

NC Department of Health and Human Services

Medical Basics: Working with Opioid Treatment Programs (OTPs)

Dr. Jana Burson – Mountain Health Solutions North Wilkesboro CTC

Anna Stanley – NC State Opioid Treatment Authority Coordinator

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Recover Stronger

*These priorities and our work across the department are grounded in **whole-person health**, driven by **equity**, and responsive to the lessons learned responding to the greatest health crisis in more than a generation.*

Behavioral Health & Resilience



We need to offer services further upstream to build resiliency, invest in coordinated systems of care that **make mental health services easy to access** when and where they are needed and **reduce the stigma** around accessing these services.

Child & Family Wellbeing



We will work to ensure that North Carolina's children grow up safe, healthy and thriving in nurturing and resilient families and communities. **Investing in families and children's healthy development builds more resilient families, better educational outcomes and, in the long term, a stronger society.**

Strong & Inclusive Workforce

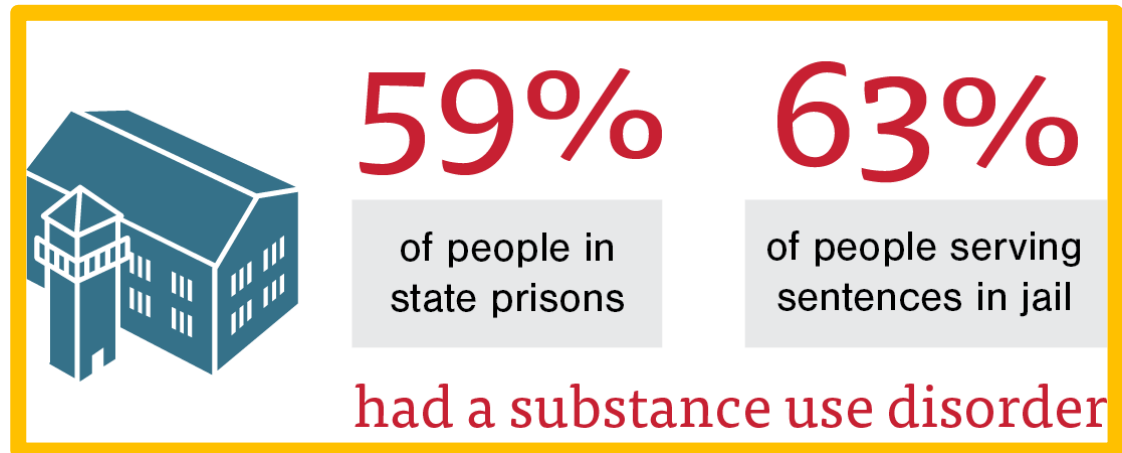


We will work to strengthen the **workforce that supports early learning, health and wellness by delivering services** to North Carolina. And we will take action to be an equitable workplace that lives its values and ensure that all people have the opportunity to be fully included members of their communities.

The health insurance coverage gap coupled with insufficient access to affordable care disproportionately impacts Historically Marginalized Populations who have also experienced worse outcomes than others under COVID-19. Medicaid expansion would help close the health insurance coverage gap.

What we know...

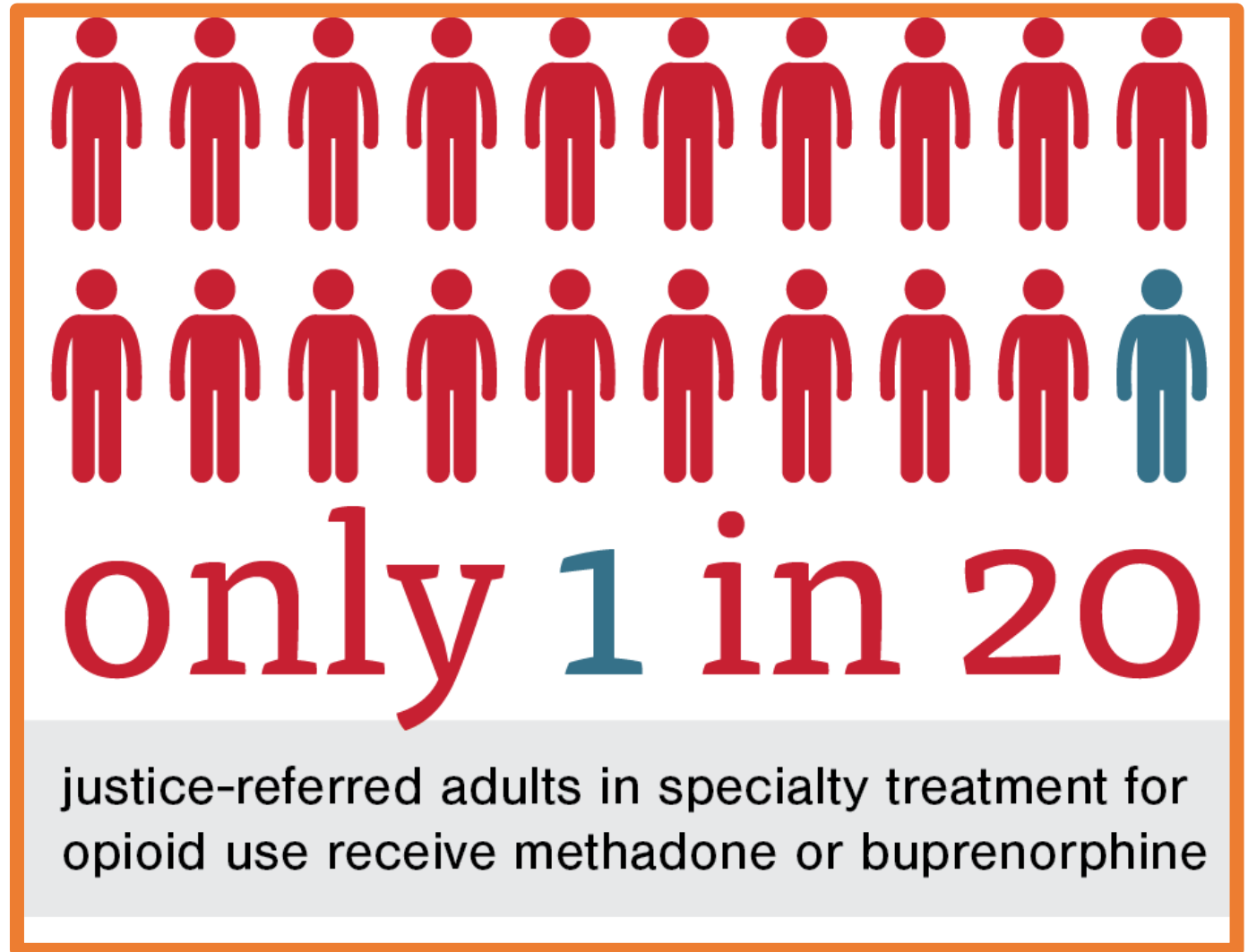
People with substance use disorders have a higher risk of getting involved with criminal justice system



