

# EXPANDING TREATMENT OPTIONS

Alex Gertner  
Chris Smith  
Brandy Harrell  
MeLane Childress Barber  
Moderator: Mark Botts

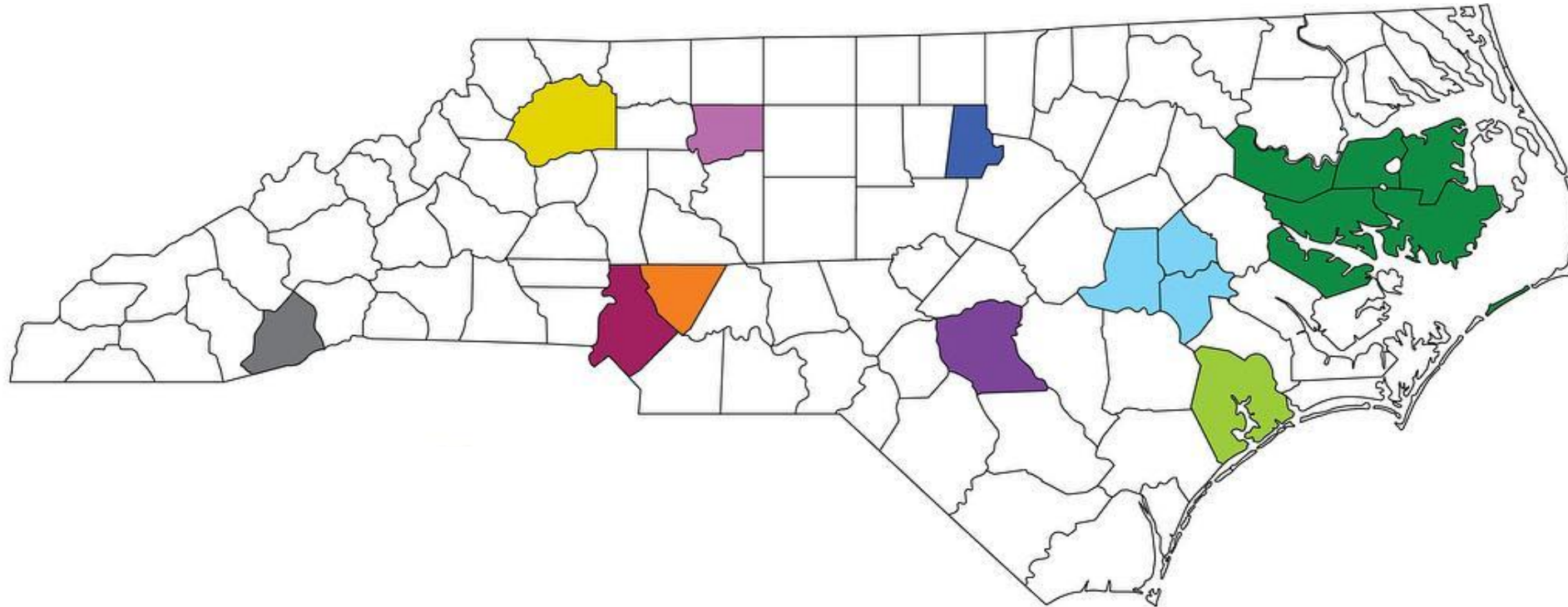
WEBINAR  
SERIES

THE  
OPIOID  
RESPONSE  
PROJECT



SCHOOL OF  
GOVERNMENT

# OPIOID RESPONSE PROJECT



SCHOOL OF GOVERNMENT  
ncIMPACT Initiative



BlueCross BlueShield  
of North Carolina

An independent licensee of the Blue Cross and Blue Shield Association

# Webinar Series: Communities Responding to the Opioid Crisis

- June 20, 10:00-11:30 AM **Expanding Treatment Options**
- July 18, 1:00-2:30 PM **Outreach and Education**
- August 15, 1:00-2:30 PM **Syringe Exchange Programs**

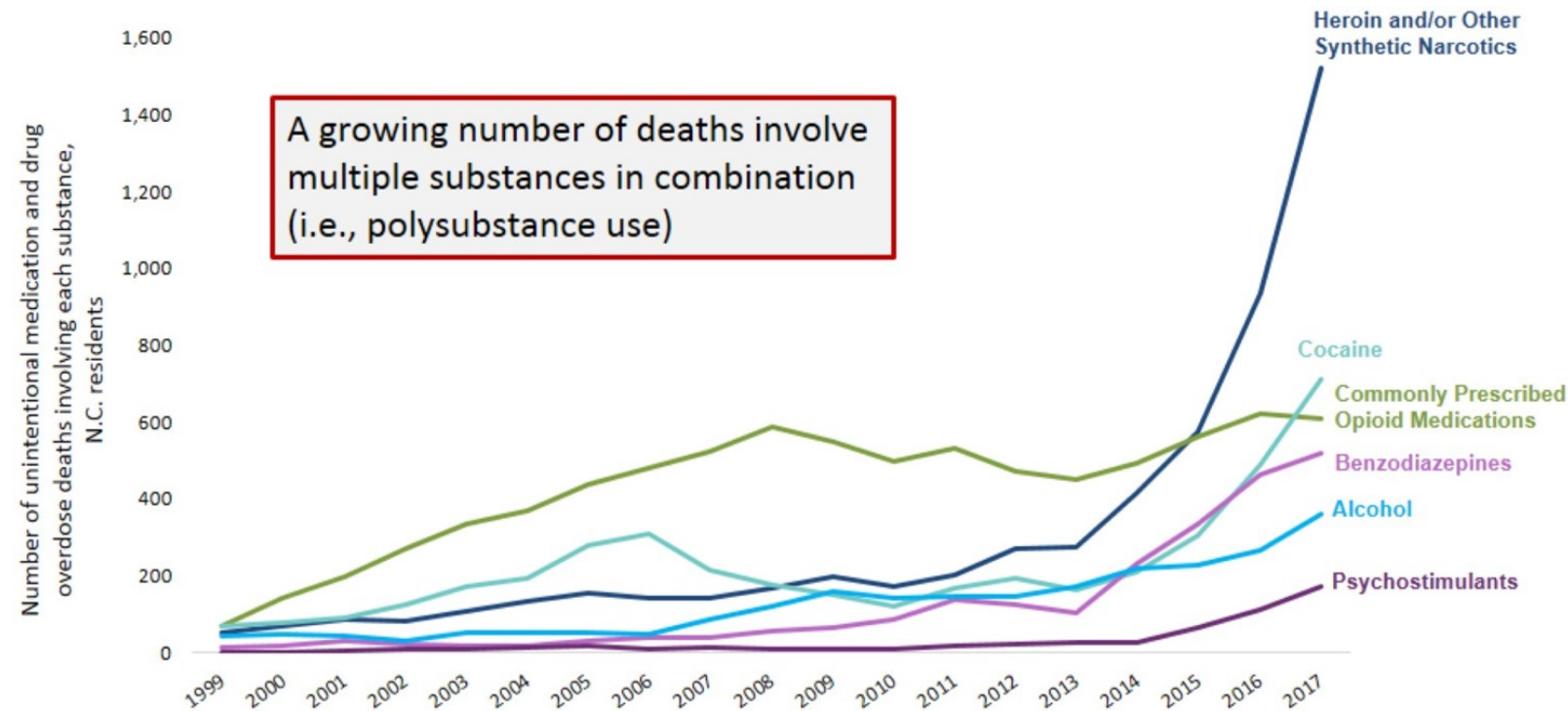
<https://www.sog.unc.edu/courses/communities-responding-opioid-crisis-webinar-series>

In 2017, over 6 North Carolinians died each day from unintentional medication or drug overdose.

