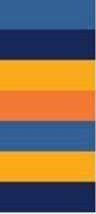




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OCT 15-18 —  — VIRTUAL



Medications for Opioid Use Disorder (MOUD) and Incarcerated Patients

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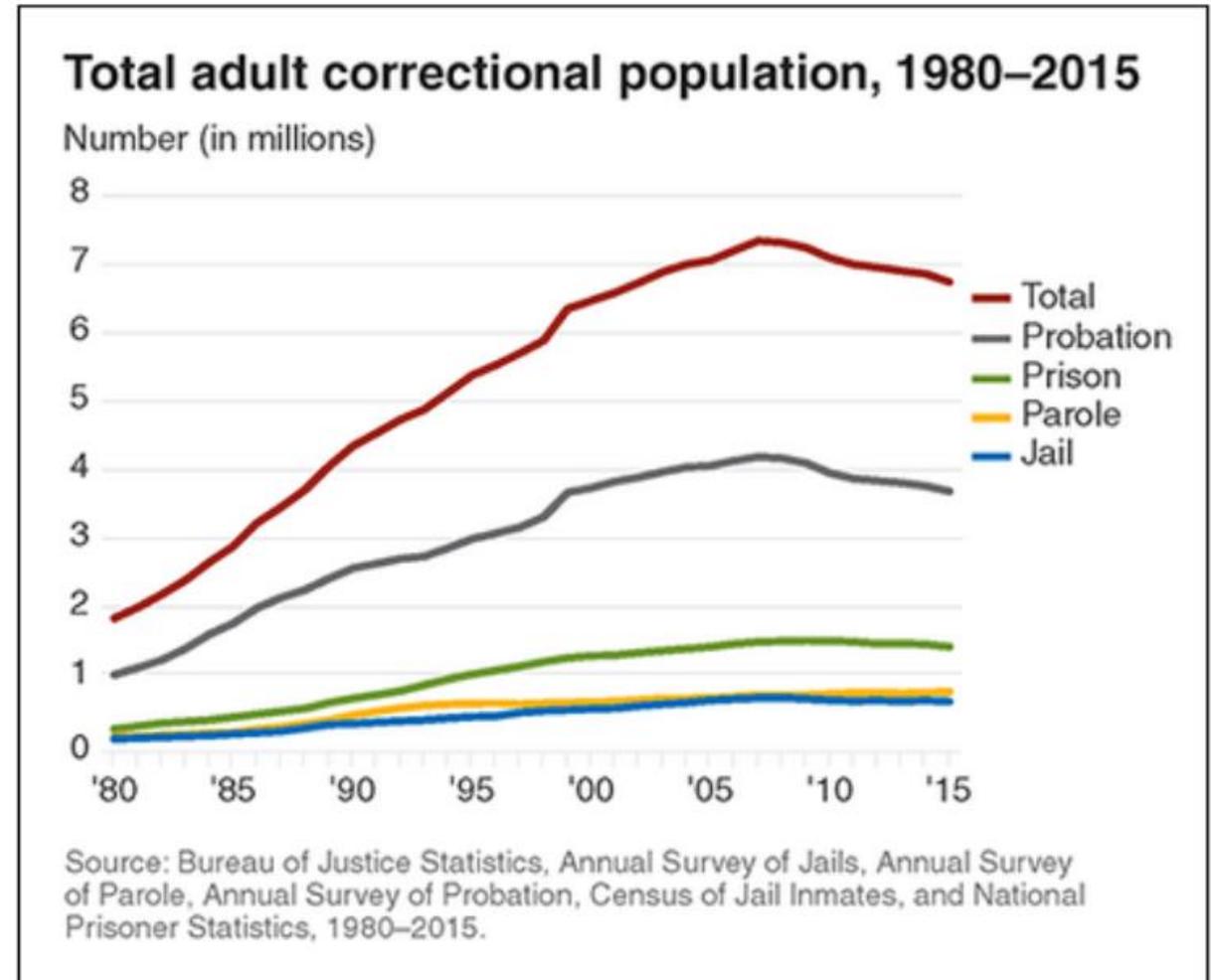
Penn Medicine Lancaster General Health

Objectives

1. Review the epidemiology of Substance Use Disorders and Opioid Use Disorders in criminal justice detention settings.
2. Understand the medico-legal implications of the 8th amendment and the right to health care in criminal justice detention settings.
3. Provide an overview of Medications for Opioid Use Disorder (MOUD) and special considerations for providing treatment within correctional populations.