Source: Drug Policy Alliance

<https://drugpolicy.org/issues/treatment-criminal-justice-system>

1 in 3 people in custody have opioid use disorder

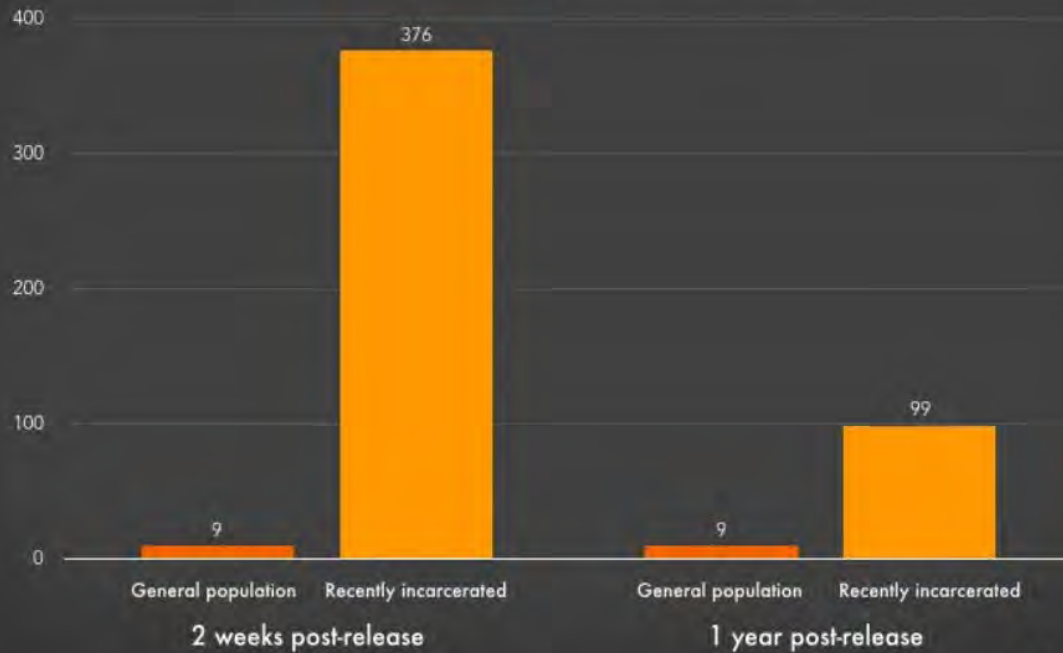


Source: Drug Policy Alliance

<https://drugpolicy.org/issues/treatment-criminal-justice-system>

Recently incarcerated people are over 40 times more likely to die from an opioid overdose

Number of opioid overdose deaths per 100,000 recently incarcerated people in North Carolina compared to rate among the general population in North Carolina



Data Source: "Opioid Overdose Mortality Among Former North Carolina Inmates: 2000-2015" Table 1

PRISON
POLICY INITIATIVE

Data Source: [Opioid Overdose Mortality Among Former North Carolina Inmates: 2000-2015](#), Table 1. (Graph: Maddy Troilo, 2018)

Putting it into perspective...

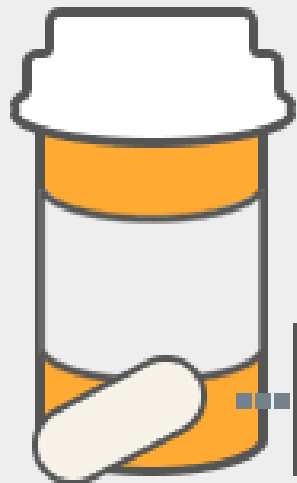
MODULE 1

- Reviewed the U.S. Department of Justice's (USDOJ) recent guidance on protections for people with opioid use disorder under the Americans with Disabilities Act (ADA), including access to medication-assisted treatment
- Reviewed information about USDOJ settlements in other jurisdictions specific to the criminal justice and corrections context
- Reviewed what opioid use disorder is and how to address it with evidence-based treatment through Medications to treat Opioid Use Disorder (MOUD)

Introduction to Module 2

- What is the usefulness of methadone and in what cases might it be superior to other medications?
- How do Opioid Treatment Programs (OTPs) fit into the broader opioid treatment service array?
- How can you partner with OTPs to maintain your patients on methadone when needed?