**Technical Notes:** Unintentional medication and drug overdose: X40-X44; Limited to N.C. residents  
**Source:** Deaths-N.C. State Center for Health Statistics, Vital Statistics, 2017  
**Analysis by** Injury Epidemiology and Surveillance Unit

North Carolina  
Injury & Violence  
PREVENTION Branch

# Unintentional overdose death involving illicit opioids\* have drastically increased since 2013



\*Heroin and/or Other Synthetic Narcotics (mainly illicitly manufactured fentanyl and fentanyl analogues)

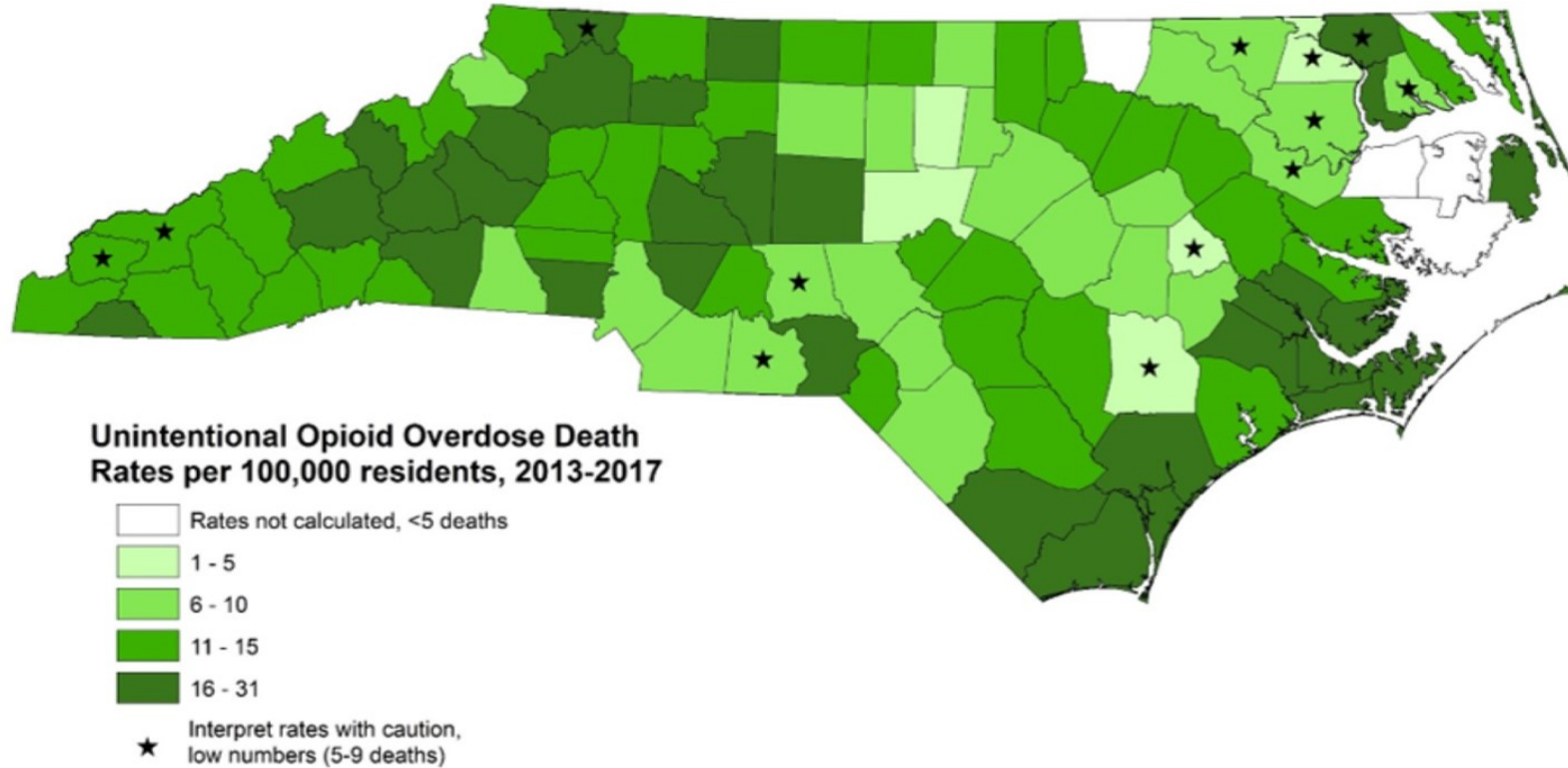
**Technical Notes:** These counts are not mutually exclusive; if the death involved multiple substances it can be counted on multiple lines; Unintentional medication, drug, alcohol poisoning: X40-X45 with any mention of specific T-codes by drug type; limited to N.C. residents

**Source:** Deaths-N.C. State Center for Health Statistics, Vital Statistics, 1999-2017

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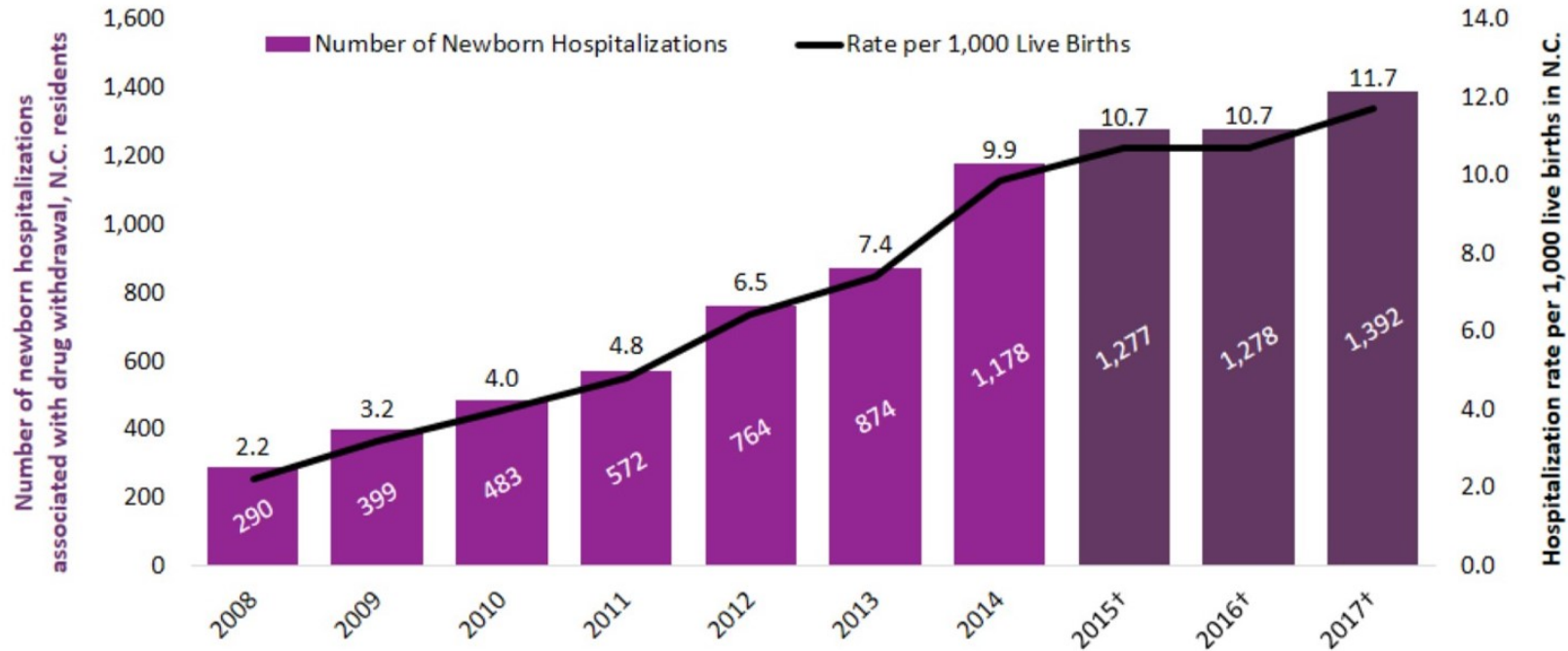
# Statewide, the unintentional opioid overdose death rate is 12.1 per 100,000 residents from 2013-2017



**Technical Notes:** Rates are per 100,000 N.C. residents, Unintentional medication and drug poisoning: X40-X44 and any mention of T40.0 (opium), T40.2 (Other Opioids), T40.3 (Methadone), T40.4 (Other synthetic opioid) and/or T40.6 (Other/unspecified narcotics)  
**Source:** Deaths-N.C. State Center for Health Statistics, Vital Statistics, 2013-2017; Population-NCHS, 2013-2017  
**Analysis by** Injury Epidemiology and Surveillance Unit

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Injury & Violence  
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# Number of hospitalizations associated with drug withdrawal in newborns increased 380% over last 10 years



†In October 2015, there was a change in the coding system used in administrative data sets that impacted the definition used to identify poisoning-related injury cases. Because of this change, data pre-2015 are not comparable to data collected after this change occurred.

