



MARYLAND ANNUAL REPORT *Patient Outcomes*

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2022





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Introduction

This 3rd Annual Patient Outcomes Report for Maryland, published by Ideal Option, increases awareness about the effectiveness of office-based addiction treatment and demonstrates that:

- Specialized treatment yields verifiably positive recovery outcomes.
- Objective outcomes can be longitudinally measured over extended periods.

This report relies on toxicology results as a key indicator of treatment outcomes. In the outpatient treatment setting, objective and accurate test accountability is essential to the patient-provider therapeutic alliance and, together with medication and psycho-social support and guidance, is a key element of the treatment process. At Ideal Option, unexpected test results do not lead to treatment discontinuation or to a judgmental response. Return to use is recognized as a normal part of recovery and harm reduction is always the primary goal.

Key Take-Aways



Polysubstance (multiple drug) use remains prevalent among patients seeking treatment.



Lab results confirm materially reduced consumption of all types of illicit substances as patients progress in treatment.



Over half of new patients returning for a second visit remain in treatment after six months.



After six months of treatment, patients report meaningful improvement in housing, employment, finances, physical and mental health, and relationships.



Treatment Works¹



98%

less fentanyl use



60%

less methamphetamine use

Life Improves²



94%

Reported improvement in housing



89%

Reported improvement in employment

¹The reduction in positive tests for all patients during 2022 at the Maintenance B Stage of Care compared to at the Initiation Stage of Care

²2022 Ideal Option Self-Reported Patient Outcomes Survey

Our Patients

2022 Active Patients by County

210-567 140-210 97-140 38-97 1-38



Geographical Reach

As of December 2022, Ideal Option served a patient census of 981 in six clinics across Maryland. The map displays patient census concentration by county of residence.



981
Patient Census



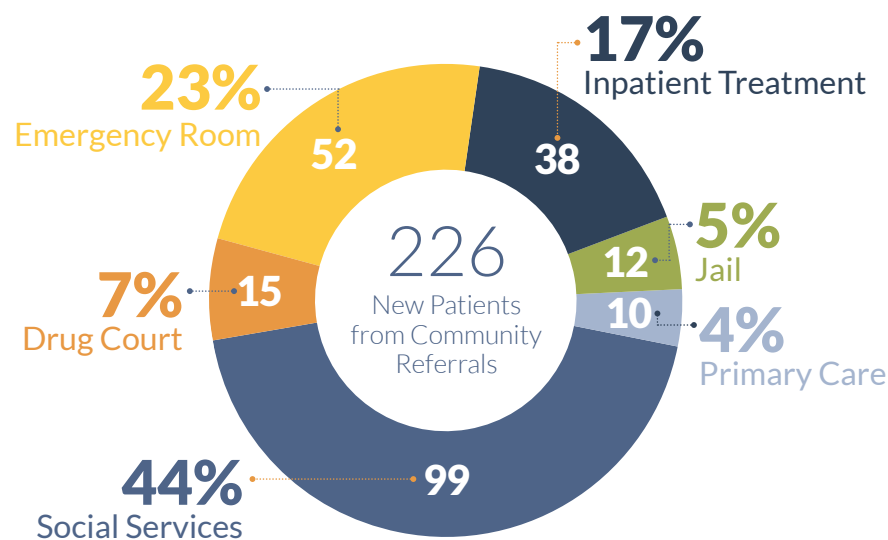
6
Clinics

Community Referrals

Community partners who refer patients to Ideal Option include drug courts, county jails and law enforcement, social services agencies, primary and behavioral health care providers, inpatient treatment facilities, and hospital emergency rooms.

Ideal Option in Maryland is supported by a community outreach coordinator and peer outreach specialist who work together to develop relationships with community based organizations and provide outreach and support to patients during the intake process. Our field outreach team works closely with our internal referral specialists who are available to accept and process warm handoffs from community partners 24 hours a day, seven days a week.

More than 70 organizations in Maryland actively send warm handoff referrals to Ideal Option including Frederick Memorial Hospital, Allegany County Detention Center, Garrett County Health Department, Washington County Health Department, Baltimore County Bureau of Behavioral Health, St. Mary's County Health Department, Mountain Manor Treatment Center, Serenity Treatment Center, Medmark Treatment Center, Meritus Health, and UM Charles Regional Medical Center.