Opiate Withdrawal Timeline



Last Dose

Symptoms Begin

6-12 hours

Short-Acting Opiates



30 hours

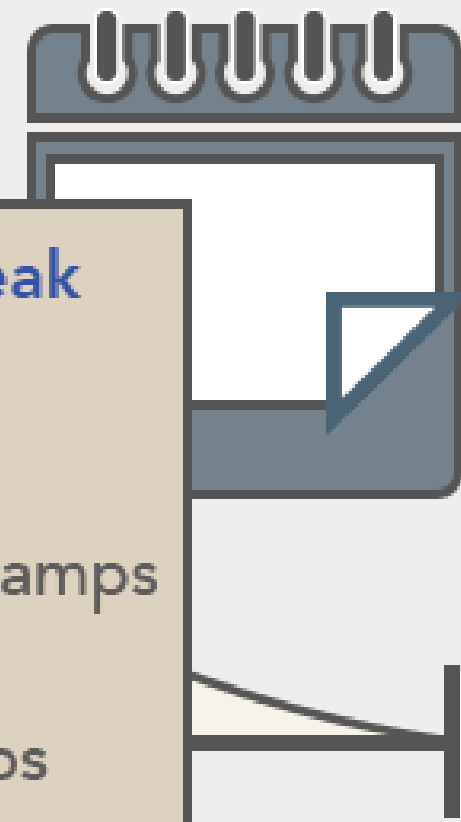
Long-Acting Opiates



72 hours

Symptoms Peak

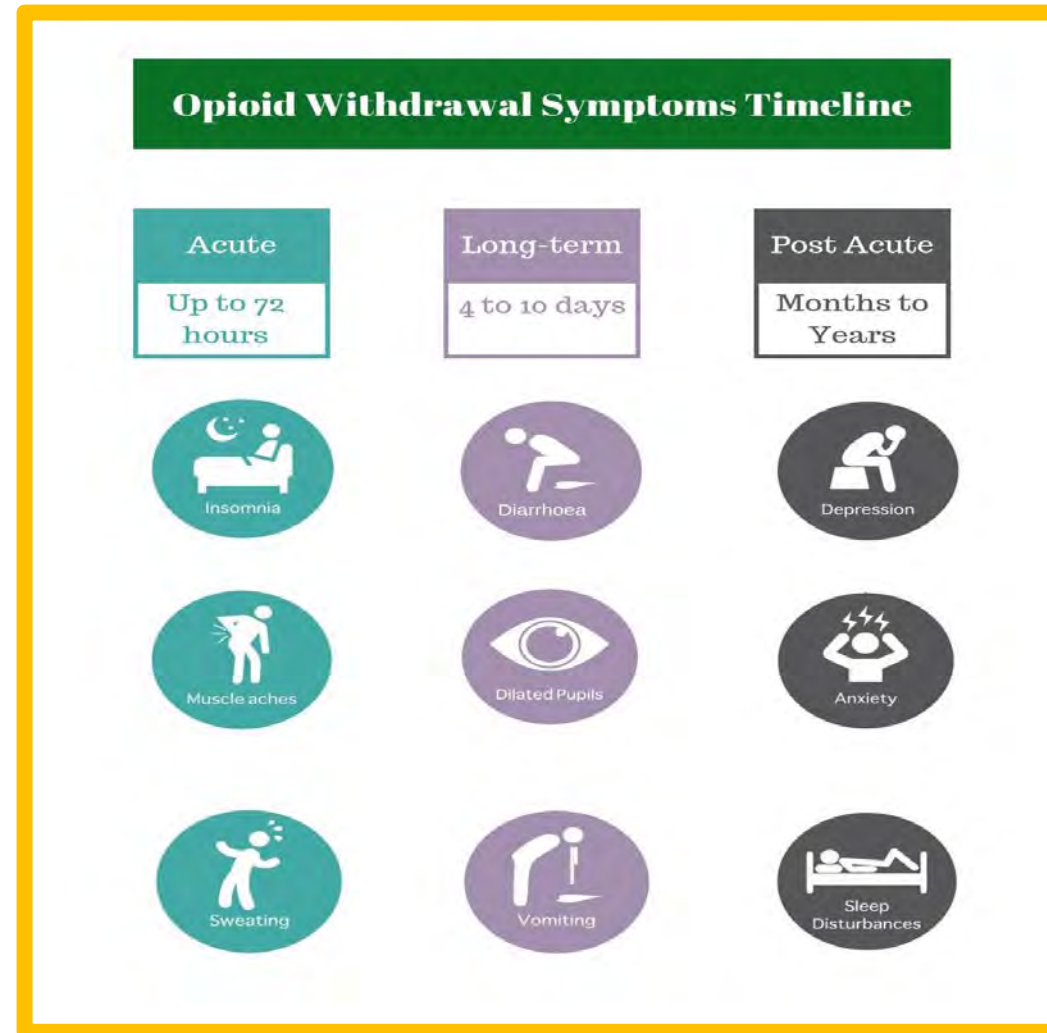
- ✓ Nausea
- ✓ Vomiting
- ✓ Stomach Cramps
- ✓ Diarrhea
- ✓ Goosebumps
- ✓ Depression
- ✓ Drug Cravings



Withdrawal – the great precipitator of relapse

Acute Withdrawal occurs when tissue dependence has developed after chronic use and the person suddenly stops using

Post-Acute Withdrawal is the persistence of subtle emotional and physical symptoms for several months to years after discontinuing drug use