**Technical Notes:** Beginning in 2014, hospital data structure changed to include up to 95 diagnosis codes

**Source:** Hospital-Hospital- North Carolina Healthcare Association, 2004-2017;

Birth Certificate records- N.C. State Center for Health Statistics, Vital Statistics, 2004-2017

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# Speakers

- **Alex Gertner**, Injury and Violence Prevention Fellow, MD/PhD Candidate, Dept. of Health Policy and Mgt at UNC Chapel Hill
- **Chris Smith**, Director of Nursing, PORT Health
- **Brandy Harrell**, Director of Behavioral Health, Kinston Community Health Center, Inc.,
- **MeLane Childress Barber**, Clinic Director, Wilkesboro CTC
  
- Moderator: **Mark Botts**, Associate Professor of Public Law and Government, UNC School of Government



# Introduction to Medication Treatment for Opioid Use Disorder

Alex Gertner

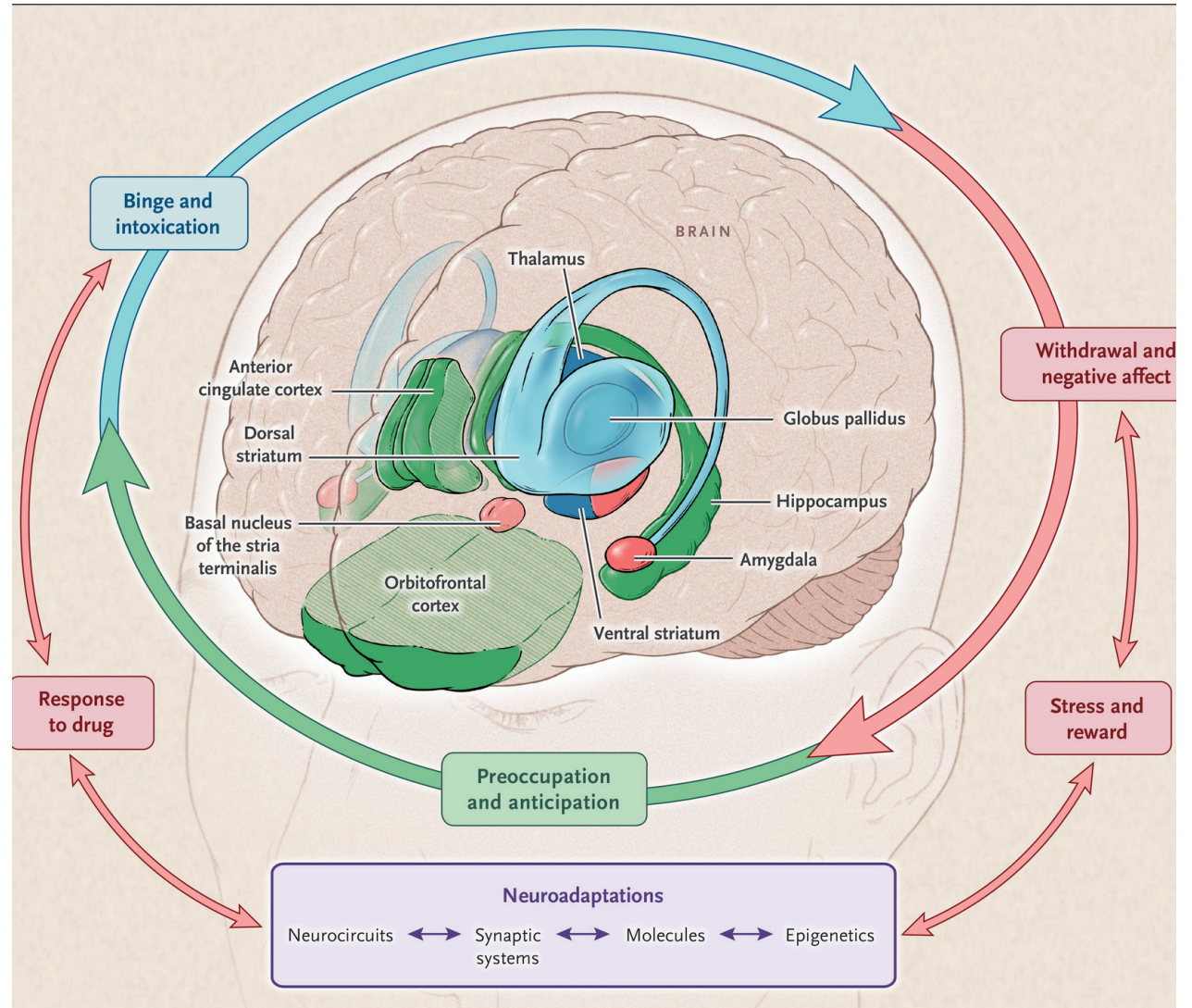
MD/PhD candidate

University of North Carolina at Chapel Hill

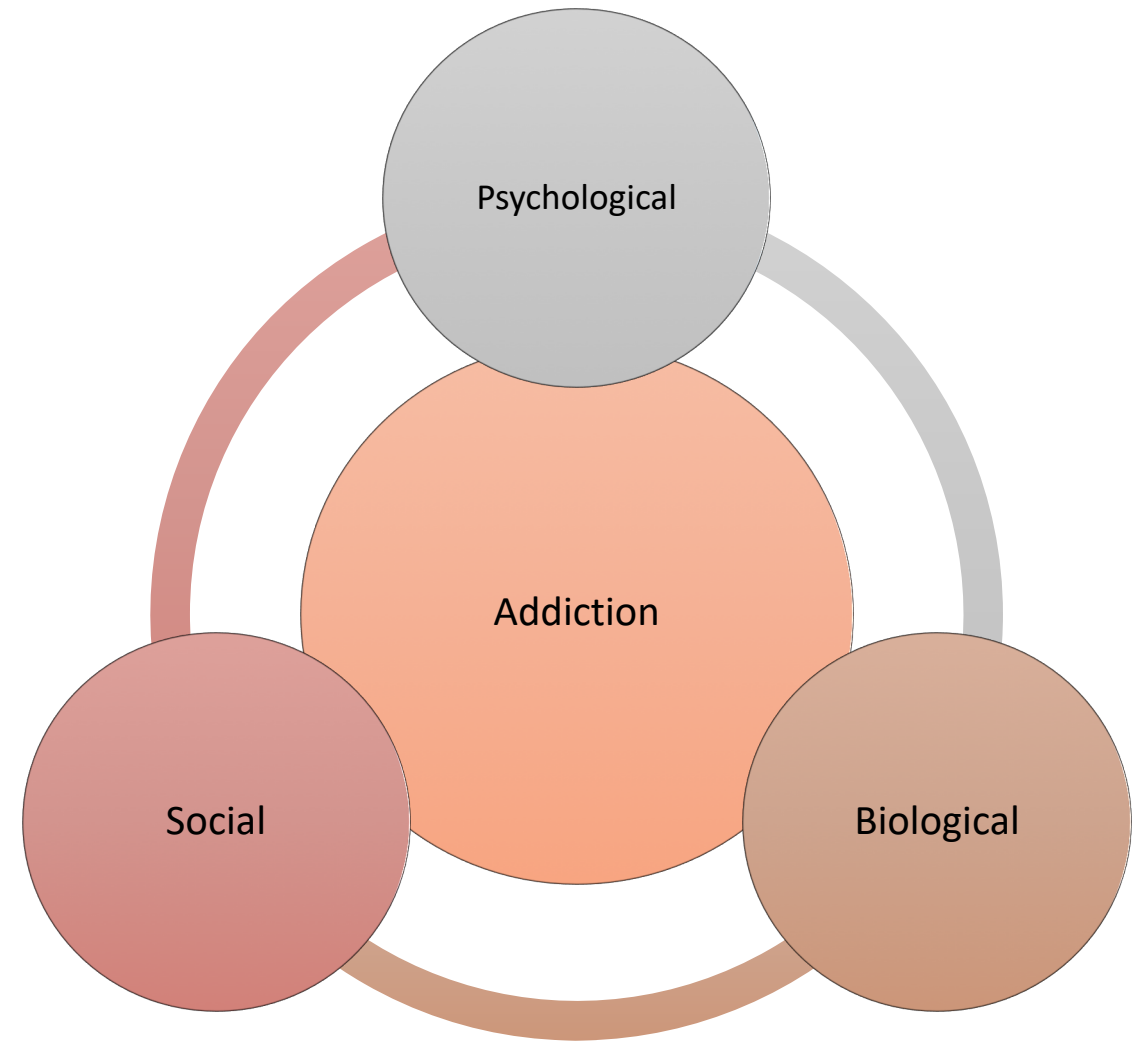
# Disclosures

- None
- Views my own

# Addiction as a brain disease



# Addiction as a learning disorder



# Addiction vs. physical dependence



Substance use disorder: pattern of substance use leading to clinically significant impairment or distress (DSM 5)



Physical dependence: A condition in which a person takes a drug over time, and unpleasant physical symptoms occur if the drug is suddenly stopped or taken in smaller doses. (NCI)

# Opioid use disorder (DSM 5)

\*These criteria are not considered to be met for those taking opioids solely under appropriate medical supervision.

Opioids are often taken in larger amounts or over a longer period than was intended.

There is a persistent desire or unsuccessful efforts to cut down or control opioid use.

A great deal of time is spent in activities necessary to obtain the opioid, use the opioid, or recover from its effects.

Craving, or a strong desire or urge to use opioids.

Recurrent opioid use resulting in a failure to fulfill major role obligations at work, school, or home.

Continued opioid use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of opioids.

