



Building Evidence-Based Strategies to Improve Employment Outcomes for Individuals With Substance Use Disorders

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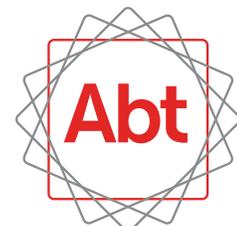
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Overview

INTRODUCTION

This paper examines the impetus and existing evidence on programs that integrate employment services with treatment and recovery services for people with opioid and other substance use disorders (SUDs). It includes an overview of the nature and recent history of SUDs and their treatment, including the important role that employment can play in recovery, and discusses the factors that historically limited the role of employment services in treatment programs. It also provides a brief review of the limited but promising evidence on the effectiveness of integrating substance use disorder treatment and employment services in improving participants' employment outcomes.

The Building Evidence on Employment Strategies for Low-Income Families (BEES) project studies programs that combine employment services with substance use disorder treatment and recovery services. It is funded by the Office of Planning, Research, and Evaluation within the Administration for Children and Families. Through a series of rigorous evaluations, BEES aims to increase the understanding of effective interventions that help low-income individuals find jobs and advance in the labor market.

PURPOSE

The United States is in crisis as it attempts to address the wide-ranging and growing needs of persons with substance use disorders, driven by both the opioid epidemic as well as the ongoing misuse of other drugs and alcohol. Recently, in large part due to the opioid crisis, there has been a growing focus on and increased federal funding for programs that address both treatment and employment outcomes. The provision of employment services specifically designed to be part of substance use disorder treatment or recovery efforts provides opportunities to develop programs that can achieve the dual goals of sustaining recovery and improving economic well-being. The paper considers how the growing number of programs that offer this combination of services offers opportunities to learn more about the efficacy of the approach, and how the BEES project plans to use it.

KEY FINDINGS AND HIGHLIGHTS

- While alcohol is the most common substance linked to a SUD, opioid misuse has increased at an alarming rate during the past two decades. Opioids now represent a significant share of substances linked to SUDs in the United States.

- Substance use disorders have hit low-income populations the hardest. They are more prevalent among those who are unemployed, have lower earnings and educational levels, and live in communities with higher unemployment rates.
- Employment can help people with substance use disorders stay on the path to recovery, reflecting both the economic and noneconomic benefits of work. But many people with substance use disorders face challenges in finding and keeping a job, including discrimination based on having a criminal history, mental or physical health problems, and limited education and skills. Many employers are also reluctant to hire those with a history of substance use disorder.
- While much attention has been given to developing and implementing effective treatment efforts for substance use disorder, employment services have historically not been a primary element in these programs. There are many reasons for this outcome, including limited resources for employment services, lack of SUD treatment staff with appropriate employment-related skills, and limited research on how to sequence employment-focused services most effectively in treatment programs.
- Evidence gathered from numerous studies of employment services for those in treatment and recovery shows that some programs that combine employment services and substance use disorder treatment services have produced some positive results on employment outcomes. However, because many of these studies were not designed as rigorous randomized controlled trials and the study samples were generally small, it is difficult to draw conclusions about the efficacy of any specific approach.
- Further research is needed to understand how to integrate employment and SUD treatment services to improve both economic and treatment outcomes for people with substance use disorders. The BEES project provides an opportunity to examine this approach for serving low-income populations with SUDs.

GLOSSARY

- **Substance use disorder (SUD):** Substance use disorders result from prolonged, repeated use of alcohol and other substances at high doses or high frequencies. Disorders can range from mild and temporary to severe and chronic.
- **Randomized controlled trial:** An experimental research design used to evaluate the effectiveness of an intervention or program by assigning individuals at random to a program group offered the intervention or a control group not offered it.

Contents

Overview	iii
List of Exhibits	vi
Acknowledgments	vii
Substance Use Disorders in the United States	2
Treatment for Substance Use Disorders	3
The Role of Employment and Employment Services in SUD Treatment and Recovery	5
Combining Treatment and Recovery with Employment Services: What Do We Know?	7
Job Search Assistance	9
Moving Forward with the BEES Project	10
Notes and References	12

List of Exhibits

Figure

- | | | |
|---|--|---|
| 1 | Prevalence of Different Types of SUDs, Among Those Reporting a SUD, 2018 | 2 |
|---|--|---|

Box

- | | | |
|---|------------------------------|---|
| 1 | Overview of the BEES Project | 1 |
|---|------------------------------|---|

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The Authors

The United States is experiencing a crisis in addressing the wide-ranging and growing needs of persons with substance use disorders (SUDs), driven by both the opioid epidemic and the ongoing misuse of other drugs and alcohol. Employment is a critical element in effectively addressing this crisis. Employment can help people with substance use disorders stay on the path to recovery, but many struggle to find and maintain jobs. And while much attention has been given to developing and implementing effective prevention and treatment for substance use disorders, employment services have historically not been a primary element of these programs. Recently, mainly because of the opioid crisis, programs that address both treatment and employment outcomes are getting more attention and federal funding. Including employment services specifically designed to be part of substance use disorder treatment or recovery efforts may help develop programs focused on the dual goals of sustaining people’s recovery and improving their economic well-being.

