The Interface of Opioids and Workforce

Boston College Workforce Roundtable
Evergreen Treatment Services
DSM V Criteria for Substance Use Disorders

- Taking in larger amounts and for longer than intended
- Wanting to cut down or quit but not being able to
- Spending a lot of time obtaining the substance
- Craving or a strong desire for substance
- Repeatedly unable to carry out major obligations at work, school, or home due to use
- Continued use despite persistent or recurring social or interpersonal problems caused or made worse by use
- Stopping or reducing important social, occupational, or recreational activities due to use
- Recurrent use in physically hazardous situations
- Consistent use despite acknowledgment of persistent or recurrent physical or psychological difficulties from using
- *Tolerance*: either a need for markedly increased amounts to achieve desired effect or markedly diminished effect with continued use of the same amount.
- *Withdrawal*: either a characteristic syndrome or the substance is used to avoid the syndrome
DSM V Criteria for Substance Use Disorders

• 2-3 criteria is *mild*
• 4-5 is *moderate*
• 6-7 is *severe*

• Impaired psychosocial functioning
• Craving
• Preoccupation
• Loss of control
• Continued use despite negative consequences
Epidemiology of Substance Use Disorders – U.S.

• **Prevalence:** % of population at any point in time
  - Alcohol use disorders: 16%
  - Drug use disorders: 3%

• **Lifetime Incidence:** % of population over lifetime
  - Alcohol use disorders: 15-20%
  - Drug use disorders: 3-8%
Opioid Epidemic
The total number of daily doses of opioids sold to hospitals and pharmacies in WA State peaked in 2011 at 112 million. The increase over time was enormous, it has since declined modestly.

http://adai.washington.edu/wadata/ARCOSopiates.htm
Prescription Opioids Distributed in WA State

Daily doses distributed to retail level in Washington

2011
- hydrocodone: 48,143,950.7

Graph showing the increase in daily doses distributed from 1998 to 2014, with a peak in 2011.
Drug Overdose Rates

Overdose Deaths Involving Opioids, United States, 2000-2015

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


5/9/2018
Since 1999, the number of overdose deaths involving opioids (including prescription opioids and heroin) quadrupled.

From 2000 to 2015 more than 500K people died from drug overdoses.

More people die from a drug overdose EVERY YEAR (64K and climbing) than the number of people who died from the Vietnam war.
Police Evidence Testing- What’s on “the street”

Data source: WA State Patrol Forensic Laboratory Services Bureau
Data analysis: Alcohol and Drug Abuse Institute, UW [http://adai.washington.edu/WAdata/cases.htm](http://adai.washington.edu/WAdata/cases.htm)
WA State Crime Lab and Death Data: Opioids

The graph shows the trends in crime lab cases and deaths related to opioids from 2000 to 2014. The data includes:
- Crime lab cases, all
- Crime lab cases, heroin
- Crime lab cases, other opiates
- Deaths, all opiates
- Deaths, other opiates
- Deaths, probable heroin

The data indicates a significant increase in crime lab cases and deaths related to opioids over the years, particularly from 2004 to 2010.
WA State Data – Treatment Admissions: Opioids

2015
• Admissions, all opiates: 14,422

Graph showing the trend of treatment admissions for opioids from 2000 to 2015, with a peak in 2015.

Key:
- Admissions, all opiates
- Admissions, heroin
- Admissions, prescription-type
- First admissions, all
- First admissions, heroin
- First admissions, prescription
Heroin primary, First treatment admit
WA State, Publicly Funded

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Pills to IV drug use
Acute to chronic opioid use

- Euphoria
- Normal
- Withdrawal

Tolerance and Physical Dependence
Need and interest in treatment in WA State

• Most drug injectors in WA State reported they would like help stopping or reducing their drug use

  • based on the 2015 WA State Syringe Exchange Survey
Medication Assisted Treatment

• Addiction is a chronic, relapsing medical disorder
• Disease of the brain’s reward system
• Similar to hypertension and diabetes
  ▪ Medication helps stabilize the disorder

• Addiction doesn’t get cured. It gets managed.
Medication Assisted Treatment: Goals

• Stabilize the brain
  ▪ Alleviate withdrawal
  ▪ Alleviate craving
  ▪ Permits return to more normal cognitions

• Engage the patient in recovery
  ▪ Understand chronic, relapsing medical disorder
  ▪ Work through past consequences

• Medication is life-saving
  ▪ Duration of treatment is unknown
Options for Medication Assisted Treatment (MAT)

- **Office Based Opioid Treatment (OBOT)**
  - Prescriptions in Primary Care Settings
    - *Buprenorphine (Suboxone)*
    - *Naltrexone (Vivitrol)*
  - Begin with weekly medical provider appts

- **Opioid Treatment Program (OTP)**
  - Daily visits to receive medication (*methadone or bupe*)
  - Mandatory counseling, urine drug screens, medical provider
  - Most intensive form of treatment available for OUD
How do the medications work?

- **Full Agonist** (e.g., methadone)
- **Partial Agonist** (e.g., buprenorphine)
- **Antagonist** (e.g., Naloxone)

Opioid Effect vs. Dose of Opioid
Drug Use & Length of Time in Methadone Treatment

Evergreen Treatment Services

% of Time Cohort with a positive U.A. during month

- < 90 days
- 91 - 180 days
- 181 days - 1 year
- 1 - 2 years
- > 2 years

57.4%
42.9%
33.8%
26.5%
16.4%
Relapse After MAT: Leaving AMA

N=104 men who left methadone treatment against medical advice

![Graph showing percent of IV users over time since stopping treatment]
The Role of Psychosocial Treatments

NIH Consensus Panel on MAT, 1997:

Non-pharmacologic supportive services are pivotal to successful MAT. The immediate introduction of these services as the opiate-dependent patient applies for MMT leads to significantly higher retention and more comprehensive and effective treatment.

Comorbid psychiatric disorders require treatment (50-80% of population).

Ongoing substance abuse counseling and other psychosocial therapies enhance program retention and positive outcome.
One man’s story
1. Addiction is a brain disease:
Management of a chronic medical condition

2. Medication Assisted Treatment Works:
People do recover

3. Treatment Benefits Society:
Crime rates decline, costs decline