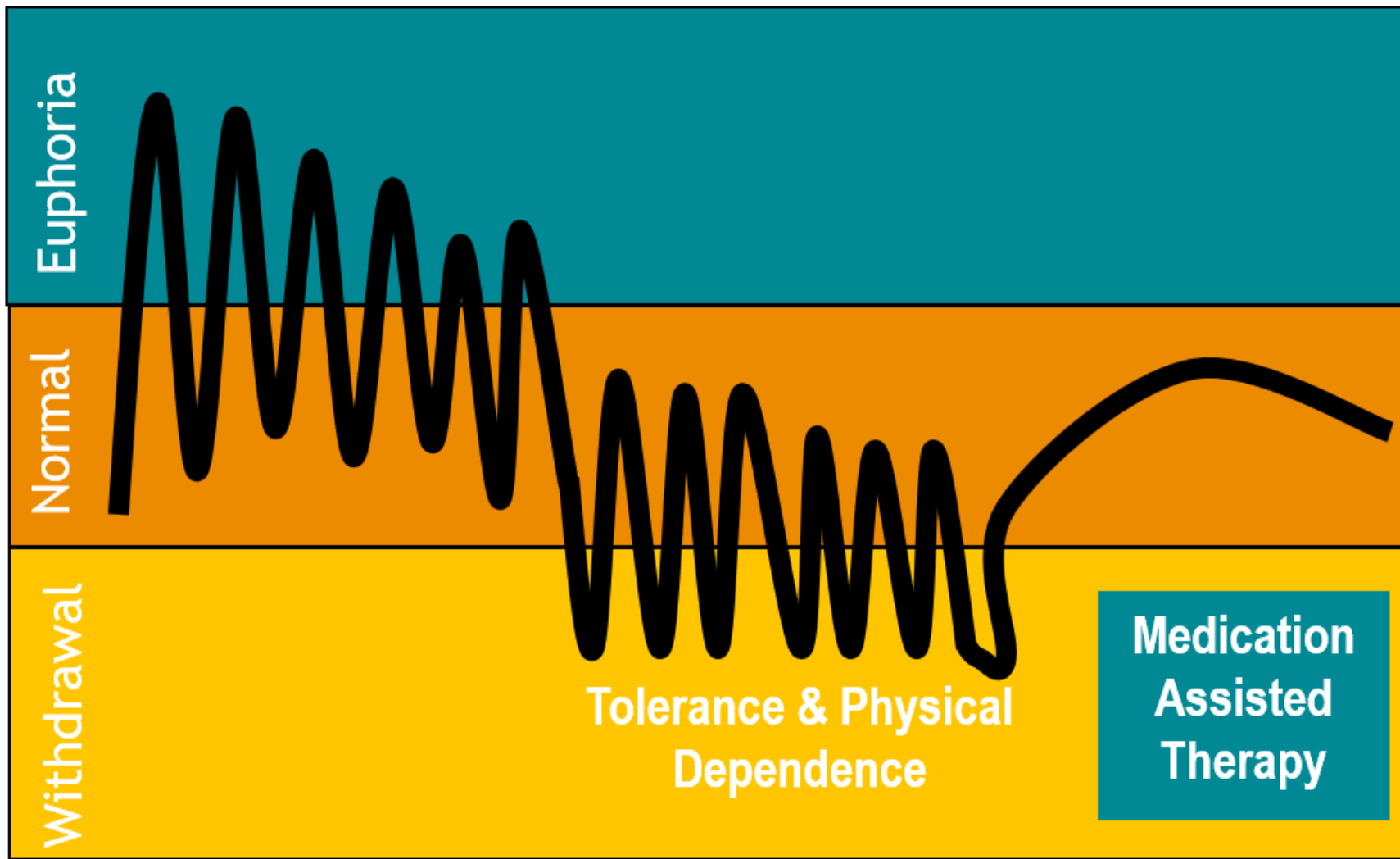
Important social, occupational, or recreational activities are given up or reduced because of opioid use.

Recurrent opioid use in situations in which it is physically hazardous.

Continued opioid use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance.

Tolerance\*

Withdrawal\*

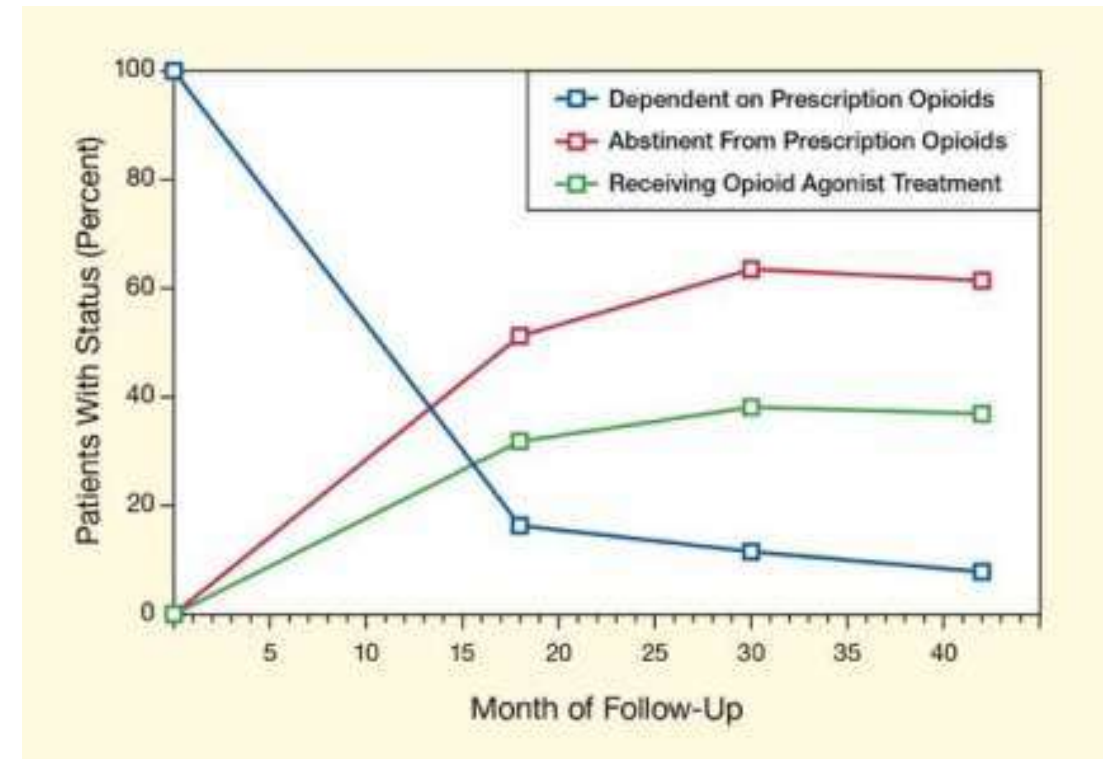


**Acute Use**

**Chronic Use**

Alford, Boston University, 2012

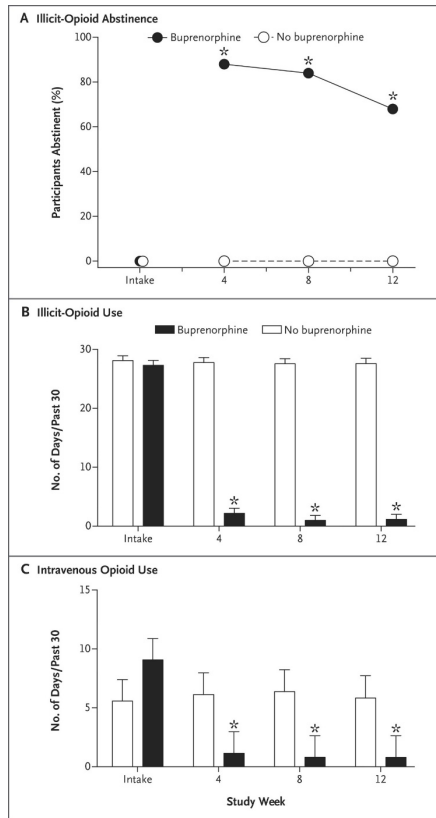
- 4 week bup-nx “detox”
  - 7% successful after 8 weeks
  - No different with counseling
- 12 week bup-nx stabilization
  - 49% successful outcome at week 12
  - 8% successful 8 weeks after taper
  - No difference with counseling
- 18 months follow up
  - 79% abstinent with medication
  - 38% abstinent without medication
- 42 months follow up
  - 80% abstinent with medication
  - 51% abstinent without medication



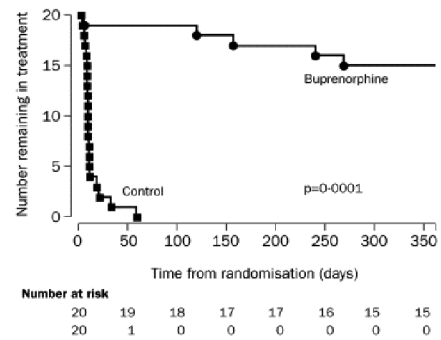
Weiss et al, 2011; Weiss et al 2015.