The past 40 years have been a period of vigorous growth of the adult correctional population in the United States.

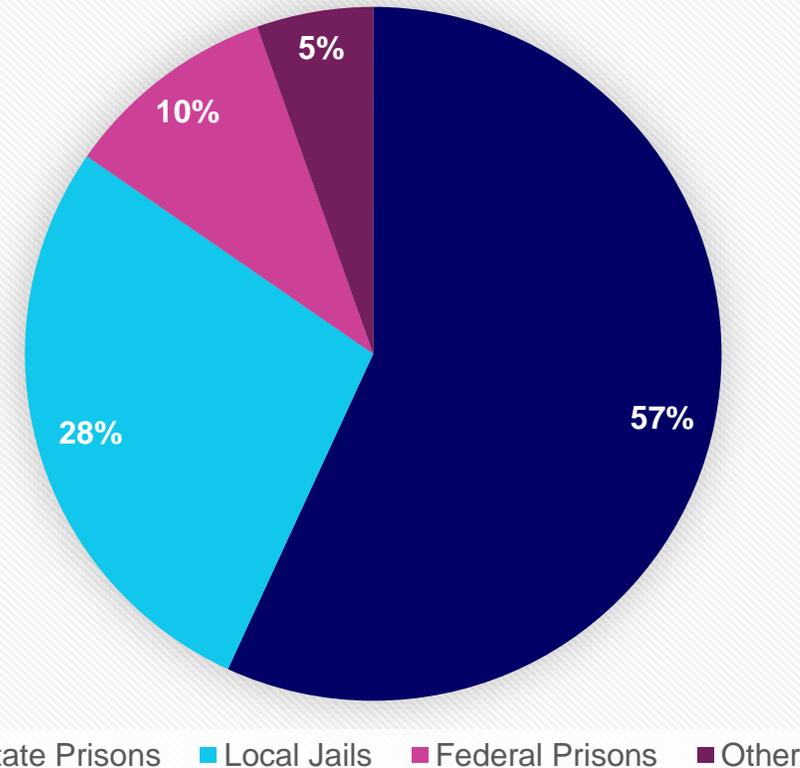
- Growth of incarcerated population grew far out of proportion with growth of general US population
 - From 1996 to 2006, US population grew by 12% and incarcerated population grew by 33%
- This growth was largely driven by criminalization of substance use
 - From 1996 to 2006, Inmates with “substance involved” offenses increased by 43%



An estimated 2.3 million individuals are confined to jails, prisons, and related detention facilities in the United States.

- The majority of incarcerated individuals are within State Prisons
- Local Jails account for nearly one third of incarcerated adults
- There is a substantial contribution from the federal system and miscellaneous detainment facilities (immigration detention, military, etc.)
- Source:
 - Prison Policy Initiative, <https://www.prisonpolicy.org/reports/pie2020.html>
 - accessed 9/22/2020

