

## **EVERY VISIT COUNTS**

Despite the climbing opioid-related mortality crisis and a smoldering epidemic of deaths related to alcohol and tobacco use, important questions about addiction treatment in America remain unanswered. The variability in clinical practice among treatment programs is as pervasive as ever. Policymakers, payers, regulatory bodies, patients, and providers continue to disagree on what constitutes "quality addiction treatment."

Thankfully, best-in-class treatment provider, BrightView Health, has begun to answer some of these questions by publishing industry-leading insight into patient outcomes. The highest-level findings include:

- 1. Addiction treatment works.
- 2. People with substance use disorder can and do recover.
- 3. Recovery is multidimensional, with outcomes spanning various facets of a person's functioning.
- 4. Treatment programming can be implemented with fidelity at scale to meet the challenge of the modern addiction crisis.
- 5. A minimum threshold of patient engagement is necessary to reliably produce positive clinical outcomes.

#### ADDICTION TREATMENT MUST BE COMPREHENSIVE TO WORK

Key to these findings is that "addiction treatment" must be defined and simultaneously delivered via a comprehensive approach that incorporates medical treatment, behavioral counseling, and social services into an integrated model, reflective of the complexity of the underlying disease. In preceding publications, BrightView has demonstrated consistently that people with substance use disorder can achieve life-changing benefits in as little as three months of consecutive, comprehensive treatment – with long-term, sustainable gains achieved for most patients through one year of treatment engagement.

In addiction medicine the path to "remission" is often cloudy — but it doesn't have to be.

BrightView identified a minimum threshold treatment "dosage" required to reliably achieve the best clinical outcomes

#### GLOBAL OUTCOMES DATA PROVIDES HOPE AND A SENSE OF WHAT'S POSSIBLE

BrightView uses data analytics to answer the deeper questions, especially related to treatment over time. In other areas of healthcare, providers can easily point to the best service pathway to achieve a desired result. For example, once a patient is diagnosed with cancer, oncologists can utilize an array of options to create clear courses of treatment. Using up-to-date science, the oncologist can also provide guidance as to what "doses" and frequency of interventions will most likely lead to the best outcomes.



Behavioral healthcare in the U.S. has rarely included such levels of clarity. The essential analytical models have simply not existed. Until now. BrightView Health is once again leading the way by delivering another industry-first: a data-based treatment pathway that most individuals with substance use disorder can follow to achieve their goals of sustained recovery.

BrightView provides individualized addiction treatment for every patient served. There are global insights that can be derived to create a foundation from which treatment plans can be personalized to meet patient needs. BrightView's integrated model provides patients an understanding of their progress at every step along the course of treatment and clarifies what work still lies ahead to make the challenging journey of recovery feel more possible.

We've proven that thousands of patients with similar conditions have walked a known path in treatment and have achieved their goals.

### **METHOD: USING DATA SCIENCE** TO INFORM ADDICTION TREATMENT **DELIVERY**

Using data from electronic medical records. BrightView's Analytics and Quality Leadership teams created a detailed database of treatment histories for more than 12,000 patients over a 30-month timeframe. The dataset included patients diagnosed with a variety of substance use disorders including opioid use disorder, alcohol use disorder, and stimulant use disorder. More than 1 million datapoints were collected and analyzed using statistical and frequency analytics. The results yielded useful observations concerning typical service engagements. According to a recent study conducted by BrightView, thousands of patients consistently achieved a variety of positive outcomes and successfully accomplished treatment goals. In addition to these markers of success, the data also highlighted the service mix needed to achieve these outcomes.

12,000+

unique patients

**30-MONTH LONGITUDINAL STUDY** 

more than

1.3 million data points

Historical patient journeys were grouped together based upon outcomes achieved and length-of-stay within BrightView's comprehensive programs. Then, those patient groupings that had experienced the best outcomes were further analyzed by measuring the average number of service-level engagements per month in 30-day increments. The resulting output is a robust frequency analysis depicting precisely how many visits of each service type that successful patients typically engaged in along their road to achieving desired treatment goals, divided into sequential 30-day periods.

### THE RESULTS: EVERY VISIT COUNTS

The broad findings applicable to these analyses were clear: Every Visit Counts.

Each unique service type contributes to a patient's engagement level, as well as their achievement of positive outcomes. There is a clear minimum viable threshold of participation that fosters long-term engagement in treatment services, which correlates to various positive clinical outcomes.

When disengagement from one service type occurs, the data is clear that patients will disengage from the remainder, typically within the next month.

By far, the best outcomes occurred when patients engaged in each aspect of the complete biopsychosocial model that BrightView delivers.