This paper—developed as part of the Building Evidence on Employment Strategies for Low-Income Families (BEES) project, shown in Box 1—examines the impetus and existing evidence on programs that integrate employment services with treatment and recovery services. It includes an overview of the nature and recent trends in substance use disorders and their treatment, including the important role that employment can play in recovery and the factors that have limited the role of employment-related services. It briefly reviews the limited but promising evidence on integrating substance use disorder treatment and employment services and their effect on improving participants’ employment outcomes. Finally, the paper considers how growing numbers of these types of programs provide important opportunities to learn more about the efficacy of this approach, and how the BEES project plans to use this opportunity.

Box 1. Overview of the BEES Project

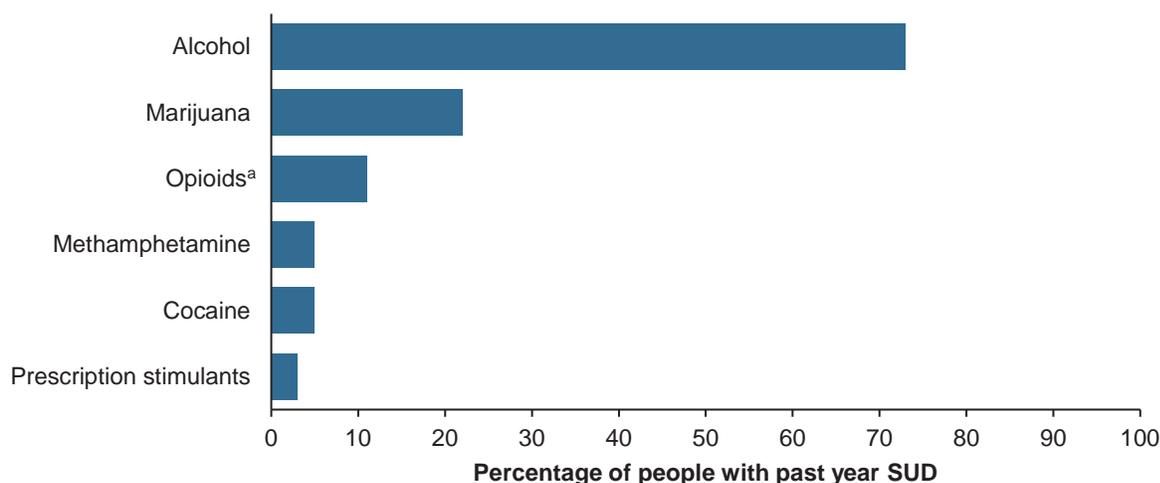
The Office of Planning, Research, and Evaluation within the Administration for Children and Families funded the Building Evidence on Employment Strategies for Low-Income Families (BEES) project. Its goal is increasing the understanding of which interventions are effective in supporting low-income individuals in finding jobs, advancing in the labor market, and improving their economic security. It will do so through a series of experimental evaluations, when possible, of interventions that were identified as innovative that hold the promise of promoting employment and building self-sufficiency among low-income populations. BEES makes a priority of evaluating programs that serve people affected by substance use disorders, including opioid use disorder, or mental health conditions.

SUBSTANCE USE DISORDERS IN THE UNITED STATES

Substance use disorders result from prolonged, repeated use of substances at high doses or high frequencies. They can result in enduring and costly health, economic, and social consequences, including incarceration, job loss, intimate partner and sexual violence, child abuse and neglect, suicide attempts and fatalities, a stroke, or overdose deaths.¹ Disorders can range from mild and temporary to severe and chronic.

In 2018, 20 million Americans—or about 7 percent of the national population—reported a substance use disorder during the past year. While the licit or illicit use of any substance can lead to a substance use disorder, alcohol use poses the greatest health threat to Americans. As shown in Figure 1, in 2018 approximately 73 percent of those reporting a substance use disorder reported alcohol misuse, with 88,000 alcohol-related deaths.²

Figure 1. Prevalence of Different Types of SUDs, Among Those Reporting a SUD, 2018



SOURCE: Calculations from Substance Abuse and Mental Health Services Administration (2019). Results from the 2018 National Survey on Drug Use and Health.

NOTES: People may have reported using multiple types of drugs.

^aIncludes prescription misuse and heroin.

In the past two decades, opioids misuse has increased at an alarming rate, and these drugs now represent a significant share of SUDs in the United States. The current opioid epidemic began with the vastly increased prescribing of potent prescription opioids in the 1990s, leading to widespread misuse of these medications. A rapid increase in heroin use was evident by 2010, then illegally manufactured synthetic opioids, primarily fentanyl, in 2013. In 2018, an estimated 11 percent of those with an SUD had an opioid use disorder (OUD), as shown in Figure 1, primarily due to prescription pain reliever misuse (not shown). In 2018, almost 50,000 Americans

died from an opioid overdose death—four times higher than the number of opioid overdose deaths in 1999.³

Populations with low incomes are hardest hit by substance use disorders. They are more prevalent among people who are unemployed, have lower earnings and educational levels, and live in communities with higher unemployment rates. Studies have consistently found higher licit and illicit SUD rates among those who are unemployed compared with those who are employed, particularly among men. Studies also show job loss substantially increases substance use.⁴