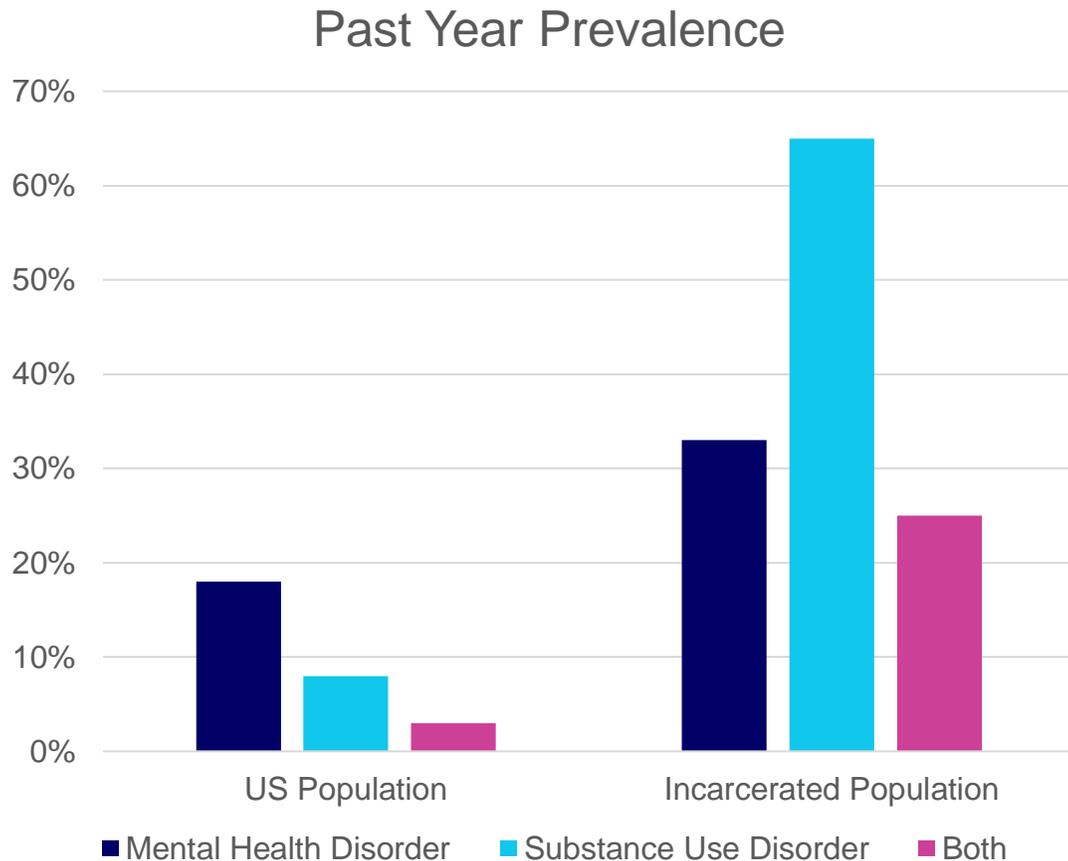
US Incarcerated Population



A brief summary of the distinction between Jails vs. Prisons

- Jails are the entry point to the Criminal Justice System
 - Short lengths of stay are the norm
 - High turnover of inmate population
 - Approximately 75% of jail inmates are pre-trial detainees
 - Funded and operated on a municipal or county level
- Prisons house individuals who have been convicted and adjudicated to a defined (and usually somewhat lengthy) sentence
 - Prolonged lengths of stay
 - Post conviction
 - State or Federal level

Individuals with Substance Use Disorders comprise a majority of the incarcerated population in the United States.



- Nearly 65% of individuals in jails and prisons meet criteria for a substance use disorder
 - Typical past year prevalence of any Substance Use Disorder (SUD) in US population is 8%
- Proportion of inmates with SUD far outnumber those with other mental illness in correctional settings
- Sources:
 - Center on Addiction, Behind Bars II: Substance Abuse and America's Prison Population, February 2010
 - SAMHSA National Survey on Drug Use and Health (NSDUH) 2018