Medications

Treating the physical aspects of addiction

Treatment that does not address physical aspects is associated with high relapse rates (more than 90%) most in the first 6 months

MOUD (medications for opioid use disorder) is the gold standard of treatment for opioid use disorder

<https://www.samhsa.gov/medication-assisted-treatment>





Medications for Opioid Use Disorder

Methadone -
Agonist

Buprenorphine -
Partial Agonist

Naltrexone -
Antagonist

Methadone

- We have more data to support using methadone for patients with opioid use disorder than any other medication for any other illness
 - **Reduces the risk of overdose death 3-8 X** (Sordo et al, 2017; Ma et al., 2020; Caplehorn 1996; Gronbladh 1990; Zanis 1998; Krawczyk 2020; Scherbaum 2002)
 - Improves physical and mental health status, reduces risk of suicide, drastic reduction in criminal activities, improved rates of employment
- Data spans five decades and diverse populations
- For the purposes of treating opioid use disorder, methadone can only be prescribed at opioid treatment programs
- This medication must be started with an in-person visit; follow-ups can be done via telehealth
- **It is effective for patients using fentanyl**

Methadone

- Full Opioid Agonist
- Synthetic opioid that fully binds to the same receptor sites as other heroin and other prescription opiates
- Produces the same effects as other opiates including some pain relief
- Has a long half life and slow onset of action, so when taken as prescribed, does not produce euphoria or sedation
 - At the correct dose it should not cause sedation
- An adequate daily oral dose of methadone suppresses withdrawal and drug craving for 24-36 hours
- Therapeutically appropriate doses of methadone block the euphoric effects of heroin and other shorter acting opiates
- Most patients stabilize between 80-120mg

Buprenorphine

- This medication can be prescribed from physicians' offices since DATA 2000 was passed
- This medication can be started using telehealth!
- Also is dosed at most opioid treatment programs
- It is a partial Opioid Agonist
- Synthetic opioid that partially binds to the same receptor sites as other heroin and other prescription opiates
- Has a greater affinity for the opioid receptor sites in the brain, so will push other opioids off if taken, which can lead to withdrawal

Buprenorphine

- Produces most of the same effects as other opiates including some pain relief, but has a ceiling effect, so larger doses are ineffective making overdose uncommon
- Has a long half life and slow onset of action, so when taken as prescribed, does not produce euphoria or sedation
- Can be tricky to start in patients on fentanyl and patients on long-acting opioids like methadone
- Buprenorphine can cause withdrawal in patients accustomed to fentanyl, even after 24-48 hours
- It is difficult to switch from methadone to buprenorphine - Methadone must be tapered gradually, stopped for a few days to switch to buprenorphine
- Even with cautious induction, buprenorphine may not be strong enough for patients with high fentanyl tolerance

Naltrexone

- Opioid Antagonist (An “Anti-opioid”)
- Tightly binds to opioid receptor sites in the brain and displaces them, precipitating withdrawal in patients taking opioids
- Must be started after the patient is through the withdrawal process
- Difficult to get patient to that point, usually started in an inpatient setting
- Produces no narcotic effect; it is NOT a controlled substance
- Produces no withdrawal symptoms when use is discontinued
- Produces no relief from opioid withdrawal symptoms
- Can be prescribed/given in any medical provider’s office

Naltrexone

- Highly effective in preventing relapse when taken as directed, but has had little impact on treatment of opioid addiction due to very low patient compliance rate when given in daily oral form
- Compliance rates are much better when given in depot-injection form - Brand name Vivitrol
- Once-monthly injection into the buttocks
- It's a difficult shot to receive, with some side effects: nausea, depression, body aches
- Has been used with medical professionals for years
- Expensive (\$1000/month) but Medicaid covers



Empty opioid receptor

Methadone



Full agonist:
generates effect

Buprenorphine



Partial agonist:
generates limited effect

Naltrexone



Antagonist:
blocks effect

Why methadone?

- One medication won't work for every patient
- We have sixty years of data about the benefits of methadone
 - Buprenorphine only became available after DATA 2000 was passed
- Better patient retention with methadone compared with buprenorphine
- Works better in patients using fentanyl
- It won't cause precipitated withdrawal in patients
- It is cheaper

Disadvantages of methadone compared to buprenorphine

• Stigma

- It is more difficult to taper off than buprenorphine
- Stopping methadone suddenly causes intense and long-lived withdrawal for weeks to months
- Has more drug interactions than buprenorphine
- More likely to cause overdose when combined with sedatives than buprenorphine is
- Induction must be done with caution
- It can only be prescribed in opioid treatment programs, for the purpose of treating opioid use disorder



Treatment Options

Office Based Opioid
Treatment (OBOT)

Opioid Treatment
Program (OTP)

Opioid Treatment Program (OTP)

State and federally licensed facility where medication is administered daily by a nurse, and counseling is provided by certified or licensed substance abuse counselors