Misuse of opioids has been particularly devastating for low-income individuals and communities. People with incomes below the poverty line are twice as likely to have an opioid use disorder as people with incomes of more than 200 percent of the poverty line. Rates of opioid-related hospitalization and overdose deaths are higher in geographic areas with high rates of poverty and unemployment, and unemployed men and the long-term unemployed are particularly affected.⁵

Substance use disorders have caused substantial negative impacts on society, including lost productivity and increased health care costs, lost tax revenue, and additional spending on health care, social services, education, and criminal justice. In total, estimates put the cost of the opioid crisis alone above \$1 trillion from 2001 to 2017 and forecast that by the end of 2020 this amount will have increased by an additional \$500 billion.⁶

TREATMENT FOR SUBSTANCE USE DISORDERS

While substance use disorders can occur along with other physical and mental health issues, the condition is generally recognized as an independent, diagnosable disease that significantly impairs health and function and may require special treatment. Studies of brain circuits associated with motivation, reward, and cognition support the view that substance use disorders are chronic diseases in which relapse is common. Treatment is not expected to result in a “cure,” rather, it initiates a long period of disease management that may include both a treatment phase and a long—sometimes lifelong—recovery phase. As such, the objectives of substance use disorder treatment are similar to those for other chronic conditions, such as diabetes—that is, to reduce symptoms, improve functioning, manage the disease, and prevent relapse.⁷

A range of treatment options are available for substance use disorders. Upon assessment and diagnosis by a trained professional, a treatment plan is typically developed that includes a combination of components, such as:

- **Behavioral therapies.** These include individual, group, or family counseling; contingency management approaches (using positive rewards to encourage positive behavior change); cognitive behavioral therapy (using techniques to modify negative behavior patterns and improve coping skills through self-monitoring); and motivational enhancement therapy (using motivational interviewing techniques to help resolve any uncertainties about stopping substance use).⁸

- **Medication-assisted treatment (MAT).** MAT, including use of naltrexone, buprenorphine, or methadone, is consistently recognized by the National Academy of Sciences as an effective practice to treat opioid use disorders. Other medications such as disulfiram and acamprosate have been shown to be effective in treating alcohol use disorder. These medications curb the physical and chemical symptoms of the disorder by regulating brain chemistry and function, blocking the effects of the substance, and reducing cravings for the substance. MAT is often administered in conjunction with behavioral therapies or other recovery support services, as medication alone is usually not a sufficient approach to treating a substance use disorder.⁹
- **Recovery support services.** The process of recovery is marked by changes to the brain's functioning that are typically bolstered by resources that promote health and well-being during the post-treatment recovery phase. These services include 12-step programs, peer support services, and recovery coaching programs that can be offered in a variety of locations including educational settings, health care centers, community centers, and supportive housing.¹⁰ These may be delivered separately from formal treatment, although they can be provided by substance use disorder treatment programs.

Typically, treatment for SUDs falls along a continuum with the type, frequency, duration, and intensity of services to be matched, ideally, to the severity of the disorder and needs of the individual. Substance use disorder treatment can be provided in a range of settings. For example, individuals with a mild disorder typically require a lower level of care and may benefit from regular outpatient treatment, while those with a more severe disorder typically require a higher level of care and may need more intensive services in a residential facility or an intensive outpatient program.¹¹

As with any other chronic conditions, SUDs can be successfully managed, and substance use disorder treatment programs have been shown to be effective in improving both physical and psychological functioning. The evidence shows that no single approach to treatment is appropriate for everyone and programs that allow components to be tailored to an individual's needs are more likely to result in success. However, because of the recurring nature of the disease, relapse is common, and several treatment attempts may be required to sustain recovery.¹²

Studies consistently indicate that longer stays in treatment have been the most consistent predictor of favorable treatment outcomes.¹³ In particular, individuals who are engaged in and complete treatment programs are more likely to discontinue their substance use and have lower levels of relapse compared with people who leave treatment early, who are more likely to have outcomes similar to individuals who do not receive any treatment at all.

Estimates put the cost of the opioid crisis over \$1 trillion from 2001 to 2017. Forecasts suggest by 2020 this will have increased by another \$500 billion.

THE ROLE OF EMPLOYMENT AND EMPLOYMENT SERVICES IN SUD TREATMENT AND RECOVERY

While treatment services are critical to helping individuals address their substance use, evidence also indicates that employment is on a par with treatment duration as a predictor of maintained recovery. Across numerous studies of individuals in substance use disorders treatment, those who remained unemployed after treatment were two to three times more likely to relapse than those who were employed. Employment is a commonly used domain to assess substance use disorder effectiveness, reflecting both the economic and noneconomic benefits of work for recovering individuals. In addition to income, which provides economic stability that is critical in and of itself, employment also provides a range of other benefits, such as structure and routine, a way to fill time constructively, a valued role in society, and social connections. These non-economic benefits are especially important for those who have been stigmatized and discriminated against because of their substance use history. Because employment provides valuable benefits to individuals in recovery from substance use disorders that could be lost through continued substance use, it often serves as a motivator for both adhering to treatment and decreasing relapses after treatment.¹⁴

While having a job can be important in maintaining recovery, the evidence also indicates that substance use treatment programs on their own do not improve the employment status of those who are treated. Studies have found little difference in employment in the years before and after treatment, for example. Moreover, most people entering treatment are not employed and will therefore need to address employment issues as part of their recovery. For example, a recent study of more than 150 treatment programs found that only 23 percent of people in treatment were employed either full or part time at the time they enrolled.¹⁵

