

PROVEN RESULTS:

Understanding Outcomes-Driven, Comprehensive Addiction Treatment

It is impossible to overstate the positive impact of effective addiction treatment on individuals and society. The value of transforming individual lives is immeasurable, with benefits extending far beyond the patient who has substance use disorder (SUD) into the lives of loved ones and entire communities.

Within communities, successful addiction treatment substantially reduces the demand on emergency medical services and healthcare organizations, while simultaneously decreasing the burden on local law enforcement, court systems, and jails.¹

Effective addiction treatment also reduces both costs related to unreimbursed medical care and public assistance benefits by helping patients better navigate the healthcare system and secure employment and housing.

Outcomes data gathered by best in class treatment provider BrightView replicates data from the National Institute on Drug Abuse.² Headquartered in Cincinnati, BrightView is leading the way in effective treatment modalities and is currently providing care to more than 12,000 patients throughout Ohio, Kentucky, Virginia and Delaware using a comprehensive harm-reductionist, biopsychosocial model of care.

BrightView collected and analyzed outcomes data from patients in its evidence-based substance use disorder care programs and found that treatment was found to decrease:

- Consumption of illicit substances and alcohol
- Anxiety and depressive disorders
- Emergency Department utilization
- Unemployment
- Length of incarceration
- New arrests/recidivism

Equally important, the positive results BrightView patients experience are maintained at a year of treatment and beyond. Ongoing care builds significantly on these initial improvements.

1/3

Patients report a 1/3 decrease in emergency room visits after 3 months in BrightView's program and a 50% decrease after one year.

50%

After 90 days with BrightView, patients report more than a 50% decrease in alcohol consumption, with many patients achieving abstinence.

70%

BrightView patients decrease use of illicit substances by nearly 70% on average within the first 90 days, with many patients achieving complete abstinence.



BrightView patients report a nearly 50% increase in engagement with regular medical providers (ex. primary care) after 90 days in treatment.

50%

Within six months, unemployment among BrightView patients decreases by over 50%, with the improvement sustained long term.

BETTER QUALITY OF LIFE

BrightView's outcomes analysis reveals dramatic, measurable improvement in people's lives, including substantial reductions in drug and alcohol use, unemployment, depression, and anxiety.

Illicit Substance Use: Decreased 70%

In the first 90 days of treatment, BrightView patients decrease consumption of illicit substances by an average of 70%, with many patients achieving complete abstinence. P-value less than 0.0001.

This outcome is considered by many as one of the most important indicators of successful substance use disorder treatment.

Alcohol Use: Decreased 50%

BrightView patients report an average 50% reduction in their alcohol consumption within the first 90 days of treatment, and many patients abstain from alcohol entirely. P-value less than 0.0001.

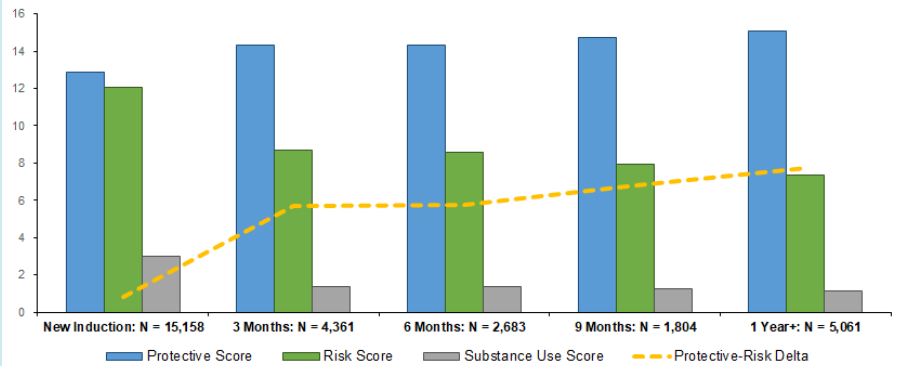
Unemployment: Decreased 50%

Within 6 months of initiating treatment at BrightView, unemployment among patients decreased by more than 50%. As part of the organization's commitment to helping patients achieve long-lasting recovery, BrightView focuses on assisting patients in job-readiness training, resume-building, and connecting them with local social service organizations to help secure stable employment, housing, food allowances, and access to transportation.

