The Evolving Landscape of the Opioid Epidemic in 2018 – What the Provider Can Do

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Michigan Department of Health & Human Services
Disclosures – David Neff, DO

• Full time employee – MDHHS
• Conflicts – None
Overview

1. The Neurobiological and Sociological Consequences of Addiction
2. The Expanding Magnitude of the Epidemic
   - When the Prescription Is The Problem
   - When Prescription Opioid Diversion Is The Problem
   - When Heroin Is the Problem
   - When Fentanyl and Fentanyl Analogues Are the Problem
3. What Can Be Done to Address the Dual Epidemic Within
4. What Can The Provider Do to Prevent Addiction, Overdose and Death – Starting On Monday?
The Neurobiological and Sociological Consequences of Addiction
Addiction Is A Neurodegenerative and Neurocognitive Disorder From Prolonged Exposure of External Chemicals on the Brain

- Loss of Neural Dendrites (Prolonged Drug Exposure)
- Normal Dendrites
- Loss of Brain Function Including the Frontal Lobe

**Biological and Social Consequences of Ongoing Addiction**

- Prolonged exposure leading to downregulated structure and function (decreased neurotransmitters, receptors and structural proteins)
- Loss of self control and executive function, ie, judgement
- Inability to calculate risk versus benefit
- Severe uncontrollable drug seeking to satisfy craving and avert withdrawal symptoms
- Loss of Family, Job and Shelter
- Petty Theft Leading to Larger Crimes, Arrest and Incarceration
- Accidental overdose, cardiorespiratory arrest, brain injury and death
The Problem Grows Exponentially with the Cyclical Nature of Aberrant Behaviors and Adverse Childhood Events (ACE’s)

Aberrant Behaviors Increase Risk for ACE’s

- Physical abuse
- Sexual abuse
- Emotional abuse
- Physical neglect
- Emotional neglect
- Intimate partner violence
- Mother treated violently
- Substance misuse within household
- Household mental illness
- Parental separation or divorce
- Incarcerated household member

Findings: A person’s ACEs score has a strong relationship to numerous health, social and behavioral problems across a lifespan, including substance use disorders

ACE’s Increase Risk for Aberrant Behaviors

- Alcoholism and alcohol abuse
- Chronic obstructive pulmonary disease (COPD)
- Depression
- Fetal death
- Health-related quality of life
- Illicit drug use
- Ischemic heart disease (IHD)
- Liver disease
- Risk for intimate partner violence
- Multiple sexual partners
- Sexually transmitted diseases (STDs)
- Smoking
- Suicide attempts
- Unintended pregnancies
- Neonatal Abstinence Syndrome
- Early initiation of smoking
- Early initiation of sexual activity
- Adolescent pregnancy
- Diabetes
- Lung cancer

Landmark study of 17,000 participants from 1995-1997 by the Centers for Disease Control in partnership with Kaiser Permanente

The Opioid Epidemic in 2018
12 Month-ending Provisional Counts and Percent Change of Drug Overdose Deaths

[Graph showing the number of deaths from drug overdose in the United States over a 12-month period, with data points for December 2015, December 2016, and December 2017, showing increasing trends.

United States
- 12 month ending period: December 2015
  - Reported number of deaths: 52,623
  - Predicted number of deaths: 54,207
  - Percent change: 21.5% US

United States
- 12 month ending period: December 2016
  - Reported number of deaths: 63,938
  - Predicted number of deaths: 66,012
  - Percent change: 10.2% US

United States
- 12 month ending period: December 2017
  - Reported number of deaths: 70,771
  - Predicted number of deaths: 72,240
  - Percent change: 10.2% US

Select Jurisdiction
- United States

Accessed 10/18/18

https://www.cdc.gov/nchs_nvss_vsrr_drug-overdose-data.htm
12 Month-ending Provisional Counts and Percent Change of Drug Overdose Deaths

Based on data available for analysis on: 10/7/2018

Figure 1a. 12 Month-ending Provisional Counts of Drug Overdose Deaths: Michigan

- Michigan 12 month ending period: December 2015
  - Reported number of deaths: 1,973
  - Predicted number of deaths: 1,991

- Michigan 12 month ending period: December 2016
  - Reported number of deaths: 2,342
  - Predicted number of deaths: 2,386
  - Percent pending investigation: 0.09

- Michigan 12 month ending period: March 2018
  - Reported number of deaths: 2,652
  - Predicted number of deaths: 2,710

↑ 13.3 % MI
(↑ 10.2 % US)
↑ 18.5 % MI
(↑ 21.5 % US)

12 Month-ending Provisional Number of Drug Overdose Deaths by Drug or Drug Class

**Figure 2. 12 Month-ending Provisional Number of Drug Overdose Deaths by Drug or Drug Class: United States**

- **Opioids (T40.0-T40.4, T40.6)**
  - Predicted number of deaths: 49,038
  - Reported number of deaths: 47,944

