017 (estimated)
- Over 65% of accidental overdose deaths are due to opioids (prescription pain relievers and heroin)

In 2012, 259 million prescriptions were written for opioids, which is more than enough to give every American adult their own bottle of pills. (This upward trend is now decreasing.)

Four in five (80%) new heroin users started out misusing prescription painkillers.

94% of respondents in a 2014 survey of people in treatment for opioid addiction said they chose to use heroin because prescription opioids were “far more expensive and harder to obtain”.

(Source: ASAM Opioid Addiction 2016 Facts and Figures, NIDA, SAMHSA)
Heroin use is part of a larger substance abuse problem.

Nearly all people who used heroin also used at least 1 other drug. Most used at least 3 other drugs.

**People who are addicted to...**

- **Alcohol**: 2x
- **Marijuana**: 3x
- **Cocaine**: 15x
- **Rx Opioid Painkillers**: 40x

...more likely to be addicted to heroin.

**Heroin** is a highly addictive opioid drug with a high risk of overdose and death for users.

SAMHSA NSDUH Data 2011-2013, CDC Infographic

The Opioid Crisis

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

- Any Opioid
- Heroin
- Natural & Semi-Synthetic Opioids
- Other Synthetic Opioids (e.g., fentanyl, tramadol)
- Methadone

Drug overdose deaths involving Rx opioids, heroin & fentanyl

(Source: Josh Katz, NY Times, 8-10-2017)
Overdose deaths per year

(Source: Josh Katz, NY Times, 9-2-2017)
Overdose deaths by drug type

Source: Josh Katz, NY Times
9-2-2017
Distribution of drug deaths by age

(Source: Josh Katz, NY Times, 8-10-2017)
National Drug Overdose Deaths 2013
National Drug Overdose Deaths 2015

[Map of the United States showing states colored according to overdose death rates.]
The Midwest, Appalachia & New England
The worst of the problem – for now

Source: Josh Katz, NY Times, 8-10-2017
Opioid Deaths in 2015
Source: CDC WONDER

Opioid deaths in 2015
Age-adjusted death rates (per 100,000) for overdose deaths from all opioid drugs

Heroin deaths in 2015
Age-adjusted heroin overdose death rate (per 100,000)

Synthetic opioid deaths in 2015
Age-adjusted synthetic opioid overdose death rate (per 100,000)

Natural opioid deaths in 2015
Age-adjusted natural opioid overdose death rate (per 100,000)
Overarching community responses are focused on harm reduction to reduce overdose incidence and overdose deaths, transmission of infectious diseases (HIV, Hep C) and related criminal behavior.

Associated Prevention, Intervention and Treatment efforts are focused on interrupting the cycle that leads to these dangerous consequences and on restoring people’s lives.

Hospitals and physicians are engaged in changing treatment approaches and prescription practices to reduce the use of opioids.
A National Crisis

Some states have more painkiller prescriptions per person than others.

Controlled Prescription Drugs (CPDs) distributed nationwide

Source: US Department of Justice, Drug Enforcement Administration
National Drug Threat Assessment Summary, November 2016
Source: US Department of Justice, Drug Enforcement Administration
National Drug Threat Assessment Summary, November 2016
Opioid Prescription Guidelines

Making a Difference: State Successes

New York 75% ↓

2012 Action:
Required prescribers to check the state’s prescription drug monitoring program before prescribing painkillers.

2013 Result:
Saw a 75% drop in patients who were seeing multiple prescribers for the same drugs.

Florida 50% ↓

2010 Action:
Regulated pain clinics and stopped health care providers from dispensing prescription painkillers from their offices.

2012 Result:
Saw more than 50% decrease in oxycodone overdose deaths.

Tennessee 36% ↓

2012 Action:
Required prescribers to check the state’s prescription drug monitoring program before prescribing painkillers.

2013 Result:
Saw a 36% decline in patients who were seeing multiple prescribers for the same drugs.

Medications that treat addiction – buprenorphine, methadone and a third named naltrexone -- were a cornerstone of the Obama administration's plan to combat the opiate epidemic. (Photo: Joe Raedle, Getty Images)
MAT (Medication-Assisted Treatment) is a tool that works best in combination with counseling, therapy, intensive behavioral treatment and support programs. (SAMHSA)

- An **antagonist** blocks opioids by attaching to the opioid receptors without activating them. Antagonists cause no opioid effect and block full agonist opioids. Examples are naltrexone and naloxone.

- Buprenorphine is a **partial agonist** meaning, it activates the opioid receptors in the brain, but to a much lesser degree than a full agonist. Buprenorphine also acts as an antagonist, meaning it blocks other opioids, while allowing for some opioid effect of its own to suppress withdrawal symptoms and cravings.