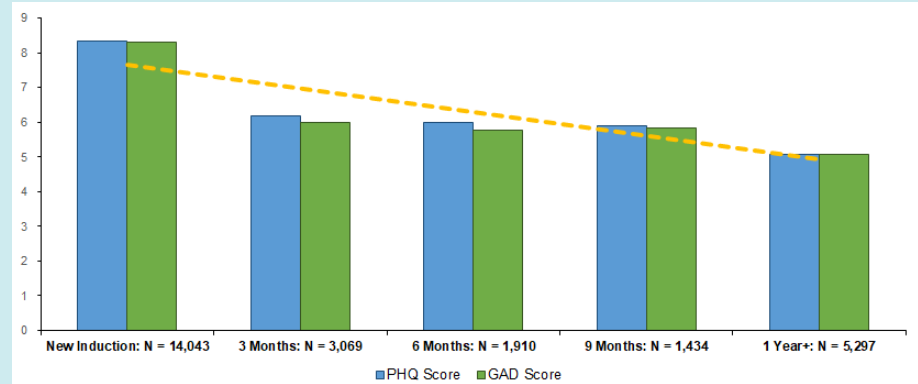
Anxiety and Depression: Decreased

Mental health disorders such as depression and anxiety can contribute to SUD diagnoses and/or worsen symptoms of a pre-existing, co-occurring diagnosis. Based on the response measurements gathered from a standardized Patient Health Questionnaire (PHQ) and the Generalized Anxiety Disorder (GAD) scale, BrightView patients reported reduced anxiety and depression in their first 90 days of treatment, along with better sleep. P-value below 0.0001.

BAM RESULTS



PHQ AND GAD RESULTS



ACCURATELY MEASURING RESULTS

Statistical validity is key for scientific research. Two variables fundamental to statistically valid research include:

Sample size (n): simply means the research must be conducted across a large enough group to ensure validity of any outcome trends to a larger population. Generally speaking, a larger sample size leads to greater validity and a reduced margin of error. BrightView's outcome variables are collected from the experiences of more than 12,000 patients across 30 outpatient addiction treatment centers in two states.

Statistical Significance (p-value): Determining causality involves evaluating a potential relationship and/or effect that one variable may have on another. A p-value refers to the statistical significance of a relationship between two variables. A p-value lower than 0.05 between two variables demonstrates a very high likelihood that one variable produced the resulting change in the second. In BrightView's published data, treatment outcomes are well below this threshold.

DECREASED EMERGENCY DEPARTMENT USE, INCREASED PREVENTATIVE AND ROUTINE HEALTHCARE

Emergency Departments (ED) have become the default source of medical care for individuals with substance use disorders. In fact, nearly half of all ED visits can be categorized as related to SUD.⁶ Patients present seeking SUD treatment, withdrawing from substances, with other complications of their disease, such as injection-related infections.

Identifying untreated substance use disorder in the Emergency Department enables providers to identify, diagnose, and triage patients with SUD to life-saving, specialty addiction medicine care.

Despite overwhelming supportive evidence, the adoption of SUD treatment initiation programs within Emergency Departments has been slow, with few EDs in the U.S. offering treatment.⁷

A 2019 survey of emergency physicians from one health system found that only one in five had completed the mandatory X-waiver training, one-third had ordered buprenorphine for individuals with OUD in the past three months, and less than 30% felt confident clinically to initiate buprenorphine treatment.⁸

Initiating treatment within the ED and establishing an immediate follow-up referral appointment improves outcomes for individuals with SUD⁹. Implementing these programs can be facilitated more easily if referral networks of readily accessible outpatient community providers and treatment programs are established.

Smooth transitions to successful outpatient treatment programs are crucial to break the cycle of Emergency Department over-utilization. BrightView patients engaged in treatment have demonstrated both reduced visits to Emergency Departments and increased participation in routine and preventative healthcare.

