

A Clinical and Research Agenda for Improving OUD Treatment for Young Adults

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ASAM 2023

Disclosures

- Dr Fishman has been a consultant for Alkermes, Indivior, Drug Delivery LLC, received research funding from Alkermes
- Dr. Levy serves as an expert consultant on the legal case against JUUL and on a legal case involving cannabis dispensaries
- Dr. Hogue has no disclosures to report
- Dr Wenzel has no disclosures to report

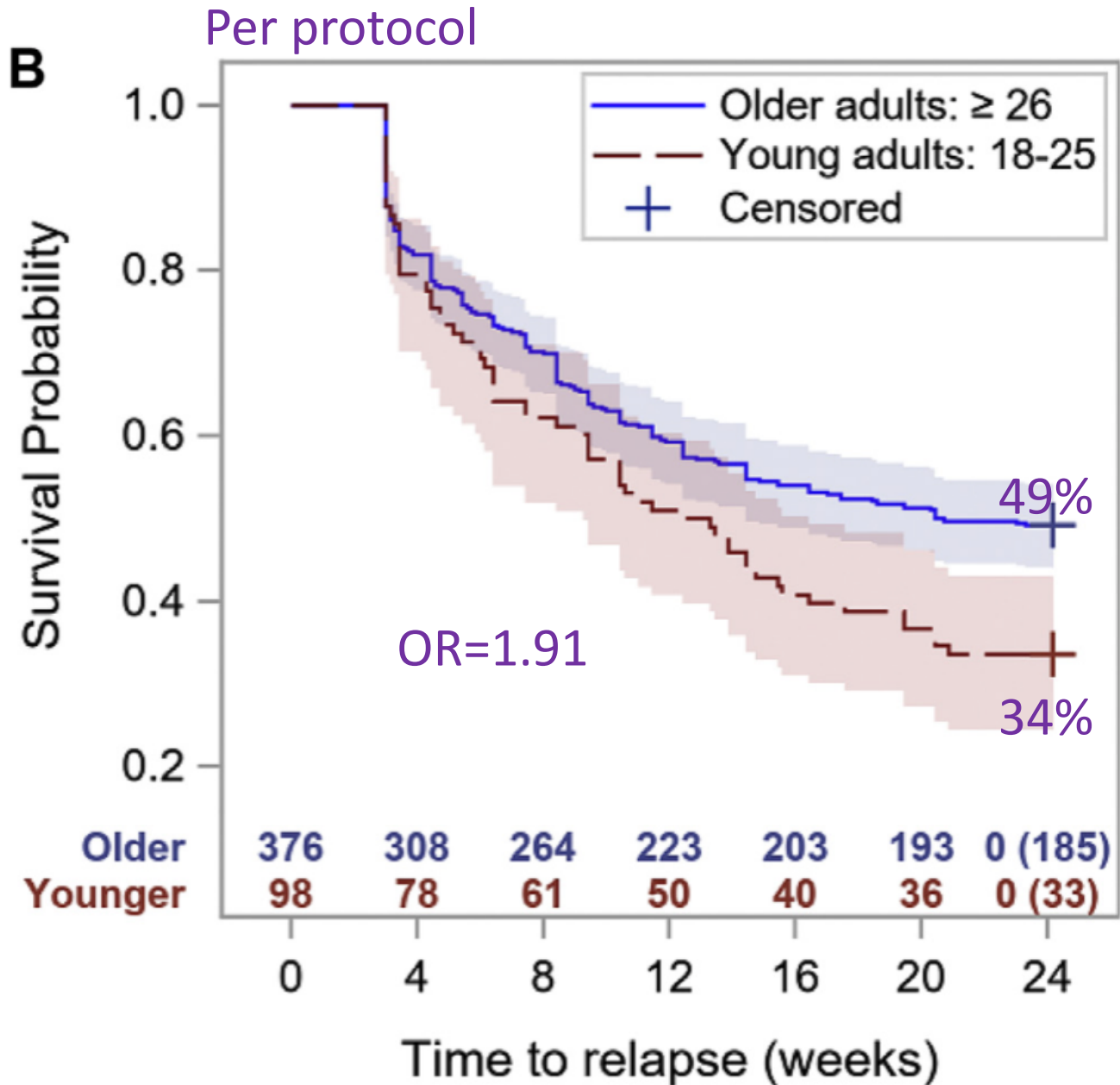
Background and overview

- Opioid use disorder (OUD) is an advanced, malignant form of substance use disorder (SUD), usually beginning in **youth**
- Adolescents and young adults extremely vulnerable; Young adults disproportionately affected
- Cannabis use disorder underappreciated as a major problem in youth
- Intervention for youth SUD **prior** to opioid initiation (nicotine, cannabis, alcohol) is **OUD prevention**
- Evidence and consensus for **medications in OUD** (MOUD) in youth, but dissemination poor due to problems with capacity, misinformation, and prejudice
- **MOUD-forward approaches** vital as a cornerstone of treatment.
- But youth have **worse outcomes** than mature adults because of developmental vulnerability and treatment system limitations
- Improved, developmentally-informed strategies that target engagement, retention and medication adherence will help

Outline

- Sharon Levy. Integrating Substance Use Treatment into Primary Care.
- Aaron Hogue. Relationship-Oriented Approach to Treatment and Recovery for Youth with Opioid Use Problems
- Kevin Wenzel. Youth Opioid Recovery Support (YORS): Improving treatment of OUD in young adults
- Discussion.

Young adults
have worse
MOUD
outcomes vs
older adults:
XBOT secondary
analysis



Integrating Substance Use Treatment into Primary Care

Sharon Levy, MD, MPH

ASAM National Conference, Washington, DC April 2023



Learning Objectives

- ◆ Describe a hub and spoke model for capacitating SUD treatment in pediatric primary care
- ◆ Review data from a state-based hub and spoke model in Massachusetts

Adolescent Substance Use and Treatment

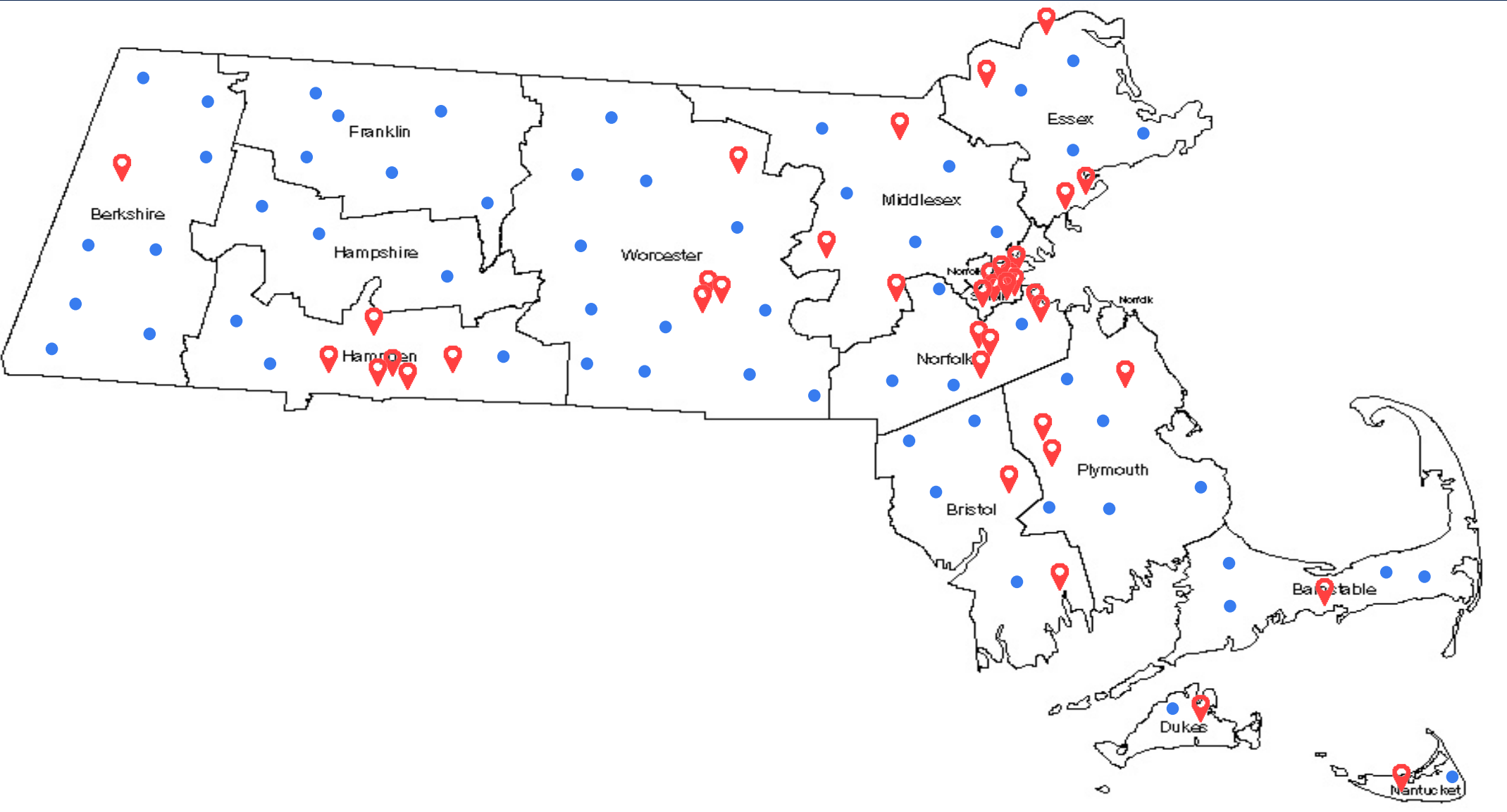
8.5% of adolescents meet criteria for any substance use disorder

