

AACAP Jeanne Spurlock, MD, Research Fellowship in Substance Abuse and Addiction for Minority Medical Students, supported by the National Institute on Drug Abuse (NIDA), and AACAP's Campaign for America's Kids

The AACAP Jeanne Spurlock, MD, Research Fellowship in Substance Abuse and Addiction for Minority Medical Students, supported by the National Institute on Drug Abuse (NIDA), is named in honor of Jeanne Spurlock, MD, in recognition of her lifetime of opening doors for colleagues from diverse backgrounds and fostering career advances. The summer fellowships encourage outstanding minority students to pursue careers in substance abuse and addiction research in child and adolescent psychiatry. The fellowships are administered through AACAP's Department of Research, Grants, and Workforce, AACAP's Substance Use Committee, under the direction of Patrice Malone, MD, PhD, and Amy Yule, MD, along with AACAP's Diversity and Culture Committee, under the direction of Annie Li, MD, and Dayna LePlatte, MD.



Irving A. Barrera, BS

Harvard University

Project: *Integrated Care Models and Their Effect on Retention and Treatment of Youth With Opioid Use Disorder Enrolled in Medicaid*

Mentors: Kevin M. Simon, MD, MPH, and Scott E. Hadland, MD, MPH



Saranya Menon, BS

University of Illinois College of Medicine

Project: *Developing a Social Framework for Black Adolescent Opioid Use Disorder Treatment Motivation*

Mentor: Niranjan S. Karnik, MD, PhD



Kathryn Nielsen, BS

Boston University

Project: *Substance Use Treatment Utilization for Youth with Co-Occurring Psychiatric and Substance Use Disorders*

Mentor: Amy Yule, MD



Jayla French, BS

Indiana University

Project: *Engaging Families in Adolescent Opioid Addiction Treatment: Insights From Caregiver Experiences*

Mentors: Leslie Hulvershorn, MD, and Trey Dellucci, PhD

Abstract

This study evaluates how integrated care models affect care delivery and engagement for Medicaid-enrolled patients under 19 with opioid use disorder (OUD). Using the Transformed Medicaid Statistical Information System Analytic Files, we analyze nationwide care continuity, comparing referrals to substance use disorder care adjacent to primary care centers versus elsewhere. Primary outcomes include retention in care and medication for OUD receipt rates. We employ statistical analyses to assess associations between integrated care models and outcomes, exploring factors like treatment center distance and provider training. This research aims to improve care accessibility and continuity for youth with OUD. The project is currently in the data analysis phase.

Background

Youth with substance use disorders (SUDs) in the United States face significant barriers to accessing necessary care. Recent research highlights several critical issues:

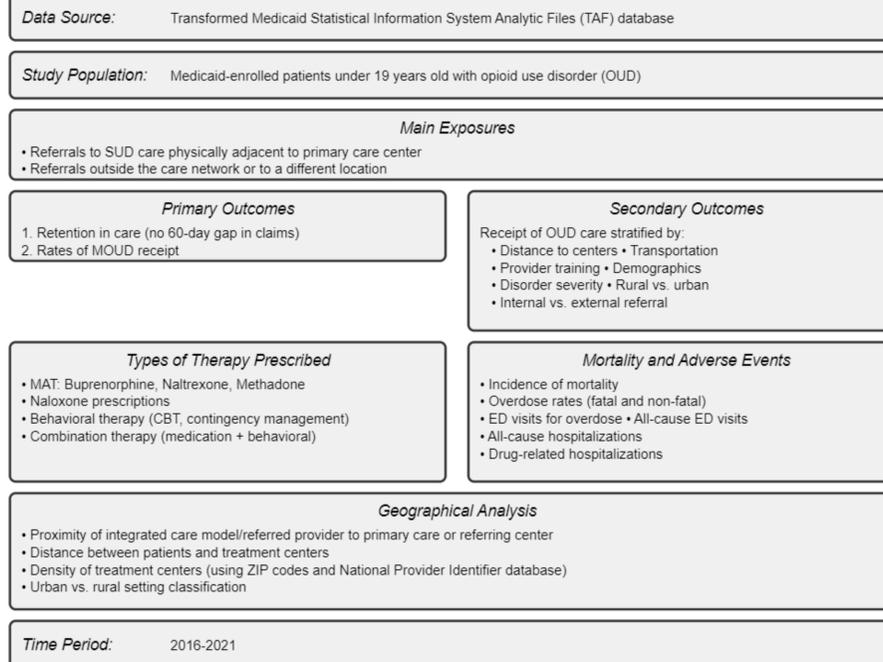
- Inadequate treatment facilities for those under 18, including:
 - Scarcity of standard medications for opioid use disorder (OUD)
 - Fragmented care continuity
 - Shortage of available treatment beds, even for those with medical insurance[1]
- Racial disparities in treatment access:
 - Black and Hispanic adolescents are less likely to receive treatment for SUDs compared to their white peers[2,3]
- Early onset and increasing risk:
 - The majority of individuals with SUDs begin substance use before age 25
 - Alarming increase in overdose rates among youth[4,5]
- Challenges in care continuity:
 - Disruptions occur when there's no available referral network for specialized OUD providers
 - Changes in care location can interrupt treatment[4,5]
- Potential of integrated care models:
 - Primary care centers offering specialized substance use programs may mitigate some barriers
 - Gap in research concerning their effectiveness on outcomes and continuity of treatment, especially for pediatric patients with OUD

