Reducing Harms from Opioid Use among people living with HIV:

A brief guide for HIV providers

Comments or questions?
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Opioids and HIV

- The United States is in the midst of a severe opioid epidemic. 1, 2
- Prescription opioid and heroin use are widely prevalent and the rates are rapidly escalating. 1, 2
- Rates of opioid-related overdose deaths increased exponentially. 1, 2
- There has been a significant increase in injection drug use. 3, 4
- There has been an associated increase in Hepatitis C, Hepatitis B, HIV infections. 3, 4
- Methadone and buprenorphine treatment of HIV-positive individuals have both been shown to decrease HIV transmission risk and improve HIV biological outcomes. 5
- In addition, extended release naltrexone has been shown to decrease opioid use. 6
- Few sites integrate the treatment of HIV and opioid use disorder. 5
- Ongoing injection drug use negatively affects treatment outcomes among HIV-positive individuals despite the combined antiretroviral treatment. 7
- HIV Primary care clinics offer an opportunity to integrate HIV and addiction treatment. 7

Educational Resources:

1. SAMSHA Opioid Overdose Prevention Toolkit: This toolkit offers strategies to help prevent opioid-related overdoses and deaths. https://store.samhsa.gov/product/Opioid-Overdose-Prevention-Toolkit/SMA16-4742
3. Provider’s Clinical Support System for Medication-Assisted Treatment (PCSS-MAT) is a national training and clinical mentoring project developed in response to the opioid use disorder crisis. The overarching goal of PCSS is to provide the most effective evidenced-based clinical practices in the prevention, identification, and treatment of opioid use disorders. https://pcssnow.org/education-training/

References:

### Medications for Treatment of Opioid Use Disorder

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<thead>
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<th>Medication</th>
<th>MOA</th>
<th>Dosage</th>
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| Buprenorphine/Naloxone (Suboxone, Bunavail, Zubsolv) Or Buprenorphine (Subutex) | Partial Opioid Agonist | 2-24mg daily of tablet or sublingual formulation. Approved injectable formulations | - Ceiling effect: Potentially less overdose risk as compared to full agonist  
- Improved treatment retention  
- Improved social functioning  
- Decreased opioid use  
- Decreased overdose deaths  
- Decreased HIV and HCV transmissions  
- Improve HIV treatment, biological outcomes  
- Decreased criminal behavior |
| Methadone (oral)                  | Full Opioid Agonist | 20-120 mg. Higher doses as indicated in special circumstances | - Improved treatment retention  
- Improved social functioning  
- Decreased opioid use  
- Decreased overdose deaths  
- Decreased HIV and HCV transmissions  
- Improve HIV treatment, biological outcomes  
- Decreased criminal behavior |
| Naltrexone Oral (Revia) Extended Release, IM (Vivitrol) | Full Opioid Antagonist | Tablet: oral 50-100mg daily Vivitrol): injectable IM 380mg monthly Extended release formulation: | - Improved treatment retention  
- Decreased opioid use |

### Buprenorphine and HIV Treatment Outcomes

The primary findings, including work in New Haven and Providence, from the Human Resources and Service Administration-funded Buprenorphine and Integrated HIV Care Model Demonstration Project (BHIVES) Collaborative: 5, 8

1. Initiating buprenorphine/naloxone (BUP/NX) in HIV clinical care settings: Feasible, improves initiation of ART, and CD4 lymphocyte Counts.
2. BUP/NX retention improves HIV treatment outcomes for those not on ART at baseline.
3. BUP/NX provided in HIV treatment settings decreases opioid use.

Comparison of initiating antiretroviral therapy and viral suppression outcomes among patients not on antiretroviral therapy at baseline: stratified analysis among patients retained on buprenorphine/naloxone for three or more quarters. Compared to baseline, p< 0.05 for all comparisons. 8
### DSM-5 Criteria for Opioid Use Disorder

<table>
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<tr>
<th>DSM-5 Criteria</th>
<th>Explanations</th>
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<tr>
<td>1. Opioids taken in larger amounts or for longer than intended</td>
<td>Lack of control over opioid use, leading to compulsive use</td>
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<td>2. Persistent desire or unsuccessful efforts to cut down or control opioid use</td>
<td>Desire for the drug despite awareness of negative consequences</td>
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<td>3. Great deal of time spent obtaining, using, or recovering from opioid use</td>
<td>Time spent on drug-related activities dominates daily life</td>
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<td>4. Craving or strong desire to use opioids</td>
<td>Urgent desire for the drug, even when not in immediate need</td>
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<td>5. Failure to fulfill major obligations due to opioid use</td>
<td>Neglect of responsibilities due to drug use</td>
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<td>6. Continued use despite problems caused or exacerbated by opioid use</td>
<td>Persistence in drug use despite adverse effects</td>
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<td>7. Important activities given up or reduced because of opioid use</td>
<td>Prioritization of drug use over other life activities</td>
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<td>8. Recurrent opioid use in physically hazardous situations</td>
<td>Use of drugs in situations that increase risk of harm</td>
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<td>9. Continued use despite knowledge of physical or psychological problems that are caused or exacerbated by opioids</td>
<td>Persistence despite awareness of negative health consequences</td>
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<td>10. Tolerance</td>
<td>Physical or psychological adaptations to reduced drug effects</td>
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<td>11. Withdrawal</td>
<td>Physical or psychological symptoms when drug use is decreased or discontinued</td>
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### RESPONDING to the OPIOID EPIDEMIC

**Reduce problems related to prescription opioids**
- Safe opioid prescribing, identifying patients receiving high doses of opioids (i.e. >90 mg morphine equivalents per day)
- Use prescription monitoring systems
- Prescription drug disposal, “take-back” events
- Avoiding polypharmacy, drug combinations that might increase overdose risk especially benzodiazepines

**Increase access to medication treatments for opioid addiction**
- Methadone
- Buprenorphine
- Oral and Extended release naltrexone

**Prevent or address medical comorbidities**
- Education
- Syringe Service Programs
- Screening and Treatment for Hepatitis and HIV, including pre-exposure prophylaxis for HIV (PrEP)

**Expand access to naloxone and overdose prevention training**
- Overdose prevention education and training
- Naloxone rescue kits