~ 2.2 million youth aged 12-17

Of those, only **3.5%** of them received treatment

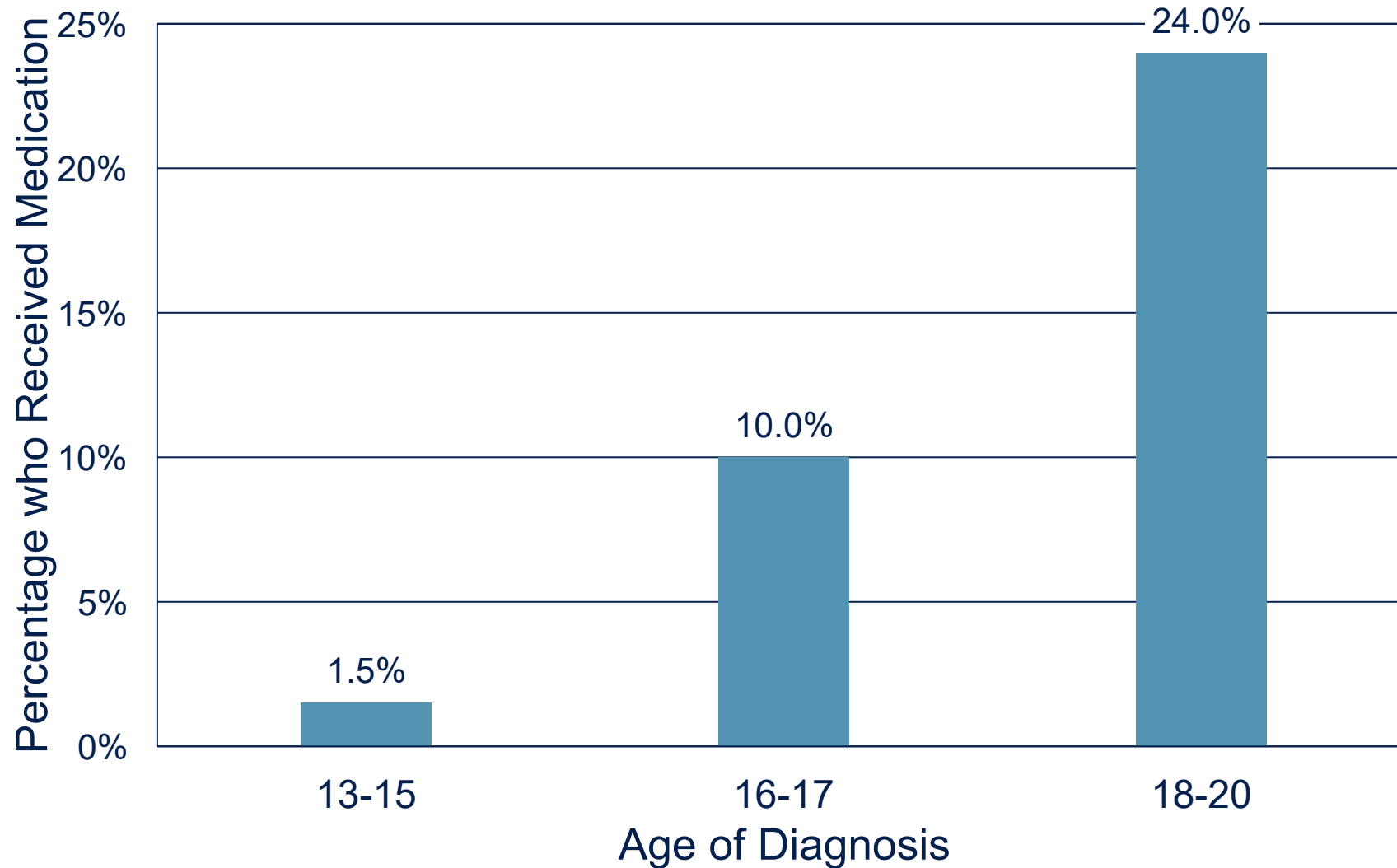


Adolescent Substance Use Treatment Centers Concentrated in Few Areas



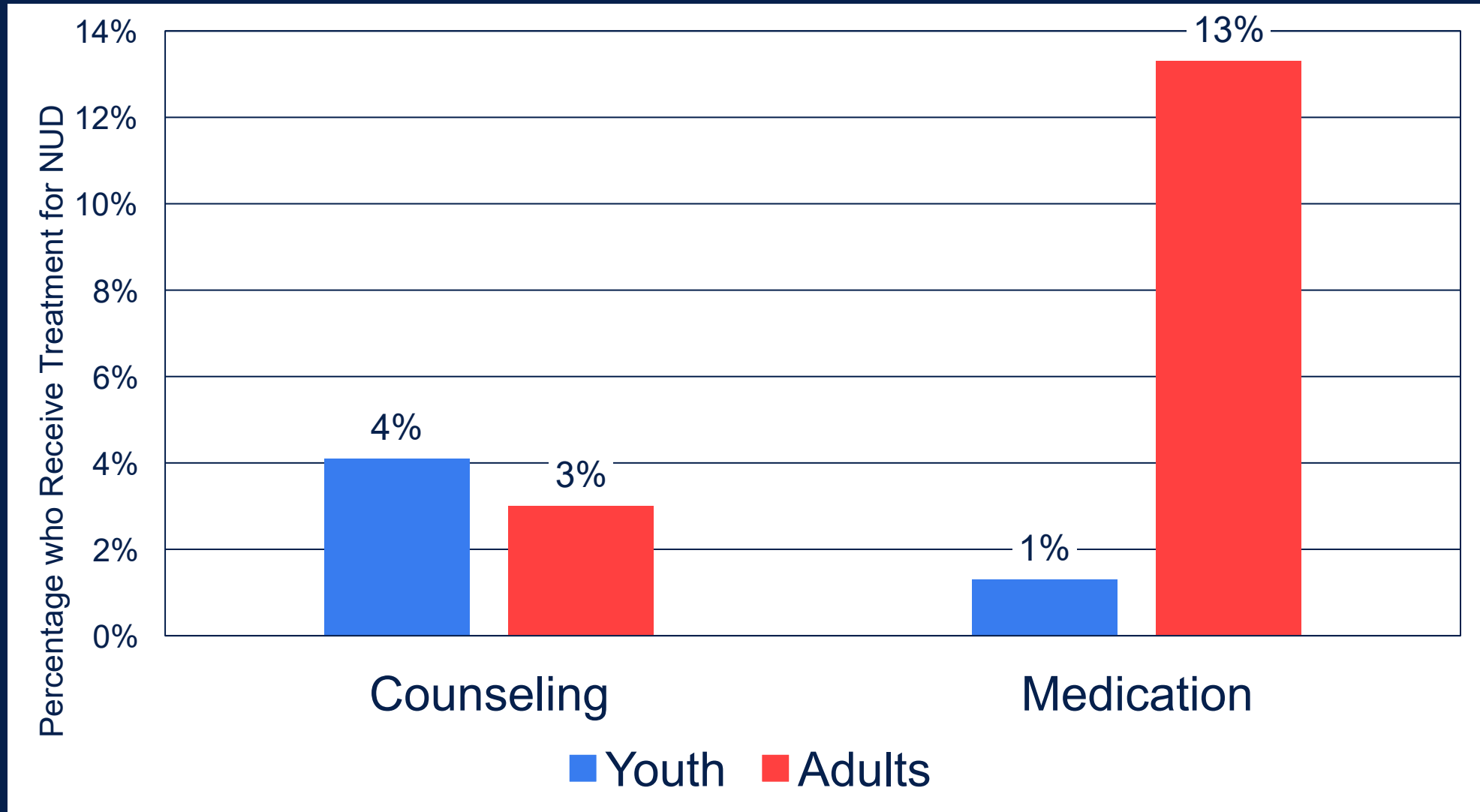
Bureau of Substance Addiction Services (2023). *January 2023 Licensed Programs and Beds report*. Mass.gov. <https://www.mass.gov/service-details/information-for-licensed-substance-use-disorder-treatment-programs>

Percentage of Youth Who Received Medication for OUD by Age of Diagnosis



Hadland, S. E., Wharam, J. F., Schuster, M. A., Zhang, F., Samet, J. H., & Larochelle, M. R. (2017). Trends in Receipt of Buprenorphine and Naltrexone for Opioid Use Disorder Among Adolescents and Young Adults, 2001-2014. *JAMA pediatrics*, 171(8), 747-755. <https://doi.org/10.1001/jamapediatrics.2017.0745>