- **Synthetic opioids, excl. methadone (T40.4)**
  - Predicted number of deaths: 29,385
  - Reported number of deaths: 28,866

- **Heroin (T40.1)**
  - Predicted number of deaths: 16,950
  - Reported number of deaths: 15,616

- **Natural & semi-synthetic opioids (T40.2)**
  - Predicted number of deaths: 14,934
  - Reported number of deaths: 14,573

- **Cocaine (T40.5)**
  - Predicted number of deaths: 14,639
  - Reported number of deaths: 14,095

- **Psychostimulants with abuse potential (T43.6)**
  - Predicted number of deaths: 10,695
  - Reported number of deaths: 10,429

**Legend for Drug or Drug Class**
- Opioids (T40.0-T40.4, T40.6)
- Synthetic opioids, excl. methadone (T40.4)
- Heroin (T40.1)
- Natural & semi-synthetic opioids (T40.2)
- Cocaine (T40.5)
- Psychostimulants with abuse potential (T43.6)
- Methadone (T40.3)

The U.S. opioid epidemic in 2018 is now characterized as having three distinct waves:

1) the first wave of opioid overdose deaths began in the 1990s and included prescription opioid deaths,
2) a second wave, which began in 2010, was characterized by an increase in heroin related deaths
3) a third wave started in 2013, with deaths involving highly potent synthetic opioids, particularly illicitly manufactured fentanyl (IMF) and fentanyl analogs.
This is an official
CDC HEALTH UPDATE

Distributed via the CDC Health Alert Network
July 11, 2018, 1300 ET (1:00 PM ET)
CDCHAN-00413

Rising Numbers of Deaths Involving Fentanyl and Fentanyl Analogs, Including Carfentanil, and Increased Usage and Mixing with Non-opioids

Number of drug submissions testing positive for fentanyl analogs and U-47700 in NFLIS in 2016 and during January–June 2017.

<table>
<thead>
<tr>
<th>Fentanyl analog/synthetic opioid</th>
<th>2016*</th>
<th>January–June 2017^</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carfentanil</td>
<td>1,251</td>
<td>2,268</td>
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<tr>
<td>Furanylfentanyl</td>
<td>2,273</td>
<td>3,322</td>
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<tr>
<td>3-methylfentanyl</td>
<td>427</td>
<td>432</td>
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<tr>
<td>Acrylfentanyl</td>
<td>26</td>
<td>1,508</td>
</tr>
<tr>
<td>U-47700</td>
<td>533</td>
<td>1,087</td>
</tr>
</tbody>
</table>

^NFLIS 2017 Midyear Report. These data are preliminary, and may change in the Annual Report for 2017.
Four Primary Root Causes for The Epidemic in 2018

• When the Opioid Prescription is the Problem
  • Too much opioid being prescribed for acute and chronic pain over the last 20 years
    • Unintended consequence of treating “Pain as the 5th Vital Sign” and HCAPS Surveys
    • The Good News -- Prescription Rates are Going Down Nationally, in Michigan and in Medicaid by Double Digits in the last two years

• When Diversion of the Prescription Opioid is the Problem – National Drug Threat Assessment Survey
  • 2/3– 3/4 of Prescribed Opioids are Bought, Stolen or Given Away
  • Leakage in the Distribution System - Lost in Transit, Armed Robbery, Night-time Break-ins and Employee Pilferage
  • Illegal Backdoor Sales and Distribution – Informal Networks and Organized Crime

• When Heroin is the Problem
  • Largely distributed by 6 Mexican Cartels of Which Two are in Michigan
  • $300 Billion Dollar Global Business Where Revenues Are Only Outpaced by Walmart Global Sales

• When Illicitly Manufactured Fentanyl (IMF) is the Problem
  • Mostly made in China and sold in the US over the internet
  • Some brought across the border from Mexico or Canada
  • Reassembled by smuggled reassembled pill presses
  • Prepared for inhalation (including vaping devices) or IV injection
The Opioid Epidemic in 2018: When the Prescription is the Problem
The Risk for Continued Opioid Use Goes Up with Days Supply and Number of Prescriptions in the First Episode of Care

FIGURE 1. One- and 3-year probabilities of continued opioid use among opioid-naïve patients, by number of days' supply* of the first opioid prescription — United States, 2006–2015

FIGURE 2. One- and 3-year probabilities of continued opioid use among opioid-naïve patients, by number of prescriptions* in the first episode of opioid use — United States, 2006–2015

* Days' supply of the first prescription is expressed in days (1–40) in 1-day increments. If a patient had multiple prescriptions on the first day, the prescription with the longest days' supply was considered the first prescription.