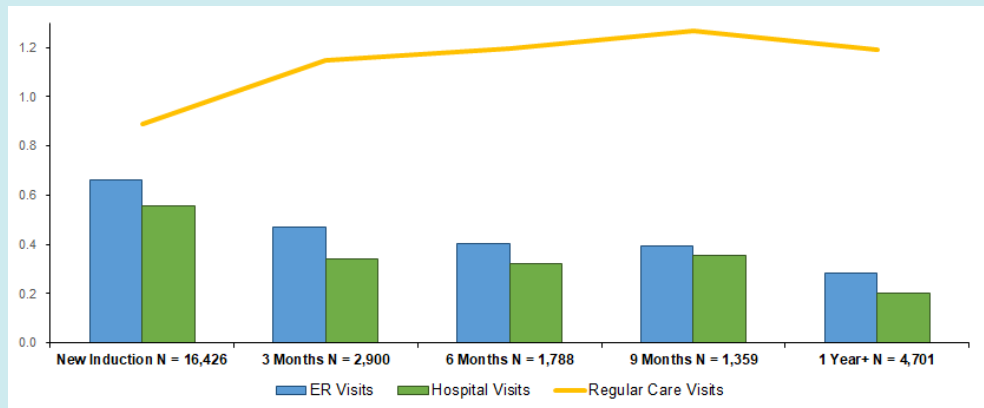
50% Reduction in ED Visits

In their first 90 days of treatment, BrightView patients reduce emergency department visits by one-third. After one year of sustained treatment, the reduction in visits climbs to 50%. An associated p-value below 0.00001 indicates that BrightView's program yields this change.

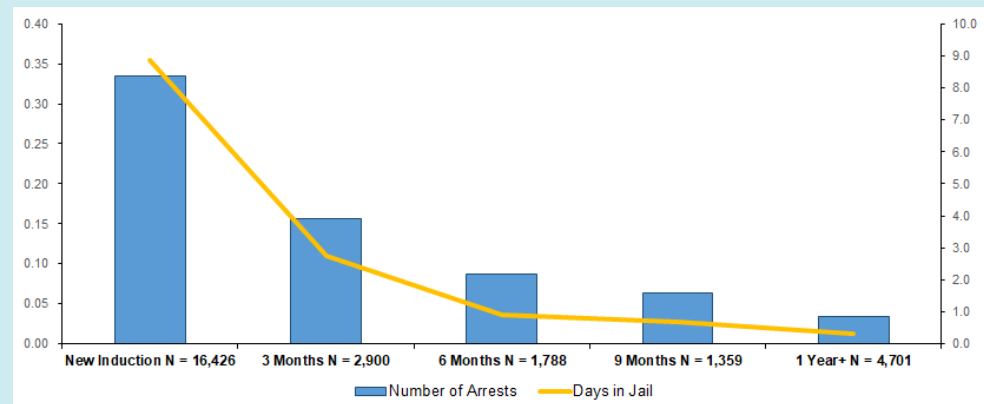
Increased Engagement with Non-Emergent Medical Care Providers

Within their first 90 days of treatment, BrightView patients increase their participation with non-emergent medical providers such as primary care physicians, medical specialists, and dentists by nearly 50%. This rise in care participation is partially due to patients routinely engaging with a medical professional as part of their addiction treatment, with referrals to other healthcare providers as indicated.

HEALTHCARE UTILIZATION: THE PAST 6 MONTHS



CRIMINAL JUSTICE INVOLVEMENT: THE PAST 6 MONTHS



DECREASED INCARCERATION AND FEWER ARRESTS

Criminal justice statistics detail a punitive national policy approach to substance use disorder in the United States. Research estimates that 65% percent of our nation's current prison population has an active SUD. Another 20% do not meet the official criteria for an SUD but were under the influence of drugs or alcohol at the time of their crime.⁹ In 2016, more than 1.5 million Americans were arrested for a drug-related offense. Every minute, there are two arrests for drug possession in the United States.

The financial burden attributed to the criminalization of substance use and substance use disorder is crippling. The National Drug Intelligence Center (NDIC) estimates the annual cost of drug-related crime in the U.S. is greater than \$61 billion, with the criminal justice system cost making up \$56 billion of that total.¹⁰

In 2016, Ohio and Kentucky alone spent more than \$73 million on arrests, court proceedings, and incarceration for drug-related criminal offenses.¹¹ To combat surging drug-related incarceration and criminal justice costs, BrightView provides comprehensive, evidence-based care to help patients overcome substance use disorder and help communities heal. Effective substance use disorder treatment offers marked reductions in length of incarceration, new arrests, and recidivism.

Arrests: Decreased 60%

BrightView patients decrease arrests by nearly 60% in the first 90 days of treatment. With a p-value less than 0.00001, the impact of successful treatment on arrests is unmistakable.

Incarceration Length: 70% Reduction

Within the first 3 months of treatment, patients' time spent in jail declines by nearly 70%. P-value less than 0.00001.

The benefits of these reductions to communities are especially promising given that local governments are responsible for almost 50% of criminal justice costs nationally.¹²



Over the first 90 days in our program, time spent in jail decreases by nearly 70% for BrightView patients.

THE BRIGHTVIEW APPROACH: COMPREHENSIVE OUTPATIENT TREATMENT ON DEMAND

Founded in 2015, BrightView provides comprehensive, evidence-based outpatient treatment to more than 12,000 patients throughout Ohio and Kentucky who suffer from substance use disorder.