Objectives

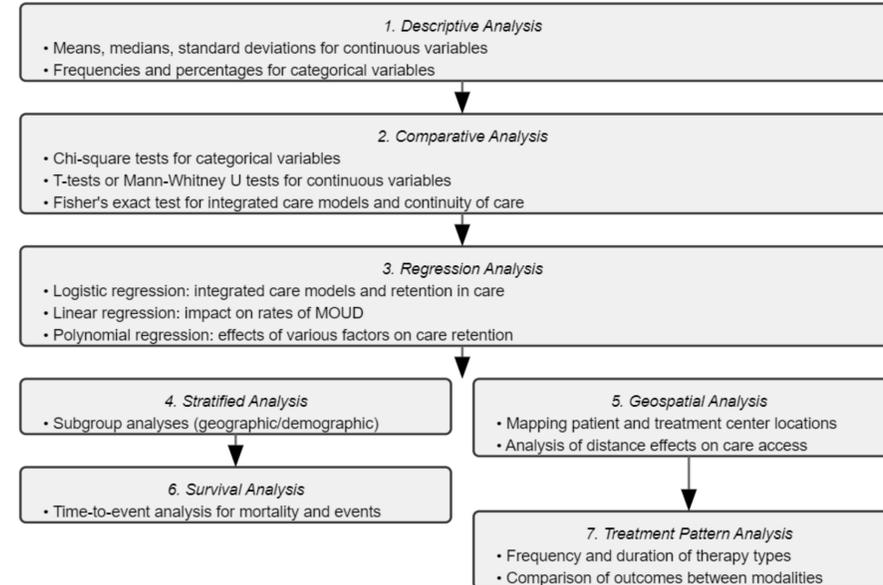
- To evaluate the impact of integrated care models on the delivery and sustained engagement in care for Medicaid-enrolled patients under 19 years old with opioid use disorder (OUD).
- To assess how the proximity of substance use disorder (SUD) care to primary care centers
 - Retention in care
 - Rates of medication for opioid use disorder (MOUD) receipt
- To analyze the influence of secondary factors on OUD care accessibility and continuity, including:
 - Distance to treatment center
 - Provider's training and credentials
 - Patient demographics
- To inform strategies for improving care accessibility and outcome continuity for youth with OUD on a national scale.

Methods

Study Overview: OUD in Medicaid-Enrolled Youth (2016-2021)



Analysis Plan



Next Steps

Integrated care models show promise for improving OUD treatment access in youth. Medicaid claims data provide valuable insights into treatment patterns and effectiveness.

Next Steps:

- Refine analysis techniques for complex Medicaid claims data
- Expand geospatial analysis of treatment center locations
- Conduct in-depth analysis of most effective treatment patterns
- Develop policy recommendations for integrated care models

References

- King CA, et al. Health Aff (Millwood). 2024;43(1):64-71.
- Alegria M, et al. J Am Acad Child Adolesc Psychiatry. 2011;50(1):22-31.
- Substance Abuse and Mental Health Services Administration. National Survey on Drug Use and Health: Summary of Methodological Studies, 1971–2014. 2014.
- Bremer W, et al. Front Public Health. 2023;11:1141093.
- Kelley AT, et al. J Subst Abuse Treat. 2022;136:108685.