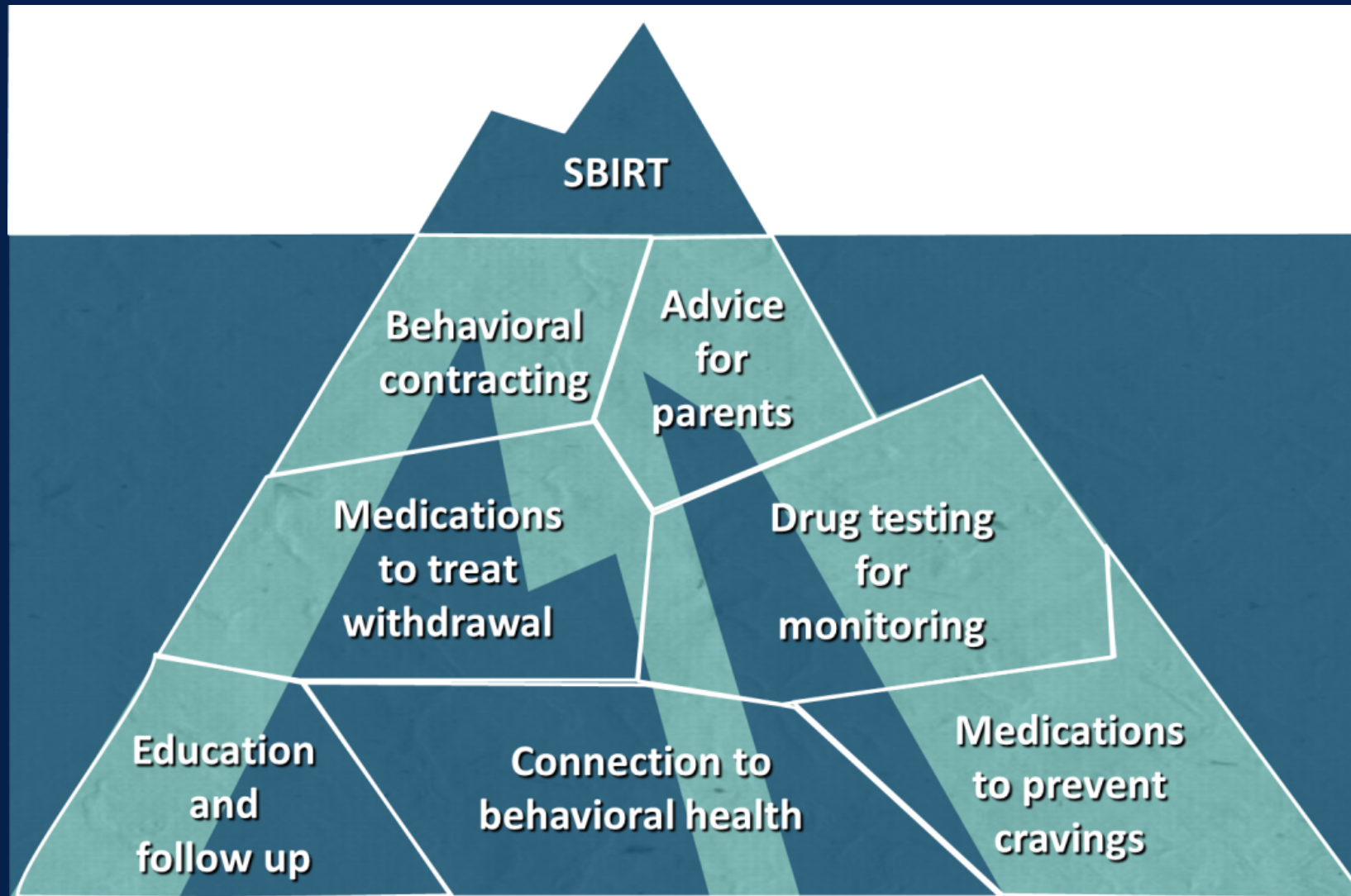
Percentage of patients who received treatment for Tobacco Use Disorder



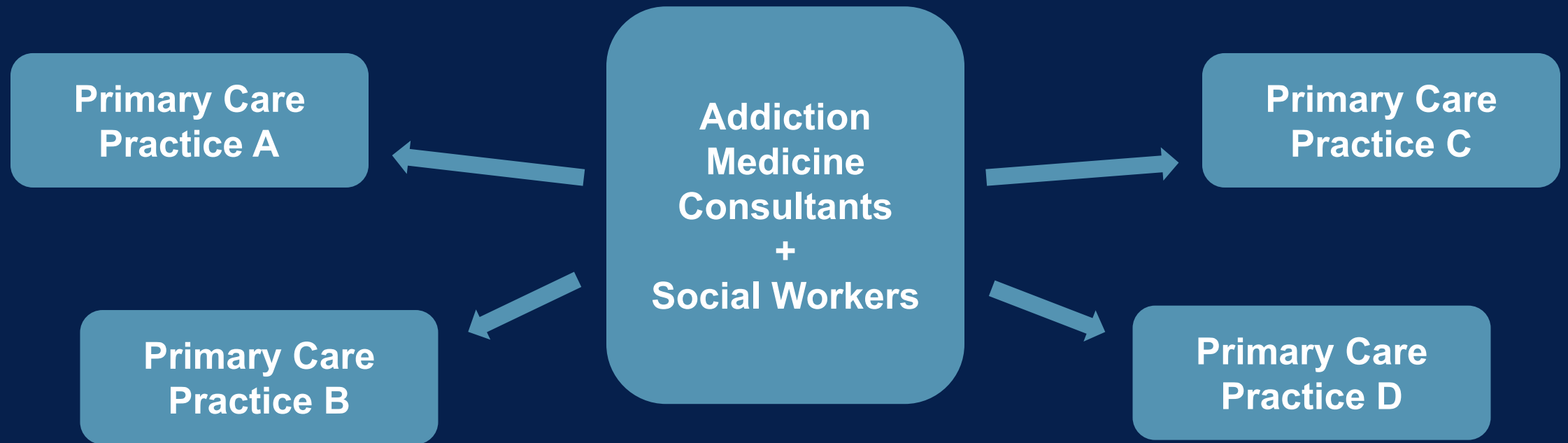
Integration Programs



Beyond SBIRT



Hub and Spoke Model



PC Plus Program

All network practices

- ◆ Access to drop-in sessions, quarterly trainings, printed tip sheets, rapid-response consultation and access to centralized behavioral health counseling delivered virtually

13 Highly Engaged Practices

- ◆ Monthly data reports, quarterly check-ins, and customized training opportunities

Services Provided

Peer-to-peer consultation for questions about adolescent substance use



Virtual Counseling

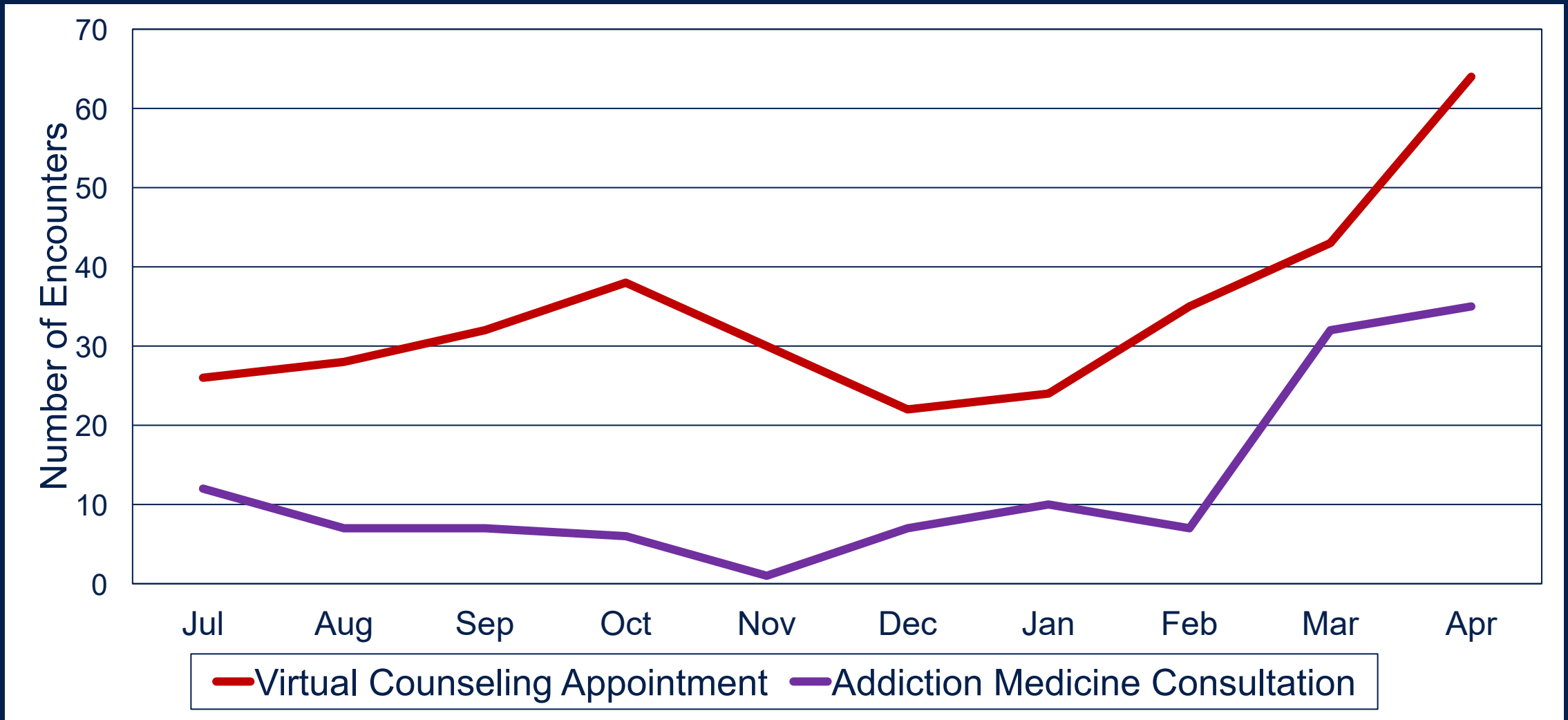
- ◆ Virtual SUD counseling for pediatric primary care patients who did not have access to an integrated or community SUD counselor
- ◆ Components:
 - ◆ Comprehensive Biopsychosocial Evaluation
 - ◆ Individual Counseling (MI, RP, CBT, etc)
 - ◆ Group Therapy (MI, RP, CBT, Psychoed)
 - ◆ Parent/Caregiver Guidance

