FY2021 ANNUAL REPORT

CENTER FOR Health & Human Services R E S E A R C H

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LETTER FROM THE DIRECTOR

Dear Friends.

While Fiscal Year 2021 was marked by a global pandemic that posed many challenges for CHHSR, it was also a year of important achievements and collaborations. It was a year that allowed us to engage in projects related to the ongoing opioid epidemic, trauma-informed corrections programs, guick response teams, COVID-19 vaccine uptake, and the intersection of converging health epidemics on justice-involved individuals - all projects that align with and support the Talbert House mission of empowering children, adults, and families to live healthy, safe and productive lives.

Highlights of the year include:

- Like many of researchers and practitioners around the country, we successfully shifted to remote work for projects that did not require us to be present in person while safely maintaining in-person work when required.
- Responder Diversion programs in Ohio.
- among correctional treatment program residents.
- grants.
- and enhancing trauma-informed environments within corrections programs.

The end of each fiscal year affords us the opportunity to reflect on our work and contribution to important social issues. We must acknowledge, however, that these accomplishments are not ours alone. We are continually mindful and appreciative of the steadfast support of Talbert House leadership staff who support our work, agency line staff who continue to adapt and innovate in response to the pandemic so that they may continue to deliver evidencebased care to Talbert House clients, the Talbert House Board of Trustees and external funders who make our work possible, and our external collaborators and partners who bring their practical experience and expertise to the design and execution of our work. We look forward to continuing our work with all of them to address important social issues during FY2022.

Building a stronger community....one life at a time.

Sincerely.

Kuberly Openber

Kimberly Sperber, Ph.D. Director



We secured our largest multi-year grant to date to lead a multi-agency evaluation team to evaluate First

• We completed qualitative interviews with 50 members of Quick Response Teams across Ohio to gather information on team composition, community context, and barriers to and facilitators of team success.

 We were awarded a grant to study relationships among underlying health conditions, infectious disease risk, opioid use and overdose risk, criminogenic risk, health literacy, and COVID-19 vaccine knowledge and uptake

We continued to support outcome data collection and analysis in support of the agency's State Opioid Response

• We continued to support internal agency quality improvement initiatives related to COVID-19 vaccine uptake



MAJOR

Monitoring risk profiles after expanding Engagement Center enrollment criteria (2020-21): expanded State Opioid Response cohorts include opioid, stimulant, and other drug users

In FY21 Talbert House continued to expand Engagement Center (EC) withdrawal management and substance use treatment services with support from State Opioid Response grants during 2020 and 2021 (SOR1&2). CHHSR staff administered intake and follow-up assessments with EC clients as required by the Government Performance and Results Modernization Act (GPRA). As part of ongoing process evaluation during FY21, research staff abstracted results of baseline assessments administered at intake into the program. Analyses compared drug related risk factors and clinical outcomes during a period when inclusion criteria were expanded to include stimulant users in addition to opioid users. During FY21, 576 EC intake records were selected for analysis. Of the 576 records, 45 (7.8%) were excluded because clients declined to complete a GPRA assessment, 63 (10.9%) clients left treatment against medical advice prior to completing a GPRA assessment, 10 (1.7%) clients could not be assessed due to medical or behavioral issues, and 138 (24.0%) clients were not eligible to complete a GPRA assessment. Research included 320 records (73.1% of eligible clients) collected during SOR 1 (n=112) and SOR 2 (n=208). Chi square and other tests of statistical significance were applied for independent group comparisons of clients admitted under the admission criteria of SOR 1 versus SOR 2. Research staff examined past 30-day self-reported drug use across 22 categories (GPRA-CSAT Section B responses including open-ended item). These 22 categories were collapsed into 8 categories based on rank-ordered modal categories of drug use. These categories were explored in association with grant year, clinical length of stay, discharge status, and other behavioral risk factors.