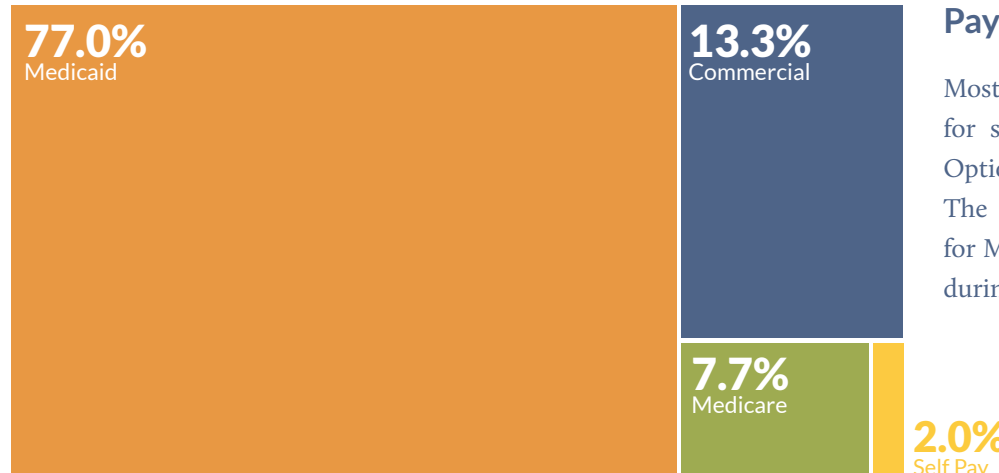
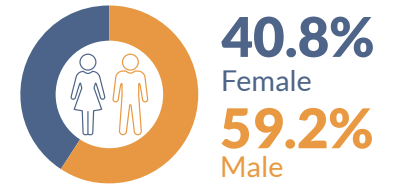
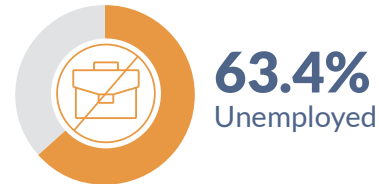
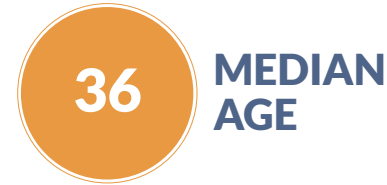


Our Patients



Patient Characteristics

The characteristics of our Maryland patients, self-reported at enrollment, illustrate the devastating societal impact of substance use disorder. Individuals afflicted with the disease of addiction are more likely to experience homelessness, unemployment, drug-related charges, and incarceration. Stability in recovery from addiction has been consistently shown to improve social determinants of health such as housing, employment, food security, education, and social inclusion.



Payor Coverage

Most patients seeking treatment for substance use disorder at Ideal Option rely on Medicaid coverage. The chart illustrates payor coverage for Maryland patients who were seen during 2022 based on visit billing.