Volume Jan-Dec 2021

- ◆ 407 encounters/108 unique patients
- ◆ 128 consultations
- ◆ 49 patients referred to counseling
 - ◆ 36 (73%) completed at least one appointment
 - ◆ 279 counseling appointments provided



Volume 2022



Substance of Concern (N=128 consults)

	N (%)
Cannabis	82 (64%)
Nicotine	26 (20%)
Alcohol	25 (20%)
Vaping	12 (9%)
Opioid use	6 (5%)
Sedative use	4 (3%)
Stimulant use	4 (3%)
Non-specific substance	24 (19%)
Primary mental health concern/substance not listed	9 (7%)

Outcomes (N=128 consults)

	N (%)	
Treated in primary care	87 (68%)	
Therapist appointment (non-MCPAP)	1 (1%)	
Therapist (MCPAP virtual therapist)	49 (38%)	
Bridge treatment with PCP	5 (4%)	
Referred to specialty substance use treatment	34 (27%)	
Outpatient		27 (21%)
Partial program		2 (2%)
Inpatient		5 (4%)
Emergency department	2 (3%)	

Medications (N=128 consults)

	N (%)
MAT	2 (2%)
Naloxone	2 (2%)
Naltrexone	8 (6%)
NAC	52 (41%)
NRT	12 (9%)
Capsaicin	2 (2%)
No medication change	1 (1%)
No medication after encounter	59 (46%)



Summary

- ◆ SUD treatment can be accomplished in pediatric primary care
- ◆ Provider to provider consultation is feasible and acceptable to many pediatric primary care providers in Massachusetts
- ◆ Virtual counseling with specially trained behavioral health care professionals is a feasible method for increasing access to substance use treatment for youth

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Sample Tip Sheet (NRT)

Advice and Support

- Advise that “non-use” is best
- Ask about cravings and symptoms of nicotine withdrawal (increased appetite, fatigue, headache, irritability, anxiety, and depression). If patient is experiencing either, offer NRT.
- Assess for shortness of breath, decreased exercise tolerance or other respiratory symptoms. If present, refer to Pulmonary for evaluation.
- If possible, connect to counseling for support.
- Ask patients to make a brief quit trial while trying NRT, or set a quit date!

Prescribe Nicotine Replacement Therapy (NRT)

Cigarettes/Day 1 pod equals 20 cigarettes	Patch Dose
< 10	7-14 mgs
10-20	14-21 mgs
21-40	21-42 mgs
> 40	42 mgs

ASAM Essentials, 3rd Edition, 2020.

Titration with Patch & Lozenges

- Add 2mg Lozenges for cravings, may use one every 2 hours.
- If using multiple lozenges and still craving nicotine, increase dose of patch at next visit.
- Nicotine is a stimulant. If patch is interfering with sleep, remove overnight. (Patient may experience morning cravings if removing the patch overnight.)

Tapering

- Decrease the strength of the patch every 2-3 weeks, or when patients are no longer using gum/lozenges.
- After 2-3 weeks with a 7 mg patch, remove patch entirely but keep gum/lozenges available.
- DO NOT CUT PATCHES
- Follow up every 2-4 weeks while on NRT.

When NRT is not enough:

- Add Contingency Management: rewards provided for abstinence or decreased smoking
- Consider adding Bupropion SR 150mgs once a day x 7 days, then increase to 150mgs bid.
- Or, Adding Varenicline (Chantix) 0.5mgs once a day 3x days, then 0.5mgs bid x 4 days then 1 mg bid for 12 to 24 weeks.
- Both bupropion and varenicline lower seizure threshold so do not prescribe together.

Offer Support Lines

- 1-800-QUIT-NOW
- TEEN.SMOKEFREE.GOV

Relationship-Oriented Approach to Treatment and Recovery for Youth with Opioid Use Problems

Aaron Hogue, Ph.D.

Disclosure Information

A clinical and research agenda for improving OUD treatment for youth

Sunday April 16, 2023
10:15 AM – 11:30 AM
Washington, DC

Aaron Hogue, Ph.D.

Dr. Hogue is a Clinical Psychologist and Principle Investigator of the Family Involvement in Recovery Support and Treatment (FIRST) Research Network (R24DA051946). Dr. Hogue has no disclosures to report.



Learning Objectives

1. Support the value of adopting a relationship-oriented approach to behavioral treatment and recovery interventions for adolescents and young adults receiving services for opioid use disorder (OUD).
2. Introduce four clinical intervention techniques that comprise a Relational Orientation module for youth with OUD.

What is the FIRST Research Network?

Mission:

To promote family integration into treatment and recovery support services for youth with substance-related problems

Aim 1:

Build
infrastructure
and sustainability

Aim 2:

Develop provider
training
resources

Aim 3:

Develop
generalizable
direct-to-family
resources

Why Adopt a Relationship-Oriented Approach?

MOUD services are evidence-based but vastly underutilized by youth due in part to ***Client-Level*** barriers:

- Low motivation to change SU habits or seek treatment
- Weak involvement in the healthcare system
- MOUD-related misinformation, stigma, and bias
- Extended effort required for MOUD induction and tapering
- Disruptions from untreated co-occurring disorders

Why Adopt a Relationship-Oriented Approach?

Barriers can be addressed by emphasizing involvement of ***Concerned Significant Others (CSO)*** in OUD services:

- CSO represent primary risk and protective factors, and contexts of developmental influence, for youth SU problems of every kind
- CSO-focused SU interventions are highly effective for promoting treatment engagement and outcomes among youth & adults
- CSO are critical resources for youth recovery capital: helping youth sustain SU reductions and achieve health-promoting goals

Relational Orientation

Assess Recovery
Domains

Identify/Nominate
CSO

CSO
Outreach/Engagement

OOD Relational
Reframe

What Does It Look Like?



Assess Recovery Domains

- How independent/interdependent is this youth?
- How connected is this youth to family and social networks, and how do each of these networks reinforce (or not) the youth's recovery goals?
- Assess housing status (e.g., living with caregivers/partners, living independently, institutionalized), education/employment status, financial status, and CSO involvement.

Identify/Nominate CSO

- Who is the person in the youth's life with potential availability to be a functional and emotional support for recovery goals?
- Consider how stigma related to OUD and MOUD, and the perceived value of treatment, can factor into this choice.
- Honor family-of-choice in the nomination process, and consider nominating more than one CSO.
- When a supportive CSO is not currently available, clinicians can continue to emphasize youth-focused interventions, while also periodically revisiting whether or which CSO may be available.