Acknowledgements

This research was supported by the

AACAP Jeanne Spurlock, MD, Research Fellowship in Substance Abuse and Addiction for Minority Medical Students

We express our sincere gratitude for their generous support and commitment to advancing research in substance abuse and addiction among minority populations.



Developing a social framework for Black adolescent opioid use disorder treatment motivation: Study Protocol



Saranya Menon¹, Veronica Bucci¹, Stephanie Torello¹, Shirley Stephenson¹, Konadu Fokuo¹, Niranjan Karnik¹

¹Department of Psychiatry, Institute for Juvenile Research & Institute for Research on Addictions, University of Illinois at Chicago

Introduction

- Black minoritized populations have the highest increase in deaths related to opioid overdose.^{1,2}
- The CDC reports that 14% of students report using opioids (often from vulnerable groups such as LGBTQ+).³
- High-risk Black populations are significantly less likely to receive and maintain treatment for Opioid Use Disorder (OUD).^{4,5,6}
- Stigma** and **negative attitudes** towards those who use opioids are related to barriers in feeling motivated to seek treatment for opioid use disorders (MOUD).⁷

Social Connections

Family	Peers
Greater MOUD for adolescents associated with having parents who perceive child as having more externalizing problems and parents who have higher educational expectations for their children. ^{10, 11}	Greater peer support was found to be associated with lower risk for substance use even in disordered neighborhoods. ^{10, 11}
Sports	Faith
Exercise intervention found to increase relapse prevention efficacy for those with general substance use disorder. ⁸ No other studies show the relationship between team sports (which combines exercise with greater opportunity for peer support) with attitudes towards opioid use.	84% of relevant literature demonstrated that faith could be a positive factor in addiction recovery. ⁹

Table 1. Prior Studies on Social Connectedness Factors

Objectives

- To identify social connectedness-related predictors of Black adolescent attitudes towards opioid use.
- To explore hidden relationships between social connectedness-related factors in determining Black adolescent opioid use attitudes.

Methods

Study Design

- Cross-sectional survey-based design: Employ validated surveys to measure social connectedness and opioid use attitudes among Black adolescents in at-risk communities

Participants (n = 30)

- Black adolescents, aged 12-17
- Recruited from avenues such as social media, community agencies, and local schools
- Snowball sampling methods utilized

Surveys

Family and Peers	Sports	Faith	Attitudes Towards Opioid Use
Network of Relationships Inventory (NRI-RQV)	Sports Participation scale	Brief Multidimensional Measure of Religiousness/Spirituality (BMMRS)	Adolescent Opioid Safety and Learning (AOSL) scale
10 scales to characterize friend, romantic relationship, sibling, parents • 5 + features (companionship, disclosure, emotional support, approval, and satisfaction) • 5 - features (conflict, criticism, pressure, exclusion and dominance)	1-10 scale about Participation and Enjoyment	Indices include Public/Private Religious Activities, Congregation Benefits and Problems, Coping, Religious Intensity, Forgiveness, Daily Spiritual Experiences, Beliefs and Values	Opioid Learning Interest, Opioid Misuse Behavior, Likelihood to Misuse Opioids, Opioid Harm

Table 2. Measures and subscales used to determine level of social connectedness and attitudes towards Opioids

Expected Results

Hypothesis

Increased participation and connectedness will correlate with higher interest in learning about opioids, greater perceptions of opioid harm and misuse, and less likelihood to engage in opioid use.

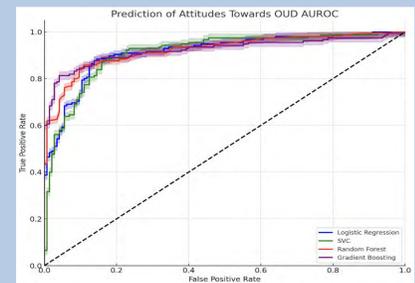
- Supported by research that suggests that social connectedness factors such as peer support, faith, familial support, and exercise may protect individuals from risky or adverse behaviors.⁸⁻¹²

Data Analysis

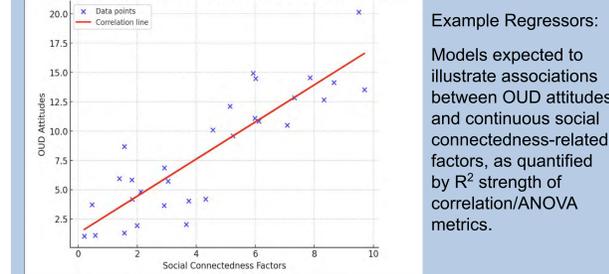
- Classification-based approaches** used to identify features predictive of categorically positive versus negative attitudes towards opioid use disorder.
- Regression-based approaches** used to examine the relationship between social connectedness-related factors and attitudes towards OUD.
- Cluster-based methods** will explore combined effects of social factors on opioid treatment motivation.