Benefits

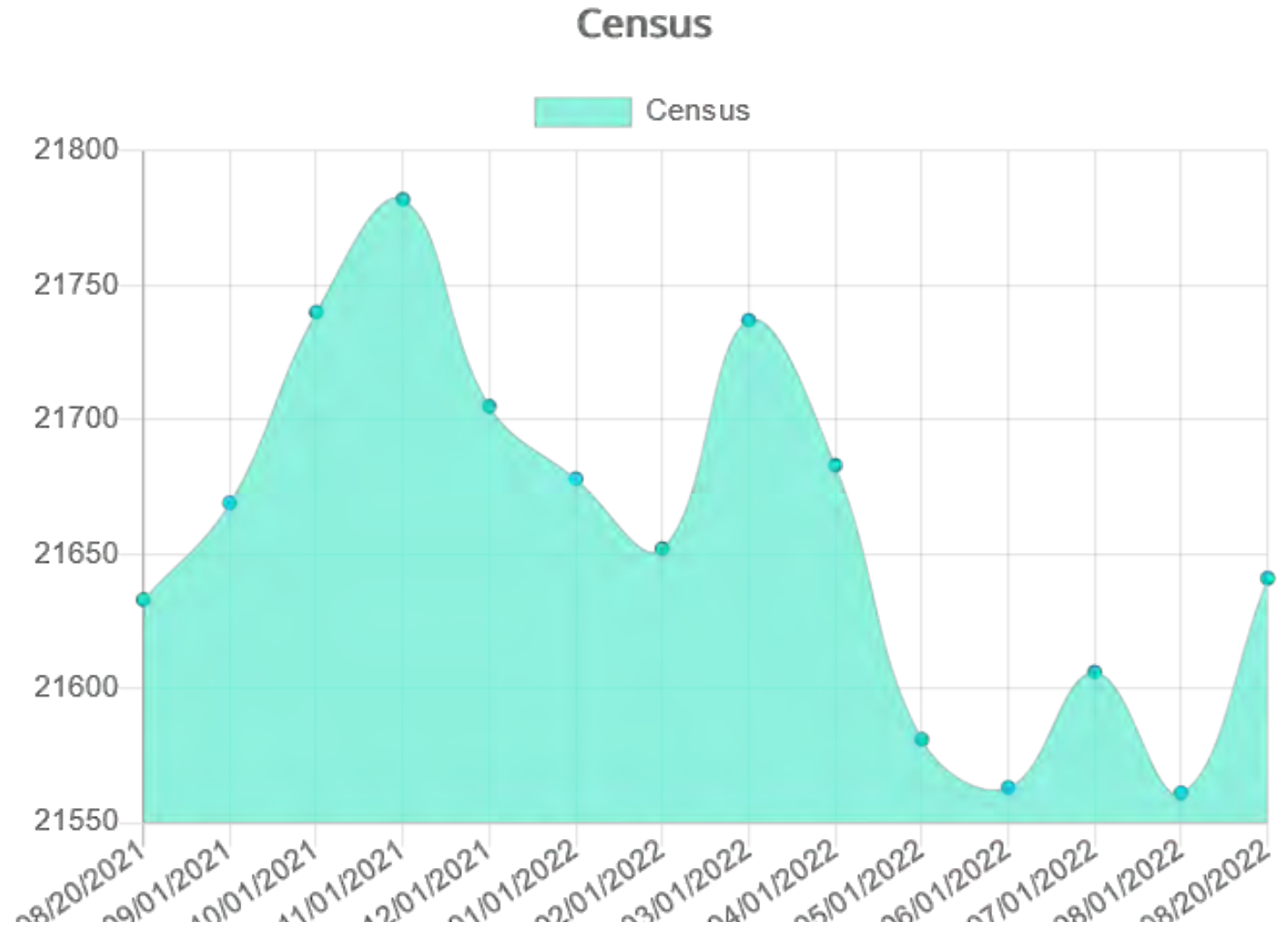
- More patient oversight due to daily attendance and mandatory counseling
- Low risk for diversion because medication is consumed in front of nurse
- Greater access to counseling & it is built into the system of treatment
- Mandated regular drug screening
- More regulatory oversight to ensure that clinics are in compliance with State and Federal regulations
- Recommended level of care for patients who are not successful in OBOT setting
- Medicaid fully covers treatment at an OTP

Drawbacks

- Daily attendance until take home medication is earned
- Some private insurance does not cover the cost of treatment at an OTP
- Many areas don't have nearby OTPs
- Less flexibility than office-based practices.

OTP Programs in NC

- 83 OTP Programs across the state
- 3 are North Carolina state operated inpatient Alcohol and Drug Abuse Treatment Centers (ADATC)
- 1 is operated by Eastern Band of Cherokee Indians on Tribal Land
- 21,641 patients currently enrolled
- ***Methadone, for the treatment of opioid use disorder, can only be obtained through a licensed OTP***