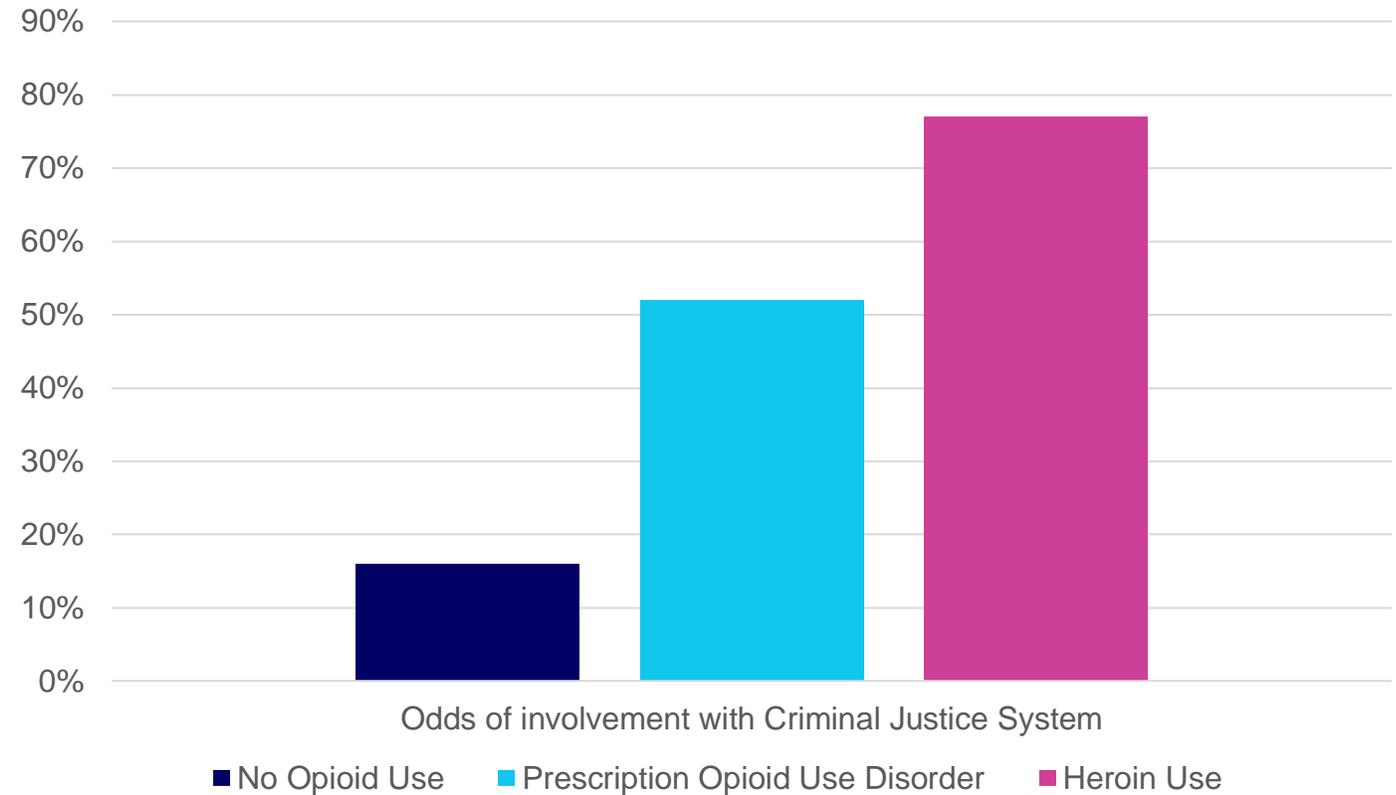
Opioid Use poses unique problems for incarcerated individuals.

- 24 to 36% of individuals with OUD and using illicit opioids pass through correctional facilities every year
- 17% to 19% of detainees report regular use of opioids
- Opioid Use Disorder is associated with unique risk of death and overwhelmingly negative consequences upon community re-entry
 - High likelihood of return to opioid use (75% within 3 months)
 - High likelihood of recidivism
 - Loss of physiologic tolerance imparts substantial elevation in risk of overdose and death

Those return to opioid use (and survive) have high likelihood of recidivism and return to incarceration.

- Opioid Use substantially increases the odds of involvement with Criminal Justice System
- Source:
 - SAMHSA 2019

Past year opioid use and odds of arrest



Release from correctional settings is associated with a substantial increase in the risk of death.

- Release from jail or prison is a precarious time
- Drug overdose is leading cause of death among formerly incarcerated individuals
 - In 2016, nearly 5% of all illicit opioid overdose deaths involved individuals released from correctional settings within past 30 days. (Source: CDC 2018)
- Homicide and Suicide are major contributors
- Cardiovascular Disease, Liver Disease, and Cancer occur at higher than expected rates