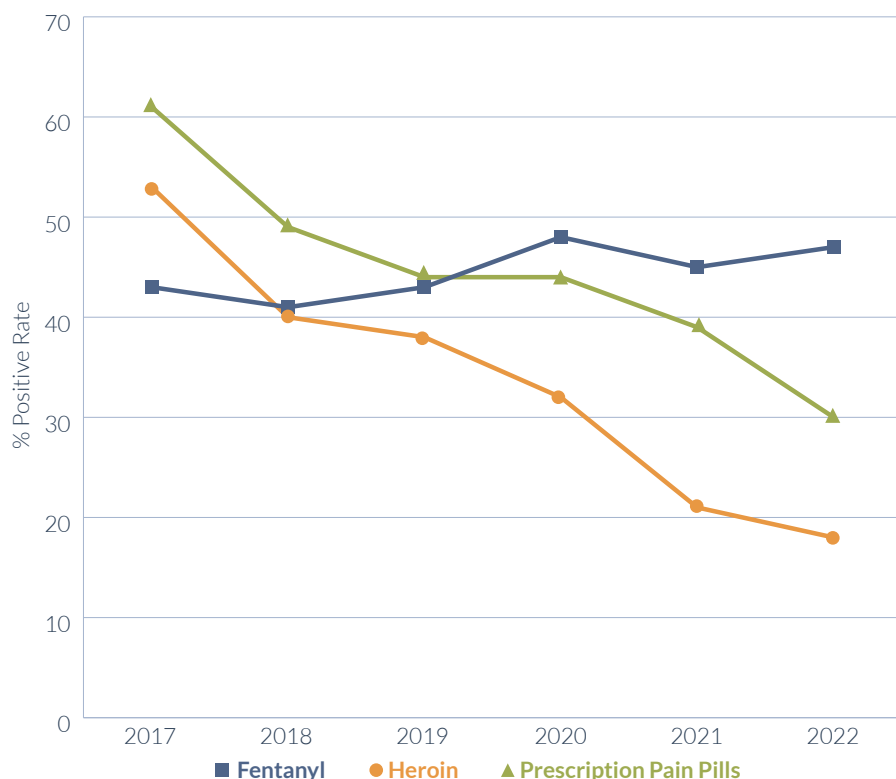
Polysubstance Use Trends

Test results at program enrollment reveal real-time societal substance use trends in Maryland. Ideal Option data confirms the rapidly changing drug trafficking trends and the escalation in synthetic drug use cited in national and local reports. Street drugs increasingly contain a combination of substances, often including fentanyl, in a format masquerading as prescription tablets and capsules. The risk for overdose, addiction, and adverse health and societal outcomes is compounded by polysubstance use.

Opioid Use Trends

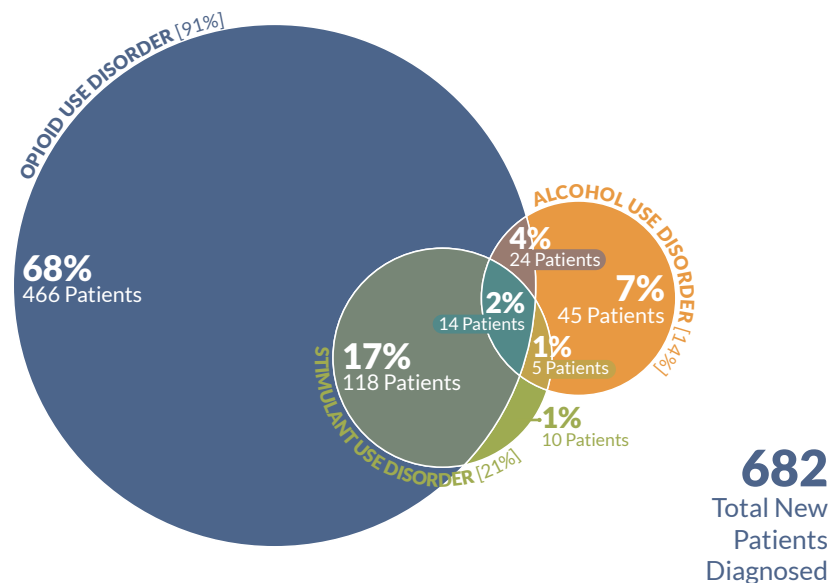
POSITIVE RATES AT FIRST ENROLLMENT | MARYLAND

Over the past five years, fentanyl use has displaced consumption of heroin and prescription pain medications as illustrated by new patient test outcomes in the graph below.



Treatment Diagnosis

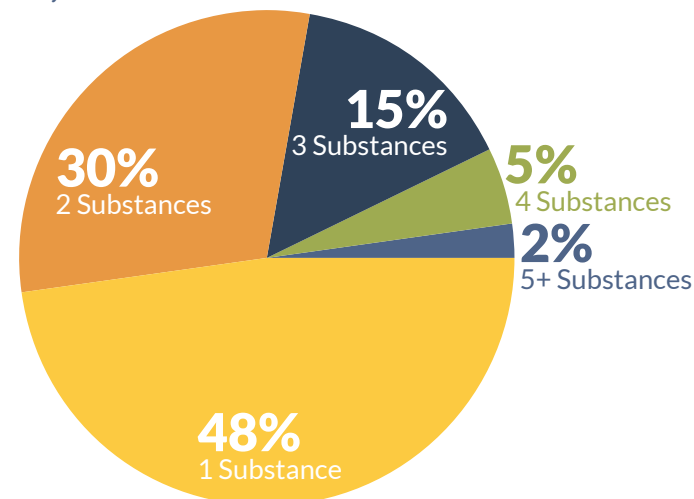
2022 DIAGNOSES AT FIRST ENROLLMENT | MARYLAND



Polysubstance Use

2022 POSITIVE RATES AT FIRST ENROLLMENT | MARYLAND

Most new patients test positive for multiple substances, not just one. Today's illicit drug market provides easy access to an expanding variety of inexpensive synthetics blended together in random combinations and potencies in counterfeit pills and powder. Patients are commonly unaware of some of the substances they have consumed.