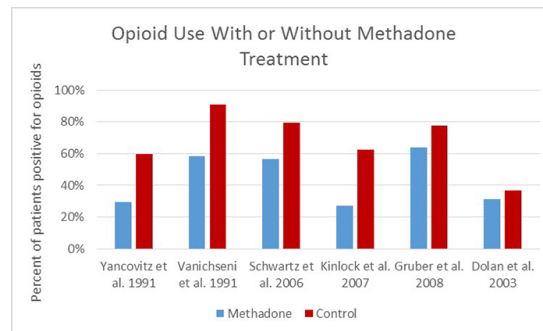
# Many studies support the use of medications in treatment



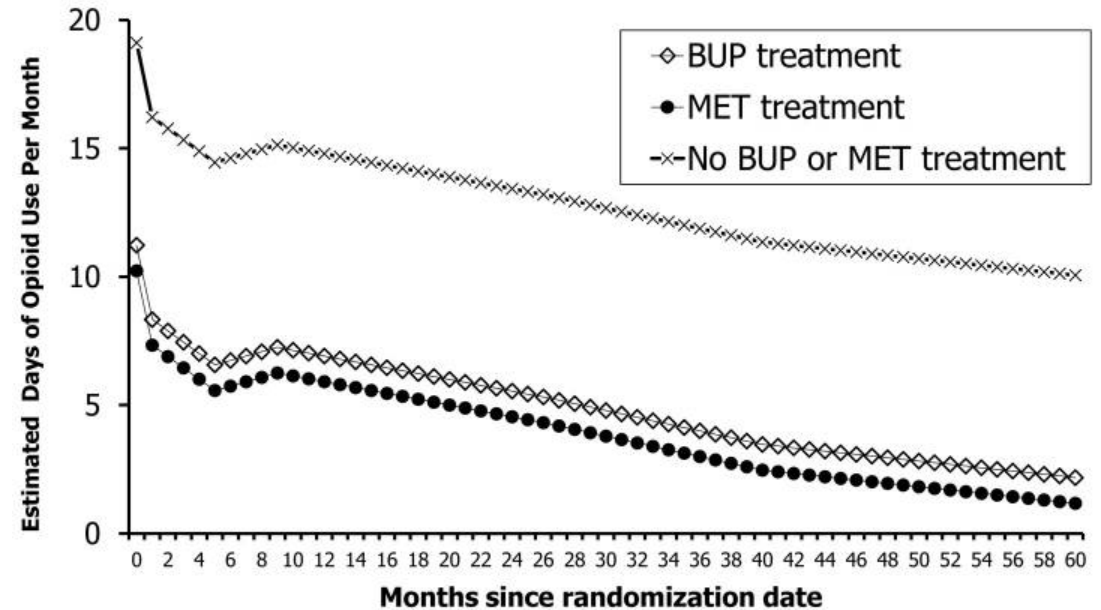
Sigmon et al 2016



Kakko et al 2003



NIDA 2018



Hser et al 2016

Figure 1  
How OUD Medications Work in the Brain



Empty opioid receptor

Methodone



Full agonist:  
generates effect

Buprenorphine



Partial agonist:  
generates limited effect

Naltrexone



Antagonist:  
blocks effect

© 2016 The Pew Charitable Trusts

	<b>Methadone</b>	<b>Buprenorphine</b>	<b>Naltrexone</b>
Formulations	Oral liquid	Transmucosal pill/film, subcutaneous, injectable	Oral pill, injectable
Brand names	Dolophine, Methdadose	Suboxone, Zubsolv, Probuphine, Sublocade	ReVia, Vivitrol
Class	Agonist (full activation of opioid receptors)	Partial agonist (diminished activation of receptors)	Antagonist (blocks opioid receptors without activation)
Effects	Reduces opioid cravings and withdrawal symptoms / blocks short-acting opioids	Reduces opioid cravings and withdrawal symptoms / blocks short-acting opioids	Blocks opioids
Availability	Opioid treatment programs	OTPs and waived providers	No restrictions
Special issues	Daily visits	Naloxone combo	Must be abstinent

Adapted from Volkow et al 2014

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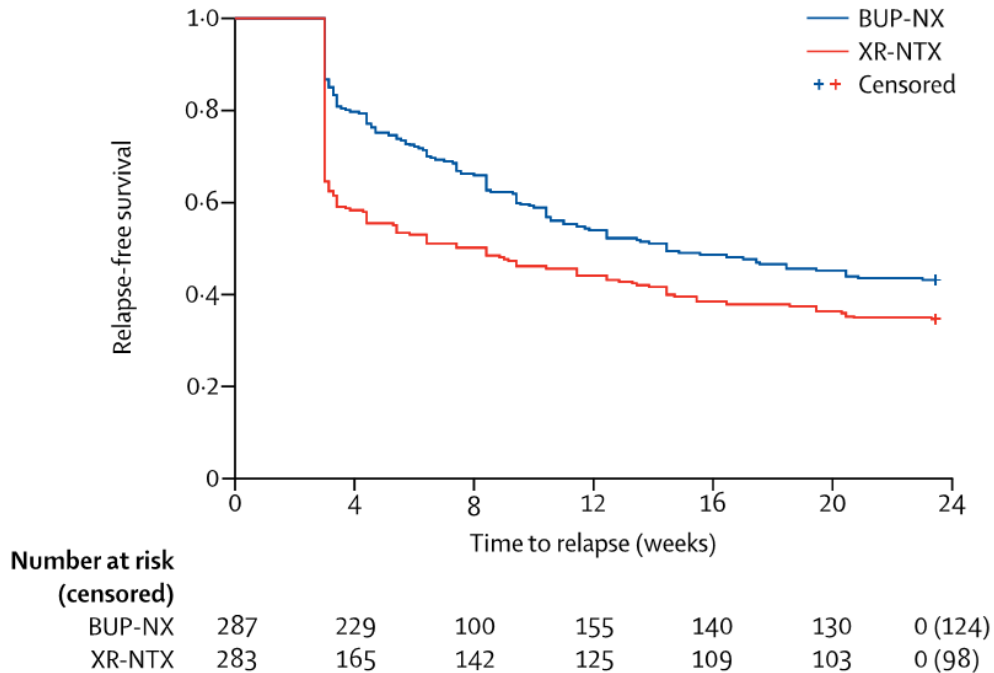
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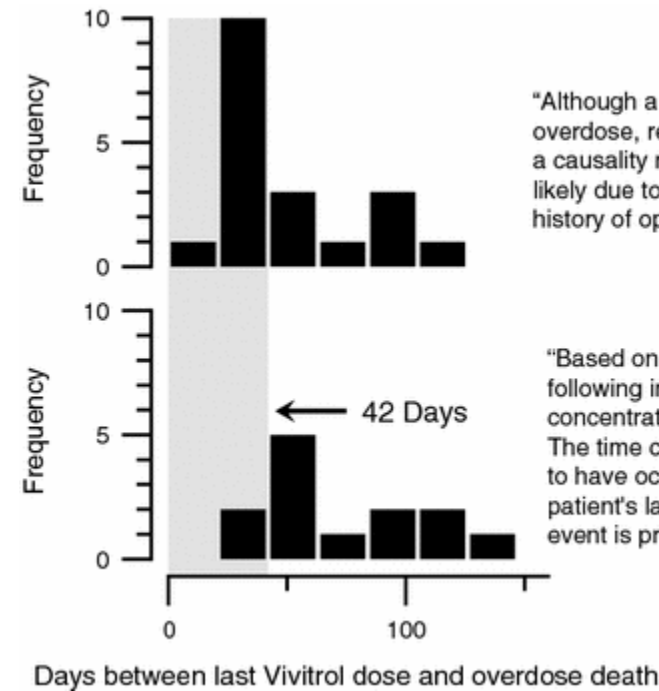
Adapted from Volkow et al 2014

# Naltrexone

## Lower retention



## Possible OD risk



"Although a temporal relationship exists between overdose, relapse, heroin use, and VIVITROL, a causality relationship is unlikely as it is more likely due to the patient's underlying history of opioid dependence."

"Based on a pharmacokinetic assessment of VIVITROL following intramuscular injection, average naltrexone concentrations are undetectable by 42 days. The time course of the event of overdose appears to have occurred greater than 42 days after the patient's last injection of VIVITROL. Accordingly, the event is probably not related to VIVITROL."