Results: From July 2020 to June 2021, most clients (>53%) reported both opioid and stimulant use at intake into the program. Overall, 92 (29%) reported fentanyl use and this proportion was not significantly different across SOR 1 (32%) and SOR 2 (26%) funding periods. Most prevalent was Heroin and Stimulants (35%), Heroin only (20%), and Stimulants only (13%). Fentanyl and Stimulants (9%), and Fentanyl only (9%) were 4th and 5th most prevalent. Numbers and percentage in each group are rank ordered and reported by grant year in Figure 1. As anticipated,

clients reporting Stimulants-only increased significantly (>10%) during SOR 2. Notably, crack/cocaine was more prevalent among clients reporting Stimulants only (59%). Meth/amphetamines was more prevalent among clients reporting Fentanyl and Stimulants (59%). Overall distribution of stimulants is reported in Figure 2. Injection drug use (IDU) was more likely for clients reporting Heroin and Stimulants, and IV Equipment Sharing was more likely for women than men in this group.

Of note is that average length of stay (ALOS) increased for Successful Discharge (+3.9 days) and decreased for Unsuccessful Discharge (-1.0 day) from the SOR 1 funding period to the SOR 2 funding period. While length of stay increased for successfully discharged clients, preliminary results indicate that Successful Discharge rates were not significantly different across SOR 1 (51%) and SOR 2 (47%). In sub-analyses, Successful Discharge was less likely for Fentanyl only (n=9, 31%). Among clients with an Unsuccessful Discharge, ALOS was shortest for men and women reporting Fentanyl only. Among clients with a Successful Discharge, ALOS was longest for women reporting Fentanyl only and Heroin, Fentanyl, and Stimulants. Distributions of Length of Stay by Drug Use, Discharge Status, and Grant Year are represented in Figures 3-4.

Conclusion: Analysis of SOR-funded GPRA-CSAT interview data and clinical discharge records revealed widespread fentanyl use and opioid-stimulant combinations reported at intake into the program, heightened risk of IDU among clients reporting both heroin and stimulant use, and heightened risk of IV equipment sharing among women. Future analyses may examine point-of-care urinalysis results, withdrawal symptom scores, and effects of standardized and prescribed treatments. Social support interventions may include women and men exposed to vulnerable and transient living conditions. Ongoing analyses include additional variables and adjusted odds of risk factors reported at baseline and multivariate models including successful discharge and other outcomes of Clinically Managed Withdrawal Management Services [see full report for details].

FIGURE 1. Drug Use by Grant Year, 2020-2021 (n=320)

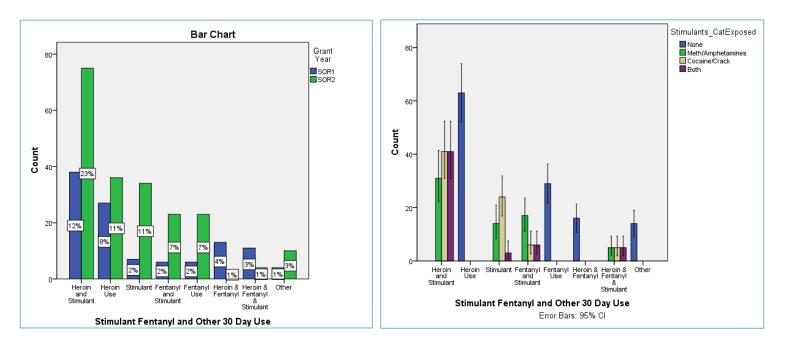
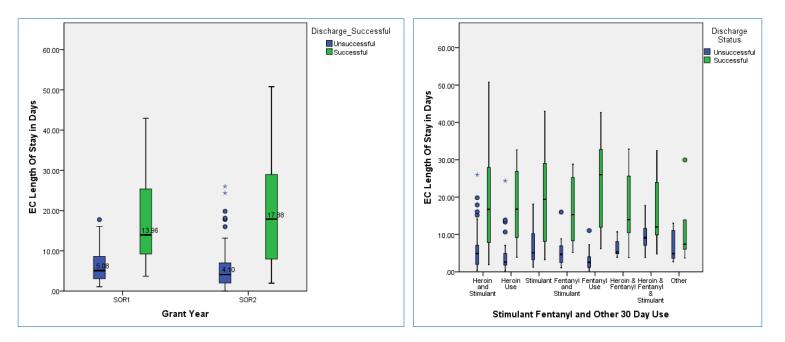


FIGURE 3. Length of Stay and Discharge Status by Grant Year



PROJECTS

FIGURE 2. Drug Use distribution of Stimulants by category, 2020-2021 (n=320)