Treatment Retention

“The chronic nature of the disease means that relapsing to drug abuse is not only possible but also likely, with symptom recurrence rates similar to those for other well characterized chronic medical illnesses—such as diabetes, hypertension, and asthma.”³

Recovery from substance use disorder typically requires sustained treatment over many months.

- Return-to-use episodes are common in the treatment histories of patients who achieve long-term recovery.
- Retention is constrained by the voluntary nature of outpatient treatment.
- Readiness to change varies widely among individuals over time.

Despite these obstacles, the determination and resilience of Maryland patients is reflected in outcomes since 2017:

- 83% of patients returned for a second visit.
- 59% of patients who returned for a second visit remained in treatment after 6 months, 51% remained after 9 months, and 45% remained after 12 months.

³National Institute on Drug Abuse. 2020, June 1. Community Reinforcement Approach Plus Vouchers (Alcohol, Cocaine, Opioids). Retrieved from <https://nida.nih.gov/publications/principles-drug-addiction-treatment-research-based-guide-third-edition/evidence-based-approaches-to-drug-addiction-treatment/behavioral-therapies/community-reinforcement-approach-vouchers> on 2022, February 28.



59%
patients who returned
for a second visit
remained in treatment
after **6 months**



51%
patients who returned
for a second visit
remained in treatment
after **9 months**



45%
patients who returned
for a second visit
remained in treatment
after **12 months**

Stages of Care

How the Program Works

Ideal Option providers strive to guide patients through a stage-based protocol toward long-term, sustainable recovery. The chart to the right illustrates the criteria opioid use disorder patients achieve to graduate from one Stage of Care to the next. This evidence-based treatment approach leverages contingency management behavioral theory to optimize patient outcomes, and it helps to achieve clinical consistency while enabling providers to customize care and acknowledge and celebrate key milestones toward long-term recovery.

Note: Patients with isolated methamphetamine or alcohol use disorder follow specialized protocols

STAGES OF CARE

INITIATION

New patients, re-start patients, or patients not yet stabilized on buprenorphine.



STABILIZATION A

Patients who are starting to feel stable on buprenorphine and have reduced their use of opioids.



STABILIZATION B

Patients who are stable on buprenorphine and have stopped use of opioids but may still be using other non-prescribed substances.



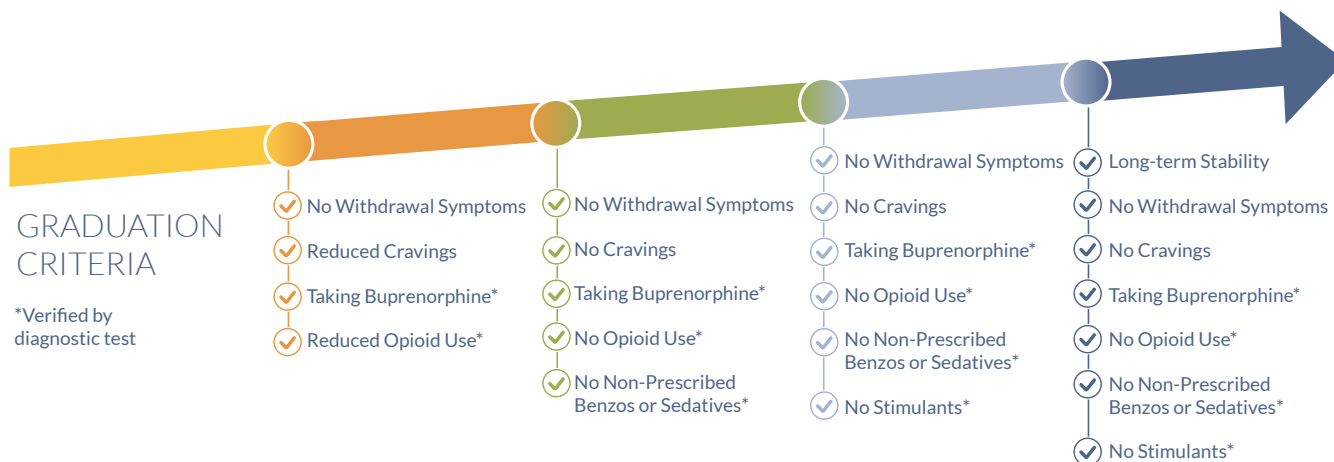
MAINTENANCE A

Patients who are completely stable on buprenorphine and abstinent from all non-prescribed substances.