Example Classifiers:

Models expected to discriminate between OUD positive and OUD negative perceptions, as quantified by area under the receiver operating characteristic metrics, sensitivity, and specificity



Association between Social Connectedness Factors and OUD Attitudes



Example Regressors: Models expected to illustrate associations between OUD attitudes and continuous social connectedness-related factors, as quantified by R² strength of correlation/ANOVA metrics.

Discussion

- Significance:** Understanding the effects of community support influences can aid with the development of targeted, community-based interventions that may improve treatment adherence and motivation.
- Limitations:** Self-reported data may introduce bias. Predictors may be codependent. Causality cannot necessarily be inferred.

References

- Furr-Holden, D., Milam, A. J., Wang, L., & Sadler, R. (2021). African Americans now outpace whites in opioid-involved overdose deaths: A comparison of temporal trends from 1999 to 2018. *Addiction*, 116(4), 677-683. <https://doi.org/10.1111/add.15233>
- Hoopsick, R. A., Homish, G. G., & Leonard, K. E. (2021). Differences in Opioid Overdose Mortality Rates Among Middle-Aged Adults by Race/Ethnicity and Sex, 1999-2018. *Public Health Reports*, 136(2), 192-200. <https://doi.org/10.1177/0033354920968806>
- Centers for Disease Control and Prevention. (2022, July 11). *Teen newsletter: Opioids*. Centers for Disease Control and Prevention. <https://www.cdc.gov/museum/education/newsletter/2022july/index.html>
- Nguyen Thiho, M. J. (2021). Addressing racial & socioeconomic disparities in access to medications for opioid use disorder amid COVID-19. *Journal of Substance Abuse Treatment*, 122, 108214. <https://doi.org/10.1016/j.jsat.2020.108214>
- O'Connor, A. M., Cousins, G., Durand, L., Barry, J., & Boland, F. (2020). Retention of patients in opioid substitution treatment: A systematic review. *PLOS ONE*, 15(5), e0232086. <https://doi.org/10.1371/journal.pone.0232086>
- Samples, H., Williams, A. R., Olsson, M., & Crystal, S. (2018). Risk factors for discontinuation of buprenorphine treatment for opioid use disorders in a multi-state sample of Medicaid enrollees. *Journal of Substance Abuse Treatment*, 95, 9-17. <https://doi.org/10.1016/j.jsat.2018.09.001>
- Fripp, J. A., & Carlson, R. G. (2017). Exploring the Influence of Attitude and Stigma on Participation of African American and Latino Populations in Mental Health Services. *Journal of Multicultural Counseling and Development*, 45(2), 80-95. <https://doi.org/10.1002/jmcd.12066>
- Jalali, M. S., Botticelli, M., Hwang, R. C., Koh, H. K., & McHugh, R. K. (2020). The opioid crisis: A contextual, social-ecological framework. *Health Research Policy and Systems*, 18(1). <https://doi.org/10.1186/s12961-020-00596-8>
- Grim, B. J., & Grim, M. E. (2019). Belief, behavior, and belonging: How faith is indispensable in preventing and recovering from substance abuse. *Journal of Religion and Health*, 58(5), 1713-1750. <https://doi.org/10.1007/s10943-019-00878-w>
- Dakof, G. A., Tejeda, M., & Liddle, H. A. (2001). Predictors of engagement in Adolescent drug abuse treatment. *Journal of the American Academy of Child & Adolescent Psychiatry*, 40(3), 274-281. <https://doi.org/10.1097/00004583-200103000-00006>
- Mason, M. J., Light, J. M., Mennis, J., Rusby, J. C., Westling, E., Crews, S., Zaharakis, N., Way, T., & Flay, B. R. (2017). Neighborhood disorder, peer Network Health, and substance use among young urban adolescents. *Drug and Alcohol Dependence*, 178, 208-214. <https://doi.org/10.1016/j.drugalcdep.2017.05.005>
- Furzer, B., Rebar, A., Dimmock, J. A., More, A., Thornton, A. L., Wright, K., Colthart, A., & Jackson, B. (2021). Exercise is medicine... when you enjoy it: Exercise enjoyment, relapse prevention efficacy, and Health Outcomes for youth within a drug and Alcohol Treatment Service. *Psychology of Sport and Exercise*, 52, 101800. <https://doi.org/10.1016/j.psychsport.2020.101800>