* Number of prescriptions is expressed as 1–15, in increments of one prescription.
National Opioid Prescription Rates are Continuing to Shrink

Medicine Use and Spending in the U.S.
A Review of 2017 and Outlook to 2022

The decline in the number of retail opioid prescriptions accelerated to 10.2% during 2017, while high doses declined by 16.1%

Prescription opioid volume peaked in 2011 at 240 billion milligrams of morphine equivalents and have declined by 29% to 171 billion

Opioid new therapy starts fell to 2.9 million per month at the end of 2017, while medically assisted treatment starts increased sharply
Availability Of Controlled Prescription Drugs (CPDs) has Dropped by ~1/3
De-identified MAPS Data provided by LARA in partnership with Appriss Health & MDHHS

239,608 fewer
Michigan residents received an opioid prescription in Mar ’18, than in Mar ’16

The percent of patients receiving an opioid prescription with avg. daily dose >90 Morphine Milligram Equivalents decreased from 10.4% of patients in Mar ’16 to 6.3% in Mar ’18

32 EHR systems integrated with MAPS as of Dec ’17

2017 Opioid Prescription Rate per 100 Population

Rate of multiple provider opioids* for prescriptions opioids, per 100,000 residents

Source: Michigan Automated Prescription System-MAPS Quarterly CDC Indicator Reports, 2016-2018; Prescription rate data collected from 2017 MAPS Yearly Drug Utilization Report

Data Source: LARA Michigan Automated Prescription System-MAPS Quarterly CDC Indicator Reports, 2016-2018; Prescription rate data collected from 2017 MAPS Yearly Drug Utilization Report

Produced by: MDHHS Injury and Violence Prevention Unit (IVP)
The Opioid Epidemic in 2018: When the Prescription Diversion is the Problem
Data From Drug Users Responding to the DEA NDTA Survey – 2/3 of Prescription Opioids Were Obtained For Free, Bought or Stolen

- Much of This Use Started for Recreational and Not Medicinal Purposes

![Figure 20. Source Where Pain Relievers Were Obtained for Most Recent Misuse among Past Year Users Aged 12 or Older: 2015.]

Source: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health (NSDUH)
About 40% of Frequent Chronic Misusers and Recent Initiates Still Receive Their Prescription Opioid From A Provider – By Prescription or Stealing It

Goal is to decrease prescription rates that propagate continued misuse without clear cut indication to treat ongoing pain

Figure 21. Methods and Sources Where Pain Relievers Were Obtained for Most Recent Misuse among Past Year Users Aged 12 or Older: 2015.

Source: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health (NSDUH)
Other Forms of Prescription Opioid Diversion

States With Above-Average Drug Theft and Loss

Number of DEA-Reported Drug Theft and Loss, per 100K

- Arizona: 53.84
- Missouri: 46.77
- Ohio: 45.61
- New Hampshire: 41.40
- South Carolina: 32.51
- Arkansas: 19.59
- Indiana: 19.37
- Michigan: 17.52
- Kentucky: 16.37
- Montana: 16.04
- South Dakota: 7.02
- New Mexico: 6.06
- Wisconsin: 6.69

Source: DEA’s Office on Legislation and Enforcement/Compliance Division

Drug Theft and Loss Over Time

- Lost to Stealers
- Employee Filching
- Night Break-In
- Armed Robbery
- Concealed Theft

Source: DEA’s Office on Legislation and Enforcement/Compliance Division

Breakdown of Drug Theft and Loss, by Type

- Lost to Stealers
- Employee Filching
- Night Break-In
- Armed Robbery
- Concealed Theft

Source: DEA’s Office on Legislation and Enforcement/Compliance Division

Breakdown of Drug Theft and Loss, by Business Activity

- Business Activity
- Pharmacy
- Hospital
- Dispensary
- Clinics
- Law Enforcement
- Non-Compliance
- Manufacture
- Resale
- Abuse/End of Loss
- Expensive
- Pharmacy
- Cathe Positive
- Staging Institution

Source: DEA’s Office on Legislation and Enforcement/Compliance Division

DEA 2016
The Opioid Epidemic in 2018: When Heroin is the Problem
Most Heroin in the US Comes From Mexico
$300 Billion Dollar Industry

Source: DEA
The National Heroin Threat is the Greatest in the Northeast Corridor, Mid-Atlantic States and the Midwest
Heroin Availability Remained High in 2017

Source: 2017 National Drug Threat Survey
The Opioid Epidemic in 2018: When Fentanyl and Fentanyl Analogues Are the Problem
Carfentany & U-47700 Deaths in Michigan

- **August 19-24, 2016** – Cincinnati area experienced 174 opioid carfentanyl overdoses
- **September 15, 2016** – First documented carfentanyl overdose seen in Kent County
- **October 6, 2016** – 19 confirmed carfentanyl overdose deaths in Wayne County since July
- **October 5, 2016** – First documented U47700 (aka, U-4 or pink) overdose seen in White Lake, MI