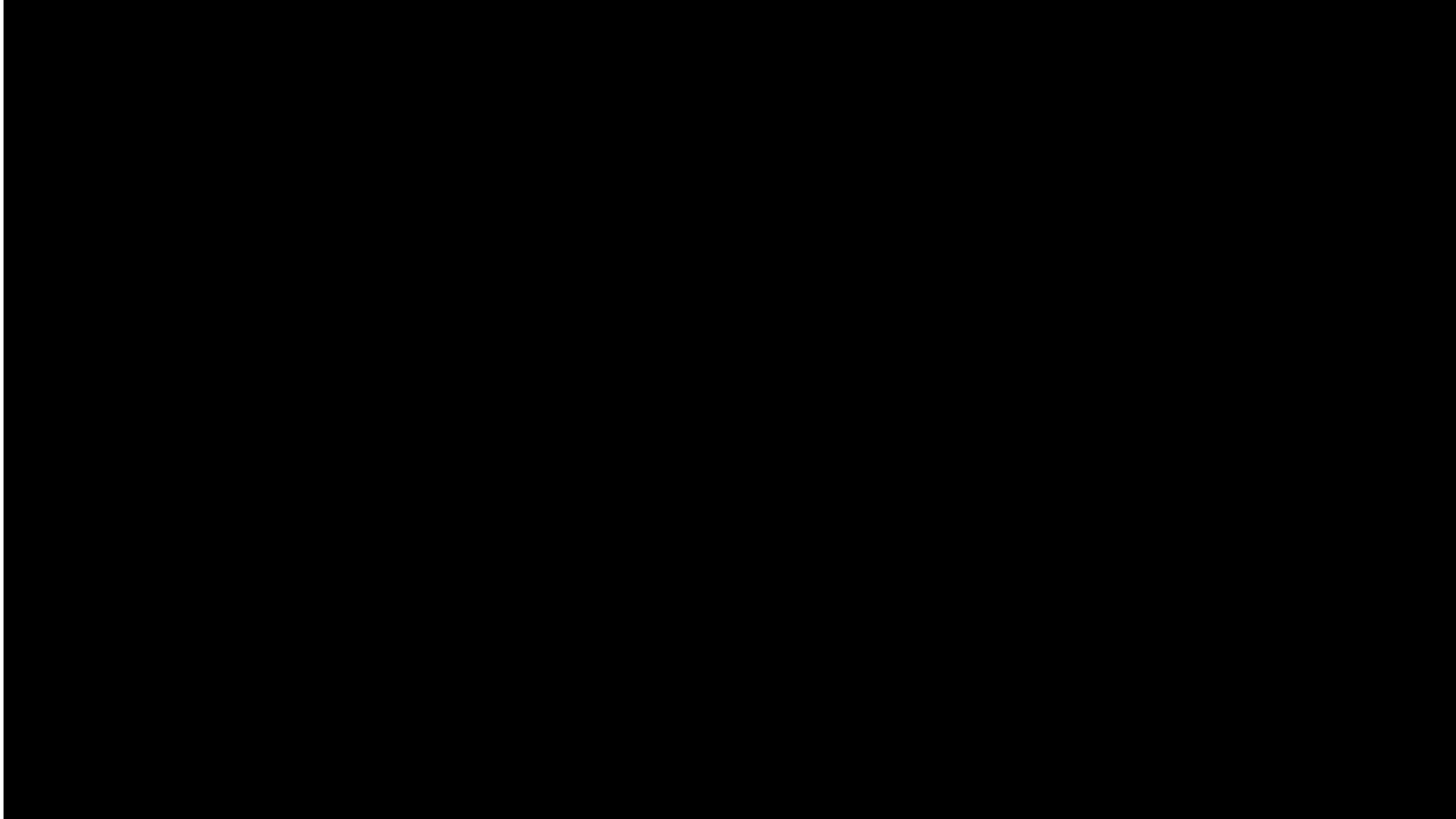
CSO Outreach/Engagement

- Outreach procedures can address potential logistic and attitudinal barriers and enhance CSO readiness and motivation to participate.
- Anticipate how family/CSO resources and dynamics could impact CSO participation, build a therapeutic alliance with CSO, and provide rationale for CSO participation that accounts for both youth- and CSO-specific concerns
- When CSO participate, clinicians promote long-term CSO engagement in OUD services by instilling hope and involving them in recovery goals.
- As clinicians work to engage CSO, it is imperative they explore the influences of race, ethnicity, and culture on the engagement process.

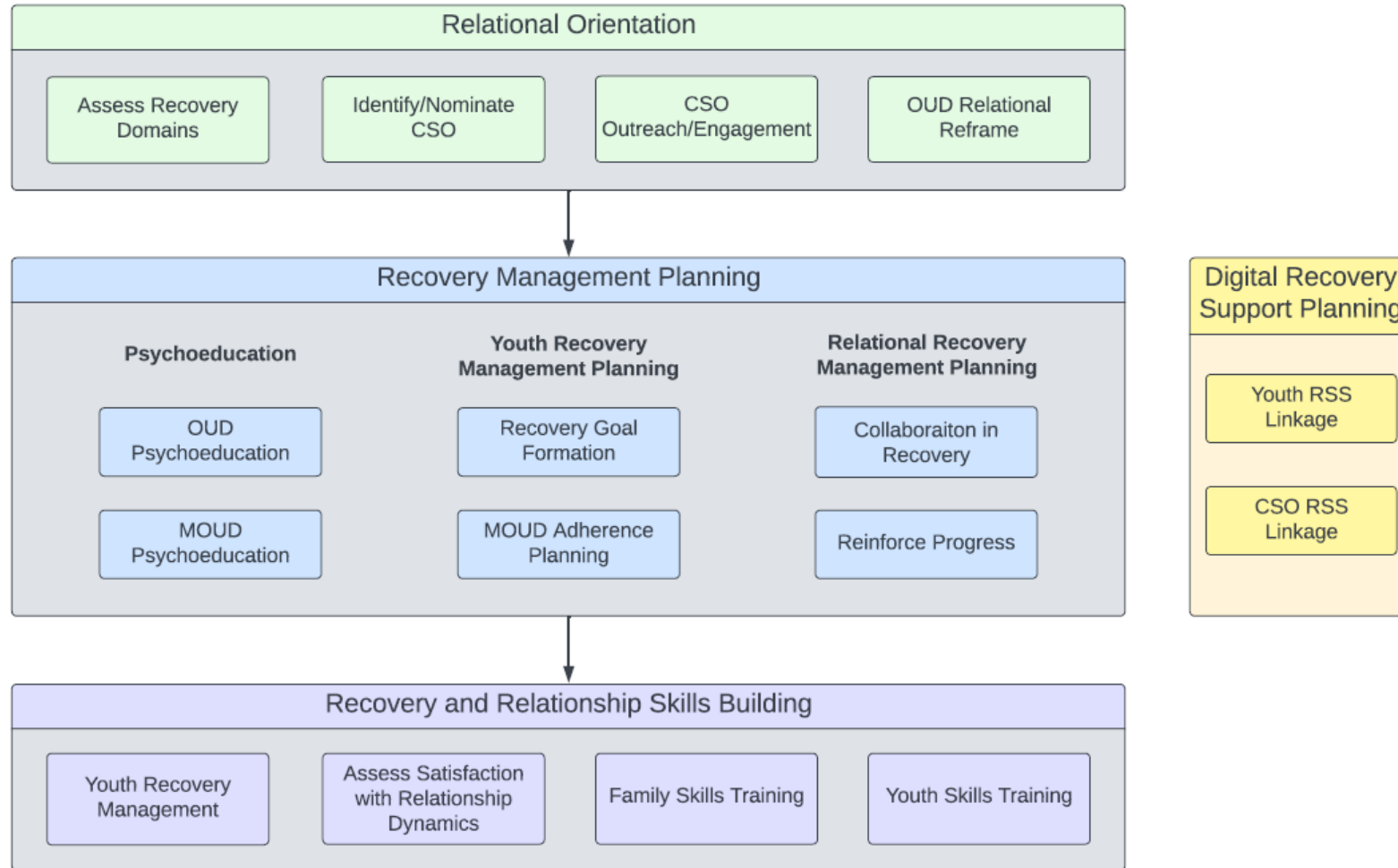
OUD Relational Reframe

- Shift the focus of OUD services from exclusively fixing youth symptoms to also improving the quality of youth-CSO relations.
- Assert that acknowledging, understanding, and repairing relationship problems can be an effective way to address individual problems and bolster MOUD recovery support.
- Identify sequences of behaviors or emotions involving CSO that precede, or directly cause, an OUD-related problem; focus directly on the impact an OUD-related problem has on the actions, thoughts, and feelings of both youth and CSO; and champion relational repair or improvement.

What Does It Look Like?



RORSY Pathway Scheme



Pilot Study: Appalachian TN

Phase One

6-8 Months

Understanding Treatment

Data collection and client interviews to gather information about current treatment activities & youth experiences in treatment

Phase Two

1 Month

Training in Relationship-Oriented Approach

Workshops and consultations designed to support clinicians working with young people with OUD

Phase Three

6-8 Months

Evaluating the Relationship-Oriented Approach

Data collection and client interviews to assess technique effectiveness

FIRST Research Network

Steering Committee

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Youth Opioid Recovery Support (YORS): Improving treatment of OUD in young adults

Kevin Wenzel, PhD

Presented at ASAM Conference 2023, National Harbor, MD



Disclosure Information

Youth Opioid Recovery Support (YORS): Improving treatment of OUD in young adults

Sunday, April 16th, 2023

Kevin Wenzel, PhD

- ◆ No Disclosures
- ◆ Research reported in this presentation was supported by the National Center for Complementary and Integrative Health (NCCIH) under award number 1R61AT010614-01 and the National Institute on Drug Abuse (NIDA) under award number 4R33DA056230-02.



Background and Overview: Youth OUD

- Opioid use disorder (OUD) is an advanced, malignant form of substance use disorder, usually beginning in **adolescence and early adulthood**
- There is evidence and consensus for **medications for OUD (MOUD)** in youth, but dissemination and adherence is poor
- Young adults are disproportionately affected by the opioid epidemic and have **worse outcomes** than mature adults, particularly **adherence**
- Even with extended-release MOUD, most young adults with OUD who get a first dose during inpatient treatment **never return** for a second outpatient dose

Fishman, M., Wenzel K., Scodes, J., Pavlicova, M., Lee, J. D., Rotrosen, J., & Nunes, E. (2020). Young adults have worse outcomes than older adults: Secondary analysis of the X:BOT trial of extended release naltrexone versus buprenorphine for opioid use disorder. *Journal of Adolescent Health*, 67(6), 778-785

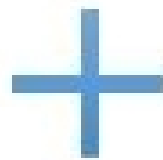
Mitchell, S. G., Monico, L., Gryczynski, J., Fishman, M., O'Grady, K. E., Schwartz, R. P. (2021). Extended-release naltrexone for youth with opioid use disorder. *Journal of Substance Abuse Treatment*



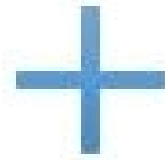
What is the Youth Opioid Recovery Support intervention (YORS)?