Acknowledgements

This project was supported by the AACAP Jeanne Spurlock, MD, Research Fellowship in Substance Abuse and Addiction. The study is being done in collaboration with CTN-0144 supported through the National Institute on Drug Abuse and the NIH HEAL Initiative under award numbers UG1DA049467 and UG1DA013720. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health or its NIH HEAL Initiative.

Substance Use Treatment Utilization for Youth with Co-Occurring Psychiatric and Substance Use Disorders

Kathryn Nielsen, Heather Thibeau, Adriana Salome, Agata Bereznicka, Timothy E Wilens, MD, Amy M. Yule, MD

In 2022, 12 million youth met criteria for a substance use disorder (SUD), yet **only 40%** of 12-17 year-olds, and **16.4%** of 18-25 year-olds received treatment.

For youth with co-occurring SUD and psychiatric disorders there is limited information on SUD treatment utilization patterns. We **examine SUD treatment utilization in a sample of youth with co-occurring SUD and psychiatric disorders.**

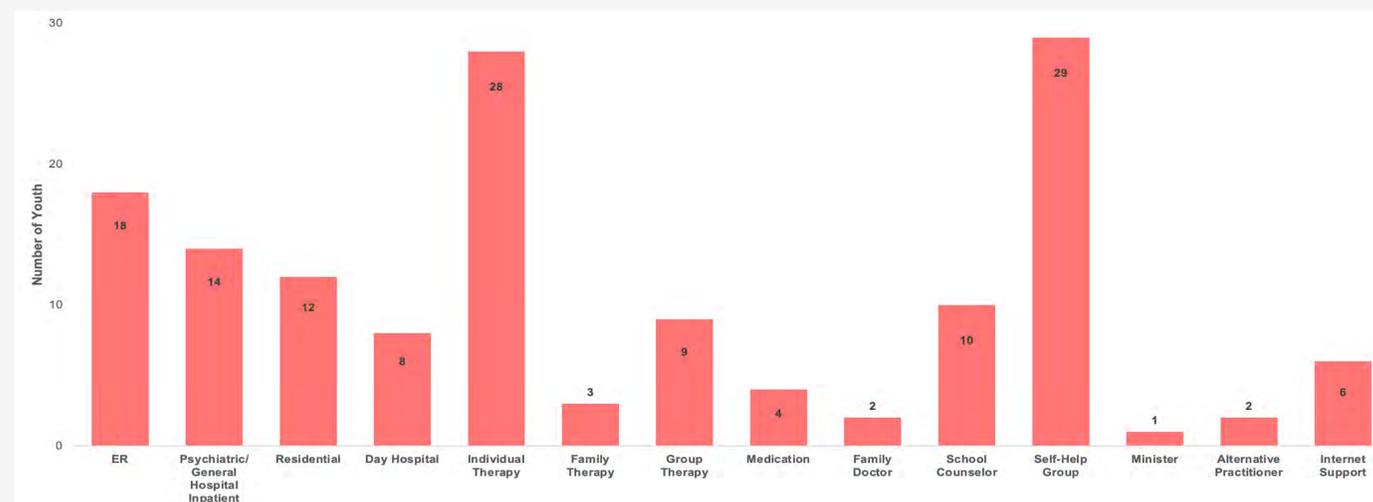
Methods: 16-30 years-olds with non-opioid SUD were recruited from 6 behavioral health clinics at 2 urban academic medical centers in the Northeast for a longitudinal observational study examining the impact of psychopathology treatment on risk for developing an opioid use disorder (OUD). Youth completed self-report questionnaires that assessed demographic characteristics and treatment utilization (Child and Adolescent Services Assessment—adapted). The Screening Assessment for Guiding Evaluation Self-Report (SAGE-SR) was used to assess for current psychiatric and SUD diagnoses.

We used a logistic regression analysis to assess the relationship between demographic factors (ie race/ethnicity, sex, income) and receipt/non-receipt of SUD treatment. Odds ratios and 95% CI were calculated to determine association strength.