While employment is important to recovery, people with substance use disorders face a variety of challenges in obtaining and maintaining employment. Difficulties typically include:

- **Previous history in the criminal justice system.** People with substance use disorders are more likely to be involved in the criminal justice system than those without SUDs, which can be a significant deterrent to being hired. In addition, in-person meetings, activities, and court dates for parole and probation requirements can limit the ability to seek and obtain employment.¹⁶
- **Mental or physical health problems.** Those with a substance use disorder are more likely to experience co-occurring mental or physical health conditions, such as depression or hepatitis C infections, than people who do not suffer from these disorders. These issues can cause complications that may make it difficult to adhere to work schedules.¹⁷
- **Limited education, job skills, and work experience.** Limited work experience, as well as a lack of the hard and soft job skills necessary to attain employment, particularly jobs at higher wages, are common among people entering treatment.¹⁸

- **Poor employment opportunities.** Substance misuse is more likely to occur among individuals in areas with high unemployment and limited job prospects.¹⁹
- **Treatment-related constraints.** Certain treatment programs—notably residential treatment and intensive outpatient treatment—have scheduling and time constraints that often pose practical barriers to steady employment.
- **Stigma.** Studies have shown that a substance use disorder is a highly stigmatized condition, on par with a previous history in the criminal justice system and mental health issues, and this affects the employability of people with these disorders. Stigma in the workplace has various forms, including discrimination or treating an individual differently from other employees because of a substance use history.²⁰
- **Employer considerations.** Some employers are reluctant to hire a person with a history of a substance use disorder. Doing so may increase the risk of incurring higher costs, including higher workers' compensation claims, costlier medical expenses, higher job turnover and fewer days worked.²¹ In addition, employer accommodations might be necessary for workers using MAT, which can impair their ability to pass needed drug tests to perform duties safely.

Given the limitations of substance use treatment programs in improving employment outcomes and the challenges people with substance use disorders face in obtaining and maintaining employment, the need for employment services to help those in treatment find jobs is well-established. Programs that combine employment services with treatment and recovery services have been in operation for decades, but the programs are generally small, and they are not common in the SUD service delivery system. For example, a recent national survey of opioid treatment programs found that only one-fourth of them offered vocational training services, with even fewer helping with job placements.²² Several challenges have contributed to the limited number of programs that combine treatment and employment services.

- **Sustained abstinence is viewed as the primary goal of SUD treatment.** Employment is often viewed as falling outside the scope of practice of treatment providers and in the domain of other service providers. Moreover, individuals are often in treatment for limited periods of time, and many providers perceive that time may not be sufficient to address both substance use and employment issues as part of a treatment program.²³
- **Limited resources for employment services.** Insurers, including Medicaid, typically have not reimbursed for nonmedical services (like employment services) and programs have consequently not had the resources to provide these services.²⁴ Recent new federal resources to help mitigate the opioid crisis may help to address this issue.
- **Lack of treatment staff with appropriate employment-related skills.** Few staff employed in substance use disorder treatment programs have the background and training needed to provide employment services. For example, a 2008 national survey of substance use treatment facilities across the United States found that only 10 percent of treatment providers reported having some training in vocational rehabilitation services, and only 4 percent reported having a certified vocational rehabilitation counselor on staff.²⁵

- **More research is needed on how to most effectively use employment-focused services within a treatment program.** Existing evidence does not suggest an optimum point to offer employment services in treatment. Standard practice is often to wait until individuals are “ready” for employment, as indicated by their treatment plans or when they are preparing to transition out of a clinical treatment program. While recognizing that employment can ultimately support recovery, this approach is based on evidence showing that employment can be stressful and relapse-inducing. This indicates that individuals would benefit from focusing on their recovery first and then turning to employment. However, the financial impact of remaining unemployed for an extended period of time may also be stressful to individuals receiving SUD treatment. In addition to the correlation between employment duration and completing treatment, studies have also found that participating in employment services can have a positive effect on treatment compliance.²⁶
- **Limited evidence on effective employment strategies for SUD populations.** As discussed further below, no specific employment intervention has been generally adopted or recognized by the substance use disorder treatment field. Treatment providers face a lack of established evidence-based employment services for the SUD population.²⁷ Importantly, people with a substance use disorder often have other characteristics that make employment particularly challenging. Limited evidence on effective strategies is available, including mental health issues, low skill levels, and involvement in the criminal justice system.

Overall, the relationship between substance use disorders, treatment, recovery, and employment is complex. Current substance use reduces employability, and employment may support recovery. And yet, given the extensive employment barriers faced by people with substance use disorders, treatment alone may not improve their employment outcomes. Because of the critical role employment appears to play in recovery, an interest in developing and expanding approaches that integrate treatment and employment services has increased in recent years. The next section discusses what is currently known about the effectiveness of these approaches.

Given the limitations of substance use treatment programs...the need for employment services to help those in treatment find jobs is well established.

COMBINING TREATMENT AND RECOVERY WITH EMPLOYMENT SERVICES: WHAT DO WE KNOW?