Deeper causal associations were also identified, leading to profound insights into just how critical patient participation in each service type is to their overall outcomes:

- Patients who engage in medical services but forgo counseling fare worse in both outcomes and overall length-of-stay.
- Patients who engage in counseling but forgo medical services fare worse in both outcomes and overall length-of-stay.
- Patients who participate in group therapy appear to participate more frequently in all other BrightView services.
- Patients who decrease group therapy engagement experience a correlating frequency decline in medical visits, care coordination participation, and individual counseling sessions.
- One type of behavioral therapy does not sufficiently replace other therapy services – group therapy confers unique benefits as compared to individual counseling, which also brings a unique contribution versus care coordination or peer support services. All are equally necessary, and none should be sacrificed in favor of another.
- Many patients need more than the minimum threshold of visits to be successful. BrightView's sample included several hundred patients who needed and engaged in more frequent group therapy sessions and more frequent evaluations by their doctor to reliably achieve remission.

The most crucial insight in this analysis was the clear definition of a minimum engagement threshold. The data showed that falling below this threshold is predictive of impending, early departure from treatment prior to achieving sufficient positive outcomes and before the patient is reliably stable. Using predictive engagement thresholds, clinical teams can identify at-risk patients and intervene before they disengage.

#### **PHASE I**

The data analysis produced clear guidance for the first phase of treatment, highlighted by a relatively intense level of service engagement for a two-month period. Successful patients saw their doctor and individual counselor once per week during this first phase, with biweekly group therapy sessions and care coordination. Stepping back, this cadence makes sense: the introductory phase of treatment occurs when patients are most vulnerable and at their highest level of acuity. More-frequent services at this crucial stage help the patient reach stability and establish a foundation for recovery.

### PHASES II & III

For the second phase of treatment, the data analysis depicted a lengthier period taking shape during the four months following the initiation of care. Here, successful patients engage in all service types twice per month at minimum. The third and ongoing phase of treatment, where all services are delivered on a monthly basis, begins in month seven and continues throughout the remainder of the first year in treatment and beyond. Similar to how no upper limit was identified at the service level, there was no clearly discernable ceiling on the length of each phase in treatment. However, baseline minimum thresholds in treatment phase lengths were noted. Reducing visit frequency and/or concluding the first phase prior to two consecutive months of service increases patients' risk of premature dropout. And by concluding the second phase of treatment prior to four consecutive months of service delivered similarly increases risk of attrition.

Across all three phases, and even within each individual phase, premature treatment dropout was greatly pronounced when patient participation fell more than 50% below the recommended monthly visit frequency. For example, if four medical visits are recommended in the first month of treatment but a patient only completes two, this can be construed as a significant warning sign. This patient is now predicted to complete two-or-fewer medical visits in the second month and is likely to stop treatment entirely before the third month commences. These same predictabilities held true across all service types, including individual counseling, group therapy, and care coordination.

Early signs of disengagement in any single service predicted dramatically reduced visit frequency across all service types in the following 30 days, with many patients discontinuing services altogether.

Taken collectively, this framework provides a clear, concise programmatic model for patients to follow. Engaging in services less than the monthly model minimum reliably produces worse outcomes and shorter lengths of stay, while engaging at the recommended monthly level or higher reliably produces better outcomes and longer lengths of stay.

# PHASE 1 MONTHLY PLAN





2 CASE MANAGEMENT VISITS

2 GROUP THERAPY SESSIONS

# PHASE 2 MONTHLY PLAN

2 COUNSELING SESSIONS



2 CASE MANAGEMENT VISITS

2 GROUP THERAPY SESSIONS

# PHASE 3 MONTHLY PLAN

1 COUNSELING SESSION

1 MEDICAL APPOINTMENT

1 CASE MANAGEMENT VISIT

**1** GROUP THERAPY SESSION



### **FREQUENCY OF LABORATORY TESTING**

BrightView Health has made an industry-leading investment in laboratory science to adequately equip healthcare providers with reliable and valid data to inform clinical decisions.

With a turnaround time of less than one week, BrightView consistently leverages liquid chromatography-mass spectrometry (LC-MS) data to support patient care in near real-time. The "Every Visit Counts" analysis found that the frequency of confirmatory urine toxicology testing was one of the most prognosticative singular services in predicting patient outcomes and overall length-of-stay. This conclusion is not surprising: laboratory data provides a transparent and complete understanding of each patient's clinical presentation, including those intangible indicators that cannot be observed via physical examination alone.