# Myths and Misinformation

Substituting one drug for another

Counseling is a requirement

Naltrexone is preferred

Shorter treatment is better

Detox is treatment

NA/AA is treatment

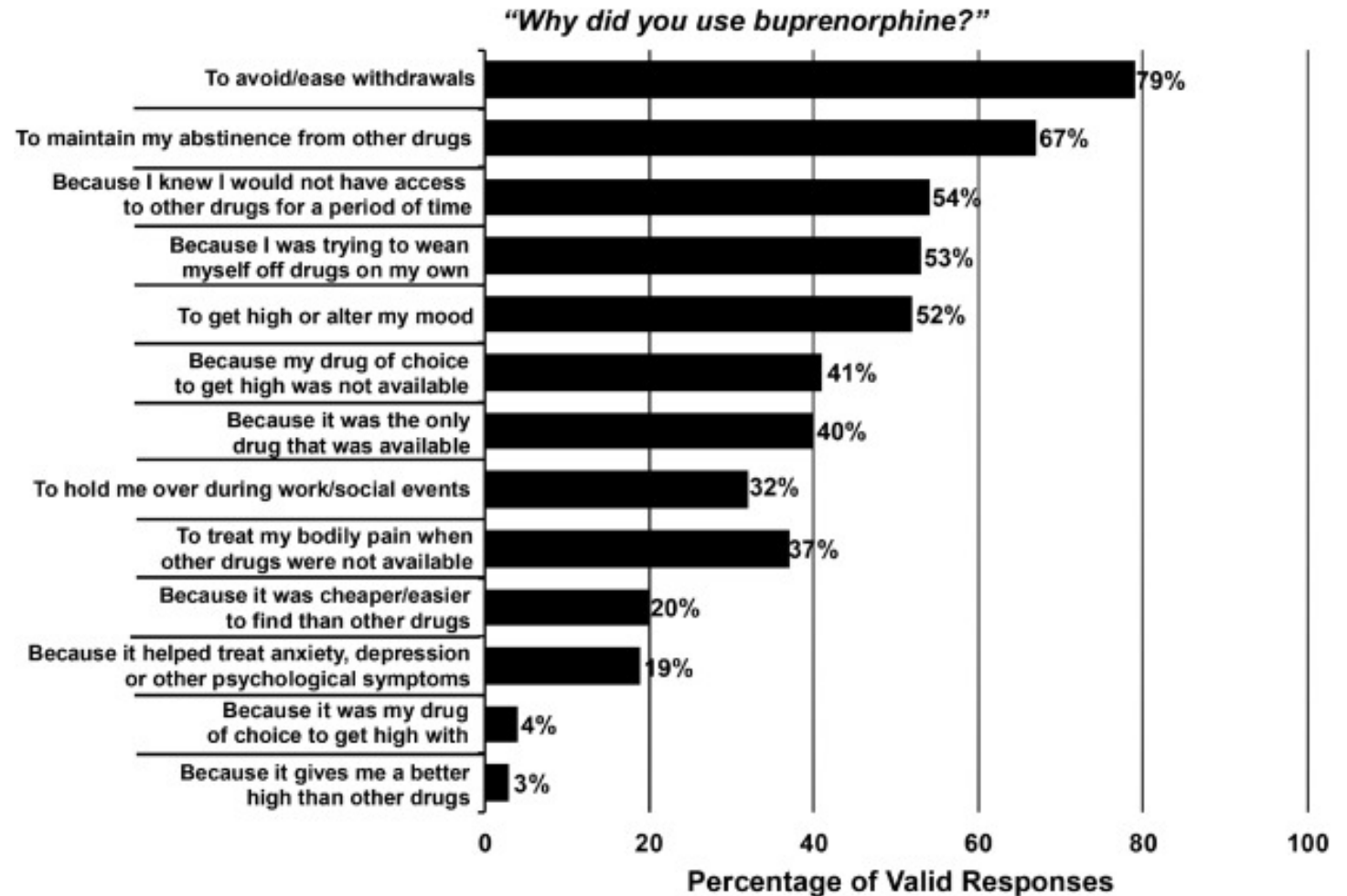
Hit rock bottom

Can't treat if pregnant

Buprenorphine is widely "abused"



- Several studies have surveyed people who use drugs about diverted buprenorphine use
- Cited reasons for diverted use are consistent with therapeutic use
- 81% said they'd prefer to be prescribed buprenorphine
- Only 4% said buprenorphine was their drug of choice



Cicero et al 2018

# Barriers to treatment



Lack of training



Lack of providers



Providers accepting insurance



Provider office policies



Insurer policies



Stigma/misinformation




	Mutual Aid Meetings	In Public	With Clients	Medical Settings	Journalists
<b>Addict</b>	✓	STOP	STOP	STOP	STOP
<b>Alcoholic</b>	✓	STOP	STOP	STOP	STOP
<b>Substance Abuser</b>	STOP	STOP	STOP	STOP	STOP
<b>Opioid Addict</b>	✓	STOP	STOP	STOP	STOP
<b>Relapse</b>	✓	STOP	STOP	STOP	STOP
<b>Medication Assisted Treatment</b>	STOP	STOP	STOP	STOP	STOP
<b>Medication Assisted Recovery</b>	✓	✓	✓	✓	✓
<b>Person w/ a Substance Use Disorder</b>	✓	✓	✓	✓	✓
<b>Person w/ an Alcohol Use Disorder</b>	✓	✓	✓	✓	✓
<b>Person w/ an Opioid Use Disorder</b>	✓	✓	✓	✓	✓
<b>Long-term Recovery</b>	✓	✓	✓	✓	✓
<b>Pharmacotherapy</b>	✓	✓	✓	✓	✓

Language matters but can change depending on the setting we are in. Choosing when and where to use certain language and labels can help reduce stigma and discrimination towards substance use and recovery.



# Language matters in reducing stigma

 SOURCE: Ashford, R. D., Brown, A. M., & Curtis, B. (2018). Substance use, recovery, and linguistics: The impact of word choice on explicit and implicit bias. *Drug and Alcohol Dependence*, 189, 131-138.

# Summary

Medications are effective in reducing illicit opioid use but underutilized

Buprenorphine and methadone are most effective medications

Stigma and misinformation are significant barriers to medication

Many other barriers remain

# Facing Challenges Head On

Chris Smith MSN, RN

Director of Nursing

PORT Health

**Expanding Treatment Options**

# Medication Assisted Treatment (MAT): One Slice of the Pie

- The challenge requires an interdisciplinary group of leaders to activate a strategic plan
- Think of the community and as a pie. If multiple community stakeholders take a slice of pie, we will come a lot closer to cleaning our plate.

# Medication Assisted Treatment (MAT): One Slice of the Pie

- Many different sectors: judicial system, foster care system, health care systems, law enforcement, emergency medical services, schools faith-based organizations, treatment providers.
- Collaboration is easier if everyone
  - appreciates each slice as different, but part of the same pie
  - understands and respects what motivates each of them to be at the table
  - has a multi-pronged campaign to appeal to each of their differences to garner support for the pie from wherever they can get it.

# Medication Assisted Treatment (MAT): One Slice of the Pie

- Diabetes is the nation's seventh-leading cause of death, causing 79,500 deaths annually.
- Type 2 diabetes
  - often the result of poor choices over time
  - accounts for 90 to 95 percent of all cases.
  - Results in structural changes to vital organs and cells in the body (patients require insulin for the rest of their life)
- Diabetes is a serious, progressive and very costly disease.
- Prevention and treatment strategies are underway to bring evidence-based interventions into communities to reduce its prevalence.



# Medication Assisted Treatment (MAT): One Slice of the Pie

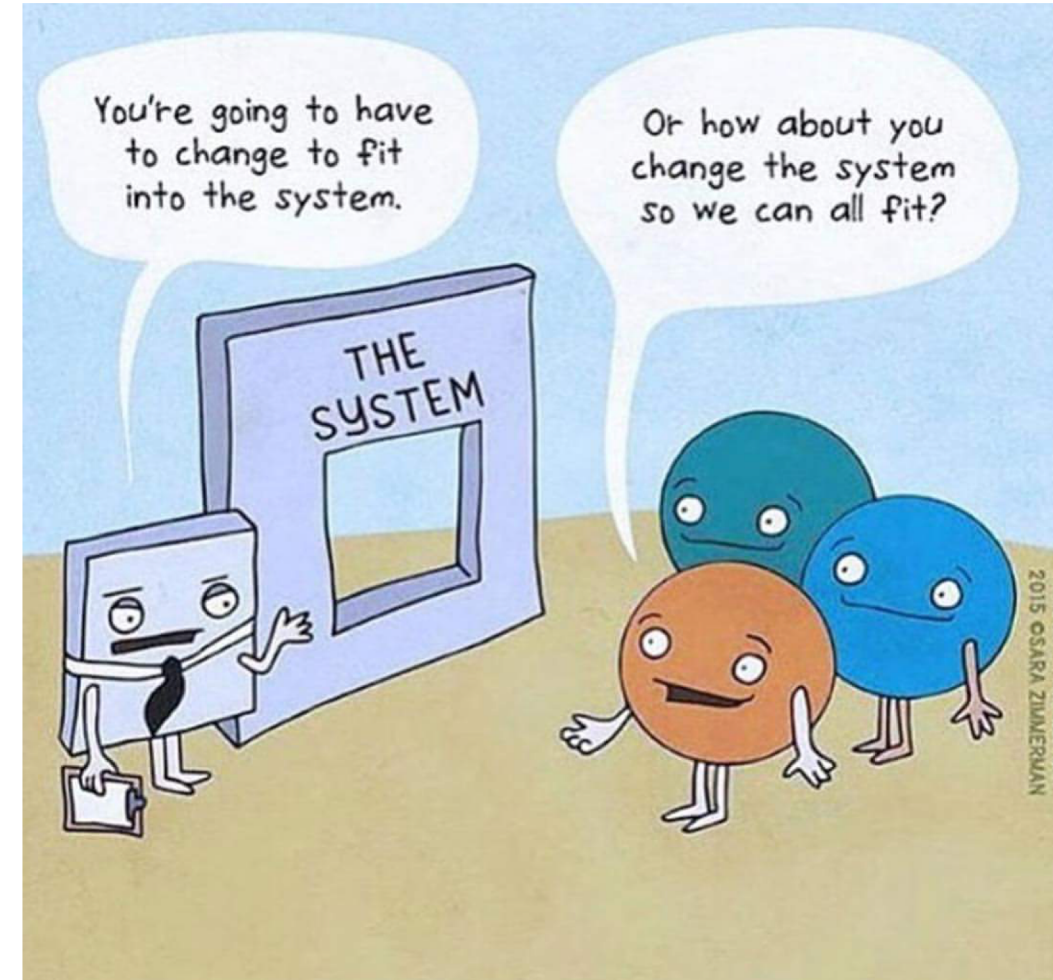
- Drug use makes critical changes in the way the brain functions and this creates what we call substance use disorder.
- Like type 2 diabetes, the patient's choices have led to the structural changes in the brain (instead of the kidneys) that includes a desensitization of reward pathways, increased stress reactivity, and changes in executive functioning.
- Disease: a disordered or incorrectly functioning organ, part, structure, or system of the body resulting from the effect of genetic or developmental errors, infection, poisons, nutritional deficiency or imbalance, toxicity or unfavorable environmental factors; illness; sickness or ailment.
- This explains why opiate use disorder is a chronic disease and MAT is very effective.

