Presentation from the CDUHR Symposium: Strategies to Improve OUD Treatment Systems - April 9, 2024. DO NOT DISTRIBUTE OR POST TO OTHER WEBSITES WITHOUT PERMISSION FROM DR. ASHLY JORDAN



Office of Addiction Services and Supports

KATHY HOCHUL Governor

CHINAZO CUNNINGHAM, MD Commissioner

OASAS. Every Step of the Way.

Expanding equitable methadone treatment in New York State

Ashly Jordan, PhD, MPH Director of Research and Program Evaluation, NYS OASAS

Center for Drug Use and HIV/HCV Research, Tuesday April 9, 2024

Outline

- Methadone treatment in New York State (NYS)
- Preventative effectiveness of methadone treatment
- State and Federal policy changes impacting methadone treatment
- Leveraging recent policy changes at NYS Office of Addiction Services and Supports

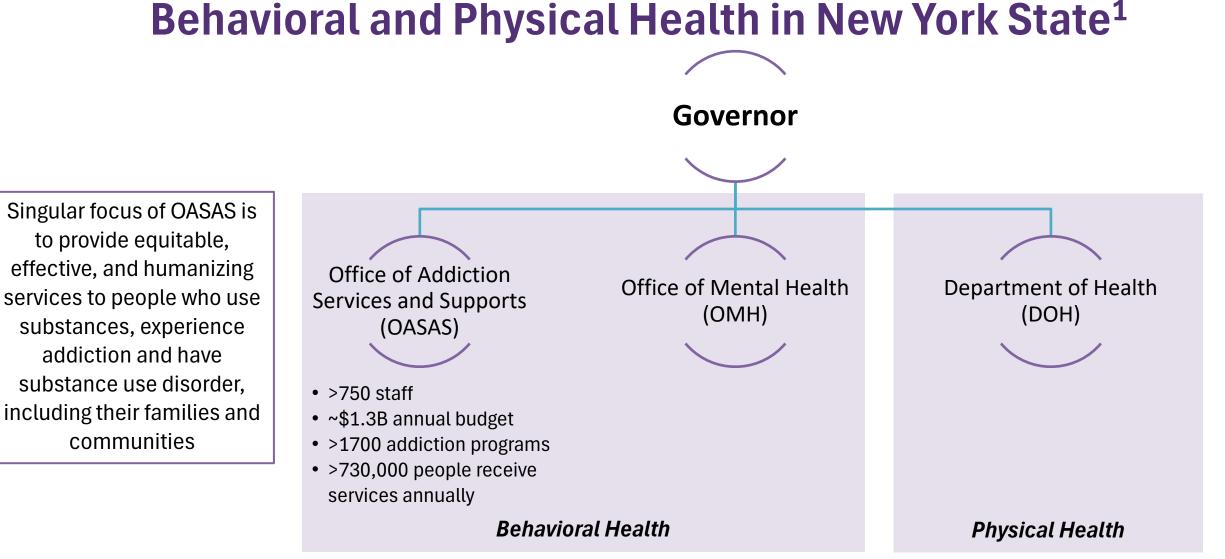
Please see our inaugural Addiction Data Bullet No. 2023-01 (Jette, et al.) for descriptive statistics of our system of care.

Office of Addiction Services and Supports Addiction Data Bulleti September 2023, No. 2023-0 New York State Substance Use Disorder Treatment Service System PURPOSE OF THIS BULLETIN This bulletin provides a summary of New Yorkers who received treatment for substance use disorder (SUD) in programs and services overseen by the New York State Office of Addiction Services and Supports (OASAS) in 2022. **KEY TAKEAWAYS** Most SUD treatment admissions in 2022 were among Recent data indicate that 2.8 million New Yorkers those living in the Upstate New York region (47.2%). aged 12 years and older had a SUD in the past year followed by those living New York City (38,7%) and Provisional data indicate that 6,358 New York State Long Island (14.1%) residents died of a drug overdose in 2022 and 2,003 · 48.6% of individuals admitted to SUD treatment in died from alcohol-related causes. 2022 identified as White, followed by Black (24,5%) Of individuals admitted to SUD treatment in 2022, the and Hispanic (21.8%). plurality (39.5%) were admitted into outpatient Of primary substances of use reported at admission i treatment. 2022, alcohol was the most common (45,9%) followed · Of all individuals receiving SUD treatment in 2022, by heroin (23.9%). Compared to other races and 40.7% received treatment at an opioid treatment ethnicities, Black individuals had the highest percent program (OTP) of admissions for alcohol use (52,3%). Hispanic and White individuals had the highest percent of Of individuals admitted to SUD treatment in 2022. admissions for heroin use (29.5% and 26.1%, 72.0% were male and 27.9% were female. respectively) compared to Black individuals Of individuals admitted to SUD treatment in 2022. Among all SUD treatment admissions between 2017 half (52.4%) were aged 25-44 years: the next largest and 2022, primary substance used at admission age group was those aged 55 years and older (20.6%). increased by 21.8% for alcohol and decreased by followed by individuals aged 45-54 years (19.3%) and 24.4% for heroin those aged 24 years and younger (7.7%) SUBSTANCE USE DISORDERS IN NEW YORK STATE As described by the Substance Abuse and Mental Health Services Administration (SAMHSA)¹, SUDs "occur when the recurrent use of alcohol and/or drugs causes clinically significant impairment, including health problems, disability, and failure to meet major responsibilities at work, school, or home." Estimates from the 2021 National Survey on Drug Use and Health (NSDUH) indicate that 2.8 million New Yorkers aged 12 years and older had a SUD in the past year. SUDs are associated with numerous potential adverse impacts to the health and well-being of an individual as well as their family and community. One of the most serious SUD-related outcomes is death due to drug overdose. According to provisional data from the CDC[®] in 2022, 6.358 New York State residents died of a drug overdose. Opioids were a primary or contributing factor in 84.3% of drug overdose deaths, 92.3% of opioid-related drug overdose deaths included synthetic opioids such as fentanyl; synthetic opioids were present in 77.9% of drug overdose deaths overall. Provisional CDC data indicated that 2,003 New York residents died from alcohol-related causes in 2022.⁸