Source: DEA

2017 National Drug Threat Assessment
30 deaths that were overdose of any kind
• 28 had an opioid
• 17 of 28 (60%) opioids were fentanyl or fentanyl family
• 14 of 17 (80%) fentanyl deaths were bootleg non pharmaceutical fentanyl
• No fentanyl was identified 4 years ago
## 2017 – Non-suicide drug deaths

<table>
<thead>
<tr>
<th>County</th>
<th>Total</th>
<th>Opioids</th>
<th>Opioid %</th>
<th>Illicit</th>
<th>Illicit %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allegan</td>
<td>12</td>
<td>6</td>
<td>50%</td>
<td>4</td>
<td>33%</td>
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<tr>
<td>Calhoun</td>
<td>49</td>
<td>44</td>
<td>90%</td>
<td>38</td>
<td>78%</td>
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<tr>
<td>GT/Leelanau</td>
<td>20</td>
<td>14</td>
<td>70%</td>
<td>13</td>
<td>65%</td>
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<tr>
<td>Kalamazoo</td>
<td>66</td>
<td>50</td>
<td>76%</td>
<td>40</td>
<td>61%</td>
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<tr>
<td>Mason*</td>
<td>6</td>
<td>2</td>
<td>33%</td>
<td>2</td>
<td>33%</td>
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<tr>
<td>Muskegon</td>
<td>50</td>
<td>39</td>
<td>78%</td>
<td>32</td>
<td>64%</td>
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<tr>
<td>St. Joseph</td>
<td>7</td>
<td>6</td>
<td>86%</td>
<td>6</td>
<td>86%</td>
</tr>
<tr>
<td>Van Buren</td>
<td>14</td>
<td>10</td>
<td>71%</td>
<td>9</td>
<td>64%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>224</td>
<td>171</td>
<td>69%</td>
<td>144</td>
<td>60%</td>
</tr>
</tbody>
</table>

Courtesy of Joyce deJong, DO, Chair, Pathology Department, WMU Homer Stryker School of Medicine
882 Samples from Michigan Opioid Rapid Testing (MORT) Project – 36 Counties

- 84%: OD suspected and opioids found
- 30%: OD not suspected and opioids found
- 50%: OD unknown and opioids found

Courtesy of Joyce deJong, DO, Chair, Pathology Department, WMU Homer Stryker School of Medicine
Heroin and Fentanyl Analogues Are the Two Largest Drug Threats in the Detroit Field Division Area – 78% Combined

Figure A3. Greatest Drug Threat by Field Division – Reported by Percentage of State and Local Agencies, 2017.

Source: National Drug Threat Survey
May 4, 2017 - Gray Death is a combination of several powerful substances such as Heroin, Fentanyl, Carfentanil and a synthetic opioid called U-47700.

The drug has the appearance of a concrete rock. It is chunky and solid, created from compressed and cooked powder.

At least 50 people have reportedly overdosed, some dying after their first dose of the drug.
How We Are Modifying Our Strategy to Address the Dual Epidemic Within One
Creating a Learning Health System* to Improve Quality of Care and Create Teachable Moments

*Embraced by the Medicaid Medical Directors Network (MMDN), AHRQ, the National Academy of Medicine and CMS (November, 2017)
MDHHS Public Health Approach to the Opioid Crisis
Data Drives Decisions

1° PREVENTION:
- Promote awareness
- Reduce supply & demand
- Improve IT analytics & surveillance

2° EARLY INTERVENTION:
- Identify co-occurring conditions
- Identify risk of addiction & overdose
- Coping skills
  - Monitor & adjust dosing
  - Informed consent & treatment contracts
  - Care coordination, collaboration, and continuity
  - Screening, brief intervention, referral to treatment

3° TREATMENT:
- Increase treatment services
- Increase emergency services
- Recovery
  - Rescue with Naloxone
  - Medication-assisted treatment

MDHHS
Michigan Department of Health & Human Services
The Opioid Mortality Crisis Is Two Epidemics Within One (An Evolving Model)

Person Reports Pain

Opioid Rx

Tolerance -> Dependence

Addiction – Uncontrollable Craving and Withdrawal Symptoms

Cardiopulmonary Arrest
Brain Injury
Death

Disease/Injury

Person Misuses

• Illicit Opioid Rx
• Heroin
• Fentanyl Analogues

Negative Cultural Influences
Address 6 Key Issues (An Evolving Model)

1. Incomplete Picture As to Root Causes – Rx’s, Heroin, and Fentanyl Analogaues
2. Despite Improvement, Rx Rates Are Still Too High
3. Heroin and Fentanyl Analogue Use is Rampant & Growing