States **North Carolina** x >

Open Clinics 83 v

Sites Projected to Close 0 >

Current Closed Sites 0 >

Mobile Units 0 >

State Messages 0

Open Clinics

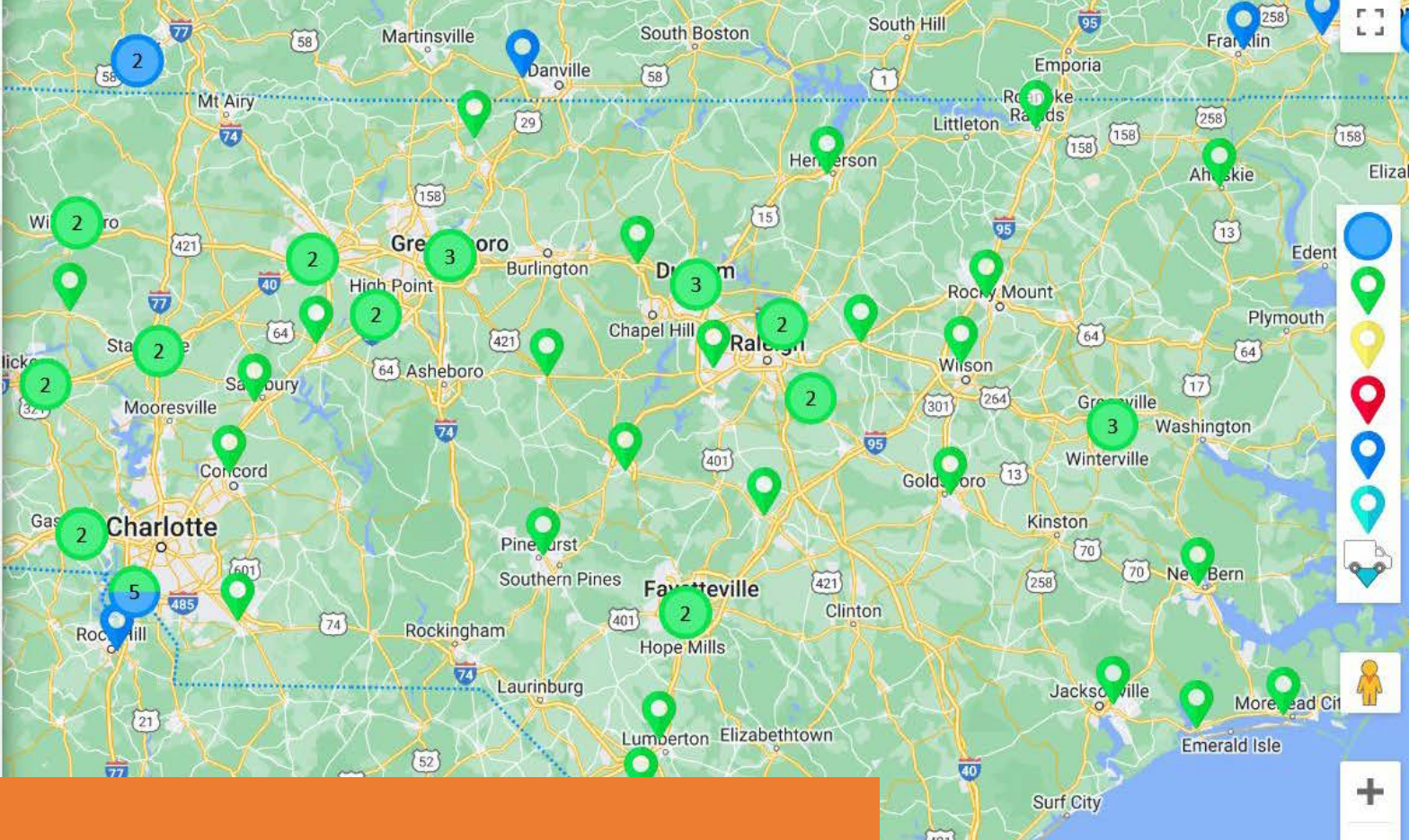
Search

North Carolina x

Addiction Recovery Medical Services - Statesville
North Carolina
Dosing hours: 5:00AM - 12:00PM

Addiction Recovery Medical Services - Taylorsville
North Carolina
Dosing hours: 5:00AM - 12:00PM

ADS Alcohol and Drug Services of Guilford, Inc.



- Visit <https://www.thecentralregistry.com/map/> to find contact information for the OTP in your area

Office Based Opioid Treatment (OBOT)

Private physicians write prescriptions that are then filled by the patients at the pharmacy

Benefits

- more patient autonomy
- less time spent at treatment facility
- private insurance usually covers the cost of Suboxone filled at the pharmacy
- May be more accessible in some areas

Drawbacks

- less regulatory requirements to oversee physician competency and counseling engagement
- more risk for diversion in the community
- less structure to reinforce recovery -oriented lifestyle
- less oversight of the patient.

How can working with a treatment provider make correction officers'/probation officers' lives easier?

- When medications to treat opioid use disorder are continued, the patient doesn't go into withdrawal
 - Reduced nausea/vomiting/diarrhea, etc.
 - Less likely to need medical care/hospitalization
 - Are able to go to general population more quickly
- Patient inmates on medications for opioid use disorder are less likely to attempt to obtain illicit opioids, overdose, die, contract Hep C/HIV during incarceration
- The patient is significantly less likely to relapse and die after release from jail if they transition back to medication provider
- Less likely to have probation violations and warrants if they remain in treatment after release

SOURCE: Evans et al., 2022, *Drug and Alcohol Dependence*

- Inmates linked with MOUD treatment were significantly less likely to relapse & significantly less likely to return to jail
- One study compared inmates with OUD offered buprenorphine to those not offered buprenorphine, found significant benefit
 - 48% on buprenorphine went back to jail
 - 63% not on buprenorphine went back to jail



Options to provide medications to treat opioid use disorder to jail inmates

OPTION 1: Jail can become an OTP

Expensive & time consuming to become licensed

Probably only practical for large facilities – e.g. Riker’s Island in NYC

- Has its own OTP since 1987; starts new patients on MOUD, continues MOUD in patients already enrolled in treatment programs
- Data from that program show well-documented success: Tomasino et al.,
 - Overall healthcare cost savings, reduced crime & recidivism, reduced HIV and Hep C transmission, better than average recovery rates
 - Study reports that patients on MOUD are less of a management problem to jailers
 - Rikers connects 80% of patients released from jail to providers in the community

OPTION 2: Jail can partner with an OTP

Medical directors of jail and treatment facility should communicate & decide most efficient and workable process for your jail

- ✓ OTP staff could bring doses to the jail and dose the patient or leave doses to be given by jail personnel, using chain-of custody forms
- ✓ Jail staff could bring patient to the OTP for observed dosing and send some number of take-home doses with jail personnel with chain-of-custody form
- ✓ Possibly an intermediary can transport the medication with chain-of custody form



Collaboration Between Jails and OTPs

Seeing the medical provider

- The frequency of medical provider appointments will depend on each patient's needs
- If unstable, patient may need to be seen more frequently by the medical provider at the opioid treatment program, or at the jail facility
- Hopefully patient would stabilize quickly in the carceral environment, where he is physically separated from illicit drugs
- Patients in the first 3 weeks of treatment, called the induction phase, would need to be seen more often
- Could be done with telehealth
- Extremely stable patients might need to be seen as little as once per month.