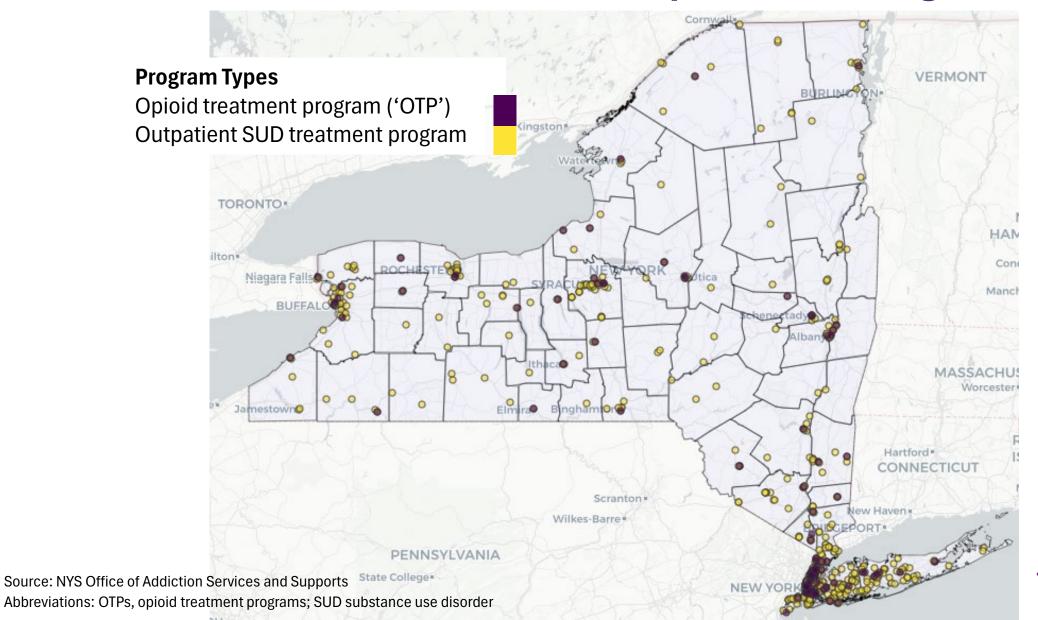
Methadone Treatment in New York State





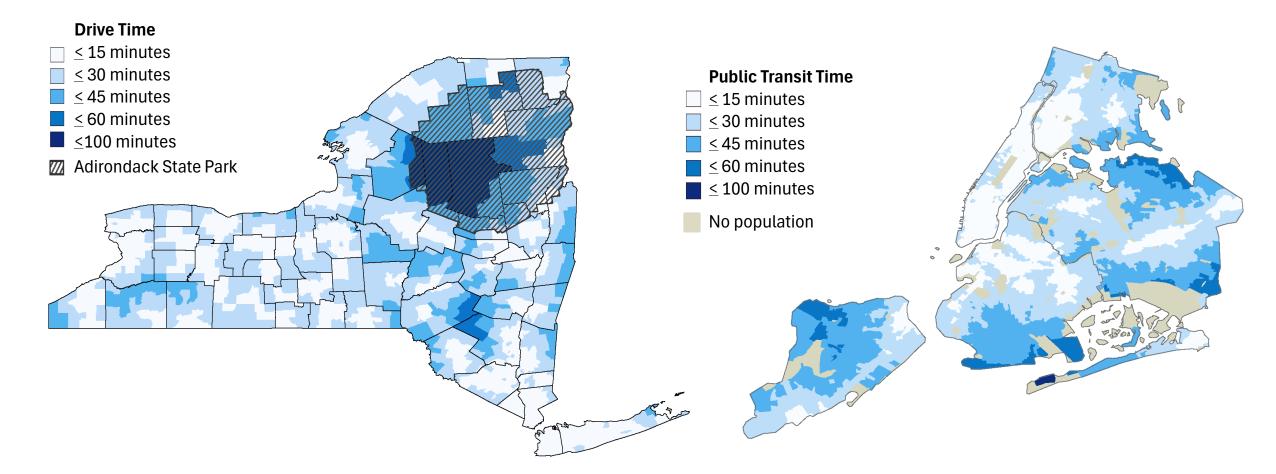


Access as Number of OTPs and Outpatient SUD Program Locations





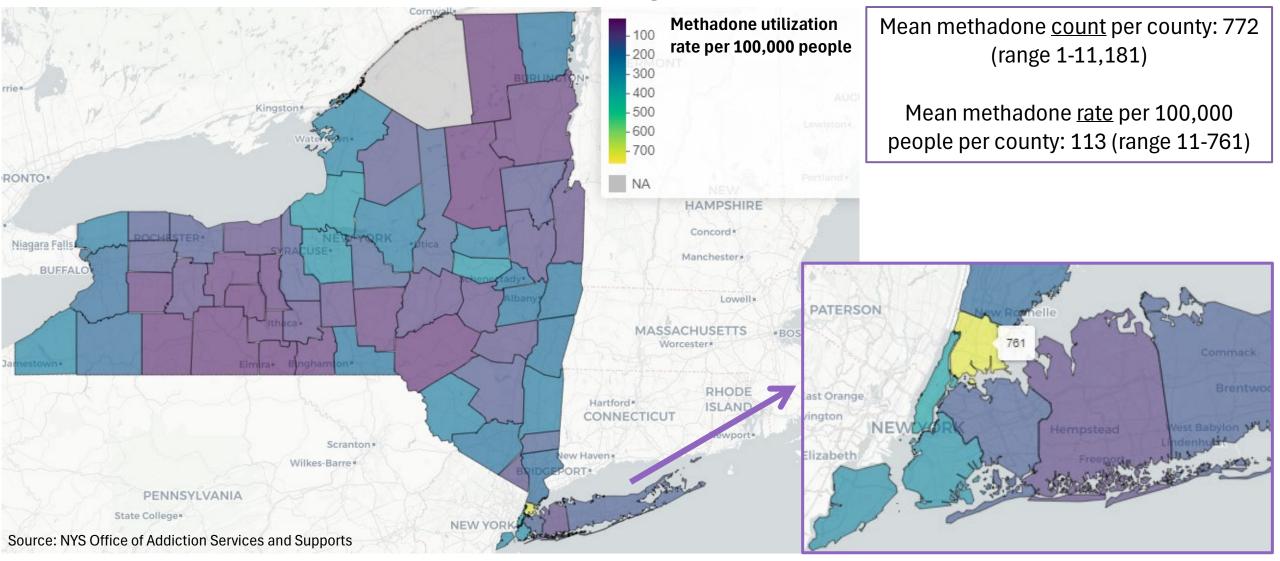
Access as Transportation Time to OTPs and Outpatient SUD Programs