Partly because of the opioid epidemic, there is growing interest in programs that combine treatment, recovery, and employment services. To facilitate development of effective programs, it is important for efforts in the field to build on existing evidence-based practices on what works to promote both substance use disorder recovery and employment. Over the past three decades, researchers have studied a range of programs that integrate treatment and employment services. Two literature reviews synthesizing these studies are complete, although one is focused primarily on programs for those with opioid use disorder.²⁸ Drawing primarily from these syntheses, this section briefly summarizes this past research, highlighting several key studies.

Brief Review of Study Findings

Numerous studies of employment services, either designed or evaluated for those in treatment and recovery, have been made, but few were designed as rigorous randomized controlled trials.²⁹ These studies did not use the highest standards of research study design and most had few participants. That means their results are not reliable, since the lack of random assignment may mean those studies did not accurately estimate the effects of the employment services being evaluated. Also, many studies of employment services within treatment programs were conducted in methadone treatment clinics, making it difficult to generalize the findings to different substance use disorder populations or different institutional settings.

Studies cover a diverse range of interventions offered by a variety of service providers, reflecting the general lack of consensus on which employment-related approaches are appropriate. The employment services examined generally belong to one of three groups: supported employment to place participants in jobs and provide support and training, one-on-one case management and counseling to support participants in finding and keeping jobs, and job search assistance to connect participants to job openings. Some programs offered a combination of these services. A review of findings for each category follows, with a focus on rigorous experimental studies.

Supported Employment

Sometimes known as the “place, then train” approach, supported employment programs are designed to help participants search for jobs first, and then, once jobs are found, to provide training and support to participants on the job. Within this general approach, two program models have shown some positive effects on employment for those with SUDs in rigorous, although small-scale, studies:

- **Individual Placement Support**—This model, often abbreviated as IPS, was originally designed for people with serious mental illnesses. IPS employment specialists connect with local employers, assist with rapid job search, integrate their services with clinical support, and provide benefits counseling. There are numerous rigorous studies of IPS programs for people with serious mental illness that show consistent statistically significant positive effects on employment.

Today, IPS programs are being adapted to serve individuals with substance use disorders. While there are still relatively few rigorous studies available that assess the impact of IPS for this population, those that have been conducted are promising. One study of an IPS program for individuals with substance use disorders found the program resulted in a statistically significant increase in employment for people receiving methadone treatment. A rigorous study of another program that focused on veterans with post-traumatic stress disorders, many of whom also reported having substance use disorders, found that the IPS services produced a statistically significant increase in employment and earnings, compared with veterans who were offered services through a transitional work program. A replication of this study in multiple sites found similar results.³⁰

- **Customized Employment Support**—This model, which provides employment and other support to participants in methadone clinics, was developed specifically for people with substance use disorders. Participants work individually with vocational counselors who develop tailored employment plans while addressing their barriers to employment. Counselors also help with job search and application skills. Each counselor has a small caseload—about 15 people—to facilitate a strong relationship with each client, with the goal of finding immediate employment, including informal work for friends or family. An experimental evaluation conducted in New York City found the customized employment support model resulted in a statistically significant increase in obtaining both paid and informal employment.³¹

One-on-One Case Management and Counseling

Other studies indicate that different types of one-on-one case management or counseling for individuals with substance use disorders, providing coordinated employment and treatment services and other support to address barriers, can produce positive effects.³² The key studies in this area include:

- **A “coordinated care services” program provided to cash assistance applicants in New York City and New Jersey who screened positive for a substance use disorder.** Case managers had low caseloads and held weekly meetings with participants and coordinated services across multiple providers, including substance use disorder treatment and transitions to employment. Two experimental studies compared participants who received these coordinated services with those who received standard case management from staff with higher caseloads who meet with their clients less frequently and offered only referrals to services. The studies found the coordinated care approach resulted in a statistically significant increase in abstinence rates, and employment levels increased for women but not for men.³³
- **A “motivational interviewing” program targeting drug-involved offenders assigned to drug court provided 26 individual and group sessions, facilitated by an employment specialist with experience in both substance use and employment counseling.** The sessions covered topics related to obtaining, maintaining, and upgrading employment using motivational interviewing—an evidence-based counseling approach aimed at promoting behavior change. An experimental study compared the outcomes of these participants with those in a control group that followed standard court processing procedures. The study found that the program using motivational interviewing resulted in statistically significant increases in employment and earnings.³⁴
- **A counseling program using “interpersonal cognitive problem-solving” techniques for individuals enrolled in methadone maintenance treatment programs.** Trained counselors used these problem-solving techniques to help participants address both substance use and employment issues concurrently in weekly counseling sessions. An experimental study compared participants who received the integrated counseling with participants in the control group who received substance use counseling alone. The study found no statistically significant results.³⁵

Job Search Assistance

A less intensive approach focused specifically on developing job search skills for those with substance use disorders, has been rigorously evaluated in multiple settings. Called the Job Seeker's Workshop, this three-session, 12-hour program was designed specifically for those receiving SUD treatment. The program provided training on job search skills such as identifying employment opportunities, developing resumes, and preparing for job interviews. In response to some positive results from an evaluation of the program in the 1970s, more recent replications of program that targeted those receiving outpatient treatment for substance use disorders, treatment services were evaluated using experimental designs. These studies did not find a statistically significant impact on employment.³⁶

