National and State Treatment Need and Capacity for Medication-Assisted Treatment

Christopher M. Jones, PharmD, MPH
CDR, US Public Health Service
Director, Division of Science Policy
Office of the Assistant Secretary for Planning and Evaluation
Overview

- Epidemiological trends
- Treatment challenges
- Expanding Treatment
- Conclusions
EPIDEMIOLOGICAL TRENDS
Past year nonmedical use of prescription opioids and heroin use

Source: SAMHSA, NSDUH 2002-2014 PUF
Past year opioid use disorders, US, 2003-2014

Source: SAMHSA, NSDUH 2003-2014 PUF
Opioid-related overdose deaths, US, 1999-2014

Source: CDC, NVSS, 2016
Drug overdose death rates, United States, 2014

Source: Centers for Disease Control and Prevention. NVSS, 1999-2014.
Nonmedical use of Rx opioids significant risk factor for heroin use

3 out of 4 people who used heroin in the past year misused opioids first

7 out of 10 people who used heroin in the past year also misused opioids in the past year

National Rates of Abuse of Opioids in the Previous Month among 15,227 Respondents

Frequent nonmedical users of Rx opioids and those with abuse/dependence most likely to initiate heroin

- 3.6% of nonmedical users of Rx opioids had initiated heroin use within 5 years of initiating nonmedical use
- Initiation rate of <1.0% per year

Source: Muhuri et al., Associations of Nonmedical Pain Reliever Use and Initiation of Heroin Use in the United States. SAMHSA, 2013
Heroin initiation rates among people nonmedically using Rx opioids

- Carlson et al – 2016
- Columbus, Ohio
- Age 18-23 at recruitment in 2009-2010
- NMU of Rx opioids ≥ 5 day in past 90 days
- No Hx of lifetime opioid dependence
- No Hx of heroin use or IDU
- Not involved in CJ system or SUD Tx in past 30 days
- Followed for 3 years

- 27 of 362 (7.5%) initiated heroin use during 36 months of study
- Transition rate of 2.8% per year

Source: Carlson et al. Drug Alcohol Depend. 2016;160:127-134
Non-Oral Routes of Rx Opioid Misuse Increasing in the U.S.

Source: Jones, Christensen, Gladden, 2016 – Manuscript Under Development
Rise in heroin overdose deaths strongly correlated with increase in heroin abuse or dependence

Past year substance abuse or dependence among past year heroin users

FIGURE 1. Annual average percentage of past-year heroin users* with past-year selected substance abuse or dependence, by time interval — United States, 2002–2013

* Past-year heroin use defined as any use of heroin in the 12 months preceding the National Survey on Drug Use and Health survey interview.

† p-value for trend <0.05.

§ Rate is statistically significantly different from 2011–2013 rate; p<0.001.

Circumstances of Rx opioid nonmedical use and heroin initiation

Harocops et al., 2016

- Interviews between 8/2013 and 1/2015
- Cycle of oral to intranasal to injection
- Dependence, social context, economics, and availability all factors in heroin initiation
- Median time from first Rx opioid misuse to heroin use was 3 years
- Among those with no Hx of IDU prior to heroin initiation, median time between intranasal and IV heroin use was 6 months

Source: Harocops et al., Int J Drug Policy 2016;28:106-112
Multiple facets of the opioid epidemic

**Morbidity and Mortality Weekly Report**

Community Outbreak of HIV Infection Linked to Injection Drug Use of Oxymorphone — Indiana, 2015

Increasing incidence and geographic distribution of neonatal abstinence syndrome: United States 2009 to 2012

SW Patrick, MM Davis, CU Lehman and WO Cooper


**Increases in Hepatitis C Virus Infection Related to Injection Drug Use Among Persons Aged ≤30 Years — Kentucky, Tennessee, Virginia, and West Virginia, 2006–2012**

**PUBLIC HEALTH**

Heroin, Opioid Abuse Put Extra Strain On U.S. Foster Care System

October 27, 2015 · 4:28 PM ET

Heard on All Things Considered

**SOUTH FLORIDA**

APRIL 29, 2016 8:00 PM

Heroin, fentanyl a deadly duo as Florida overdose deaths skyrocket
Increases in Reported Synthetic Opioid Drug Seizures and Overdose Deaths Involving Synthetic Opioids from 2013 to 2014*