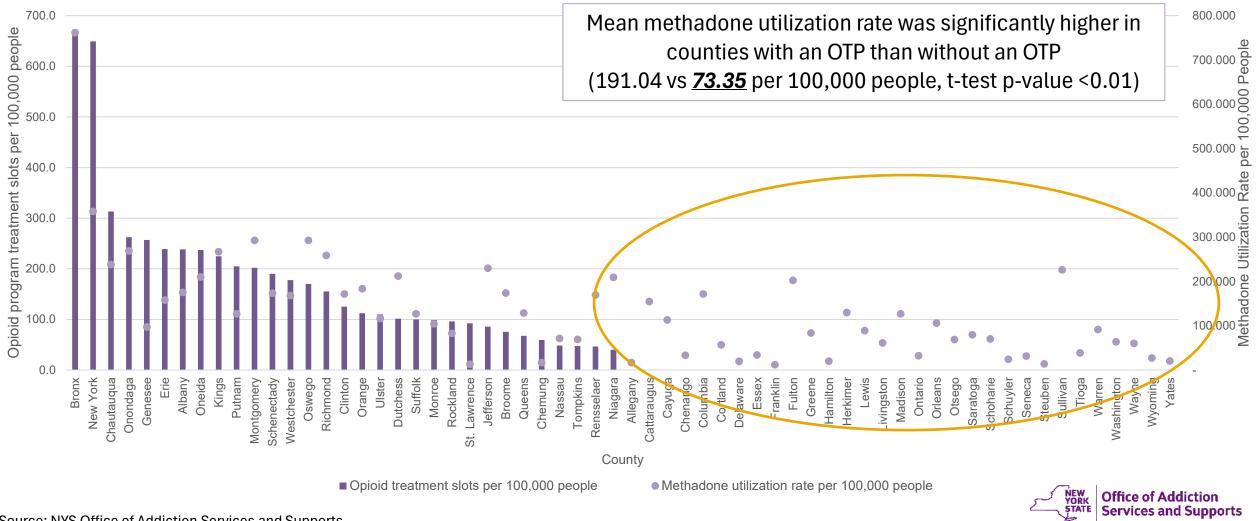
~98% of the NYS population lives within 30-minutes of an OTP or Outpatient SUD program

Source: NYS Office of Addiction Services and Supports Abbreviations: OTPs, opioid treatment programs; SUD, substance use disorder

Utilization (Actualized Access) of Methadone Treatment by Patient County of Residence



Interplay Between Area-Level Access and Individual-Level Utilization of Methadone Treatment



Source: NYS Office of Addiction Services and Supports

Abbreviations: MOUD, medication for opioid use disorder; OTP, opioid treatment program; OUD, opioid use disorder; SUD, substance use disorder

OASAS. Every Step of the Way

A Longitudinal Care Continuum of New Yorkers with Medicaid and New Opioid Use Disorder Diagnosis, 2016-2019

Goal: Estimate the OUD care continuum for all New Yorkers with Medicaid and new OUD

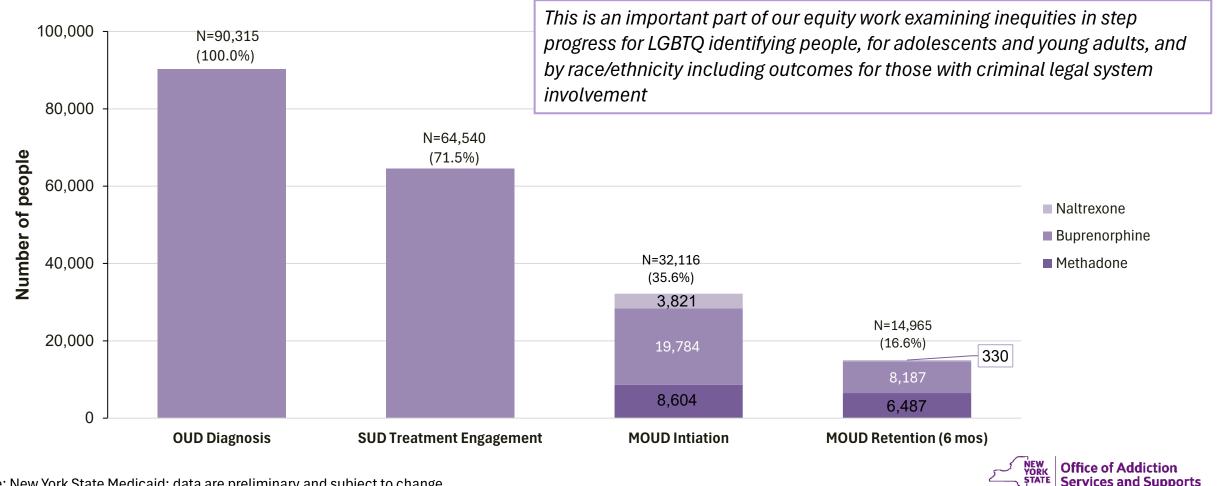
Design: Retrospective longitudinal cohort study with 18-month follow-up

- Data source: New York State Medicaid data
- **Population**: 18-63.5 years old, new OUD diagnosis, had continuous Medicaid
- Study period: 2/1/16-2/31/19

Outcomes: Completion of each step: 1) engaged in SUD treatment, 2) initiated medication for OUD (MOUD; methadone, buprenorphine or naltrexone), and 3) MOUD retention for 6 continuous months

Analysis: Proportions completing each step using a constant denominator to estimate the overall impact of cumulative losses

Those Initiating MOUD Were Significantly More Likely to Be Retained in Treatment at 6 Months Compared to Buprenorphine