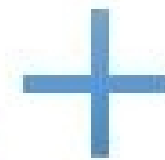
Assertive
Outreach



Family
Involvement



Medication
Home Delivery

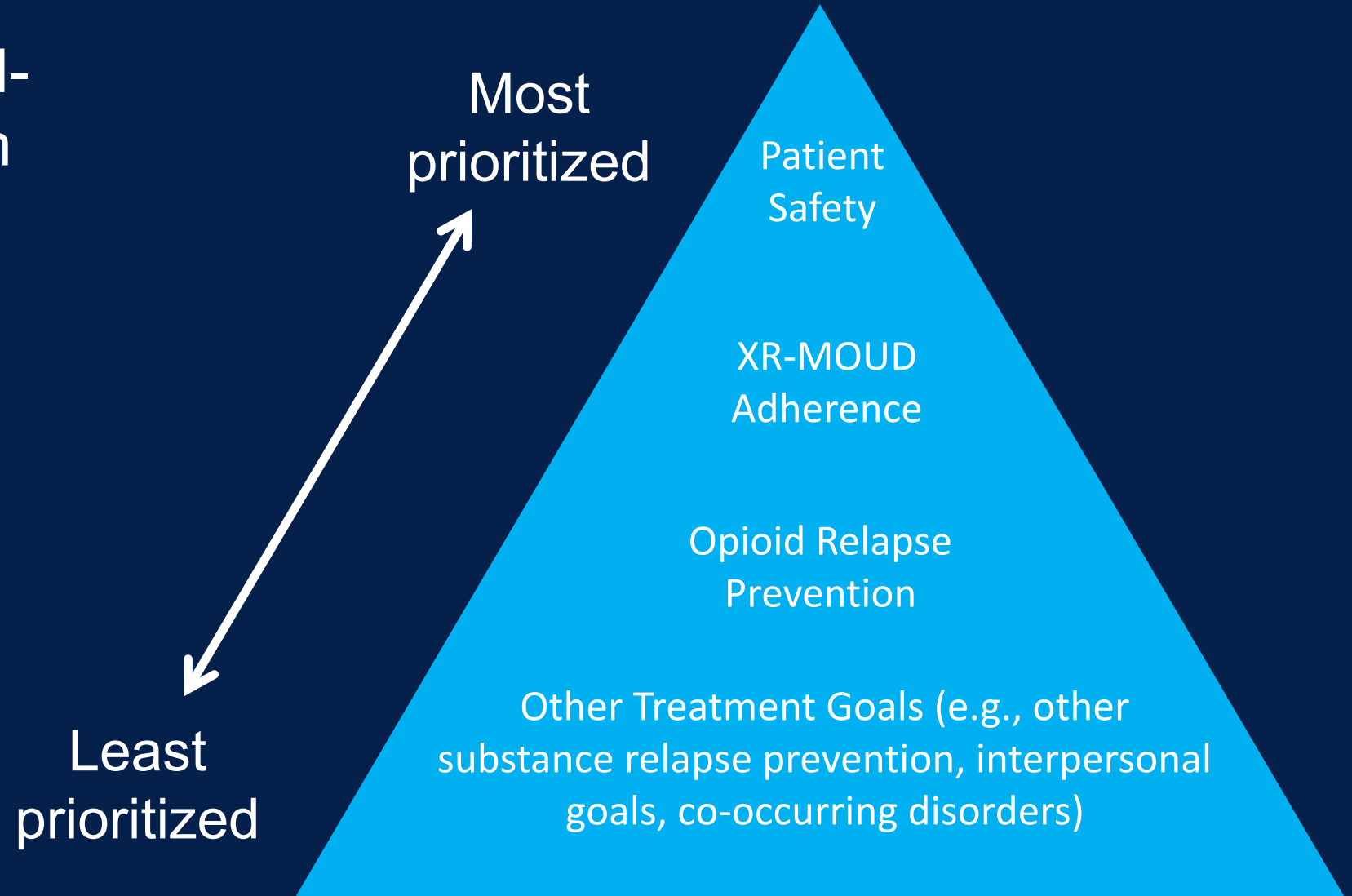


Incentives for
Medication

YORS Team: 1) Therapist; 2) Research Assistant; 3) Prescriber; 4) Nurse

Goals of YORS

- Enhance extended-release medication adherence
- Prevent opioid relapse



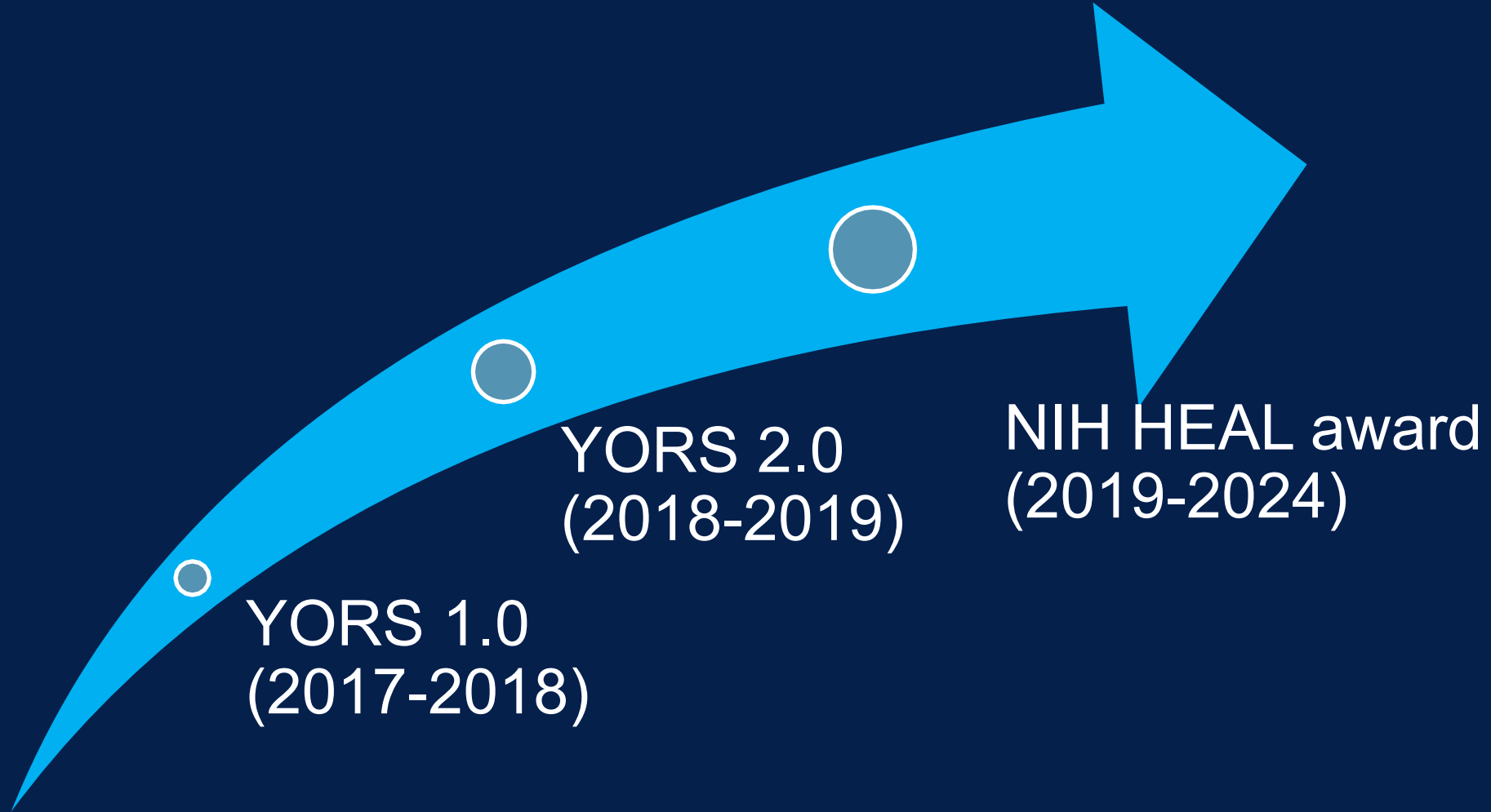
Poster child for YORS?