Data on other synthetic deaths extracted from CDC Wonder Multiple Cause of Death File: [http://wonder.cdc.gov/mcd.html](http://wonder.cdc.gov/mcd.html)
TREATMENT CHALLENGES
People with opioid use disorders are not receiving treatment

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Individuals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any Opioid Use Disorder</td>
<td>2,239,768</td>
</tr>
<tr>
<td>Received Treatment for Illicit Drugs or Alcohol Use in Past Year</td>
<td>655,575</td>
</tr>
<tr>
<td>Received Treatment at Specialty Facility</td>
<td>520,972</td>
</tr>
</tbody>
</table>

Source: Jones CM 2016 NSDUH PUF
## Reasons why people didn’t get treatment

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment Cost/No Insurance/Insurance didn’t cover treatment</td>
<td>47.8</td>
</tr>
<tr>
<td>Not ready to stop use/Didn’t feel need for treatment/Could handle problem without treatment</td>
<td>35.0</td>
</tr>
<tr>
<td>Stigma</td>
<td>30.2</td>
</tr>
<tr>
<td>Awareness of treatment</td>
<td>12.3</td>
</tr>
<tr>
<td>Other</td>
<td>11.7</td>
</tr>
<tr>
<td>Availability of treatment</td>
<td>10.2</td>
</tr>
</tbody>
</table>

Source: Jones CM 2016 NSDUH PUF
Opioid abuse and dependence exceeds OA-MAT capacity in most states

Treatment need for opioid abuse or dependence exceeds capacity for opioid agonist medication assisted treatment (OA-MAT) in the US.

Source: Jones CM, Campopiano M, Baldwin G, McCance-Katz E. National and state treatment need and capacity for opioid agonist medication assisted treatment. AJPH. 2015
EXPANDING TREATMENT

Goals

+ An established physician-led medical home
+ A single MAT prescriber
+ A pharmacy home
+ Access to existing Community Health Teams
+ Access to Hub or Spoke nurses and clinicians
+ Linkages between Hubs and primary care Spoke providers in their areas

Vermont Agency of Human Services
Oversight and Collaboration

Vermont Department of Health

Source: Cimaglio 2015
Massachusetts Collaborative Care Model

- Goal: Implement office-based buprenorphine treatment in 14 community health centers
- Collaborative between physicians and nurse care managers
- Program expanded the number of DATA-waived physicians by 375% (from 24 to 114) within 3 years
- Significant increase in number of patients receiving buprenorphine treatment
- 67% of patients were in treatment for >12 months in 2013
- Sustainable funding model

RCT of ED-Initiated Buprenorphine

• 3 interventions
  – Screening and referral to treatment (referral)
  – Screening, brief intervention, and facilitated referral to community-based treatment (brief intervention)
  – Screening, brief intervention, ED-initiated treatment with buprenorphine/naloxone, and referral to primary care for 10 week follow up (buprenorphine)

Findings related to treatment engagement and self-reported days of illicit opioid use per week are statistically significantly different for buprenorphine compared to other interventions.

Physician-Pharmacist Collaborative Practice Model Pilot

- Small pilot (n=12) for 12 months
- 135 follow up visits
- 91% attendance rate
- 100% 6-month retention rate
- 73% 12-month retention rate
- 88% of UDTs were positive for buprenorphine and negative for other opioids
- Estimated $22,000 in savings to program versus historical care provision

HHS efforts to expand access to MAT

- Approval of Probuphine
- Buprenorphine patient limit final rule
- SAMHSA grants to states in FY15 and FY16
- HRSA $94 million for MAT in Community Health Centers
- AHRQ grants for MAT in rural primary care
- Parity
- Medicaid expansion
- CARA
FY 17 Budget Request

PRESIDENT OBAMA'S BUDGET WILL INVEST $1.1 BILLION TO HELP ADDRESS THE OPIOID EPIDEMIC

$920 million will expand access to medication-assisted treatment, increase capacity and make services more affordable for Americans in all 50 states →
Conclusions

• There is a sense of urgency to address the public health crisis of opioid misuse and use disorder
• Early identification of problematic opioid use and engagement in appropriate levels of treatment are critical in preventing morbidity and mortality
• Many different models are being tested and more research is needed to identify the most effective approaches
• Collaboration with all key stakeholders is paramount
THANK YOU

QUESTIONS?

CHRISTOPHER.JONES@HHS.GOV