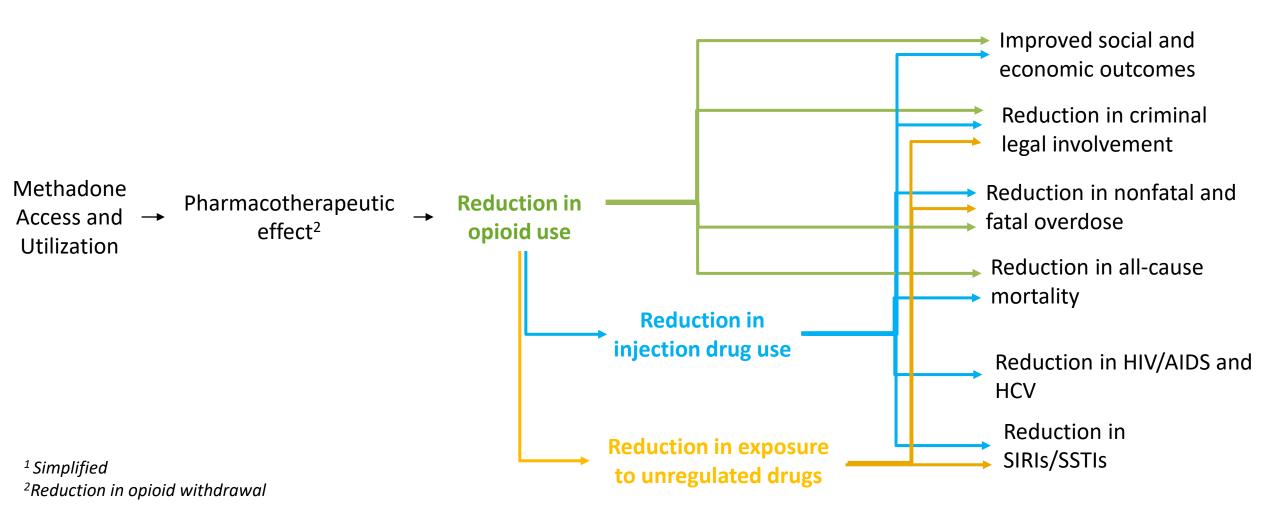
Source: New York State Medicaid; data are preliminary and subject to change Abbreviations: mos, months; MOUD, medication for opioid use disorder; OUD, opioid use disorder; SUD, substance use disorder

OASAS. Every Step of the Way.

Preventative Effectiveness of Methadone Treatment for Opioid Use Disorder



Pathways of Methadone Treatment Effectiveness¹



Abbreviations: HCV, hepatitis C virus; SIRIs, serious injection-related infections; SSTIs, skin and soft tissue infections Citations: Dole & Nyswander, 1965; Kreek, 1976; Newman, 1979; Des Jarlais, 1984; Novick, 1994; Platt, 2016; Jordan, 2020 Office of Addiction Services and Supports

OASAS. Every Step of the Way.

HCV Seroconversion in a Retrospective Longitudinal Cohort of People Receiving Methadone Treatment

Study Design: Retrospective longitudinal open cohort

Population: People receiving methadone treatment for OUD

Setting: All 11 NYC OTPs at Beth Israel Medical Center (now Mount Sinai)

Timeframe: 1/1/2013 – 12/31/2016

Data sources: OASAS, Avatar and Beth Israel EMRs, commercial laboratory data

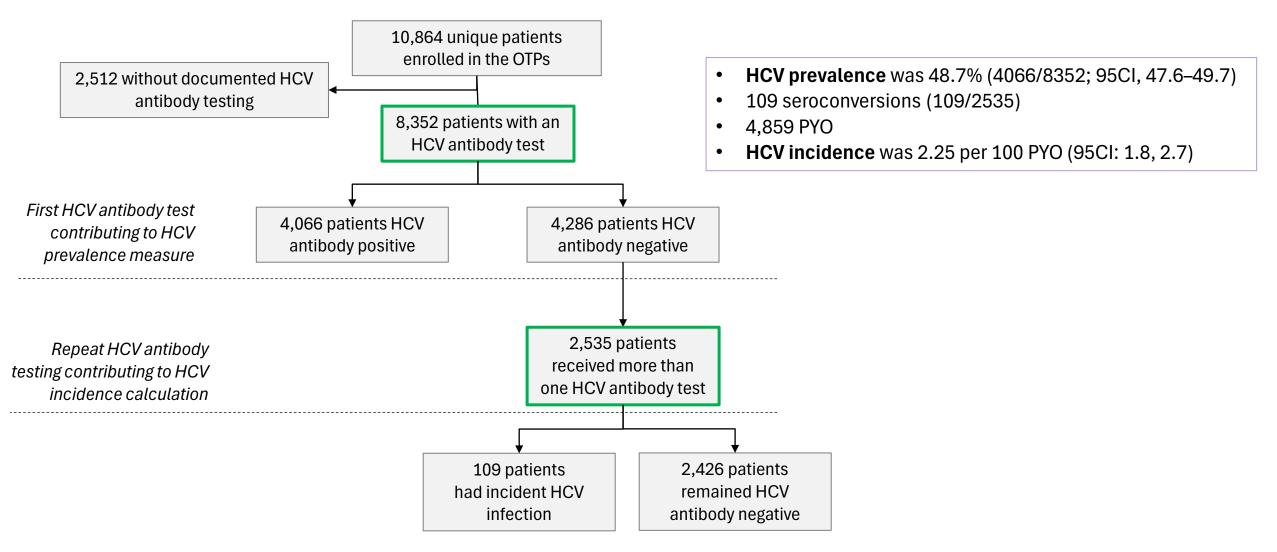
Exposure: Time in methadone treatment

Outcome: Incident HCV infection (antibody seroconversion)

Data analysis: Survival analyses using Kaplan-Meier and Cox proportional hazard models

Abbreviations: EMR, electronic medical record; HCV, hepatitis C virus; NYC, New York City; OTPs, opioid treatment programs; OUD, opioid use disorder Jordan AE, et al (2020) Hepatitis C Virus (HCV) Care Continuum Outcomes and HCV Community Viral Loads Among Patients in an Opioid Treatment Program. J Infect Dis doi: 10.1093/infdis/jiz686 Jordan AE, et al (2020). Hepatitis C Virus Incidence in a Cohort in Medication-Assisted Treatment for Opioid Use Disorder in New York City. J Infect Dis. doi: 10.1093/infdis/jiz659