- 21-year-old male injecting heroin
- 5 inpatient detox admissions over 1.5 years, each time got first dose of extended-release naltrexone but **never came back** for 2nd dose
- Lives with grandmother, team shows up with dose, he says no thank you, she says no not an option, **done deal**, gets 6 doses over 6 months

“As I learned from growing up, you don’t mess with your grandmother. “

- Prince William

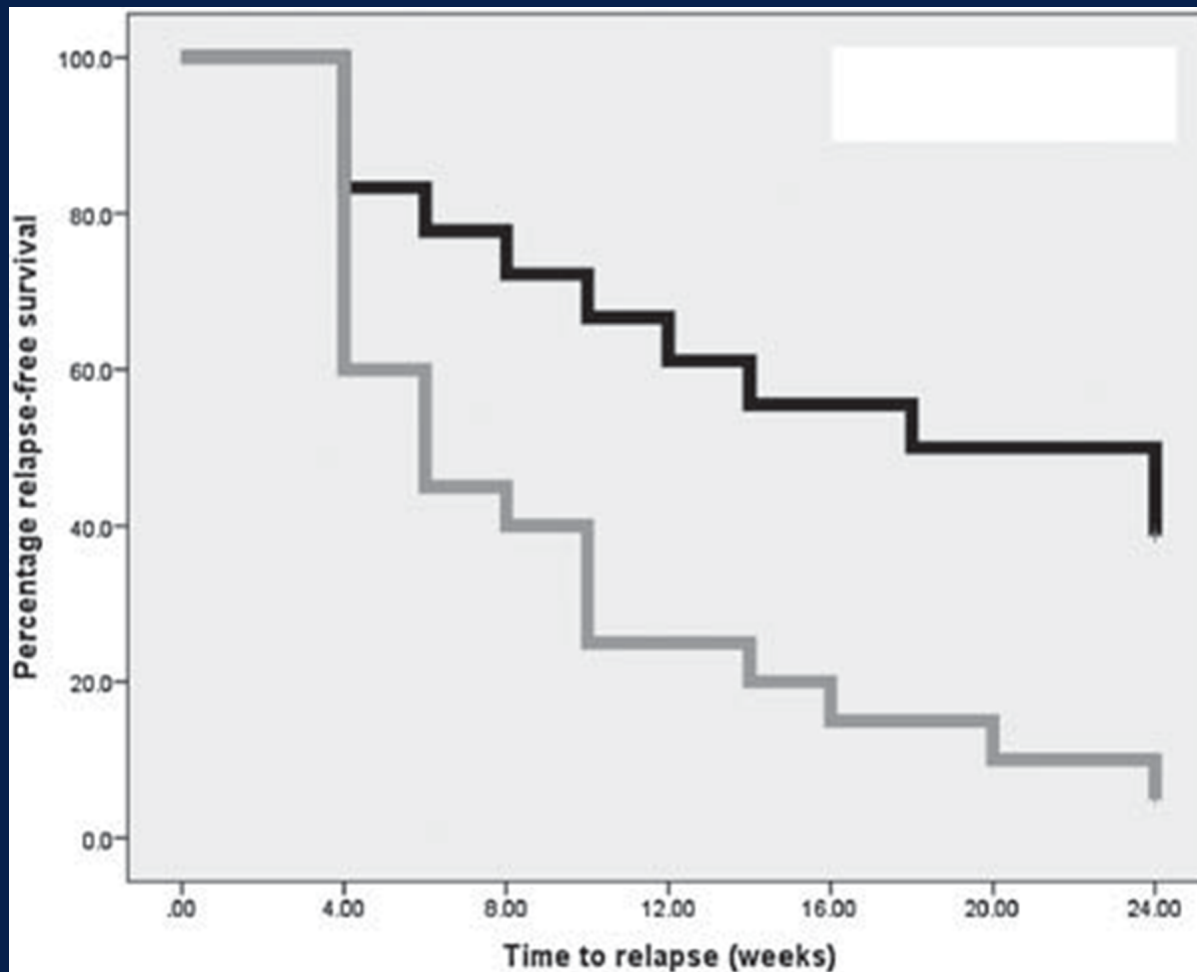
Research Progress



YORS 1.0

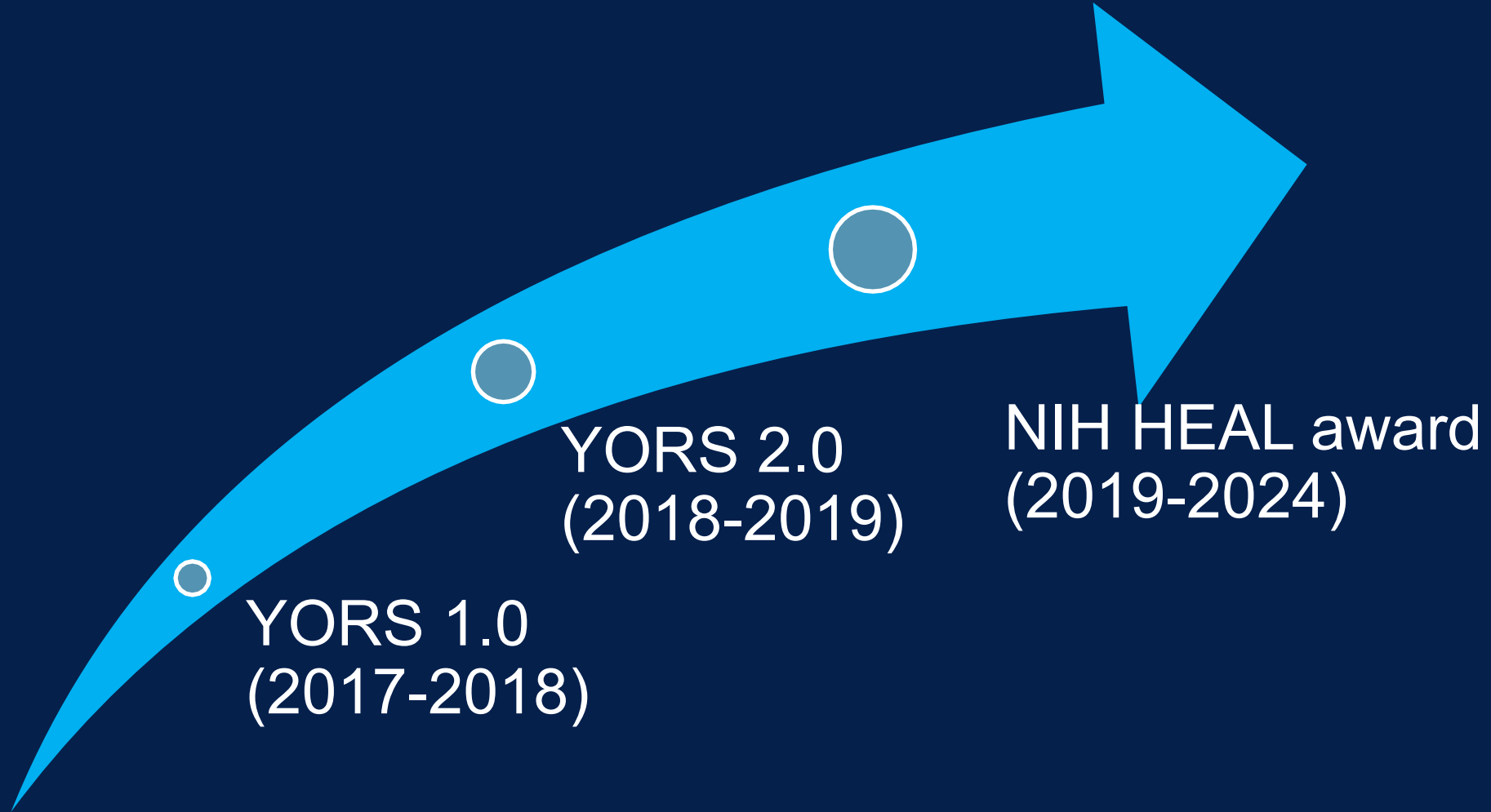
- Randomized trial of YORS vs TAU, started during inpatient treatment
- N = 40 young adults aged 18-26 seeking treatment with XR-NTX
- 6 months intervention/follow up period

	<i>YORS mean (SD) or % (n)</i>	<i>TAU mean (SD) or % (n)</i>
Number of XR-NTX doses	4.3 (2.3) (n = 18)	0.7 (1.2) (n = 20)
Opioid relapse (yes/no)	61.1% (11) (n = 18)	95.0% (19) (n = 20)
Received all prescribed doses (yes/no)	44.4% (8) (n = 18)	0.0% (0) (n = 20)



Fishman, M., Wenzel, K. R., Vo, H., Wildberger, J., & Burgower, R. (2021). A pilot randomised controlled trial of assertive treatment including family involvement and home delivery of medication for young adults with opioid use disorder, *Addiction*, 116(3), 548-557.