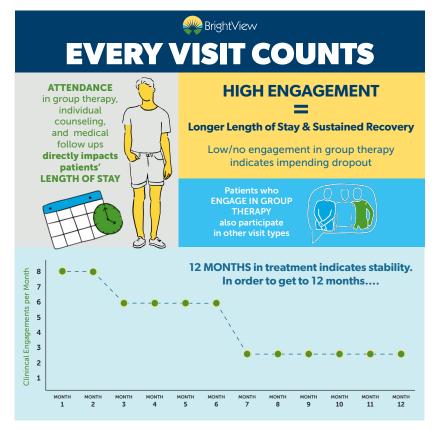
By combining clinical data with real-time toxicology results and open lines of communication to BrightView's internal laboratory scientists, providers can deliver more robust, personalized care in the selection of medications, dosing regimens, and choice of supportive therapeutics essential for addiction recovery. Without the ability to review the toxicology data in real-time, providers are left "flying blind," with patient care potentially compromised due to the lack of adequate insight into the patient's current functioning and recent substance use. With this data, providers can form deeper therapeutic connections with their patients and provide life-saving intervention at the earliest signs of relapse.

It must be noted that this data should not lead to punitive interventions or dismissal. Instead, toxicology results should be leveraged to foster further exploration of the numerous risk factors a patient may be facing and to allow the treatment team to develop and implement timely clinical interventions.

### **OPERATIONAL TACTICS: USING THE DATA TO INFORM CLINICAL PRACTICE**

Now that these invaluable insights are known, the "Every Visit Counts" (EVC) framework must be leveraged so that physicians and counselors are provided with timely, targeted intelligence to identify patients at-risk of dropping out. Once identified, the treatment team must be trained to respond to early warning signs and prevent attrition before it occurs.

Tactically, it was important at BrightView for all staff members to understand the results of the EVC analysis, how it was completed, and the validity of the findings. This education generated buy-in from staff necessary to understand the rationale behind the model of care. This also assisted counselors and medical providers in communicating the recommended visit frequency message to patients and equipped each BrightView team member with key talking points essential to ensure adequate patient education. EVC education is now a standard component of new hire orientation for all employees at BrightView.



Once a patient falls below recommended roadmap thresholds, the team recognizes their elevated premature drop out risk within the next 30 days. Now the integrated care team can utilize this information to design an individualized plan of action at their next point of contact with the patient. This underscores the importance of developing and supporting a robust multidisciplinary treatment team, with dedicated time set aside for this group to discuss patient care needs and to develop intervention plans for those patients who are demonstrating the most acute need of enhanced support.

**CONTINGENCY MANAGEMENT** is a treatment modality based upon a simple behavioral principle -if a desired behavior is reinforced or rewarded it is more likely to occur in the future. This methodology has
become recognized as one of the lowest-cost and highest-efficacy interventions for substance use disorder.
Unfortunately, many policymakers still view this modality as "paying people to engage in SUD treatment"
thus Contingency Management has typically failed to gain regulatory body permissibility or pass third-party
reimbursement policy muster. Currently, the OIG office permits healthcare providers to award patients nominal
rewards for engaging in treatment, provided that the treatment organization tracks
the per-reward and annual accrual of rewards on a per-patient basis.

BrightView's clinical leadership team took the framework found in the EVC analysis and created punch cards that patients can carry with them throughout the course of their treatment. As each month passes and visits are completed, physicians and counselors can "punch" a patient's card to reflect milestones in service completion and progress along their individual journey. At the end of each month, completed punch cards can be redeemed for nominal rewards available at each BrightView location. Of note, patients vote regularly on the selection of reward items to be made available as part of BrightView's transparent and inclusive program design. Not to mention, this adds fun and much-needed celebration into the program, which is typically welcomed by patients as they overcome challenges and move along their journey to find and sustain lasting recovery.



### CONCLUSION

BrightView Health has put a clear stake in the ground by defining what an addiction treatment program must incorporate to be effective. By serving as the best-in-class example of how addiction science can translate into integrated, multidisciplinary clinical practice, BrightView has demonstrated that addiction treatment works, proven that patients can and do recover, and defined the minimum effective threshold of addiction services necessary for most patients to yield benefit. BrightView has made it clear that there is hope for the mortality crisis our communities face.

We continue to provide frequent media commentary and impactful political advocacy to enhance the accessibility of addiction treatment across the United States. Operationally, BrightView seeks to model the delivery of truly comprehensive on-demand treatment. This desire is supported by efforts that include:

- A 24/7 call center staffed by real people who promptly answer all incoming phone calls .
- An easy-to-use online platform to schedule appointments with same- and next-day availability.
- A commitment to serving unscheduled walk-in patients every day of operation.
- The acceptance of nearly 100 different third-party insurance plans.
- A dedication to educating countless communities about evidence-based addiction medicine, understanding that stigma remains a barrier to care.

Now – thanks to the data behind "Every Visit Counts," BrightView is providing an unprecedented level of clarity into how addiction treatment works, giving current and prospective patients, their families, policymakers, and other stakeholders insight into the level of service that should be expected from all addiction treatment providers.

These hallmark characteristics – accessibility, effectiveness, and precision – are what Americans have come to expect in contemporary healthcare delivery. Collectively America should demand that addiction treatment also be delivered with those same paradigms in mind. BrightView Health is proud to serve people and save lives every day by upholding these universal standards.