Cohort Derivation Chart of Study Population



Abbreviations: HCV, hepatitis C virus; NYC, New York City; OTPs, opioid treatment programs; OUD, opioid use disorder

Jordan AE, et al (2020) Hepatitis C Virus (HCV) Care Continuum Outcomes and HCV Community Viral Loads Among Patients in an Opioid Treatment Program. *J Infect Dis* doi: 10.1093/infdis/jiz686 Jordan AE, et al (2020). Hepatitis C Virus Incidence in a Cohort in Medication-Assisted Treatment for Opioid Use Disorder in New York City. *J Infect Dis*. doi: 10.1093/infdis/jiz659

Key Findings

- Components of quality methadone treatment were significantly and independently associated with higher HCV seroconversion
 - Methadone doses <60mg (aHR: 1.52, 95Cl: 1.03, 2.24)
 - Discontinuous methadone treatment (aHR: 1.01, 95Cl: 1.00, 1.02)
- Ensuring high quality methadone treatment is needed to enhance the preventative effectiveness of methadone treatment
 - Findings point to addressing underdosing at the patient-/provider-/program-level
 - Findings point to addressing discharge criteria

Abbreviations: HCV, hepatitis C virus; NYC, New York City; OTPs, opioid treatment programs; OUD, opioid use disorder

Jordan AE, et al (2020) Hepatitis C Virus (HCV) Care Continuum Outcomes and HCV Community Viral Loads Among Patients in an Opioid Treatment Program. J Infect Dis doi: 10.1093/infdis/jiz686 Jordan AE, et al (2020). Hepatitis C Virus Incidence in a Cohort in Medication-Assisted Treatment for Opioid Use Disorder in New York City. J Infect Dis. doi: 10.1093/infdis/jiz659

Methadone Dosing Schedules Among NYS OTP Patients Before and After Federal Dosing Regulation Changes

Goal: Examine patterns in methadone dosing schedules from NYS OTPs before and after initial temporary revisions to federal methadone dosing regulations were put in place

Design: Retrospective cohort study

Population: Patient dosing schedules in all 99 NYS OTPs

Timeframe: Baseline period (02/2020) and period after policy revisions (05/2020-08/2021)

Data sources: OASAS client data and OASAS/NYC DOHMH administered weekly OTP surveys

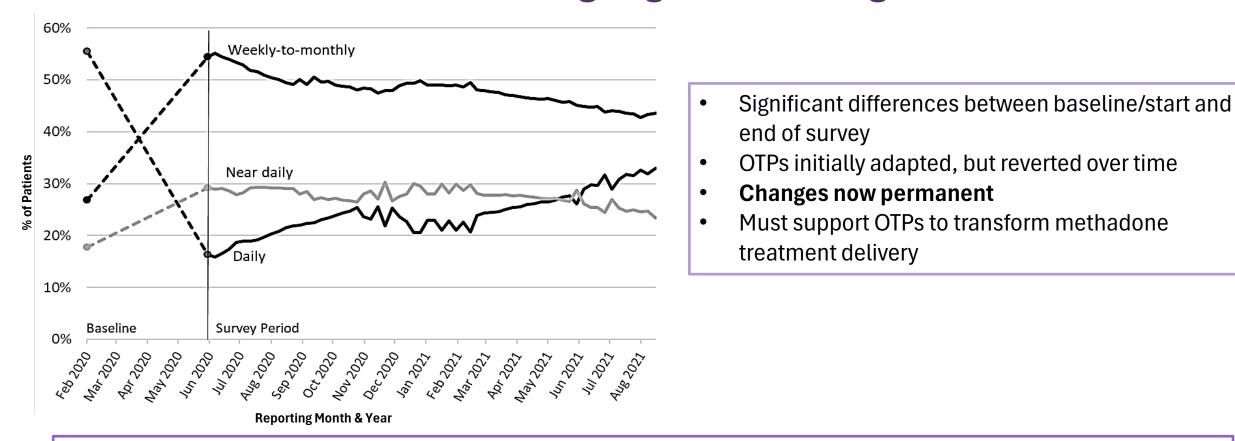
Exposure: Policy change (regulatory and financing changes) facilitating flexible methadone dosing schedules

Outcome: Changes in methadone dosing schedules over time

Analyses: Trend analyses using chi-square tests and Poisson regression



Methadone Dosing Schedules Among NYS OTP Patients Before and After Federal Dosing Regulation Changes



Showed Initial Progress but Did Not Sustain Methadone Treatment Delivery Changes

Jordan AE et al (2024). Drug Alcohol Depend In Press.

Abbreviations: OTP, opioid treatment program

"Weekly-to-monthly" schedules of weekly or less frequently; "Near daily" schedules of 2-4 days per week; "Daily" schedules of 5-7 days per week

Unintentional Drug Overdose Deaths Following SUD Treatment Termination (2016-2019)

Goal: To determine the probability of unintentional drug overdose death in the 3-month period following SUD treatment termination

- **Design**: Retrospective longitudinal cohort study
- **Population**: 51,171 NYC residents with OUD who had SUD treatment termination (for any reason) between 2016-2019
- Data sources: NYS OASAS and NYC OCME
- Exposure: SUD treatment termination
- Outcome: Unintentional drug overdose death
- Analyses: Survival analysis, Cox Proportional Hazards Model