IMPLICATIONS OF RESEARCH FINDINGS

Broadly, the evidence shows that some interventions that combine employment services and treatment services have produced positive effects on employment outcomes in rigorous studies, showing the potential of the approach. Moreover, there is some indication that more comprehensive programs, such as those that offer supported employment services, may be more effective for those with substance use disorders than less intensive interventions, such as job search assistance. This is consistent with other studies of hard-to-employ populations that face significant barriers to finding and keeping jobs.³⁷

Despite some positive findings, it is difficult to draw conclusions about the efficacy of any specific approach because very few rigorous studies have been conducted, indicating further research is needed to address important unanswered questions. In particular, more evidence-based information is needed about the content or packaging of services provided, such as supported employment and job search assistance. More research is still required to assess whether the service delivery system, such as an inpatient program, outpatient treatment, or other organizations such as public or social services agencies matters, and a need for greater clarity remain about the extent to which interventions work better for certain types of individuals with substance use disorders, such as men or women, ex-offenders, or those with opioid use disorders versus other substance use disorders.

MOVING FORWARD WITH THE BEES PROJECT

This paper explores both the critical need for and promise of strategies that integrate employment and substance use services, as well as the limited evidence on which to build future programming. To strengthen knowledge about what works, evaluating programs that integrate employment and substance use disorder treatment services is a focus of the BEES project. As a multisite rigorous evaluation of promising employment strategies for low-income families, BEES will focus on populations that face significant barriers to employment, including those with substance use disorders.

The BEES project comes at an opportune time. The current epidemic of substance use disorders and the poor employment prospects of those affected has resulted in an increase in federal funding for states to expand initiatives. This includes the Substance Abuse and Health Services Administration's (SAMHSA) Access to Recovery Grants, Substance Abuse Prevention and Treatment Block Grants, State Targeted Response to the Opioid Crisis grants, and State Opioid Response programs. A nationwide scan of programs conducted by the BEES research team showed a wide range of emerging programs that use new service delivery models or adapt existing approaches, such as IPS, for substance use disorder populations. There are limited rigorous studies of the effectiveness of these recent efforts to integrate employment and treatment services. The BEES research team is currently identifying programs for inclusion in the study and developing and launching rigorous research designs. Finding strong programs and demonstrating their effectiveness is urgently needed to mitigate the current epidemic of substance use disorders.

NOTES AND REFERENCES

- 1 A. Thomas McLellan, "Substance Misuse and Substance Use Disorders: Why Do They Matter in Healthcare?" *Transactions of the American Clinical and Climatological Association* 128 (2017): 112-130.
- 2 Substance Abuse and Mental Health Services Administration, *Results from the 2018 National Survey on Drug Use and Health: Graphics from the Key Findings Report* (Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, 2019); National Institute on Alcohol Abuse and Alcoholism (NIAAA), "Alcohol Facts and Statistics" (2019), website: <https://www.niaaa.nih.gov/alcohol-facts-and-statistics>.
- 3 National Institute on Drug Abuse (NIDA), "Opioid Overdose Crisis," (2019), website: <https://www.drugabuse.gov/drugs-abuse/opioids/opioid-overdose-crisis>; Centers for Disease Control and Prevention (CDC), "Opioid Basics: Understanding the Epidemic," (2019), website: <https://www.cdc.gov/drugoverdose/epidemic/index.html>.
- 4 Dieter Henkel, "Unemployment and Substance Use: A Review of the Literature (1990-2010)," *Current Drug Abuse Review* 4, 1 (2011): 4-27; Robin Ghertner and Lincoln Groves, *The Opioid Crisis and Economic Opportunity: Geographic and Economic Trends* (Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services, 2018).
- 5 Ghertner and Groves (2018); Henkel (2011).
- 6 Altarum, "Economic Toll of Opioid Crisis in U.S. Exceeded \$1 Trillion Since 2001," (2018), website: <https://altarum.org/newsroom>.
- 7 George F. Koob and Nora D. Volkow, "Neurocircuitry of Addiction," *Neuropsychopharmacology*, 35, 1 (2010): 217-238; U.S. Department of Health and Human Services (HHS) Office of the Surgeon General, *Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health* (Washington, DC: U.S. Department of Health and Human Services, 2016).
- 8 U.S. Department of Health and Human Services (2106).
- 9 National Academies of Sciences Engineering and Medicine, *Medications for Opioid Use Disorder Save Lives* (Washington, DC: The National Academies Press, 2019); Substance Abuse and Mental Health Services Administration, "Medication and Counseling Treatment," (2019), website: <https://www.samhsa.gov/medication-assisted-treatment/treatment>; U.S. Department of Health and Human Services, *Facing Addiction in America* (2016); U.S. Department of Health and Human Services, *Facing Addiction in America: Executive Summary* (2016).
- 10 U.S. Department of Health and Human Services, *Facing Addiction in America* (2016).
- 11 U.S. Department of Health and Human Services, *Facing Addiction in America: Executive Summary* (2016).
- 12 National Institute on Drug Abuse (NIDA), *Principles of Drug Addiction Treatment: A Research-Based Guide (Third Edition)* (Washington, DC: National Institutes of Health (NIH), U.S. Department of Health and Human Services, 2018); U.S. Department of Health and Human Services, *Facing Addiction in America* (2016).
- 13 Hanne H. Brorson, Espen Ajo Arnevik, Kim Rand-Hendriksen, and Fanny Duckert, "Drop-out from Addiction Treatment: A Systematic Review of Risk Factors," *Clinical Psychology Review* 33, 8 (2013): 1010-1024.
- 14 Henkel (2011); Substance Abuse and Mental Health Services Administration, *National Outcomes Measures* (Rockville, MD: Office of Applied Studies, Substance Abuse and Mental Health Services Administration, 2008); Alexandre B. Laudet, "Rate and Predictors of Employment Among Formerly Polysubstance Dependent Urban Individuals in Recovery," *Journal of Addictive Diseases* 31, 3 (2012): 288-302; Alexandre B. Laudet and William White, "What Are Your Priorities Right Now? Identifying