Disease/Trauma → Person Reports Pain → Opioid Rx → Tolerance -→ Dependence → Addiction – Uncontrollable Craving and Withdrawal Symptoms → Cardiopulmonary Arrest, Brain Injury, Death

1° Prevention
2° Early Intervention
3° Treatment

- Evidence-based Care
  - Naloxone
  - MAT (buprenorphine, methadone, naltrexone)
  - Behavioral Therapy

- Chronic Pain Opioid Management
  - Cancer
  - Palliative Care
  - Hospice

- There is room to Optimize Access to Care - Work Force Shortages & Complex Pathways to Care

- Person Reports Pain
  - Illicit Opioid Rx
  - Heroin
  - Fentanyl Analogaues

- Person Misuses

- Negative Cultural Influences

- Disease/Trauma

- 6. Cannot abandon patients with life altering pain

- Death Rate is Still Too High, Extent of Brain Injury is Unknown

- Access to Care - Work Force Shortages & Complex Pathways to Care

- Incomplete Picture As to Root Causes – Rx’s, Heroin, and Fentanyl Analogaues

- Despite Improvement, Rx Rates Are Still Too High

- Heroin and Fentanyl Analogue Use is Rampant & Growing

- Cannot abandon patients with life altering pain
Focus on 4 Key Objectives (An Evolving Model)

#1 Prescribe Less

Disease/Trauma → Person Reports Pain → Opioid Rx → Tolerance → Dependence → Addiction – Uncontrollable Craving and Withdrawal Symptoms → Chronic Pain Opioid Management

#2 Decrease Demand & Get Illicit Opioids Off the Street

Negative Cultural Influences → Person Misuses → Illicit Opioid Rx, Heroin, Fentanyl Analogues → Tolerance → Dependence → Addiction – Uncontrollable Craving and Withdrawal Symptoms → Cardiopulmonary Arrest, Brain Injury, Death

#3 Improve Access to Care

Evidence-based Care
- Naloxone
- MAT (buprenorphine, methadone, naltrexone)
- Behavioral Therapy

#4 Do Not Abandon the Chronic Pain Patient

Chronic Pain Opioid Management
- Cancer
- Palliative Care
- Hospice

1° Prevention

2° Early Intervention

3° Treatment
Solution – Optimize Care (An Evolving Model)

1° Prevention

- Disease/Trauma
  - Prevent
    - Disease – Malnutrition, Immobility (Deconditioning), Smoking, Substance Abuse, Infectious Disease, Cancer
    - Trauma - Seatbelts, Fall Avoidance, Safe Equipment

2° Early Intervention

- Person Reports Pain
  - Acute Treatment
    - Take a Team Based Approach
    - Scrutinize Opioid Need
    - Justify Decisions
    - Use Non-Opioid Therapies 1st
    - Rx Opioids Cautiously
    - Taper ASAP
    - Communicate Risk v. Benefit
    - Provide Informed Consent
    - Utilize Patient Contracts
    - Evaluate with MAPS/NarxRx
    - Secure Storage & Dispose Safely

- Person Misuses
  - Illicit Opioid Rx
    - Heroin
    - Fentanyl Analogues
  - Early Intervention
    - Screen Risk Regularly
    - Monitor with PDMP/UDS
    - Identify Misuse & Treat Early

3° Treatment

- Opioid Rx
  - Tolerance -> Dependence
    - Addiction – Uncontrollable Craving and Withdrawal Symptoms
  - Chronic Treatment
    - Scrutinize Opioid Need
    - Justify Decisions
    - Rx Opioids Cautiously
    - Taper ASAP

Cardiopulmonary Arrest
- Brain Injury
- Death

Evidence-based Care
- Naloxone
- MAT (buprenorphine, methadone, naltrexone)
- Behavioral Therapy

Prevent
- Improve coping strategies
- Increase Resilience
- Early Alcohol Use
- Early Nicotine Use
- Early Drug Experimentation
- Traumatic Experiences

Prevent
- Disease – Malnutrition, Immobility (Deconditioning), Smoking, Substance Abuse, Infectious Disease, Cancer
- Trauma - Seatbelts, Fall Avoidance, Safe Equipment

Early Intervention
- Screen Risk Regularly
- Monitor with PDMP/UDS
- Identify Misuse & Treat Early

Chronic Pain Management
- Cancer
- Palliative Care
- Hospice

Improve Access and Eliminate Barriers to Care
- ↑ Highly Qualified Workforce
- Simplify Pathways to Care
- ↑ Appointment Times
- ↑ Care Coordination
- ↑ MAPS/NarxRx
- ↑ UDS (w/ and w/o Fentanyl Analogues)
- ↑ Naloxone
- ↑ MAT
- ↑ Counselling