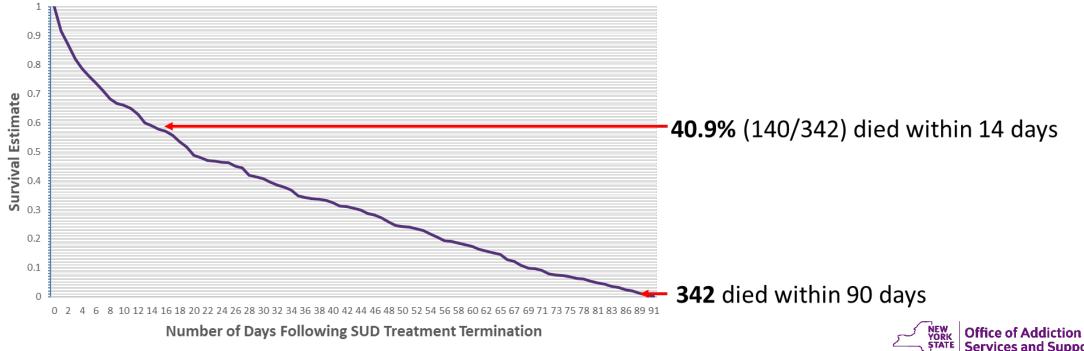


Jordan, et al (2024) Under review

Abbreviations: NYC, New York City; NYS, New York State; OCME, Office of Chief Medical Examiner; OUD, opioid use disorder; SUD, substance use disorder

Unintentional Drug Overdose Deaths Following SUD Treatment Termination, NYC (2016-2019)

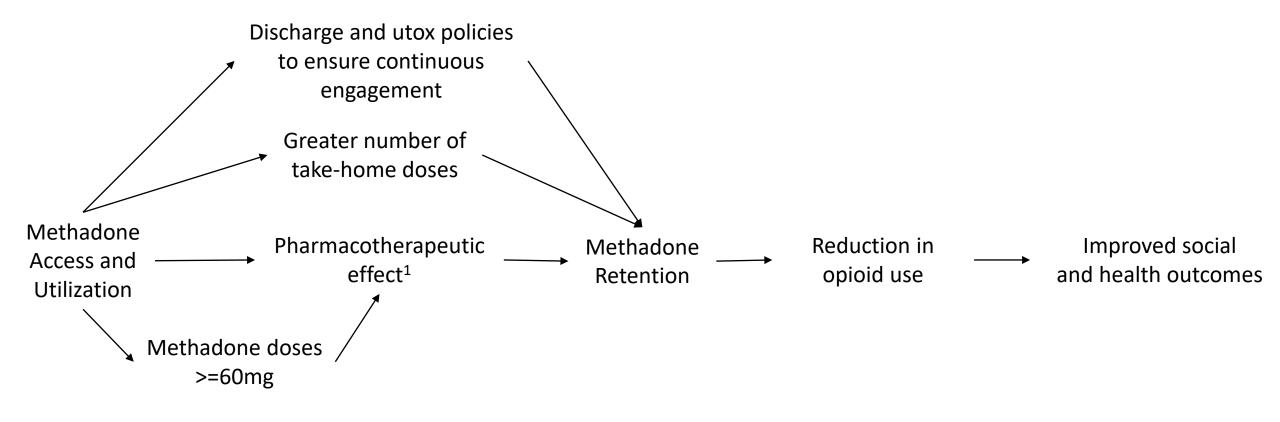
- 342 overdose deaths occurred in the 90 days following SUD treatment termination
- Median number of days to death was 20 days (IQR, 43 days)
- 6.6 drug overdose deaths per 1,000 treatment terminations
- ~2,604 overdose deaths per 100,000 people



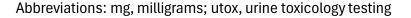
Jordan et al (2023), AMERSA conference presentation, Washington DC Abbreviations: interquartile range (IQR); New York City (NYC); substance use disorder (SUD)

OASAS, Every Step of the Way

Improving the Quality of Methadone Treatment to Increase Individual- and Population-Level Effectiveness



¹Reduction in opioid withdrawal

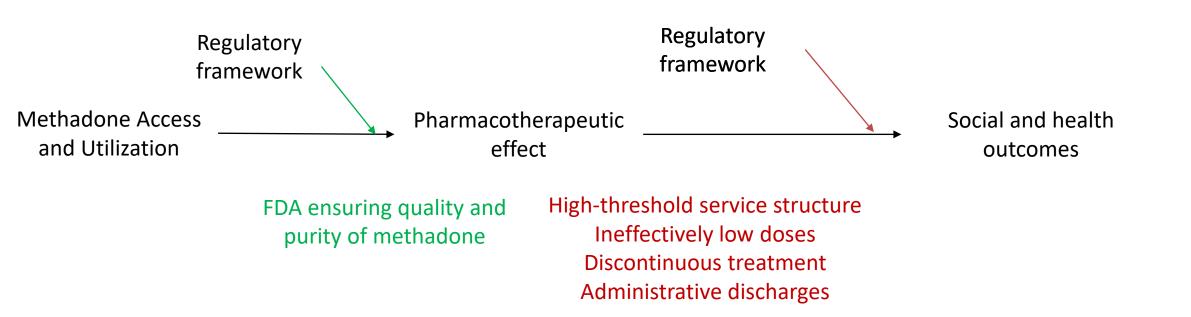




State and Federal Policy Changes Impacting Methadone Treatment



New Regulatory Framework Can Enhance the Population-Level Effectiveness of Methadone

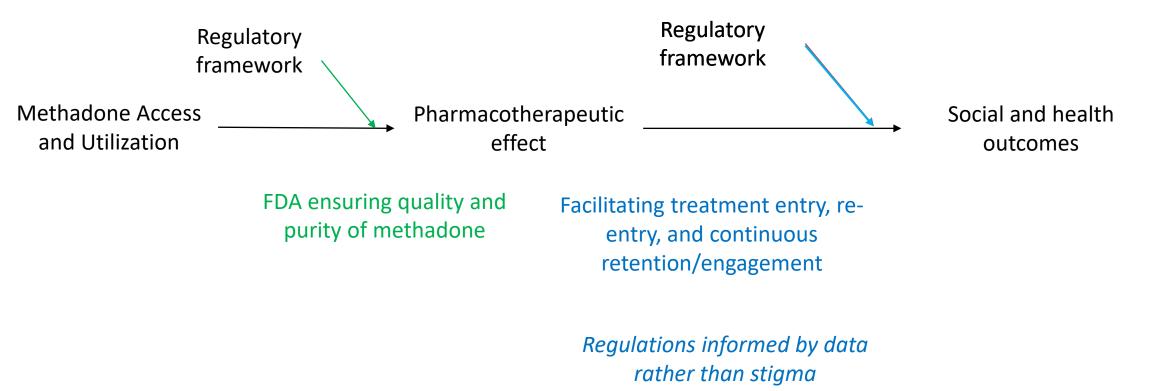




Abbreviations: FDA, food and drug administration; SAMSHA, Substance Abuse and Mental Health Services Administration Citations: Dole & Nyswander, 1965; Kreek MJ, 1976; Newman RG, 1979; Des Jarlais, 1984; Novick, 1994; Jordan, 2020