Administering medications

- Medical personnel can easily teach jail personnel how to administer medications
- They can teach techniques to reduce the risk of diversion
 - Buprenorphine tablets/films are placed under the tongue and absorbed through the thin skin under the tongue
 - Tablets can be chopped – dissolve more quickly, less likely to be diverted
 - Patient can be observed for 10 minutes – dose is usually dissolved by then
 - Films dissolve very quickly, less likely to be diverted
 - Sublocade – once-monthly depot injection of buprenorphine, not yet widely used in opioid treatment programs but ideal for jail population
 - Patients would need to go to medical provider once per month

Dosing Methadone

- Usually dosed as a red liquid that is swallowed
- Ask patient to speak after dosing
- Can ask patient to show personnel the areas between cheek & gum to look for sponge, cotton ball, other device to absorb & divert the liquid methadone
- Methadone is quickly absorbed from stomach and small intestine
- If patient can be kept away from general population for twenty minutes, most of the methadone will be absorbed from the GI tract by then

Stigma still exists...

- Trading one addiction for another
- Clinics are “licensed drug dealers”
- “It’s like giving whiskey to an alcoholic”
- Myths about safety of M.A.T.
- Conflict between M.A.T. and some self help groups or other treatment providers



MOUD is NOT
“trading one
addiction for
another”

ADDICTION

Continued use of a drug despite adverse consequences. The hallmark of addiction is the loss of control over the amount taken (escalating use), the amount of time spent obtaining, using, and recovering from use (withdrawal), and the harmful effects of use on functioning. Addiction is a chronic disease.

PHYSICAL DEPENDENCE

Occurs with chronic use of any drug that produces tolerance and withdrawal symptoms when the dose is decreased or discontinued. Methadone and buprenorphine are FDA approved medications used to treat a chronic condition.

“Clinics are just licensed drug dealers?”

- For over 50 years, medication to treat opioid addiction has been subjected to extensive regulations involving:
 - US Dept of Justice/DEA
 - DHHS/SAMHSA/CSAT
 - State Authorities – (DHSR, NC Drug Control Unit, NC SOTA)
 - Medicaid/LMEs
 - Local requirements



“Like giving whiskey to an alcoholic?”

- When dosing each day, patients build up a tolerance to the drowsiness that opioids cause in opioid-naïve people
- At a stable dose, the blood levels of the methadone in the patient’s system don’t fluctuate much throughout the day, with the highest level (or the peak) being at about 3 hours after the taking the dose
- Proper dose of the medication should make patients feel “normal,” not intoxicated or high
- Because at a stable dose the medications block other opioids from the receptor site, there is not a reward for using, further reducing the urge to use opiates in the future

Is it safe?

- **Methadone**

- Generally safe and well tolerated when taken as directed and when clients are screened for any cardiac risk factors. Overdose and death can occur if taken in larger amounts than directed and/or in combination with other central nervous system depressants.

- **Buprenorphine**

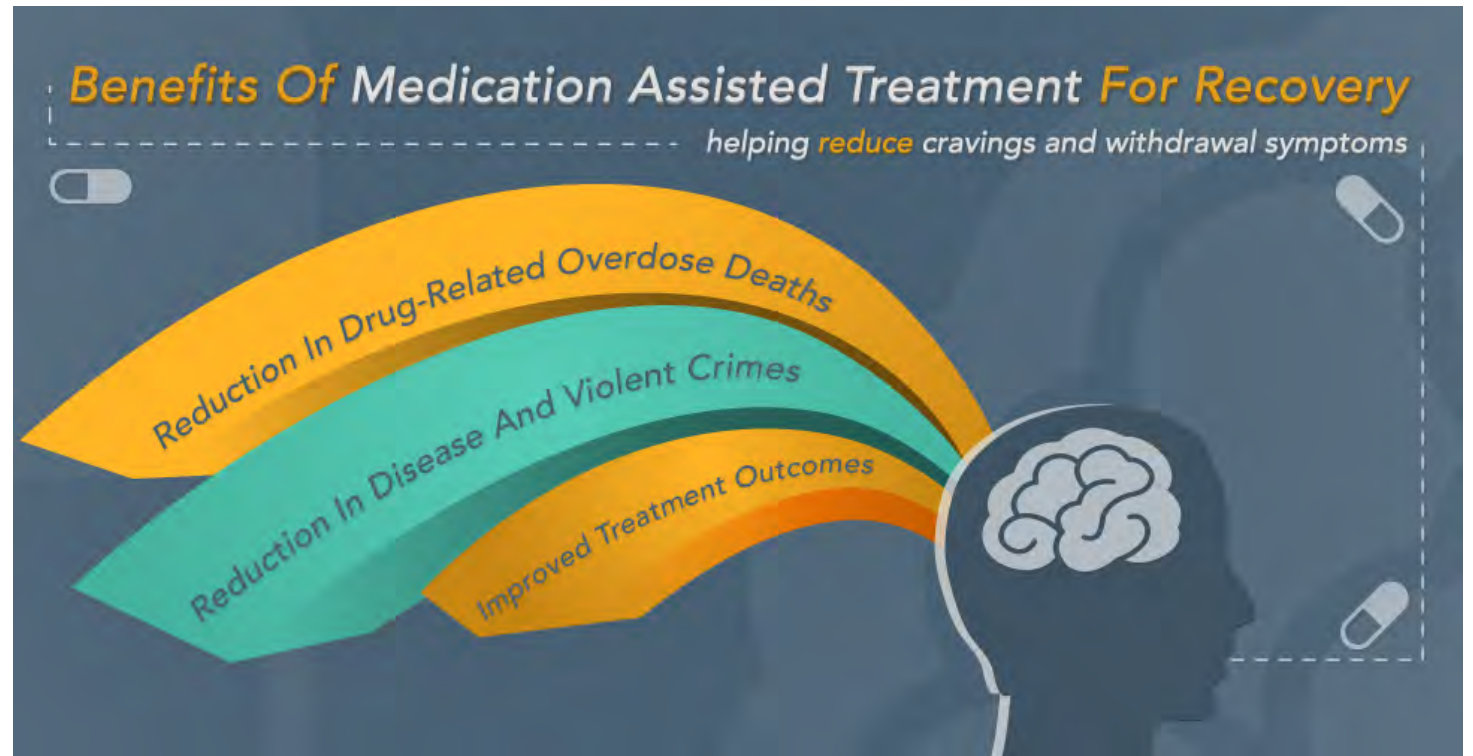
- Very safe when taken as directed. Overdose and death are very unlikely due to partial agonist characteristics, but still should not be taken in combination with other central nervous system depressants.