Prevent
- Disease – Malnutrition, Immobility (Deconditioning), Smoking, Substance Abuse, Infectious Disease, Cancer
- Trauma - Seatbelts, Fall Avoidance, Safe Equipment

Prevent
- Improve coping strategies
- Increase Resilience
- Early Alcohol Use
- Early Nicotine Use
- Early Drug Experimentation
- Traumatic Experiences

Prevent
- Disease – Malnutrition, Immobility (Deconditioning), Smoking, Substance Abuse, Infectious Disease, Cancer
- Trauma - Seatbelts, Fall Avoidance, Safe Equipment

Prevent
- Improve coping strategies
- Increase Resilience
- Early Alcohol Use
- Early Nicotine Use
- Early Drug Experimentation
- Traumatic Experiences
GUIDELINE FOR PRESCRIBING OPIOIDS FOR CHRONIC PAIN

IMPROVING PRACTICE THROUGH RECOMMENDATIONS

CDC’s Guideline for Prescribing Opioids for Chronic Pain is intended to improve communication between providers and patients about the risks and benefits of opioid therapy for chronic pain, improve the safety and effectiveness of pain treatment, and reduce the risks associated with long-term opioid therapy, including opioid use disorder and overdose. The Guideline is not intended for patients who are in active cancer treatment, palliative care, or end-of-life care.

DETERMINING WHEN TO INITIATE OR CONTINUE OPIOIDS FOR CHRONIC PAIN

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. If opioids are used, they should be combined with nonpharmacologic therapy and nonopioid pharmacologic therapy as appropriate.

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 opioid 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.

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.

CLINICAL REMINDERS

- Opioids are not first-line or routine therapy for chronic pain
- Establish and measure goals for pain and function
- Discuss benefits and risks and availability of nonopioid therapies with patient

ASSESSING RISK AND ADDRESSING HARMs OF OPIOID USE

8. Reduce starting and periodically during continuation of opioid therapy, clinicians should evaluate risk factors for opioid-related harms. Clinicians should incorporate into the management plan strategies to mitigate risk, including considering offering naloxone when factors that increase risk for opioid overdose, such as history of overdose, history of substance use disorder, higher opioid dosages (≥50 MME/day), or concurrent benzodiazepine use, are present.

9. Clinicians should review the patient’s history of controlled substance prescriptions using state prescription drug monitoring program (PDMP) data to determine whether the patient is receiving opioid dosages or dangerous combinations that put him or her at high risk for overdose. Clinicians should review PDMP data when starting opioid therapy for chronic pain and periodically during opioid therapy for chronic pain, ranging from every prescription to every 3 months.

10. When prescribing opioids for chronic pain, clinicians should use urine drug testing before starting opioid therapy and consider urine drug testing at least annually to assess for prescribed medications as well as other controlled prescription drugs and illicit drugs.

11. Clinicians should avoid prescribing opioid pain medication and benzodiazepines concurrently whenever possible.

12. Clinicians should offer or arrange evidence-based treatment (usually medication-assisted treatment with buprenorphine or methadone in combination with behavioral therapies) for patients with opioid use disorder.

OPioid SELECTION, dosage, duration, follow-up, and discontinuation

4. When starting opioid therapy for chronic pain, clinicians should prescribe immediate-release opioids instead of extended-release/long-acting (ER/LA) opioids.

5. When opioids are started, clinicians should prescribe the lowest effective dosage.

6. Clinicians should use caution when prescribing opioids at any dosage, should carefully reassess evidence of individual benefit and risks when considering increasing dosage to ≥50 morphine milligram equivalents (MME)/day, and should avoid increasing dosage to ≥80 MME/day or carefully justify a decision to titrate dosage to ≥80 MME/day.

7. Long-term opioid use often begins with treatment of acute pain. When opioids are used for acute pain, clinicians should prescribe the lowest effective dose of immediate-release opioids, and should prescribe no greater quantity than needed for the expected duration of pain severe enough to require opioids. Three days or less will often be sufficient; more than seven days will rarely be needed.

8. Clinicians should evaluate benefits and harms with patients within 1 to 4 weeks of starting opioid therapy for chronic pain or of dose escalation. Clinicians should evaluate benefits and harms of continued therapy with patients every 3 months or more frequently. If benefits do not outweigh harms of continued opioid therapy, clinicians should optimize other therapies and work with patients to taper opioids to lower dosages or to taper and discontinue opioids.