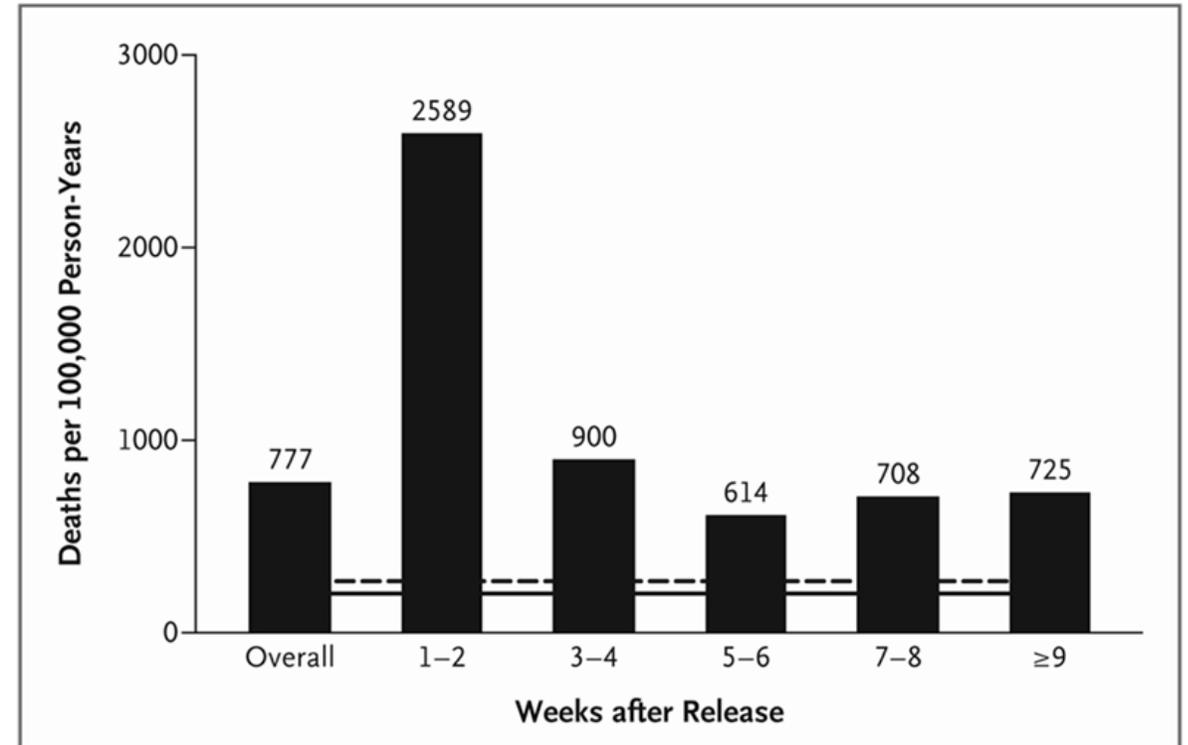


Figure above from: Binswanger IA, Stern MF, Deyo RA, et al. Release from prison--a high risk of death for former inmates. N Engl J Med. 2007;356(2):157-6

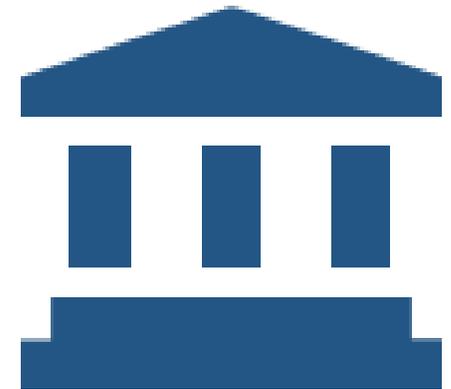
Health Care for incarcerated individuals is guaranteed by the Eighth Amendment.

- The Eighth Amendment:
- Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted



Landmark legal cases define health care for detained individuals.

- 1976 – Estelle v. Gamble
 - 8th Amendment guarantees right to adequate healthcare
- 1987 – United States v. DeCologero
 - Prison medical care must be “at a level reasonably commensurate with modern medical science and of a quality within prudent professional standards”
- 1994 – Farmer v. Brennan
 - Deliberate Indifference is defined



A summary of these landmark legal cases:

- The 8th amendment holds that inmates must receive adequate food, clothing, shelter, and healthcare from prison officials.
 - The 14th amendment (“due process”) applies same standard to pre-trial detainees in jail.
- The quality of healthcare should be reasonably commensurate with the prevailing standard of care in the community.
- Deliberate Indifference occurs when a prison health official is aware of substantial risk to an inmate and disregards or fails to act thus exposing the inmate to serious damage to future health.

Despite these legal precedents and interpretation of constitutional guarantee, funding of health care in jails and prisons is problematic.

- Social Security Act of 1965 – “inmate exclusion clause”
 - Bars use of federal funds to provide health care to inmates
- Medicare excludes reimbursement during periods of incarceration
 - Exception for acute hospitalization
- Commercial plans generally exclude coverage of incarcerated individuals



Correctional Medicine evolved out of the need to provide quality healthcare within jails and prisons in a cost-effective manner.