- **Naltrexone**

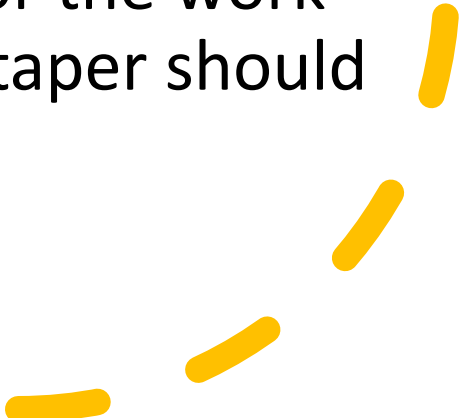
- Very safe and generally well tolerated. Difficult to start.

Benefits of MAT

- Improves survival rate
- Increases retention in counseling
- Decreases illicit drug use
- Decreases unsafe behavior and spread of disease
- Decreases criminal activity
- Improves birth outcomes for pregnant women addicted to opiates



Treatment Duration

- Opioid use disorder behaves like a chronic illness, not an acute illness
 - Subject to relapse and remissions
 - Most chronic illnesses have behavioral components that need to be managed
 - Behavioral change often takes time (for example exercise & weight loss for Type 2 diabetes)
 - Usually takes more than a year for the work of counseling to be done before taper should be considered
- 

Treatment Duration

- Tapering should be done with caution, given the risk of death after taper
- Zanis & Woody, 1998: eight-fold increase in overdose deaths for patients after they left treatment with methadone
- For some patients it may be best to leave them on medication to reduce their risk of dying and improve the quality of their lives

Case Study

- 44 year -old white male was referred to our opioid treatment program in 2019 by his parole officer
- Prior to incarceration, he had a back injury in his 20's, was sent to pain clinics, developed opioid use disorder, later stimulant use disorder
- He had served seven years in prison for drug-related offense, and relapsed to opioid use shortly after his release from prison
- Entered under the MAT PDOA program (Medication-assisted treatment of Prescription Drug and Opioid Abuse)
- This was a grant that paid for treatment for patients on parole/probation



Case Study Cont.

- He was started on buprenorphine and dose was increased to 16mg. He still had continued opioid and methamphetamine positive drug screens for the first few months. Eventually his dose was increased to 24mg and he had no more positive drug screens.
- He developed a great rapport with his counselor, participated in individual counseling. He didn't care for groups & refused to go.
- He found a job and his boss rented him a small trailer to live in near the work site



Case Study Cont.

- He was able to pay legal fines and fees, and eventually got his drivers license back.
- After that he was able to get a better job, in construction, but still had no health insurance.
- He worked long hours but saved his money and was able to buy a used vehicle
- About a year after entering treatment, the MAT PDOA grant ended. He was able to get on a second grant (Project Lazarus) that would pay the cost of medication at a pharmacy – ordinarily about \$160 per month.



Case Study Cont.

- He was moved to our office-based treatment program that's co-located with our opioid treatment program
- He continues to do well, but the second grant ended last year. Since then, he's been able to pay his own treatment fees and buy his medication at the pharmacy.
- He still talks to his same counselor, now has monthly sessions but can access his counselor more if needed.
- He hasn't returned to use for nearly three years!



Case Study Cont.

- He re-connected with his few family members who don't use drugs
- He is close again with his grandmother who raised him. He does household repairs and chores for her and visits her often
- His goals are to remain in recovery, get a better job with health insurance, buy a piece of land to move his trailer onto. He does not wish to taper at this time, but holds that as a goal in the future





QUESTIONS?

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SOTA Team

- Smith Worth, SOTA Administrator smith.worth@dhhs.nc.gov
- (919)594-3904
- Anna Stanley, SOTA Coordinator anna.stanley@dhhs.nc.gov
- (984)289-1511
- Pamela Morrison, SOTA Coordinator pamela.morrison@dhhs.nc.gov
- (919)594-3606