New Regulatory Framework Can Enhance the Population-Level Effectiveness of Methadone

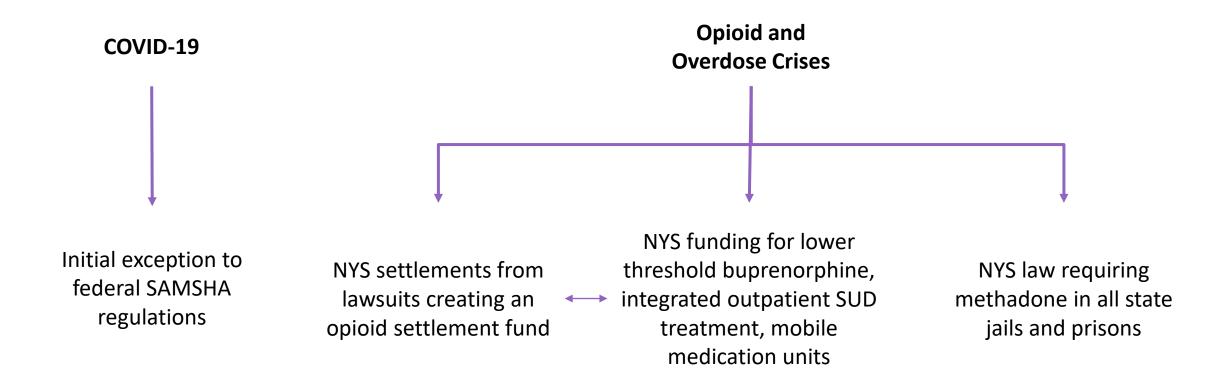
Revised SAMSHA regulations



Office of Addiction Services and Supports OASAS. Every Step of the Way.

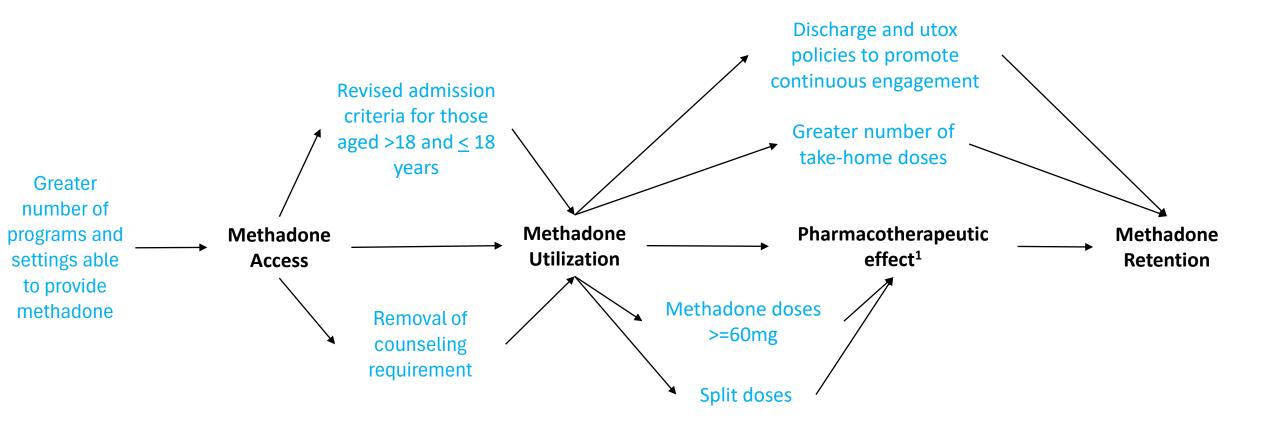
Abbreviations: FDA, food and drug administration; SAMSHA, Substance Abuse and Mental Health Services Administration Citations: Dole & Nyswander, 1965; Kreek MJ, 1976; Newman RG, 1979; Des Jarlais, 1984; Novick, 1994; Jordan, 2020

Big Events Leading to State and Federal Policy and Funding Changes: Fundamental and Sustainable Impacts on Methadone Treatment





Pathways for Methadone Treatment Effectiveness Now Modifiable due to Revised Federal SAMSHA Regulations





¹Reduction in opioid withdrawal Abbreviations: mg, milligrams; utox, urine toxicology testing

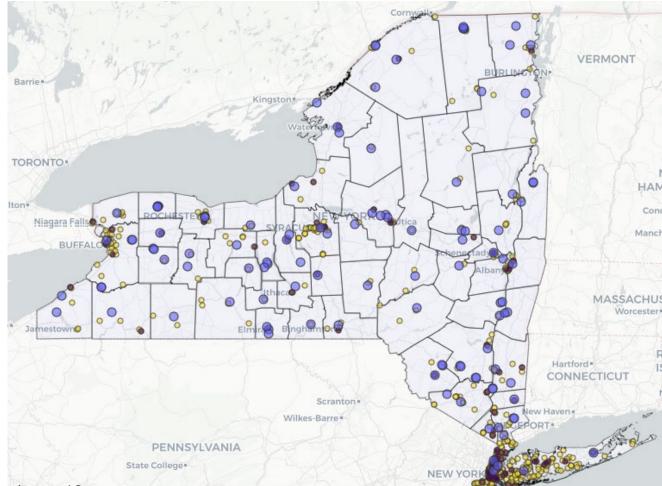
NYS Enacted Legislation Requiring Medication for Opioid Use Disorder in All State Jails and Prisons

- In October 2022, NYS enacted legislation requiring all three FDA-approved medications for OUD treatment
 - Applies to all 44 prisons and 58 jails have implemented all three FDA-approved medications for OUD treatment
- Largest implementation of MOUD in a state carceral system in the US
- Approach is consistent with the rights guaranteed under the Fourteenth Amendment and the Americans with Disabilities Act
- Given the structural racism embedded in the carceral system, and the structural racism embedded in the opioid epidemic, implementing this legislation is a great opportunity to further anti-racist equity work