FIGURE 4. Length of Stay and Discharge Status by Drug Use

MAJOR

Distribution, Composition, and Function of Quick Response Teams in Ohio: a mixed method survey and thematic analysis

During 2017-2020, the Ohio Attorney General's Office allocated more than 4.8 million dollars to enhance or replicate Quick Response Team (QRT) programs modeled after QRTs and the Drug Abuse Response Team originally implemented in Hamilton, Lucas, and Summit counties. These QRT programs were defined as law enforcement diversion programs to address addiction and required a collaborative partnership between local law enforcement and behavioral health providers. Ohio counties have had high overdose mortality rates and increased volatility in recent years. Modeling county level effect of AGO-QRT funding alone forecasts linear increases or a marginal decline in statewide mortality rates using different growth assumptions and data smoothing methods to account for volatility (Figures 5-6). These kinds of analyses provide inconclusive evidence for QRT effectiveness and say little about the diverse composition and function of Ohio's law enforcement collaborations and initiatives. Few studies have reported on the composition of QRTs, their operational strategies, or outcomes of healthcare referral processes and other linkages to care; yet, these operational reports and in-depth studies are needed to craft sound criminal justice and public health policy. Consequently, the Center for Health and Human Service Research (CHHSR) conducted a mixed methods study of Ohio QRTs. Study goals were to: characterize the heterogeneity of team composition and operations, assess community context, identify perceived barriers to QRT success, identify perceived facilitators of QRT success, and to understand the scope of QRTs and how they may have changed over time. To achieve these goals, CHHSR staff administered surveys and conducted semi-structured telephone interviews with members of QRTs across the state in 2020-2021.

Results: Researchers abstracted public records and information available from county agency websites to identify QRT members across the state for participation in the study. QRT members completed an online survey (n=49) and semi-structured interviews (n=50). Participants reported numbers of QRT members (mean=5.9, SD 3.7), partner agencies (mean=5.3 SD 4.9), and service/treatment agencies that accepted QRT referrals (mean=4.8 SD 4.7). QRTs operated on a part to full time basis (range: 4 to >40 hours per week), with

the majority of QRTs operating on a part-time basis. Many responded to small numbers of referrals per week (range: 0 to >45). Logistic regression estimated odds of furnishing naloxone, transporting to treatment, and patient monitoring. Preliminary results indicate source of funding (federal), and QRT hours per week (>4) may affect odds of naloxone furnishing and transporting clients to treatment. See Figures 7-8 for kinds of QRTs and activities reported in Ohio. Ongoing qualitative analyses explored pathways to QRT services, QRT infrastructure, and community context. Findings demonstrated that the majority of respondents worked on QRTs that no longer responded solely to opioid overdose events, opting instead to serve a wider population of individuals affected by substance use. The majority of respondents also reported that their QRT did not yet have written policies and procedures, formal data sharing agreements with community partners, or specialized training requirements for QRT staff. While most respondents indicated availability of a wide array of treatment and social services in their home counties, the majority (72.5%) also indicated that service gaps remain.

Conclusion: The initial goal of QRTs was to conduct outreach to individuals who have experienced a recent overdose event and to help connect them to treatment and other social services to reduce repeat overdoses, recidivism, and deaths. Differences in QRT distribution, composition, and function should be monitored to understand measurable effects on survival and recidivism, at both the individual and county level. Efficacy and cost effectiveness may involve minimum network size, scope, and sets of affiliates. Spaciotemporal research may include performance indicators from naloxone furnishing logs, police deployment logs, and independent assessments of treatment and housing outcomes. Recently observed trends in Ohio death rates have been attributed to fentanyl use, access to evidence-based medicine, and harm reduction interventions. Differences in rate ratios may also stem from changes in QRT funding and 'hotspot' deployments. Further research is needed to first define and then to judge QRT efficacy and to translate research findings into replicable models with fidelity assessment protocols.