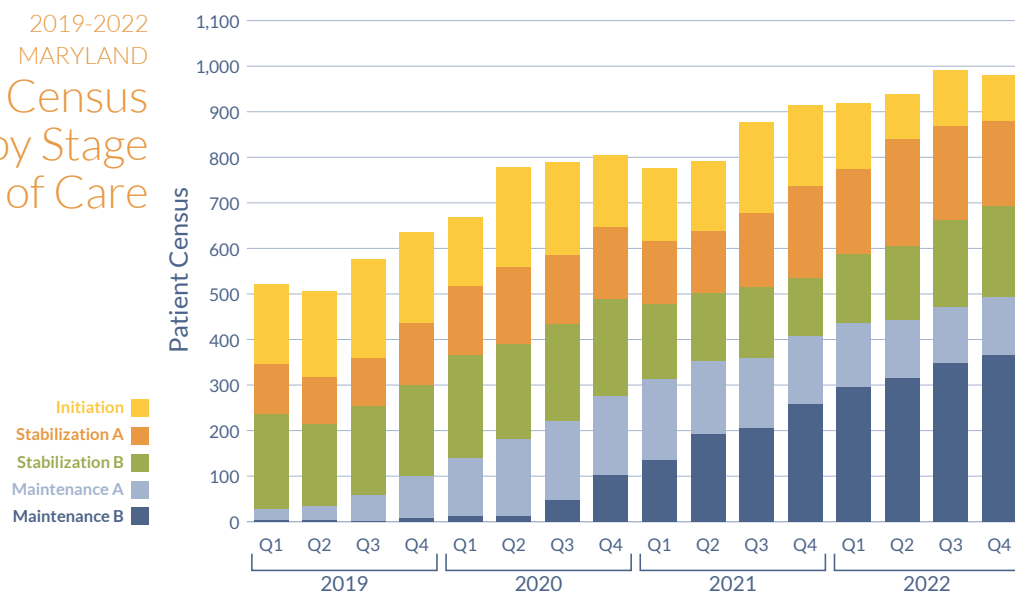


MAINTENANCE B

Patients who have long-term stability on buprenorphine and are abstinent from all non-prescribed substances.



2019-2022 MARYLAND Census by Stage of Care



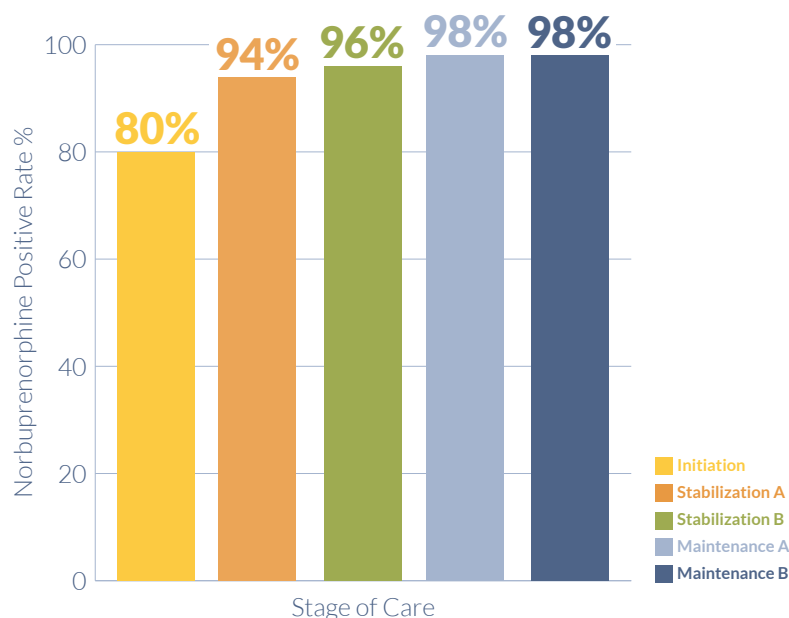
Ideal Option's Maryland patient census increased at a cumulative annual growth rate of 22% between 2019 and 2022.

- The accompanying charts illustrate census stratification by Stage of Care for each calendar quarter during the four year period.
- The cumulative annual growth rate of patients in the Maintenance Stages of Care (both A and B) was 132% over the four year period, increasing from 4% to 50% of total census.
- The Maintenance Stages of Care typically indicate long-term recovery and are correlated with outstanding outcomes (see Treatment Outcomes).