# Medication Assisted Treatment (MAT): One Slice of the Pie

- Understanding the science behind addiction allows us to approach it in the same way we do other chronic medical conditions
- Diabetic patients struggle to be compliant with the evidenced based recommendations from the American Diabetic Association (ADA) as much as a substance use patient struggles to be compliant with the evidenced based recommendations from Substance Abuse and Mental Health Services Administration (SAMHSA).

# Challenges are in “the way we’ve always done it”

- Challenge: Patients have difficulty following through with a plan if they don’t understand why this is the only way.
- Change:
  - We lay out ALL of the options out there for the patients, not just the ones we provide, in order to find a workable solution the patient believes in.
  - We find out what the real barriers are and attempt to find solutions, even outside of our wheelhouse.
  - It’s not an all or nothing scenario anymore.
  - The leaders are mentoring and role modeling this new way of thinking as much as possible.



# Our Communities Face Huge Financial Challenges

## Endocarditis

- Life-threatening bacterial valve infection that can destroy heart valves and spread throughout the body.
- Comes from using unsanitary needles to inject drugs.
- Endocarditis healthcare cost has increased 18 fold and according to the CDC, the cost for each hospitalization for endocarditis exceeds \$50,000.
- 42% of patients with drug dependence-associated endocarditis were either uninsured or on Medicaid, accounting for a total \$9.3 million in healthcare costs compared with only \$481,000 in 2010.

# Our Communities Face Huge Financial Challenges

## Hepatitis C

- Average lifetime cost of treatment for hepatitis C ranges from \$100,000-\$300,000.
- With 150,000 cases of hepatitis C, NC can expect to spend between \$15 and \$45 billion on treatment over the lifetime of these patients.

## HIV/AIDS

- An estimated 35,000 people living with HIV/AIDS in NC.
- Rate of new HIV infections in NC is 41% higher than the national rate.

**Medication Assisted Treatment provides HIV, hepatitis C and other communicable disease testing, counseling, education and treatment, improving the overall public health of the entire community. It is a way to prevent disease, promote health and significantly reduce healthcare costs.**

# MAT programs significantly reduces overdoses and helps control the rising healthcare costs

- Total cost for patients who experienced an opioid overdose resulted in \$1.94 billion in annual hospital costs across 647 healthcare facilities nationwide (according to January 2019 report by Premier Inc., a healthcare improvement company headquartered in Charlotte)
- 
- The average cost for an overdose patient:
  - Treated and released \$504.00
  - Treated and admitted \$11,731
  - Admitted to ICU \$20,500, plus generally longer lengths of stay with very low reimbursements

# North Carolina Opioid Action Plan

- Strategy number 5 from the NC Opioid Action Plan is to increase access to treatment and recovery. Although there is an abundance of evidence showing the effectiveness of medication assisted treatment with drugs like buprenorphine and methadone, there is still considerable stigma and there are still barriers to access.

- Managed Care Organizations (MCO)
- Rural areas/lack of transportation
- Provider Led Entities/New Managed Care for the standard and tailored plan
- Widespread misunderstanding of treatment options
- And more...

# Combating the Opioid Epidemic “A multifaceted approach to a multi-level problem”

Brandy Harrell, Director of behavioral health

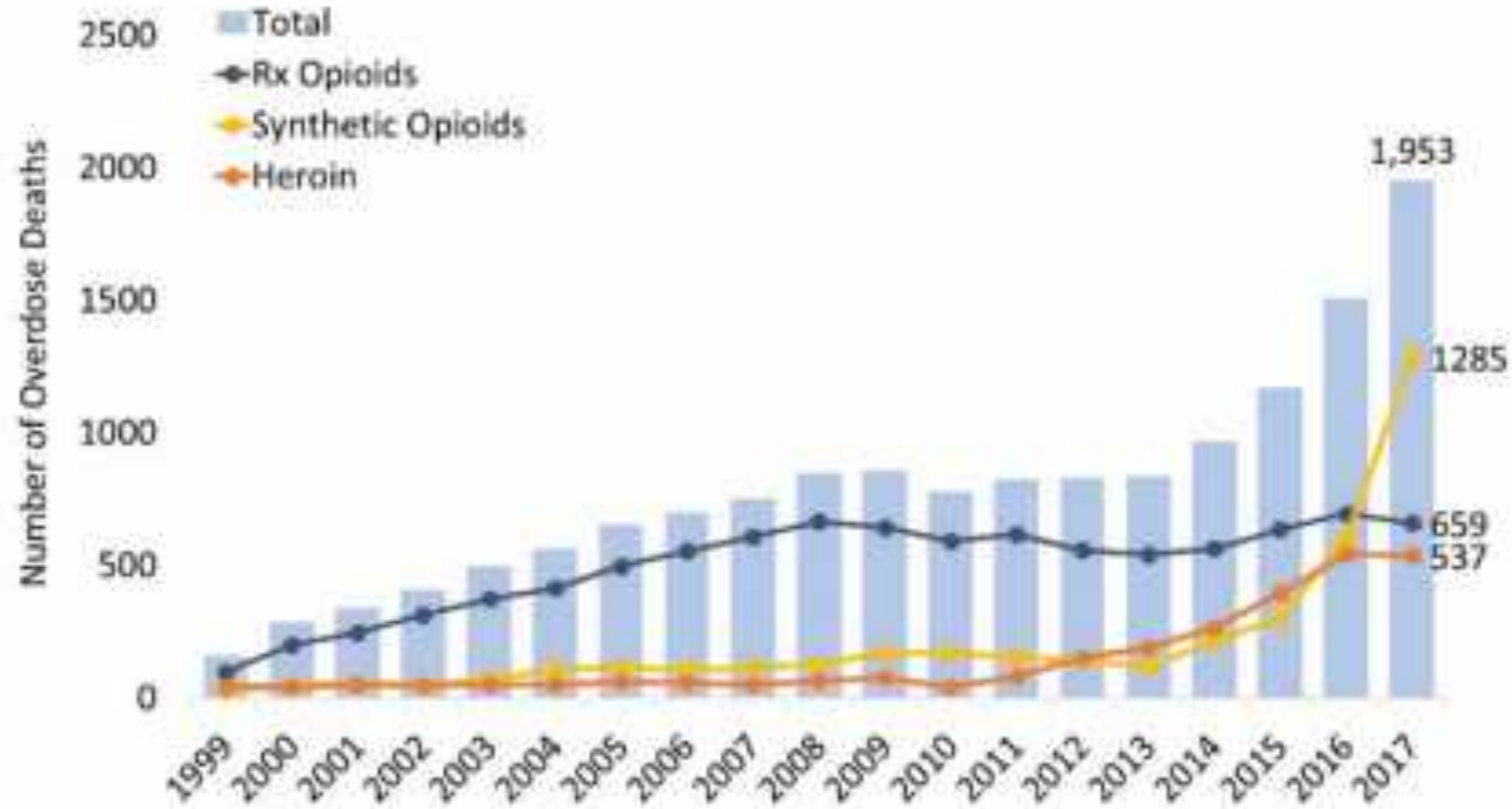
Kinston community health center, Kinston, North Carolina



# Understanding the Opioid Epidemic

- According to the National Institute on Drug Abuse, In 2017, there were 1,953 overdose deaths involving opioids in North Carolina a rate of 19.8 deaths compared to the average national rate of 14.6 deaths per 100,000 persons. The greatest rise occurred among deaths involving synthetic opioids other than methadone (mainly fentanyl), from 116 in 2013 to 1,285 deaths in 2017.