- Provide as much medical care as feasible on site and within the facility (jail/prison)
 - Safety of the institution
 - Safety of the patient
 - Cost effective
- Jails will have more focus on intake and urgent care
 - Recognition of substance withdrawal
 - Recidivism and brief lengths of stay are commonplace
- Prisons will have more focus on chronic care
 - Better opportunity to prepare for community re-entry

Whom provides health care in our jails and prisons?

- Municipal, county, or state employees
- Contracts with local health care providers and organizations
- Large national corporations provide correctional health care to hundreds of jails and prisons nationwide
- The National Commission on Correctional Health Care (NCCCHC) and American Correctional Association (ACA) establish standards and operate voluntary accreditation programs
- Medical Care
- Behavioral Health Care
- Dental Care
- Optometry



Health care that is “at a level reasonably commensurate with modern medical science and...within prudent professional standards”.



Curran Fromhold Correctional Facility, Philadelphia Department of Prisons.

Health care that is “at a level reasonably commensurate with modern medical science and...within prudent professional standards”(?)

- In 2017, 30 out of 5100 (0.5%) jails and prisons in the United States offered buprenorphine or methadone treatment
 - SAMHSA 2019
- In one 2017 study, 50% of Drug Treatment Court participants were compelled to discontinue buprenorphine or methadone in order to graduate
 - Andraka-Christou, B. (2017). What is “treatment” for opioid addiction in problem-solving courts? A study of 20 Indiana drug courts and veterans courts. *Stanford Journal of Civil Rights and Civil Liberties*, 13, 189-254.



Large correctional systems are challenged by volume and (within jails) rapid turnover of inmate population.

- Large jail and state prison systems will be challenged by patient volume, burden of disease, and (in jails) frequent turnover of inmate population
- Philadelphia Jail System in 2019 (unpublished data):
 - 23,681 Intake Screenings
 - 64,000 Sick Call Visits, 12,916 Chronic Care Visits, and 285,000 Prescriptions issued
 - 49% of individuals leave within 14 days.
 - 62% of individuals released within 30 days.
 - Average length of stay 76 days (39 days for women and 83 days for men).
 - Male to Female ratio of nearly 20:1. (94% male)

Special thanks to Bruce Herdman PhD, MA, MBA Chief of Medical Operations Philadelphia Department of Prisons

Smaller correctional systems face a different set of challenges.

- Small jail systems will be challenged by fewer resources and much leaner workforce within the system
 - Registered Nurse 40 hours per week
 - Physician once per week for “Sick Call”
- Medications might be self administered
 - Diversion control within a controlled residential setting(?)
- Lack of qualified physicians to provide MOUD
- Can the small jail afford to pay the qualified physician(?)
 - Recall “inmate exclusion clause” regarding medicaid

Telemedicine solves some problems, but not all.

- Telemedicine can be a mechanism to bring a qualified physician in to the correctional system and provide MOUD
- Naltrexone and buprenorphine (with a SAMHSA CSAT waiver) can be prescribed using this interface
- Monitored medication administration and enacting diversion control policies (buprenorphine) are difficult to enact from a distance



Why we need to overcome barriers and provide MOUD in our jails and prisons:

Medical Considerations

- Addiction is a chronic treatable medical condition.
- MOUD is the standard of care for treatment of opioid addiction.
- Involuntary withdrawal of MOUD and/or involuntary abstinence in a controlled environment results unequivocally increases risk of death upon release.

Legal Considerations

- The eighth amendment guarantees right to health care for detainees.
- Medical care “at a level reasonably commensurate with modern medical science and...prudent professional standards” is expected.
- A failure to address OUD can be interpreted as Deliberate Indifference.