CLINICAL REMINDERS

- Evaluate risk factors for opioid-related harms
- Check PDMP for high doses and prescriptions from other providers
- Use urine drug testing to identify prescribed substances and undisclosed use
- Avoid concurrent benzodiazepine and opioid prescribing
- Arrange treatment for opioid use disorder if needed

Access the full CDC guideline for prescribing opioids for chronic pain at: https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm
Medications Approved in the Treatment of Opioid Use Disorder*

### Pharmacologic Category

<table>
<thead>
<tr>
<th>Extended Release Injectable Naltrexone</th>
<th>Methadone</th>
<th>Buprenorphine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opioid antagonist</td>
<td></td>
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<tr>
<td>Naltrexone displaces opioids from receptors to which they have bound. This can precipitate severe, acute withdrawal symptoms if administered in persons who have not completely cleared opioid from their system. Patients who have been treated with extended-release injectable naltrexone will have reduced tolerance to opioids. Subsequent exposure to previously tolerated or even smaller amounts of opioids may result in overdose.</td>
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<tr>
<td>Opioid agonist</td>
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<tr>
<td>Patients starting methadone should be educated about the risk of overdose during induction onto methadone, if relapse occurs, or substances such as benzodiazepines or alcohol are consumed. During induction, a dose that seems initially inadequate can be toxic a few days later because of accumulation in body tissues. For guidance on methadone dosing for all phases of MAT consult: TIP 43 (<a href="http://store.samhsa.gov/product/TIP-43-Medication-Assisted-Treatment-for-Opioid-Addiction-in-Opioid-Treatment-Programs/SMA12-4214">http://store.samhsa.gov/product/TIP-43-Medication-Assisted-Treatment-for-Opioid-Addiction-in-Opioid-Treatment-Programs/SMA12-4214</a>)</td>
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<tr>
<td>Opioid partial agonist</td>
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<tr>
<td>Buprenorphine’s partial agonist effect relieves withdrawal symptoms resulting from cessation of opioids. This same property will induce a syndrome of acute withdrawal in the presence of long-acting opioids or sufficient amounts of receptor-bound full agonists. Naloxone, an opioid antagonist, is sometimes added to buprenorphine to make the product less likely to be abused by injection.</td>
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</tbody>
</table>

### Who May Prescribe or Dispense

<table>
<thead>
<tr>
<th>Extended Release Injectable Naltrexone</th>
<th>Methadone</th>
<th>Buprenorphine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any individual who is licensed to prescribe medicines (e.g., physician, physician assistant, nurse practitioner) may prescribe and/or order administration by qualified staff.</td>
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<tr>
<td>SAMHSA-certified Opioid Treatment Programs dispense methadone for daily administration either on site or, for stable patients, at home.</td>
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<tr>
<td>Physicians must have board certification in addiction medicine or addiction psychiatry and/or complete special training to qualify for the federal waiver to prescribe buprenorphine, but any pharmacy can fill the prescription. There are no special requirements for staff members who dispense buprenorphine under the supervision of a waivered physician.</td>
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</tr>
</tbody>
</table>
Take 10 Steps To Improve Clinical Practice and Patient Engagement

1. First – Do NO Harm
2. Remain vigilant that heroin and illicitly manufactured fentanyl (IMF) availability is high on the streets
3. Identify Opioid Addiction regardless where it’s coming from and treat early
   • Naloxone 1st, MAT and Cognitive Therapies
4. Continue Talking with Patients and Families About Risk and Benefits of Using Opioids of Any Sort
5. Teach Patients How to Securely Store and Properly Dispose Of Their Medications
6. Take a Team Based Approach with Early Consultation or Referrals – don’t “go it alone”
7. Learn More on How to Use Fewer Opioids From 1st to Last Prescription and Use More Non-opioid Pain Solutions
   • When treating acute pain, stop them ASAP
   • Carefully justify when transitioning from acute pain to chronic pain management and avoid doses ≥ 90 mg MEDD
   • Initiate a patient-centered tapering conversation early with patients taking chronic opioids and titrate them down slowly, particularly at high doses
   • Consider referral or switching over to MAT if craving or withdrawal signs become uncontrollable
8. Utilize Patient Contracts w/Informed Consent
9. Use MAPS/NarxCare & Urine Drug Screening Routinely to Assess & Reduce Risk
10. Document Carefully – Justify Reasons for Care
Summary

1. The root causes for the opioid epidemic are complex and multifactorial
2. It is imperative to shrink supply and demand for both prescription opioids and heroin/fentanyl analogues
3. A well organized Michigan-wide and nation-wide plan is necessary to avoid abandoning patients with “true” pain and also not send people to the street for heroin and synthetic opioids
4. Focusing only on prescription opioids without simultaneously addressing “heroin and fentanyl trafficking” will dramatically shrink probability of success
5. Most of all it will “take a village” – “every village” here in Michigan
6. Health professionals are well positioned to help lead the way
michigan.gov/stopoverdoses
THANK YOU!