The organization's evidence-based treatment approach includes medication-assisted treatment (MAT), individual counseling, group therapy, and social service support, as well as work on co-occurring disorders. Locations are generally able to dispense medication on-site, which makes treatment comfortable and convenient for patients.

Individuals, families and referral partners can call BrightView at **833-510-HELP (4357)** 24-hours a day, seven days a week, or schedule an appointment online at www.brightviewhealth.com. Treatment often begins the same day or the next, and walk-ins are welcome until 3:00 pm on weekdays. The path to recovery begins immediately: People in active withdrawal usually receive stabilizing medication and complete their first counseling session within four hours.

BrightView's compassionate and professional staff create an accessible and welcoming environment for physical and emotional healing. BrightView is committed to treating each patient with respect, providing positive reinforcement, and achieving long-term wellness.

To learn more, see brightviewhealth.com.

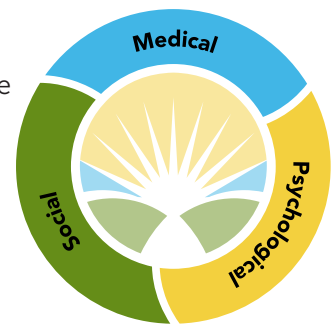
WHY MEASURING AND BENCHMARKING OUTCOMES MATTER SO MUCH

Surprisingly, according to SAMHSA's most recent National Survey of Substance Abuse Treatment Services (N-SSATS), only 10% of addiction treatment provider facilities follow the scientific literature and have opioid treatment programs (OTP) on-site.

Worse yet, only 66% of addiction treatment providers nationally accept Medicaid with an abysmal 36% taking Medicare.¹³

Patients with substance use disorder are overwhelming emergency departments, the justice system, and service agencies. States and counties are being forced to reallocate budgets in response.

To break the cycle of addiction, patients must be directed to evidence-based treatment providers with proven, statistically valid outcomes. The personal, societal, and governmental costs of addiction are too high to rely on untested or outdated treatment methodologies.



REFERENCES

1. National Institute on Drug Abuse (2020) <https://www.drugabuse.gov/publications/principles-drug-addiction-treatment-research-based-guide-third-edition/frequently-asked-questions/drug-addiction-treatment-worth-its-cost>
2. Ibid
3. National Institute on Drug Abuse (2017). *Trends & Statistics*
4. Substance Abuse and Mental Health Services Administration (SAMHSA). Behavioral Health Treatments and Services; samhsa.gov/treatment/substance-use-disorders
5. Adelman, PK. (2003) Mental and substance use disorders among Medicaid recipients: prevalence estimates from two national surveys. <https://pubmed.ncbi.nlm.nih.gov/14756195/>
6. Drug Abuse Warning Network (2010), Highlights of the 2010 drug abuse warning network findings on drug-related emergency department visits, <http://archive.samhsa.gov/data/2k12/DAWN096/SR096EDHighlights2010.htm>
7. Substance Abuse and Mental Health Services Administration (2021), Use of Medication-Assisted Treatment in Emergency Departments, https://store.samhsa.gov/sites/default/files/SAMHSA_Digital_Download/pep21-pl-guide-5.pdf and Ali, M. M., & Mutter, R. <https://www.ncbi.nlm.nih.gov/books/NBK355361/>
8. Lowenstein, M., et al, (2019), Barriers and Facilitators for Emergency Department Initiation of Buprenorphine: A Physician Survey, The American Journal of Emergency Medicine, <https://pubmed.ncbi.nlm.nih.gov/30803850>
9. Ibid
10. U.S. Department of Justice, National Drug Intelligence Center, National Drug Threat Assessment 2011, <https://www.justice.gov/archive/ndic/pubs44/44849/44849p.pdf>
11. Betz, M., et al. (2019) The Economic Costs of the American Drug Crisis in Six Appalachian States: A Rural/Urban Comparison, <https://cpb-us-w2.wpmucdn.com/u.osu.edu/dist/2/14548/files/2020/06/Release-copy-.pdf>
12. O'Neill Hayes, T. American Action Forum (2020), The Economic Costs of the U.S. Criminal Justice System, <https://www.americanactionforum.org/research/the-economic-costs-of-the-u-s-criminal-justice-system/>
13. Substance Abuse and Mental Health Services Administration, National Survey of Substance Abuse Treatment Services (2018) <https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/NSSATS-2018.pdf>