Effectiveness of MOUD in Criminal Justice Settings

- Lee et. al. showed lengthened median time to relapse, increased probability of opioid free urine, and reduced frequency of overdose (fatal and non-fatal) with XR Naltrexone provided in CJS compared to usual care
 - Enrolled participants with a stated preference for “opioid free” treatment
- Marsden et. al. showed a 75% reduction in all cause mortality and 85% reduction in drug related poisoning within 4 weeks after release among inmates provided opioid agonist treatment.
 - The treatment group was nearly 2.5 times more likely to enter treatment after release
- Green et. al. showed a 60% reduction in opioid overdose deaths among recently incarcerated individuals in Rhode Island after all forms of MOUD were made available in jails and prisons throughout Rhode Island Department of Corrections
 - Estimated NNT to prevent one death was 11

Medications for Opioid Use Disorder (MOUD)

- Naloxone
 - For reversal of acute opioid overdose
- Naltrexone
- Methadone
- Buprenorphine



Naloxone for acute opioid overdose

Opioid Overdose:

- Respiratory Depression
 - A progressive decline in respiratory rate resulting in eventual apnea
- Miosis
- Stupor



Naltrexone

- No special licensure and negligible risk of diversion makes this a highly desirable form of MOUD in the eyes of the institution
- Not an opioid agonist
 - Generally not “controversial” in the eyes of the institution
- For naltrexone XR, need to know date/time of release
 - Typically 75% or more of jail detainees are pre-trial with no known release date
- Naltrexone XR is relatively expensive compared to other forms of MOUD

Naltrexone

- Relatively few patients with Opioid Use Disorder seem to prefer this form of treatment when offered multiple options
 - In Rhode Island DOC, when offered all three forms of MAT, only 4 out of 303 individuals selected naltrexone (Green et al, JAMA Psychiatry 2018)
 - Loss of physiologic opioid tolerance
- No evidence for reduction in mortality with naltrexone
 - Opioid agonist treatments by contrast are associated with substantial reduction in mortality
 - Bahji A, Cheng B, Gray S, Stuart H. Mortality Among People With Opioid Use Disorder: A Systematic Review and Meta-analysis. J Addict Med. 2020 Jul/Aug;14(4):e118-e132. doi: 10.1097/ADM.0000000000000606. PMID: 32011406.

Who is a good candidate for naltrexone in jails and prisons?

- The patient who genuinely desires “opioid free” treatment
- Known release date
 - Oral naltrexone while in custody and naltrexone XR injection just prior to release
- Beware of compulsory naltrexone treatment
 - Mimics “forced” abstinence in a controlled environment
 - Loss of physiologic tolerance = risk of overdose if returns to use

Methadone

- OTP license required
 - The jail/prison can obtain an OTP license
 - Partnership with community OTP
 - Treatment brought into the jail/prison or patients taken to treatment.
- Often takes several weeks to reach a stabilization dose
 - Stabilization of methadone generally a 3 to 6 week process
 - Many jail detainees leave custody within 3 weeks



Methadone

- Interactions with polypharmacy
 - Psychoactive medications frequently sought and prescribed in jails/prisons
 - Examples: gabapentinoids, antipsychotics, muscle relaxants, other sedatives
 - Many interactions with anti-epileptics

- Safety concerns if diverted to opioid naïve individual
 - Stabilization doses conventionally are 80 to 120 mg per day
 - With fentanyl infiltration within illicit opioid supply, OUD patients' tolerance tends to be very high and maintenance doses in excess of 200 mg/day are commonplace

Who is a good candidate for methadone in jails and prisons?

- Understands the commitment involved and desires treatment
- Expected to be in the facility long enough to achieve an effective stabilization dose
 - Prisons vs. Jails
- There is a known release date (serving a defined sentence) and OTP that can accept the patient upon re-entry
 - Prisons vs. Jails
- Avoid polypharmacy
 - Concern is drug/drug interactions and also sedatives may potentiate methadone

Buprenorphine

- X-Waiver or OTP license
 - Waiver caps still apply (30, 100, 275)
 - Need to be able to refer for counseling

- Can achieve an effective stabilization dose relatively quickly (several days)

- Medication administration is very challenging
 - 5 minutes of direct observed medication administration per patients adds up in large institutions
 - Who is responsible for policing and intervening this process (Corrections? Nursing?)

Buprenorphine

- Diversion/Misuse is highly visible in Correctional Settings
 - Is it in the best interest of patient to involuntarily discontinue buprenorphine after a single instance of misuse/diversion?
 - Will inaction send a harmful message?
- Correctional staff historically encounter buprenorphine products as “contraband”
 - Education and effective partnership is key and takes time.