Abbreviations: FDA, food and drug administration; HCV, hepatitis C virus; MOUD, medication for opioid use disorder; OUD, opioid use disorder; SIRIs, serious injection-related infections; SSTIs, skin and soft tissue infections; SUD, substance use disorder



Largest Implementation of Medication for Opioid Use Disorder in a State Carceral System in the US



Program Types

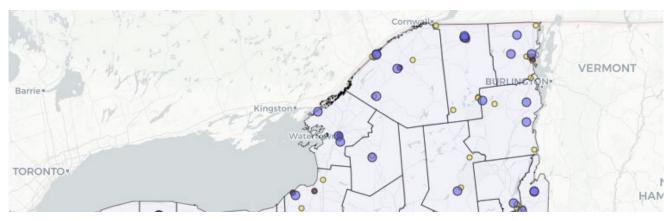
Opioid treatment program ('OTP') Outpatient SUD treatment program **Expanded Methadone Access** NYS Jails and Prisons

Source: NYS Office of Addiction Services and Supports

Abbreviations: hepatitis C virus; MOUD, medication for opioid use disorder; OUD, opioid use disorder; SIRIs, serious injection-related infections; SSTIs, skin and soft tissue infections; SUD, substance use disorder



Largest Implementation of Medication for Opioid Use Disorder in a State Carceral System in the US



Program Types

Opioid treatment program ('OTP') Outpatient SUD treatment program **Expanded Methadone Access** NYS Jails and Prisons

Unprecedented opportunity to:

- Ensure equitable access to MOUD during and through periods of incarceration
- Ensure continuity bridge to community treatment following periods of incarceration
- Reduce overdose deaths and other harms such as HCV, HIV, and SSTIs/SIRIs



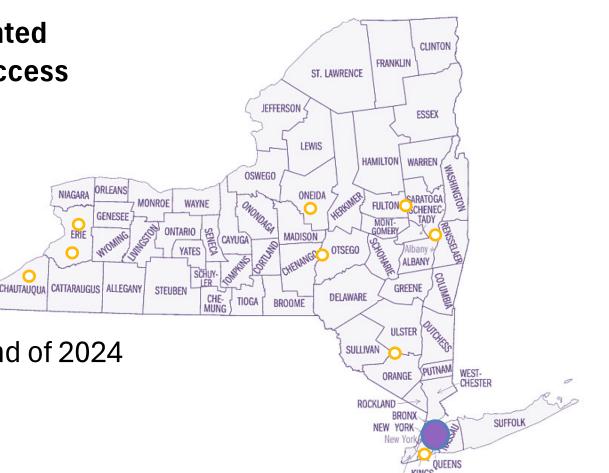
Source: NYS Office of Addiction Services and Supports

Abbreviations: hepatitis C virus; MOUD, medication for opioid use disorder; OUD, opioid use disorder; SIRIs, serious injection-related infections; SSTIs, skin and soft tissue infections; SUD, substance use disorder



Mobile Medication Units

- The DEA released a rule expanding methadone access by allowing OTPs to create mobile medication units
- New York is the first state to launch a coordinated statewide investment in mobile methadone access
- Services include (but are not limited to):
 - Methadone admissions and dosing
 - Buprenorphine admissions and dispensing
 - Clinical services including wound care
 - Harm reduction counseling and supplies
 - Peer-delivered services
- Total of 11 mobile medication units in NYS by end of 2024
 - 2 currently operational
 - 9 planned •



Integrated Outpatient Substance Use Disorder Treatment Programs

- Expand methadone access by integrating OTP program services into existing outpatient SUD treatment
 - Focus on areas with limited access to MOUD
- Since 2022, through this new program mechanism, the number of NYS counties without opioid treatment program services has decreased from 32 to 21
- 24 new integrated outpatient SUD treatment programs have opened since 2021
 - An additional 26 opening within the next 12-18 months

Evaluation of Current Programs and Impact of New Initiatives Over Time

- **Using** quantitative and qualitative methods
- **Prioritizing** implementation science and process evaluation
- Analysis plans include both effectiveness and comparative effectiveness
- Equity both population-based and geographic access
- Diverse outcomes over time
 - Mortality (e.g., drug overdose deaths)
 - Changes in substance use, housing status, employment status over time
 - Other outcomes in collaboration with other agencies
- <u>A key priority</u> is to evaluate methadone access and utilization, and individual-, population-level effectiveness



Research Projects Funded by the National Institutes of Health

Project Title	Grant	Principal Investigators
Coaching performance driven practice change in the context of value-based purchasing under New York Medicaid	R61/R33	C. Neighbors (NYU) P. Lincourt (OASAS)
Addictions treatment organizational response to COVID-19: impact on disparities in quality of care	R01	C. Neighbors (NYU)
Organizational factors associated with quality of care for opioid use disorder among transition- age adults in Medicaid	R01	C. Neighbors (NYU)
Leveraging regulatory flexibility for methadone take-home dosing to improve retention in treatment for opioid use disorder: A stepped-wedge randomized trial to facilitate clinic level changes	R61/R33	C. Neighbors (NYU) Y. Bao (Cornell) A. Jordan (OASAS)
Person-centered quality measurement and management in a system for addictions treatment in New York State	RM1	C. Neighbors (NYU) P. Lincourt (OASAS) C. Burke (OASAS)
Implementation of Mobile Medication Units for Patients with opioid use disorder in New York	R21	B. Saloner (JHU) A. Jordan (OASAS)

Conclusion

Office of Addiction STATE Office of Addiction Services and Supports OASAS. Every Step of the Way.

Conclusion

- The opioid overdose crisis prompts an urgent need for improved methadone treatment systems
- Aspects of methadone access and utilization, components of quality methadone treatment are modifiable at the population-level
- Federal methadone regulation changes represent a sustainable and unprecedented opportunity transform methadone treatment delivery and improve quality treatment
- NYS OASAS is leveraging both federal regulations and concomitant State-level structural and fundings changes to fundamentally and sustainably improve access, utilization, retention, and outcomes for those with OUD



OASAS. Every Step of the Way.



Thank you

Contact Information Ashly Jordan Ashly.Jordan@oasas.ny.gov