FIGURE 5. Rank ordered overdose mortality rates and AGO support for QRTs by Ohio counties, 2010-2019

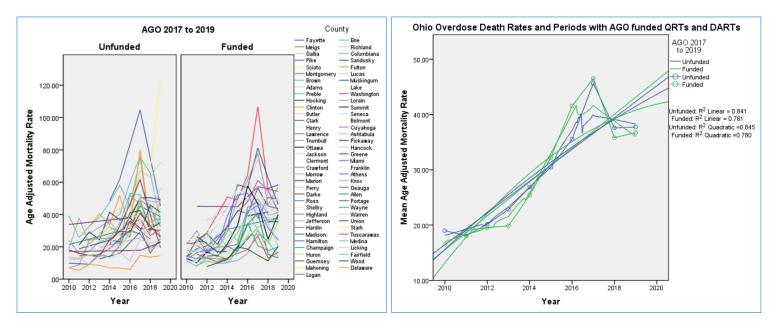


FIGURE 7. Survey results of QRTs with AGO and Other sources of funding (FY 2020; n=49)

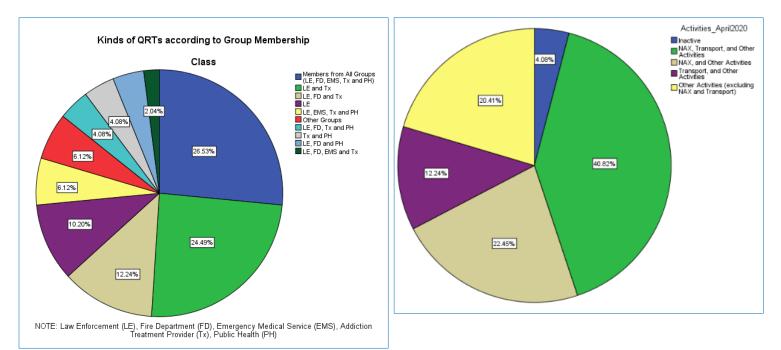


FIGURE 6. Variation in State Average within Linear and Quadratic Growth models

FIGURE 8. Survey results of QRTs with AGO and Other sources of funding (FY 2020; n=49)



PRACTITIONER HIGHLIGHT

MICHAEL ALLEN

Peer Support Certified Supervisor, Engagement Center

As part of the Peer Recovery Network and the Engagement Center, Michael and his team of certified peer supporters provide vital services to Talbert House clients experiencing Substance Use Disorders at 10 agency programs. Those programs include the Engagement Center, Parkway Center, Gateways East, Rewards Jail Intervention, Men's Extended, Turning Point, Men's ADAPT, Women's ADAPT, Day Reporting, and Pathways. He and his team also provide community outreach services. As part of his role as supervisor, Michael has acted as a liaison between peer support staff and CHHSR staff conducing GPRA assessments with clients who receive State Opioid Response (SOR)funded peer support services. A growing component of GPRA assessment is connecting with peer support clients when they begin receiving services and at follow up times while receiving services. To that end, Michael has worked closely with CHHSR staff to ensure coordination and a strong partnership amongst himself, his peer support team, and CHHSR staff. Through his leadership, Michael has proven to be an important component of the essential partnerships needed to facilitate successful connections between peer support clients and CHHSR staff, helping ensure successful GPRA data collection for the (SOR) grants.

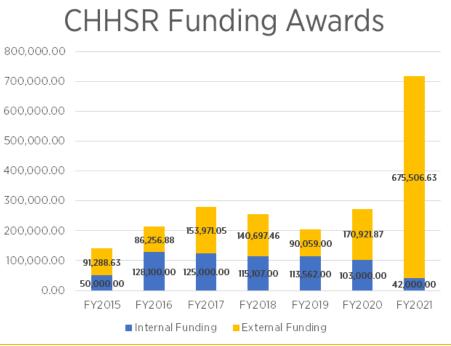
PARTNER INVESTIGATOR HIGHLIGHT

DR. SARAH MANCHAK

Dr. Manchak is an Associate Professor in the School of Criminal Justice at the University of Cincinnati. She received her Ph.D. in experimental psychopathology with a concentration in psychology and the law from the University of California, Irvine in 2011. Prior to that, she earned her MA in forensic psychology at John Jay College of Criminal Justice. Her work seeks to inform policy and practice for individuals with substance use disorder and/ or mental illness who are involved in the criminal justice system. Dr. Manchak and Talbert House have a long-standing research partnership, which includes projects focused on heroin and opioid abuse. She has worked with Talbert House over the course of the past 11 years to evaluate county initiatives aimed at increasing access to medication-assisted treatment for justice involved individuals and has served on Collaboration Boards for CHHSR research projects. She also oversees an undergraduate research internship program where she supervises research interns placed at CHHSR. Finally, she is currently serving as a Co-Principal Investigator, along with Dr. Sperber, on an evaluation of Ohio First Responder Diversion programs.