- Service Needs Across Recovery Stages to Inform Service Development,” *Journal of Substance Abuse Treatment* 38, 1 (2010): 51-59.
- 15 Stephen Magura, Graham L. Staines, Laura Blankertz and Elizabeth M. Madison, “The Effectiveness of Vocational Services for Substance Users in Treatment,” *Substance Use & Misuse* 39, 13-14 (2004): 2165-2213; R. Thomas Sherba, Kathryn A. Coxe, Beth E. Gersper, and Jessica V. Linley, “Employment Services and Substance Abuse Treatment,” *Journal of Substance Abuse Treatment* 87 (2018): 70-78.
 - 16 Sherba et al. (2018).
 - 17 Paul Duffy and Helen Baldwin, “Recovery Post Treatment: Plans, Barriers and Motivators,” *Substance Abuse Treatment, Prevention, and Policy* 8, 6 (2013); Substance Abuse and Mental Health Services Administration, *Substance Use Disorder Treatment for People with Co-Occurring Disorders* (Washington, DC: U.S. Department of Health and Human Services, 2020).
 - 18 Sigurdur Oli Sigurdsson, Brandon M. Ring, Kristen O’Reilly, and Kenneth Silverman, “Barriers to Employment among Unemployed Drug Users: Age Predicts Severity,” *American Journal of Drug and Alcohol Abuse* 38, 6 (2012): 580-587.
 - 19 Ghertner and Groves (2018).
 - 20 Marjorie L. Baldwin, Steven C. Marcus and Jeffrey De Simone, “Job Loss Discrimination and Former Substance Use Disorders,” *Drug Alcohol Dependence* 10, 1-2 (2010): 1-7; Jason B. Luoma, Michael P. Twohig, Thomas Waltz, Steven C. Hayes, Nancy Roget, Michelle Padilla, and Gary Fisher, “An Investigation of Stigma in Individuals Receiving Treatment for Substance Abuse,” *Addictive Behaviors* 32, 7 (2007): 1331-1346.
 - 21 Emily Kuhl, *Mitigating the Effects of Opioid Use Among Workers* (American Psychiatric Association Foundation: Partnership for Workplace Mental Health, 2016).
 - 22 Sherba et al. (2018); Christopher M. Jones, Danielle J. Byrd, Thomas J. Clarke, Tony B. Campbell, Chideha Ohuoha, and Elinore F. McCance-Katz, “Characteristics and Current Clinical Practices of Opioid Treatment Programs in the United States,” *Drug and Alcohol Dependence* 205, 1 (2019): 107616.
 - 23 Sherba et al. (2018).
 - 24 Sherba et al. (2018); Mental Health America, “Position Statement 31: Development of Employment Services for Adults in Recovery from Mental Health and Substance Use Conditions,” (2017), website: <https://www.mhanational.org/issues/position-statement-31-development-employment-services-adults-recovery-mental-health-and>.
 - 25 Stephen L. West, “The Utilization of Vocational Rehabilitation Services in Substance Abuse Treatment Facilities in the U.S.,” *Journal of Vocational Rehabilitation* 29, 2 (2008): 71-75.
 - 26 Scott Wetzler, *Defeating Dependency: Work First* (Washington, DC: American Enterprise Institute, 2018); Sherba et al. (2018); Daisy Gómez, Leonard A. Jason, Richard Contreras, Julia DiGangi, and Joseph R. Ferrari, “Vocational Training and Employment Attainment among Substance Abuse Recovering Individuals within a Communal Living Environment,” *Therapeutic Communities* 35, 2 (2014): 42-47; Nancy M. Petry, Leonardo F. Andrade, Carla J. Rash, and Martin G. Chermiack, “Engaging in Job-Related Activities is Associated with Reductions in Employment Problems and Improvements in Quality of Life in Substance Abusing Patients,” *Psychology of Addictive Behaviors* 28, 1 (2014): 268-275.
 - 27 Magura et al. (2004).
 - 28 Magura et al. (2004); Michaela Vine, Colleen Staatz, Crystal Blyler, and Jillian Berk, *The Role of the Workforce System in Addressing the Opioid Crisis: A Review of the Literature* (Cambridge, MA: Mathematica, 2020).