# Understanding the Opioid Epidemic



# Families are impacted

- LENOIR COUNTY

07-01-17 through 06-30-18

38 families with a new petition

91 children involved

47 children impacted by a substance use disorder

07-01-18 through 05-30-19

24 families with a new petition

57 children involved

35 children impacted by a substance use disorder

Data compiled by the 8th District Guardian ad Litem program. The petitions filed, children involved, and the number of children with one or more parent with a documented substance use disorder.

# Challenges for access to treatment

- Transportation issues
- Funding (lack of funding to aid the uninsured to pay for MAT prescriptions)
- Scarcity of qualified MAT treatment providers
- Stigma “substituting one drug for another”



# A multifaceted approach to a multi level problem

- Considering the complexity of the Opioid epidemic, the approach should be strategic and comprehensive
- Development of Community Frameworks to implement change
- Understanding the different language for communicating across systems such as Judicial, Local Management Entities (Managed Care Organizations, Government Officials, Law Enforcement, Medical Providers, Behavioral Health Providers and Emergency Medical Technicians (EMT))



# Efforts to Expand Treatment Options

- Increasing the number of Medication Assisted Treatment (MAT) Providers
- All providers, MD and Advanced level (PA, FNP) with receive education and complete the DATA 2000 wavier which permits physicians to treat opioid dependency
- MAT combined with behavioral therapy to help individuals sustain recovery
- Provide transportation via Outreach programs in the community
- Grant Funding for expansion of services

# Partnerships and collaborations to increase treatment

- Linkage to care- Eastpointe LME
- Enhanced Service providers Substance Abuse Intensive Outpatient and Substance Abuse Comprehensive Outpatient Treatment-Community providers
- Family Accountability and Recovery Court- 8<sup>th</sup> District -Chief District Court Judge
- County Commissioner
- Guardian Ad Litem
- Health Department

# Integrated Health Care

## A holistic approach to treatment

- Treating the individual, thinking of the big picture such as addressing the whole person, physical , mental, social environment and emotional well-being
- Kinston Community Health Center provides integrated health care in which our primary care team and behavioral health clinicians work together to treat the whole person





# Effectiveness of Treatment

- Goal of treatment is to return to productive functioning
- Treatment reduced drug use by 40–60%
- Treatment reduces crime by 40-60%
- Treatment increases employment prospects by 40%
- Drug treatment is as successful as treatment of diabetes, asthma, and hypertension

[www.drugabuse.gov](http://www.drugabuse.gov)



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NIDA  
NATIONAL INSTITUTE ON DRUG ABUSE

[www.drugabuse.gov](http://www.drugabuse.gov)

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**[melane.barber@ctcprograms.com](mailto:melane.barber@ctcprograms.com)**

# Treatment Challenges

## Access to Treatment

- Rural area
- Transportation
- Poverty
  - Medicaid reform/ expansion

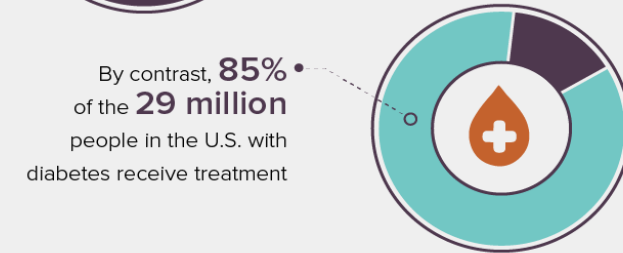


## SUBSTANCE USE DISORDERS



• **23 million** Americans (ages 12+) need treatment for substance abuse disorders

• Only **10%** receive the treatment they need



By contrast, **85%** of the **29 million** people in the U.S. with diabetes receive treatment

Sources: CDC, 2014; JAMA Psychiatry 2015  
© National Association of Addiction Treatment Providers • www.naatp.org

## Expanding Treatment

- OBOT (Office Based Opioid Treatment)
- Polysubstance use
- Emergency Department Induction
- Post Overdose Rapid Response

## Expanding Treatment Options

# Community Challenges

- Stigma
- Language of Recovery
- Harm Reduction
  - <http://www.nchrc.org>
- Qualified professionals



**stigma**  
/ 'stigmə/  
*noun*  
noun: stigma; plural noun: stigmata; plural noun: stigmas  
a mark of disgrace associated with a particular circumstance, quality, or person.  
"the stigma of mental disorder"

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# Partnerships

- Health Foundation
  - COPE TEAM



- Project Lazarus
  - Community Coalitions
  - Consortium HRSA Planning Grant



- MAT PDOA Grant

# Collaborations

- NC ATOD
  - Total Opioid Treatment Programs in NC: 74
  - Patients Receiving MAT in OTP: 19,150



North Carolina Association for the Treatment  
of Opioid Dependence

A promotional poster for the NCATOD conference. The background is dark blue with a large, colorful, abstract graphic on the left side. The text is white and yellow. The top right corner says 'SAVE THE DATE'. The center features the 'NCATOD' logo and the text 'INVITES YOU TO JOIN THE VOICES FOR RECOVERY AT THE CONFERENCE'. Below that, it says 'FOR BEST PRACTICES IN OPIOID TREATMENT'. The bottom left corner lists the organization's name, and the bottom right corner lists the dates and location: 'September 12th &amp; 13th Greensboro, NC' and 'NCATOD.org'. At the very bottom, it says 'TOGETHER WE ARE STRONGER'.

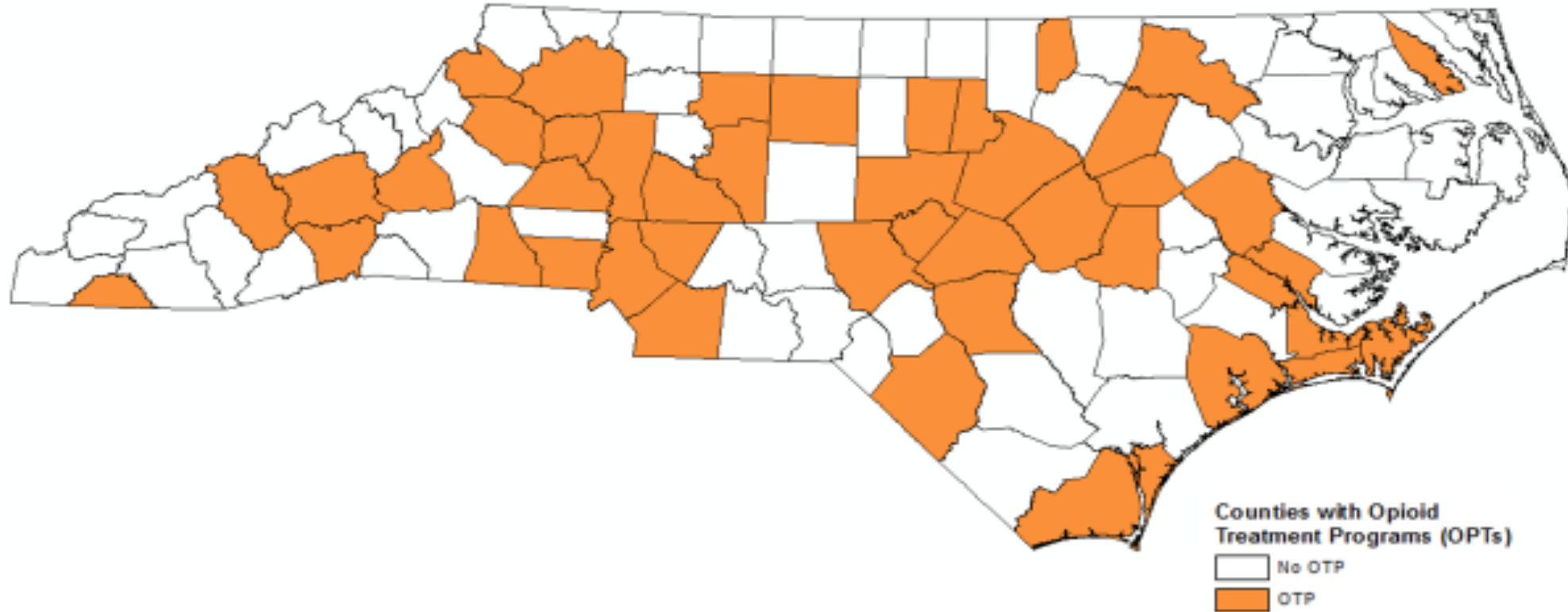
North  
Carolina  
Association  
for the  
Treatment  
of Opioid  
Dependence

September 12<sup>th</sup> & 13<sup>th</sup>  
Greensboro, NC

[NCATOD.org](http://NCATOD.org)

TOGETHER WE ARE STRONGER

# NC Opioid Treatment Programs (OTPs)



Source: Lighthouse Central Registry-NC data; OTP Census 12/1/2018; Analysis by Injury Epidemiology and Surveillance Unit

NCDHHS, Division of Public Health | Opioid Treatment Programs | December 2018

1

**Evaluation link** [https://unc.az1.qualtrics.com/jfe/form/SV\\_cN3RkuTFxIpWxCd](https://unc.az1.qualtrics.com/jfe/form/SV_cN3RkuTFxIpWxCd)