This Year's Findings include implications for Clinically stimulant combinations, IDU and IV Equipment Sharing Managed Withdrawal Management Services (ASAMamong women and men exposed to vulnerable and WM3.2) and members of Quick Response Teams. (see transient living conditions. Interventions may address Major Projects 1-2). Research from the Hamilton County short-term access to clinical and medical care and long-Engagement Center (EC) discovered widespread term household toxicological assessments (pre and fentanyl use and opioid-stimulant combinations at post discharge). Heterogeneity in QRT composition, program intake. Given the rapid onset (3-5hours), peak function, and community partnerships and resources (8-12hours), and duration (4-5days) of acute fentanyl should be further studied for impact on QRT outcomes. withdrawal, these cases may present to Withdrawal QRTs have quickly scaled-up in Ohio counties with high Management with more urgent and undetected clinical overdose mortality rates. Efficacy and cost effectiveness needs. After acute withdrawal patients may benefit may involve minimum network size, scope, and sets of affiliates. Spaciotemporal research and regulation may from additional days in residential treatment to address unique needs and to certify access to safe and secure require performance indicators including naloxone housing. Ongoing interventions may incorporate furnishing logs, police deployment logs, and independent confirmatory results from point-of-care urinalysis and assessments of treatment and housing outcomes. address independent risks of drug exposures, opioid-

The graph below shows new funding awarded during FY2021. Funding amounts do not reflect continuation of FY2020 funds from previous awards.



SUMMARY AND MAJOR IMPLICATIONS

FUNDING

FY 2021 Funders:

- Hamilton County Mental Health and Recovery Services Board, State Opioid Response (SOR) Grants
- Ohio Office of Criminal Justice Services (OCJS), Edward Byrne Memorial Justice Assistance Grant (JAG) Program
- Ohio Office of Criminal Justice Services (OCJS), Comprehensive Opioid, Stimulant, and Substance Abuse Program (COSSAP) grant
- National Institute on Drug Abuse (NIH), University of Cincinnati **HEALing Communities subaward**

OUR



KIMBERLY GENTRY SBERBER, PH.D. Director

Dr. Sperber received her Ph.D. in Criminal Justice from the University of Cincinnati in 2003 and has worked in the field for more than 25 years. In her role, Dr. Sperber oversees research in the areas of addiction, mental health, corrections and implementation science. She also assists Talbert House to implement, monitor and respond to Continuous Quality Improvement metrics that assess the agency's performance in terms of process, outcomes and treatment fidelity. Her most recent research has focused on: appropriate applications of risk-based treatment dosage for criminal justice clients; identifying and addressing barriers to Medication Assisted Treatment and opioid overdose prevention in communitybased programs; implementation of opioid withdrawal management services in community settings; and identifying barriers to engagement in co-parenting services for non-residential fathers and their co-parenting partners.



Alexander L. Burton, MS, is a PhD Candidate in the School of Criminal Justice at the University of Cincinnati. His research interests can be categorized into two main areas: correctional effectiveness and public opinion on corrections and criminal justice policy. Alexander's corrections research has largely focused on correctional officer training. For example, in 2018 he undertook a national survey of state departments of corrections to assess a variety of issues around preservice training for correctional officers (e.g., length of training, training content). His current work in the area is focused on using pre/post training surveys to assess the effects of training on a variety of topics, such as self-efficacy and attitudes toward individuals serving time in carceral institutions.

AARON T. VISSMAN, PH.D., MPH. Associate Director

Dr. Vissman joined Talbert House in 2016 after completing his Ph.D. in Behavioral Sciences and Health Education at Emory University. He has extramurally funded NIH, CDC, and other research experience investigating public health disparities and multi-level intervention outcomes. He directs ongoing research and serves as grant writer and investigator for interdisciplinary health research projects. Recent projects focus on health education, HIV/AIDS, viral hepatitis, naloxone distribution and mortality in justice-involved populations. He directs the Public Health—Prevention and Policy—Internship Program and serves as a member of the Executive Committee on Continuous Quality Improvement at Talbert House. He teaches classes and workshops available for open registration via the ITD website including: Implementation of PEER-OPS –standardized opioid overdose prevention programs for community correctional facilities; HIV/HCV Policy and Advocacy; and Survey Research Methods.