75% of the 244 youth with co-occurring SUD and psychiatric diagnoses **had not received SUD-specific treatment.**

Youth who are **cisgender, heterosexual, Hispanic, non-white**, lived **below the poverty line**, or had **no history of ACEs** had **decreased odds** of receiving treatment for substance use disorders.

Of the **61 youth** who did receive treatment, what methods did they utilize?



Scan this QR code to see this poster with additional tables, acknowledgements and citations:



Disclosures:

Amy Yule, MD—Consultant: Bay Cove Human Services, Inc., Gavin Foundation; Grant Support: Commonwealth of Massachusetts, National Institutes of Health, Satter Foundation
Timothy Wilens, MD—Consultant: Bay Cove Human Services, Gavin Foundation, US Minor/Major League Baseball, White Rhino/3D; Employee: Massachusetts General Hospital; Grant Support: National Institute on Drug Abuse, US Food and Drug Administration, White Rhino/3D; Royalties: Cambridge University Press, Guilford Press, Ironshore; Shared IP: White Rhino/3D; co-editor; no personal income: Elsevier Psychiatric

Additional Results:

Among the 831 youth recruited, **244** youth had a non-opioid SUD

- Youth with a co-occurring SUD were 23.2 ± 4.0 yrs old
- **Cannabis use disorders (59%)** were most common followed by alcohol use disorders (17%)
- The most common psychiatric disorder was any **anxiety disorder (62%)** and major depressive disorder (42%)
- **Outpatient (72%)** and **self-help groups (47%)** were the most common types of treatment received

Characteristics associated with being **less likely** to have SUD treatment:

- Cisgender vs non-cisgender (OR 0.31; 0.22, 0.43, $p < 0.001$)
- Heterosexual vs non-heterosexual (OR 0.3; 0.19, 0.48, $p < 0.001$)
- Hispanic vs non-Hispanic (OR 0.42; 0.24, 0.73, $p = 0.002$)
- Non-white vs white (OR 0.33; 0.21, 0.52, $p < 0.001$)
- Below poverty line ($\leq \$31k$) vs above (OR 0.43; 0.25, 0.74, $p = 0.003$)
- ACE 0 vs ACE ≥ 0 (OR 0.34; 0.21, 0.53, $p < 0.001$)

Conclusions:

- Sexual orientation, gender, ethnicity, race, income, and experience of Adverse Childhood Events may influence receipt of SUD specific treatment for youth with a psychiatric disorder

Funding:

- 4H3DA050252 AACAP
- Jeanne Spurlock Fellowship
- Boston University School of Medicine Medical Student Summer Research Program



Engaging Families in Adolescent Opioid Treatment: Insights from Caregiver Experiences

Jayla French, BS¹, Trey V. Dellucci, PhD², Logan A. Gillenwater, BS², Brielle L. Batch, BPH², Stephanie Strong, PhD², Allyson Dir, PhD², Amanda Broderick, PhD², Zachary W. Adams, PhD², Leslie A. Hulvershorn, MD, MSc²

¹Indiana University School of Medicine, ²Department of Psychiatry, Indiana University School of Medicine

Background

- Unintentional drug overdose is a national public health concern, with mortality rates among youth rising faster than any other group (1)
- Family involvement in the treatment of youth substance use disorders (SUDs) is among the strongest predictors of positive outcomes (2)
- Little is known about caregiver engagement in individual treatment within the outpatient setting

Objective

- Identify factors associated with caregiver engagement in outpatient adolescent substance use treatment program

Inclusion Criteria

- Caregiver of an adolescent who has completed substance use treatment in the Dual Diagnosis Clinic at Riley Hospital for Children
- A multidisciplinary outpatient clinic that works with children and adolescents presenting with co-occurring substance and mental health concerns
- Medication assisted treatment (MAT) and behavioral treatments offered such as Encompass, an evidence-based cognitive behavioral therapy and motivational interviewing program for children/adolescents with SUDs

Materials & Methods

We developed a semi structured interview guide that is grounded in the Health Belief Model and Barriers to Treatment Model (3,4)

Interviews are ongoing, we have successfully completed 9 out of 20. Caregivers were paid \$25 for completing the interview

Identification of common themes related to barriers and facilitators of caregiver engagement in their child's substance use treatment

Results – Major Barriers

Caregiver stigma and emotional distress

"I've had to let go of a lot of guilt. And stop being her friend, honestly."

"I understand the focus should be more on the child and the issues. But what isn't talked about... is the impact that it has on the parent."