- Examples of full **agonists** are heroin, oxycodone, hydrocodone, methadone, morphine, opium and others. (Methadone is included in this group; it is often used to treat opioid addiction. The others are not.)
MAT – Common medications used to treat opioid dependence

- **Burprenorphine** (Partial agonist) - Suboxone, Subutex, Zubsolv, Bunavail, Probuphine (new implantable)
  - all but Subutex are 80% buprenorphine and 20% naloxone, or 4:1 ratio. Buprenorphine is currently the most preferred and promoted medication to treat opioid dependence.

- **Methadone** (Full agonist)

- **Naltrexone** (Antagonist) – Vivitrol, Revia
  - Vivitrol – a long acting, single injection dose once monthly, developed for better compliance, considered more effective than short duration oral dose.
  - Revia – naltrexone short acting in daily pill form
  - administer naltrexone 7-10 days after last opioid use
• **Naloxone** (Antagonist) – Narcan, Evzio
  – A medication that blocks or counters the effects of opioids, especially in overdose to reverse respiratory depression. Often used in emergency situations by first responders, law enforcement, hospitals, treatment centers and families of opioid dependent individuals.

• MAT “combines behavioral therapy and medications to treat substance use disorders” (SAMHSA)
  – Treatment of opioid dependency with buprenorphine is most effective in combination with counseling services, which can include different forms of behavioral therapy and self-help programs. (SAMHSA)
What year was the first legislation passed to deal with opioids?
Legislation over the years

1914

Harrison Narcotic Tax Act

Threatened jail for physicians who prescribed opiates (and cocaine) to addicts

An opioid timeline:

1804 – scientists isolate morphine, the active ingredient in opium
1844 – the hypodermic needle invented (the glass syringe invented in 1851)
1865 – estimated 400,000 Civil War soldiers suffer with morphine addiction
1870 – doctors prescribe opiates to women for menstrual cramps, hysteria
1874 – the “acetylation” of morphine produces heroin (diamorphine)
1898 – Bayer markets heroin until 1910 as a “non-addictive morphine substitute” and cough suppressant

(Wikipedia 2017)
Heroin as Medicine

BAYER Pharmaceutical Products

HEROIN—HYDROCHLORIDE

is pre-eminently adapted for the manufacture of cough elixirs, cough balsams, cough drops, cough lozenges, and cough medicines of any kind. Price in 1 oz. packages, $4.85 per ounce; less in larger quantities. The efficient dose being very small (¼ to 1 gr.), it is

The Cheapest Specific for the Relief of Coughs
(In bronchitis, phthisis, whooping cough, etc., etc.)

WRITE FOR LITERATURE TO

FARBENFABRIKEN OF ELBERFELD COMPANY
SELLING AGENTS

P. O. Box 2160 40 Stone Street, NEW YORK
Legislation over the years

- 1914 – Harrison Narcotic Tax Act
- 1970 – Comprehensive Drug Abuse Prevention and Control Act
- 1970 – Controlled Substances Act
- 1974 – Narcotic Addict Treatment Act
- 2000 – Drug Addiction Treatment Act
- 2016 – Comprehensive Addiction and Recovery Act
- 2016 – 21st Century Cures Act
- 2018 – Patients and Communities Act

Over 100 years of legislation dealing with opioids
FACING ADDICTION IN AMERICA

The Surgeon General’s Report on Alcohol, Drugs, and Health

U.S. Department of Health & Human Services
President Trump declares public health emergency over opioid crisis

1. FEMA money made available
2. Public health workers redeployed
3. Access to MAT increased by HHS
4. Medicaid pays for more treatment
5. Congress can appropriate more funds
6. States can request aid

Each day, more than 1,000 people are treated in emergency departments for not using prescription opioids as directed.
Treating overdose in hospital settings

- Opioid misuse and abuse contribute to 420,000 ED visits each year
  
  (Advisory Board, July 2017)

- The cost of an overnight opioid overdose hospital admission in Texas is $35,908. (AHRQ HCUP 2013).iii

Neonatal Abstinence Syndrome (NAS)

- NAS babies in NICU - withdrawal inpatient costs hospitals an average of $66,000 for four months. Healthy babies costs hospitals around $4,000 during the first four months of life. (NPR 1/09/17)

- 27,315 babies were diagnosed with newborn drug withdrawal syndrome in 2013, a five-fold increase from a decade earlier. (Nationwide Hospital Reporting)
HHS announces new actions to combat opioid epidemic

- Many clinicians report feeling pressure to overprescribe opioids because scores on the HCAHPS survey pain management questions were tied to Medicare payments to hospitals. *In order to mitigate even the perception that there is financial pressure to overprescribe opioids, the Centers for Medicare and Medicaid Services (CMS) removed the HCAHPS survey pain management questions from the hospital payment scoring calculation.* This means that hospitals would continue to use the questions to survey patients about their in-patient pain management experience, but these questions do not affect the level of payment hospitals receive. (HHS Press Office, July 6, 2016)