Research Progress

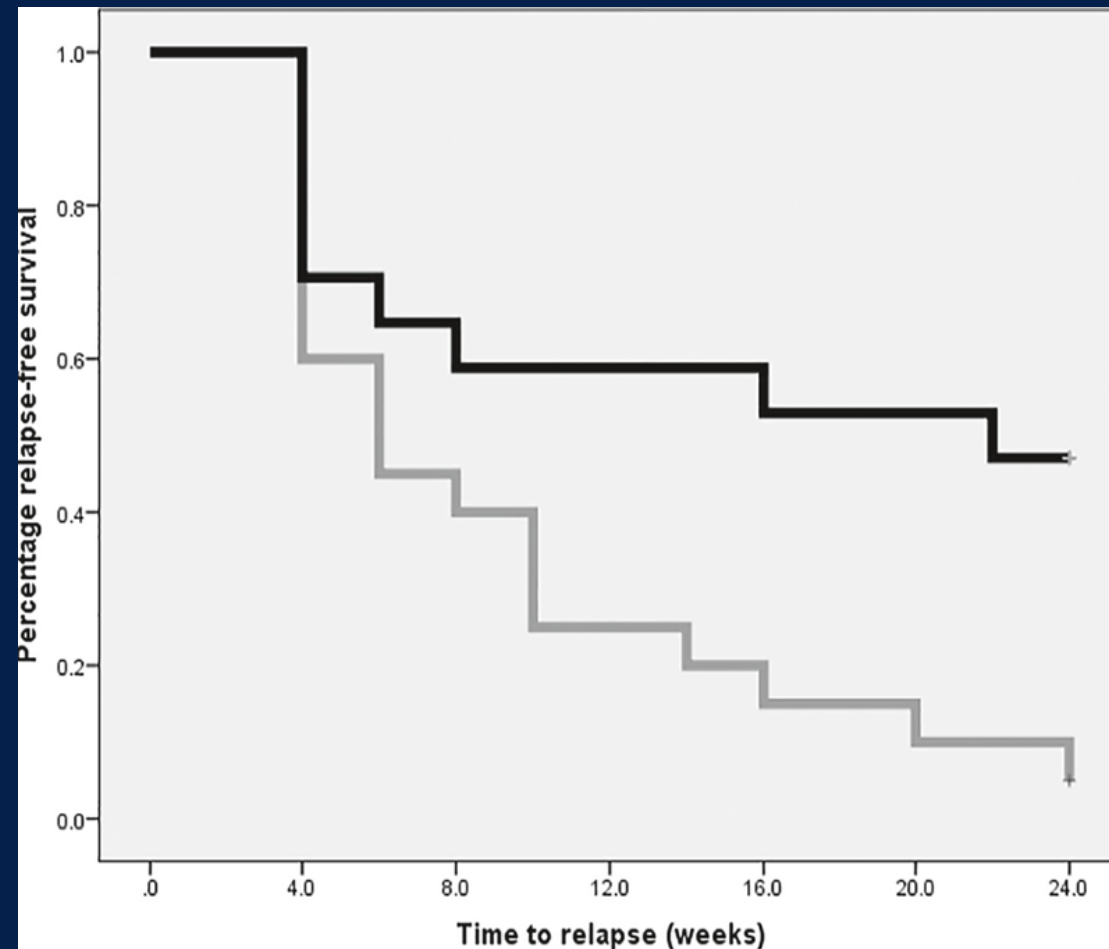


YORS 2.0

- Non-randomized trial comparing YORS to historical TAU
- N = 22 young adults aged 18-26 seeing treatment with XR-NTX or XR-BUP
- 3-6 months intervention/follow up period

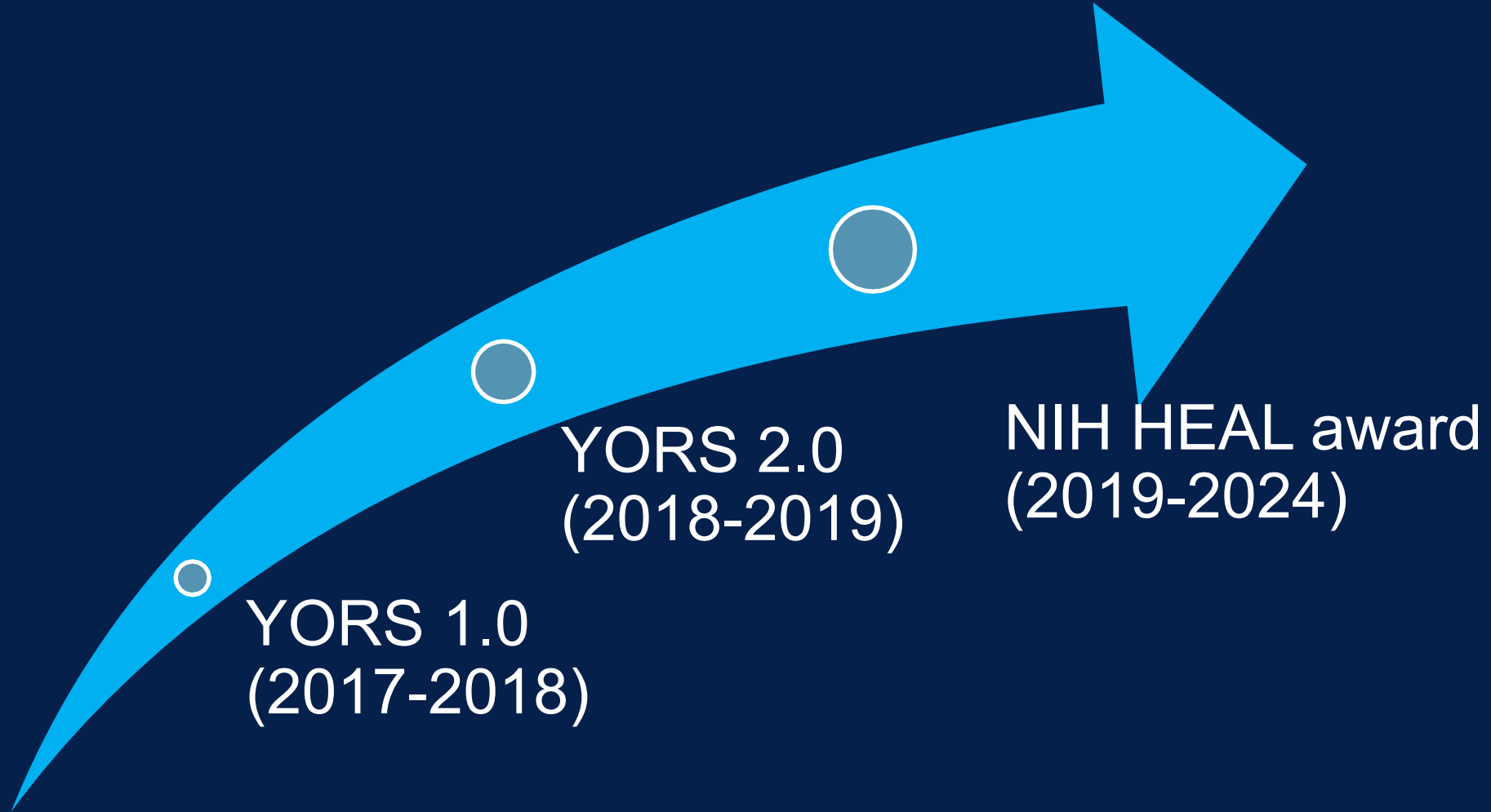
XR-MOUD receipt and opioid relapse.

	Current YORS	N	Historical TAU	N	p-Value
Doses received at 12-weeks	1.91	22	0.40	20	<0.001
Doses received at 24-weeks	3.76	17	0.70	20	<0.001
% relapsed at 12-weeks	27.3%	22	75.0%	20	<0.01
% relapsed at 24-weeks	52.9%	17	95.0%	20	<0.01



Wenzel, K., Selby, V., Wildberger, J., Lavorato, L., Thomas, J., & Fishman, M. (2021). Choice of extended release medication for OUD in young adults (buprenorphine or naltrexone). A pilot enhancement of the Youth Opioid Recovery Support (YORS) intervention. *Journal of Substance Abuse Treatment*, 125, 108306.

Research Progress



NIH HEAL Phase 1 (2019-2021)

◆ Pilot test cycles

- ◆ Choice of XR-MOUD – no brainer! ✓
- ◆ Mobile Van Delivery – 2 thumbs up! ✓
- ◆ Telehealth – 3 thumbs up! ✓
- ◆ Parent peer support group (telehealth)-
strong endorsement from sub-group ✓
- ◆ mHealth app- lukewarm ✗
- ◆ Written feedback- mixed reviews ✗



NIH HEAL Phase 2 (2021-2024)

- ◆ Larger RCT underway (33% recruited)
- ◆ Randomization YORS:TAU = 2:1
- ◆ Primary Outcome: number of XR-MOUD doses received
 - ◆ Key secondary outcome – opioid relapse
- ◆ Intervention period = 26 weeks; additional follow up at 32 weeks
- ◆ Add on projects:
 - ◆ Examine pre-post treatment utilization and costs
 - ◆ Examining executive functioning and fMRI imaging

Notable Clinical Challenges (RCT)

- ◆ Poor motivation/insight
 - ◆ Low perception of need for continued MOUD
- ◆ Ambivalence & impulsivity
 - ◆ Leaving treatment against medical advice, declining MOUD doses
- ◆ Selection of treatment-supportive TSOs
 - ◆ Mistrust/ambivalence about MOUD, behavioral health & treatment system
 - ◆ Ability and motivation to monitor and shape participant's treatment adherence
 - ◆ Language barriers for Hispanic participants: Parents with limited English proficiency
- ◆ Transition to usual care upon completion of the intervention
 - ◆ Role-induction to assume responsibility for treatment after assertive approach
 - ◆ Flexibility of assertive outreach vs. structured nature of usual care
 - ◆ Medication-first approach vs. usual care emphasis on counseling

Final Takeaways

- ◆ Young adults with OUD face unique challenges to engaging in usual care and have worse treatment outcomes than older adults
- ◆ The YORS intervention is a promising service delivery approach combining several known strategies
- ◆ YORS has demonstrated preliminary efficacy to improve XR-MOUD adherence and prevent opioid relapse
- ◆ A larger trial to establish a stronger efficacy base is underway

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1. Fishman, M., Wenzel K., Scodes, J., Pavlicova, M., Lee, J. D., Rotrosen, J., & Nunes, E. (2020). Young adults have worse outcomes than older adults: Secondary analysis of the X:BOT trial of extended-release naltrexone versus buprenorphine for opioid use disorder. *Journal of Adolescent Health, 67*(6), 778-785
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