- 29 A randomized controlled trial is an experimental research design used to evaluate the effectiveness of an intervention or program. Under this design, individuals are assigned at random to either a program group, which has access to the particular intervention or program services, or to a control group, which does not have access to these services. People in the program and control groups are typically referred to as “study enrollees,” or “research participants.” The researcher then measures selected outcomes among all study enrollees—for example, the proportion of each group that found a job—over a set period of time after random assignment (the “follow-up period”). The difference between the program group outcome and the control group outcome is seen as the program’s estimated effect, or impact. If this difference is larger than would be generally expected if the program or intervention had no true effect, the difference is referred to as “statistically significant.”
- 30 Carrie E. Lones, Gary R. Bond, Mark P. McGovern, Kathryn Carr, Teresa Leckron-Myers, Tim Hartnett, and Deborah R. Becker, “Individual Placement and Support (IPS) for Methadone Maintenance Therapy Patients: A Pilot Randomized Controlled Trial,” *Administration and Policy in Mental Health* 44, 3 (2017): 359-364; Lori L. Davis, Andrew C. Leon, Richard Toscano, Charles E. Drebing, L. Charles Ward, Pamela E. Parker, T. Michael Kashner, and Robert E. Drake, “A Randomized Controlled Trial of Supported Employment among Veterans with Posttraumatic Stress Disorder,” *Psychiatric Services* 63, 5 (2012): 464-470; Lori L. Davis, Tassos C. Kyriakides, Alina M. Suris, Lisa A. Ottomanelli, Lisa Mueller, Pamela E. Parker, Sandra G. Resnick, Richard Toscano, Alexandra A. Scrymgeour, and Robert E. Drake, “Effect of Evidence-Based Supported Employment vs Transitional Work on Achieving Steady Work among Veterans with Posttraumatic Stress Disorder: A Randomized Clinical Trial,” *JAMA Psychiatry* 75, 4 (2018): 316-324; Donald E. Frederick and Tyler J. VanderWeele. (2019): “Supported Employment: Meta-Analysis and Review of Randomized Controlled Trials of Individual Placement and Support.” *PloS ONE* 14, 2.
- 31 Stephen Magura, Laura Blankertz, Elizabeth M. Madison, Ellen Friedman, and Augustin Gomez, “An Innovative Job Placement Model for Unemployed Methadone Patients: A Randomized Clinical Trial,” *Substance Use & Misuse* 42, 5 (2007): 811-828.
- 32 Vine et al. (2020).
- 33 Jon Morgenstern, Aaron Hogue, Sarah Dauber, Christopher Dasaro, and James R. McKay, “Does Coordinated Care Management Improve Employment for Substance-using Welfare Recipients?,” *Journal of Studies on Alcohol and Drugs* 70, 6 (2009): 955-963; Jon Morgenstern, Charles J. Neighbors, Alexis Kuerbis, Annette Riordan, Kimberly A. Blanchard, Katharine H. McVeigh, Thomas J. Morgan, and Barbara McCrady, “Improving 24-month Abstinence and Employment Outcomes for Substance-Dependent Women Receiving Temporary Assistance for Needy Families with Intensive Case Management,” *American Journal of Public Health* 99, 2 (2009): 328-333.
- 34 J. Matthew Webster, Michele Staton-Tindall, Megan F. Dickson, John F. Wilson, and Carl G. Leukefeld, “Twelve-Month Employment Intervention Outcomes for Drug-Involved Offenders,” *The American Journal of Drug and Alcohol Abuse* 40, 3 (2014): 200-205.
- 35 Donna M. Coviello, Dave A. Zanis, Susan A. Wesnoski, and Sarah W. Domis, “An Integrated Drug Counseling and Employment Intervention for Methadone Clients,” *Journal of Psychoactive Drugs* 41, 2 (2009): 189-197.
- 36 Dace S. Svikis, Lori Keyser-Marcus, Maxine Stitzer, Traci Rieckmann, Laretta Safford, Peter Loeb, Tim Allen, Carol Luna-Anderson, Sudie E. Back, Judith Cohen, Michael A. DeBernardi, Bruce Dillard, Alyssa Forcehimes, William Jaffee, Therese Killeen, Ken Kolodner, Michael Levy, Diane Pallas, Harold I. Perl, Jennifer Sharpe Potter, Scott Provost, Karen Reese, Royce R. Sampson, Allison Sepulveda, Ned Snead, Conrad J. Wong, and Joan Zweben, “Randomized Multisite Trial of the Job Seekers’ Workshop in Patients with Substance Use Disorders,” *Drug and Alcohol Dependence* 120, 1-3 (2012): 55-64; K. Foley, D. Pallas, A. A. Forcehimes, J. M. Houck, M. P. Bogenschutz, L. Keyser-Marcus, and D. Svikis, “Effect of Job Skills Training on Employment and Job Seeking Behaviors in an American Indian Substance Abuse Treatment Sample,” *Journal of Vocational Rehabilitation* 33, 3 (2010): 181-192.

37 Vine et al. (2020); David Butler, Julianna Alson, Dan Bloom, Victoria Deitch, Aaron Hill, JoAnn Hsueh, Erin Jacobs, Sue Kim, Reanin McRoberts, and Cindy Redcross, *Enhanced Services for the Hard-to-Employ Demonstration and Evaluation Project: Final Results of the Hard-to-Employ Demonstration and Evaluation Project and Selected Sites from the Employment Retention and Advancement Project*, OPRE Report 2012-08 (Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services, 2012).