Who is a good candidate for buprenorphine in jails and prisons?

- Understands opioid agonist treatment and desires the medication
- Qualified Providers (or OTP) can accept the patient on re-entry
- The better question is: Which institution is a good candidate to provide buprenorphine?
 - The Provider needs to have a good working relationship with correctional staff
 - Mutually agreed upon diversion control plan
 - Mutually agreed upon medication administration process

Can buprenorphine maintenance treatment be provided to individuals with OUD within one of the largest city jails in the US?

- Philadelphia Department of Prisons (municipal jail system) in 2018
 - pilot program in female population
- Screen at intake – within 4 hours of entering facility
 - Single question screen (with follow up question if positive response), POC urine drug screen
 - Evaluation by qualified Physician next business day
- Individuals with OUD offered buprenorphine treatment
 - Fixed dose protocol
 - First dose 4mg (observed for precipitated wd) then 8mg daily.
- Integrated in to the “Chronic Care” schedule, evaluated with same frequency as other chronic illnesses (Diabetes, Asthma, etc.)

Unpublished data from Buprenorphine maintenance treatment pilot in Philadelphia. Previously presented at NCCHC Spring Conference 2019

February 5th 2018 – July 24th 2018 (pilot in female population)

| | | |
|--|------|--|
| Intakes | 1995 | |
| Scheduled for evaluation | 507 | 25% screen (+) possible untreated OUD |
| Evaluated | 454 | 10% left custody prior to eval |
| Treated (in custody) | 91 | 20% treated remained in custody |
| Treated (now out of custody) | 297 | 65% treated and re-enter community |
| Bup not prescribed | 56 | 15% Either declined treatment or no dx OUD |
| Administratively withdrawn d/t misuse or diversion | 10 | 2.5% administratively withdrawn for misuse/diversion - Naltrexone was recommended as alternative |

Unpublished data from Buprenorphine maintenance treatment pilot in Philadelphia. Previously presented at NCCHC Spring Conference 2019

August 13th 2018 – October 4th 2018 (treatment offered to men and women)

| | | |
|-----------------------------------|------|--------------------------------|
| Evaluated for bup treatment | 1024 | |
| Treated (in custody) | 249 | |
| Treated for duration and released | 589 | |
| Total treated with buprenorphine | 838 | 82% treated with buprenorphine |

References and further reading:

- Substance Abuse and Mental Health Services Administration: Use of Medication-Assisted Treatment for Opioid Use Disorder in Criminal Justice Settings. HHS Publication No. PEP19-MATUSECJS Rockville, MD: National Mental Health and Substance Use Policy Laboratory. Substance Abuse and Mental Health Services Administration, 2019.
- CASAColumbia. Behind Bars II: Substance Abuse and America's Prison Population. February 2010.
 - Available at: <https://www.centeronaddiction.org/addiction-research/reports/behind-bars-ii-substance-abuse-and-america%E2%80%99s-prison-population>

References and further reading

- Studies of effectiveness of providing MOUD in Criminal Justice populations:
 - Lee, J. D., Friedmann, P. D., Kinlock, T. W., Nunes, E. V., Boney, T. Y., Hoskinson Jr., R. A., Wilson, D., McDonald, R., Rotrosen, J., Gourevitch, M. N., Gordon, M., Fishman, M., Chen, D. T., Bonnie, R. J., Cornish, J. W., Murphy, S. M., & O'Brien, C. P. (2016). Extended-release naltrexone to prevent opioid relapse in criminal justice offenders. *The New England Journal of Medicine*, 374(13), 1232–1242.
 - Marsden J, Stillwell G, Jones H, et al. Does exposure to opioid substitution treatment in prison reduce the risk of death after release? a national prospective observational study in England. *Addiction*. 2017;112(8):1408-1418.
 - Green TC, Clarke J, Brinkley-Rubinstein L, et al. Postincarceration Fatal Overdoses After Implementing Medications for Addiction Treatment in a Statewide Correctional System. *JAMA Psychiatry*. 2018;75(4):405–407. doi:10.1001/jamapsychiatry.2017.4614
- ASAM Treatment in Correctional Settings Toolkit
 - <https://www.asam.org/advocacy/advocacy-in-action/toolkits/treatment-in-correctional-settings>



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