For more information contact:

David Neff, DO
neffd2@Michigan.gov
Cell Phone: 517-290-1079
Additional Resources
Michigan Opioid Collaborative (MOC)

In partnership with Michigan Department of Health and Human Services (MDHHS), the Department of Psychiatry and the Injury Center of the University of Michigan is working to build a statewide network to help Michigan prescribers (“providers”) to use Medication Assisted Treatment (MAT) for patients with an Opioid Use Disorder (OUD). The resulting project, called the Michigan Opioid Collaborative (MOC), provides same day consultation from physicians with specialty addiction training to support enrolled providers.

Three Easy Steps:
1. Contact us to enroll to as a Provider
2. Contact our local Behavioral Health Consultant (BHC) when you have a patient you are concerned may have an OUD
3. Receive patient support and referrals from our BHC and same day consultation from our physician team

How to Enroll

Enrollment is easy:
1. Contact us using the contact us page or email us at: moc-administration@umich.edu
2. We will contact you to complete the process which includes having the prescriber sign an MOC Prescriber Agreement.
3. You begin calling for consultations as needed.

Contact Us

If you are a provider treating patients with Opioid Use Disorders (OUDs) and interested in learning more about Medication Assisted Treatment, please contact Suzanne Kapica, MOC Project Manager, via email at: suzannak@med.umich.edu
Household Medication Disposal Event

9/7/2017

Clean out your medicine cabinets and bring your unused, unwanted or expired medications to the Michigan State Capitol in Lansing for safe disposal on Tuesday, September 12, 2017, from 10:30 a.m. to 1:30 p.m.

The Michigan Department of Environmental Quality (DEQ) is once again partnering with the Michigan Pharmacists Association (MPA) to increase public awareness about the importance of proper medication disposal. Pharmacists, student pharmacists and police officers will be on the south Capitol lawn collecting unused, unwanted or expired medications, including controlled substances, for incineration. People with disabilities or those who are short of time can utilize the drop-off tent at the intersection of Capitol Avenue and Michigan Avenue.

Visit www.MichiganPharmacists.org/medicationdisposal for more details about the event, including what is and is not being accepted, or see the DEQ Drug Disposal Web page at www.michigan.gov/drugdisposal to locate other medication take-back options near you.

Not sure if you have time? Take two minutes to hear why proper disposal of unused medications is both a human health and environmental concern.
Kick start lifesaving conversations about DRUG-FREE living

There is an epidemic of prescription opioid misuse and heroin use nationwide. To combat this, Discovery Education and the Drug Enforcement Administration (DEA) have joined forces to bring you Operation Prevention, an education program for elementary, middle and high school classrooms which aims to educate students, using science, about the impacts of these drugs.

Check out these resources and more at OperationPrevention.com
Operation Prevention offers an expanding collection of resources for students, teachers, and parents:

**Digital Classroom Lessons**
Elementary, middle, and high school classroom-ready lessons and companion guides provide educators with standards-aligned tools to integrate seamlessly into classroom instruction.

**Video Challenge**
This scholarship contest encourages students to send a message to their peers about the dangers of prescription opioid misuse by creating a 30-60 second original Public Service Announcement to win up to $10,000. The 2018 Video Challenge will launch November 2017.

**Parent Toolkit**
Parents can join the conversation with a family discussion guide which provides information on the warning signs of opioid misuse and a guide to prevention and intervention to empower families to take action. Now includes talking points for parents of elementary students. Available in English and Spanish.

**On Demand Virtual Field Trip**
Take students on a virtual journey, where leading experts provide the unfiltered facts on drugs and addiction. A companion activity helps start discussions in the classroom.

**Spanish Resources**
Operation Prevention offers expanding Spanish resources, including a Spanish website, student learning module and translated parent toolkit to aid families with their discussions about opioid misuse and prevention.

**Student Learning Module**

Check out these resources and more at [OperationPrevention.com](http://OperationPrevention.com)
https://www.justthinktwice.gov/
Opioids 101

News & Headlines
FDA Clears the First-Ever Mobile App to Treat Alcohol, Marijuana, Cocaine Addiction

The Powerful Pull of Opioids Leaves Many Missing From U.S. Workforce

Live in Hawaii, And Odds Are You'll Need Fewer Prescription Meds

Transgender Students Face Higher Rate of Substance Abuse, Study Finds

Trending Topics

https://www.getsmartaboutdrugs.gov/
Latest Improvement for MAPS Starting 11/1/17 - Sample Risk Score for the Electronic Health Record

![Sample Risk Score for the Electronic Health Record](https://michigan.pmpaware.net)
Additional resources that are available for providers and patients:

- Posters
- Fact Sheets
- Checklists
- Education on Epidemic

[https://www.cdc.gov/drugoverdose/index.html](https://www.cdc.gov/drugoverdose/index.html)

For additional training:

[https://www.cdc.gov/drugoverdose/training/overview/training.html](https://www.cdc.gov/drugoverdose/training/overview/training.html)