Joint Commission issues new Pain Management Standards

- Hospitals need:
  - a consistent, reliable process for managing opioid prescribing practices
  - management plan for acute and chronic pain patients with opioids while in the hospital
  - to direct patients to community resources/pain specialist post-discharge (TJC 2017)
Effective Treatment includes Prevention and Intervention

**Suggested practices in Hospital EDs & Urgent Care Centers**

- Develop a substance use screening process (SBIRT) or (ORT- Opioid Risk Tool)
- No replacement prescriptions for controlled substances that are lost, destroyed, or stolen
- Discourage administration of intravenous or intramuscular opioids
- No prescriptions for long-acting or controlled-release opioids
- When opioids are prescribed, provide patient counseling on proper usage, storage, and disposal of opioids
- Write prescriptions for the shortest duration possible (3 days)
- Refer patients with acute exacerbations of chronic pain to PCP and reduce prescriptions to no more than 3-5 days, if issued
- Require proper photo ID to issue prescriptions
- Consult the Prescription Monitoring Program (PMP) before writing opioid prescriptions for acutely painful conditions
- Develop way to track patients who may be seeking opioids from EDs
Red Flags and other Warnings in a Physician Practice, Urgent Care or Emergency Department setting

- Patients with chronic pain
  - Dependent
    - Lost prescriptions, early refills, after hours refills
    - Their primary care physician or specialist is not available
    - Suggesting what meds are effective: “it’s the only thing that works!”
    - Listing allergies to meds that only leaves hydrocodone or amphetamines
    - Adamant opposition to reducing the dosage of opioid meds or using alternative meds
    - Complaints of diarrhea, stomach ache, sweaty, having enlarged pupils – signs of opioid withdrawal
  - Non dependent
    - Low resistance
    - Open to suggestions of alternate meds

- Know the common addictive medications people ask for
- Have a working referral relationship with legit pain specialists
  - Best to not handle chronic pain in an urgent care or primary care setting
  - If someone needs narcotic medications, refer them to a pain specialist

Effective Treatment includes Prevention and Intervention
Effective Treatment includes Prevention and Intervention

Assess and address chronic pain using alternatives to prescription opioids

- Educate physicians, nursing and other health professionals
- Physicians and staff educate consumers
- Change prescriptive practices – less opioids
- Reduce the number of doses per opioid prescription
- Promote non-medication alternatives to managing pain
- Involve addiction treatment and behavioral health professionals as needed

Utilize alternatives to prescription opioids as appropriate in pre-op, post-op and discharge situations

- Don’t use a sledgehammer when a hammer will do
1. **Hardwire cultural change with regard to opioids**
   - Focus efforts to address the opioid crisis on all prescribers and specialties, including pain management, primary care, surgery and physical rehabilitation as all contribute to opioid over-prescribing. A narrow approach fails to create organization-wide support for opioid management efforts.

   - Organizations can garner more widespread support for their efforts and influence prescribing patterns through education and awareness, specifically with practical exercises.

   - For example, the pharmacy department at Maimonides Medical Center in New York worked with the emergency department to create a non-opioid pain treatment regimen and then mandated an eight-hour opioid-free shift for physicians to learn new protocols.

   - This stark workflow disruption enables physicians to think about their options to manage patient pain, see the effects of non-opioid pain management treatments, and change future prescribing habits.

2. Develop resources for prescribing across the opioid episode

- Although hospitals and health systems often identify the signs of existing misuse or abuse in patients, most fail to target the root of the problem. Introducing prevention tools can help prescribers avoid initiating the misuse or abuse in the first place.

- The first step is to ensure prescriber access to and accountability for checking prescription drug monitoring programs (PDMPs) before prescribing opioids in order to track patient prescription use and identify "pill shoppers."

- Prescribers must then also hold patients accountable for safely taking and storing their opioid prescriptions.

- Gundersen Health System in La Crosse, Wisconsin, uses opioid agreement contracts to increase patient responsibility and to ensure that patients understand the consequences of misuse or abuse.

3. Engage the community in efforts to reduce opioid use and misuse beyond the hospital

- Opioid management efforts cannot be confined within the walls of the hospital. Instead, organizations must connect with community partners to extend their reach beyond the inpatient setting.

- Engage community prescribers in safe opioid prescription efforts. Invite them to in-person opioid education sessions or online seminars already being offered to health system prescribers.

- Hospital leaders should identify any opportunities to connect with key community stakeholders, such as emergency service providers, law enforcement, and legislators, to create a unified effort for tackling the opioid crisis in the community.

- Implement opioid mitigation efforts such as developing county-wide opioid prescription protocols, initiating community education efforts, and creating safe medication disposal sites.

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