PAIGE ADKINS, BA. Research Assistant

Paige Adkins joined the CHHSR at Talbert House in February 2020. Prior to joining Talbert House, Paige was a graduate from the University of Kentucky with a Bachelor's degree in Sociology and Gender and Women's Studies with a minor in Criminology. During her undergraduate work, she worked on numerous research projects gaining experience in criminal reentry, gender performance in prisons, power differentiations in race, and proper interview techniques with vulnerable populations. Currently, Paige is assisting with a State Opioid Response data collection project while also facilitating administrative and project management tasks for the CHHSR and affiliated committee, the Human Subjects Committee. She hopes to start her Master's degree at the University of Cincinnati in Fall 2022 then eventually move on to obtaining her PhD.



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CHERIE CARTER, M.S. Senior Research Associate

Cherie joined Talbert House as a Graduate Research Assistant in 2018. Prior to joining Talbert House, Cherie worked at UC's Corrections Institute and UC's Institute for Crime Science. She has a background in teaching and training, and has experience with Core Correctional Practices, Motivational Interviewing, Trauma Informed Care, EPICS, Thinking for a Change, Continuous Quality Improvement, and Cognitive Behavioral Interventions for Substance Abuse. Currently, she is managing data collection and evaluation for several State Opioid Response projects and assists with data collection and data analysis for CHHSR. Cherie is a doctoral student in the School of Criminal Justice at the University of Cincinnati.



Karli L. Province, M.A., is a Ph.D. Candidate in the School of Criminal Justice at the University of Cincinnati. Her research interests are victim services/technology, mental health, and life-course/developmental criminology. Her previous work involves data collection and evaluation of GPS technology for domestic and sexual violence suspects to increase victim safety. Her current work involves data collection and evaluation for a Certified Community Behavioral Health Clinic (CCBHC) project.



ALEXANDER L. BURTON, M.S. Senior Research Associate



KARLI L. PROVINCE, M.A. Senior Research Associate



PUBLICATIONS AND WHITE PAPERS

Rhodes SD, Ballard PJ, Moore K, Klein K, Randall I, Lischke M, **Vissman AT**, Lengerich E, Daniel SS, Skelton JA. Community-Engaged Research in Translational Science: Innovations to Improve Health in Appalachia. Journal of Clinical and Translational Science. October 7, 2021 pp. 1 – 20. DOI: https://doi.org/10.1017/cts.2021.862

Burton, A. L. (2021). OLS (linear) Regression. In J.C. Barnes and D. Forde (Eds.), The Encyclopedia of Research Methods in Criminology and Criminal Justice. Hoboken, NJ: John Wiley & Sons.

Burton, A. L. (2021). Review of Policing the Second Amendment: Guns, Law Enforcement, and the Politics of Race by Jennifer Carlson. Sociological Inquiry, 91(2), 499–501.

Vissman AT. PREA-TIPS program grant, 2019-2021, Community Confinement Services at Talbert House (Year 1 Report and Executive Summary) 6/30/2021: Baseline Results of the Trauma Informed Climate Survey: Cross-Site differences among Clients and Staff, Spring 2021

Vissman AT, King JL, and ECQI Committee. Vaccine uptake in a Cincinnati mental health services center: exploring coverage, willingness, safety concerns, and ongoing informed consent processes during Phase 1-A to prevent SARS-COV-2 (Year 1 Report and Executive Summary) March 2020

Vissman AT, Teismann T, Flynn M, Vanderpool CJ, Bach T, and ODP Working Group. Talbert House Overdose Prevention Working Group Report, 2020-2021: Progress Report on Selected Goals, Objectives, and Activities, Summer 2021

PROFESSIONAL PRESENTATIONS

Vissman AT, Carter C, Adkins P, Sperber KG. Public access to withdrawal management services in a U.S. epicenter: A single site retrospective study of clinical and housing outcomes. Appalachian Translational Research Network Annual Conference at Wake Forest University (online) September 22, 2020