Lack of flexible and comprehensive services

"Probably one of the biggest [challenges] was finding continuing care afterwards."

"It would have been nice to see some evening or weekend availability, especially when you're dealing with adolescents and teens."

Logistical and practical challenges

"... the time to get down there and back was a huge chunk of not only his day but mine."

"It's hard for families to come into a 9 to 5 schedule where they're working."

Results – Major Facilitators

Safe, welcoming treatment space

"Having an office setting that's more like, therapeutic... a little more welcoming and a little less rigid in terms of like the environment."

Caregiver education and support

"Just helping the parents to better understand their kids. And helping the communication between them."

"...some sort of little newsletter email, whatever that keeps it at the forefront of our minds as parents with some tips about... these are things to look for..."

Clear communication between providers and families

"Maybe providing a little more education on kind of like, what to expect would have been nice... at our initial visit."

"So having a streamlined process... just to know everyone's role would have given me a little more ease and understanding of the processes."

Discussion

- Offering dedicated support to address feelings of guilt, shame, and frustration can help encourage caregiver participation in treatment
- Addressing logistical barriers through flexible session times can help caregivers remain engaged
- Outpatient programs should offer more comprehensive family support, including services such as post-treatment follow-up to ensure continuity of care and sustained engagement
- Offering educational workshops for caregivers may facilitate understanding of the complexities of OUD and help caregivers identify how they can contribute to treatment success

Funding and Acknowledgments

- AACAP Jeanne Spurlock, MD, Research Fellowship in Substance Abuse and Addiction for Minority Medical Students, supported by the National Institute on Drug Abuse (NIDA), and AACAP's Campaign for America's Kids (CFAK)

References

1. Friedman J, Hadland SE. The Overdose Crisis among U.S. Adolescents. *N Engl J Med.* 2024;390(2):97-100. doi:10.1056/NEJMp2312084
2. Hogue, A., Becker, S. J., Wenzel, K., Henderson, C. E., Bobek, M., Levy, S., & Fishman, M. (2021). Family involvement in treatment and recovery for substance use disorders among transition-age youth: Research bedrocks and opportunities. *Journal of substance abuse treatment*, 129, 108402.
3. Kazdin AE, Holland L., Crowley M (1997) Family experience of barriers to treatment and premature termination from child therapy. *J Consult Clin Psychol* 65:453-463
4. Janz NK, Becker MH (1984) The health belief model: a decade later. *Health Educ Q* 11:1-47

AACAP 2024 OCT 14-19 SEATTLE, WA

CHECK OUT THESE EVENTS & PROGRAMS!

MRS Committee
Training and Education Committee
Other AACAP Groups

AACAP Jeanne Spurlock, MD, Research Fellowship

in Substance Abuse and Addiction for Minority Medical Students

Supported by the National Institute on Drug Abuse (NIDA)
and AACAP's Endowment Fund

You are required to complete **seven programs**
during the Annual Meeting. See below.

Choose **one (of two) Life Member Sponsored** Session(s)

Choose **one Diversity and Culture Committee Sponsored** Session

Choose **one Substance Use Committee Sponsored** Session

Weds. Oct 16 **8:00 - 9:45 am** (Opening Plenary)
KARL MENNINGER, MD, PLENARY
From Crisis to Compassion:
Rethinking Mental Health in Foster Care

Thurs Oct. 17 **1:00 - 2:30 pm** (Invite Only)
Junior Research Scholars Lunch

4:45 - 6:15 pm [Free ticketed event - 2 sessions]
Mentorship Program for MSR - Part 1

Friday Oct. 18 **4:45 - 6:15 pm** [Free ticketed event - 2 sessions]
Mentorship Program for MSR - Part 2

Complete **two additional required sessions** of your choice; may include a program in which you are serving in a chair, discussant or co-presenter role, or other programming of choice from the program schedule.

Also consider...

**Bringing the Village to the Children
Programming**

Honors Presentations
(dates and times vary)

Wellness Programs

Networking Events

- Medical Students and Residents (MSR)/ Early Career Psychiatrist (ECP) Meet Up
- Welcome Reception
- MSR Breakfast (Ticketed)

ACCESS CONTENT BEYOND THE MEETING!

Purchase the Conference Enrichment
Package (CEP) at Registration.



AMERICAN ACADEMY OF
CHILD & ADOLESCENT
PSYCHIATRY

WWW.AACAP.ORG