Medication Adherence

2022 | MARYLAND

Norbuprenorphine Positive Rate by Stage of Care



“If you look at people who remain on [buprenorphine] treatment, you would have no idea they had an opioid addiction in the past. My patients are able to regain custody of their children, run their own businesses. It’s truly remarkable.”⁴

— PAYEL JHOOM ROY, MD, MSC

Assistant Professor of Medicine, Clinical Director of the
Addiction Medicine Consult Service, University of Pittsburgh

Medication Adherence Improves with Stage of Care

Studies have repeatedly demonstrated that buprenorphine adherence correlates with recovery from opioid use disorder, and this is confirmed by Ideal Option patient outcomes.

- Adherence often requires patients to properly follow a time-consuming daily routine for sublingual ingestion of buprenorphine and resist temptation to divert the medication.
- Despite these obstacles, 98% of Ideal Option patients in the Maintenance A and B Stages of Care are adherent to buprenorphine as shown by definitive testing results for the drug’s metabolite, norbuprenorphine.

Medication Adherence Correlates with Improved Outcomes

Medication adherence rates improved with Stage of Care progression as verified by positive norbuprenorphine test results.

- Initiation Stage data primarily includes newly enrolling or re-enrolling patients, but also includes patients who require more frequent care.
- 55% of new patients tested positive for norbuprenorphine at enrollment, potentially indicating previously prescribed or dosed buprenorphine by another provider or institution (e.g., jail, hospital) or ingestion of illicitly acquired buprenorphine.
- Patient adherence to medication improved to 94% at the Stabilization Stages, and to 98% at the Maintenance Stages of Care.
- Medication adherence, which is assisted by test result accountability, correlates with improved outcomes, as described in Treatment Outcomes.

⁴ Colarossi J. (2019, July 11). No rx required? Faster access to opioid-based medications could save lives. The Brink. <https://www.bu.edu/articles/2019/buprenorphine-without-prescription/>

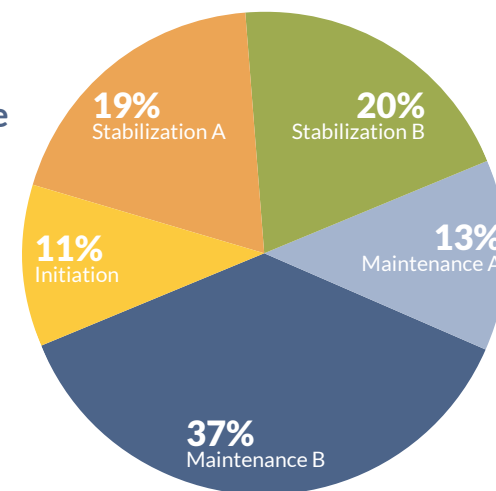
Treatment Outcomes

Fentanyl, Heroin, and Other Opioids

Positive testing rates for fentanyl, heroin, and other opioids decline sharply as patients progress in Stage of Care, as reflected in the charts below. These outcomes are attributable to a combination of medication adherence and a therapeutic alliance with patients that includes psycho-social support and guidance, test result accountability, contingency management, and positive reinforcement.

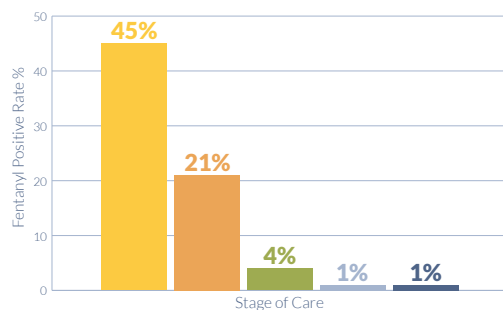
Patient Census by Stage of Care

As of December 2022, 50% of the Ideal Option patient census had progressed to the Maintenance Stages of Care which correlates with outstanding outcomes and long-term recovery as reflected in the Treatment Outcomes below.



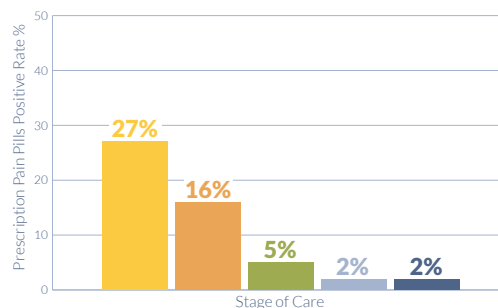
2022 | MARYLAND

Fentanyl



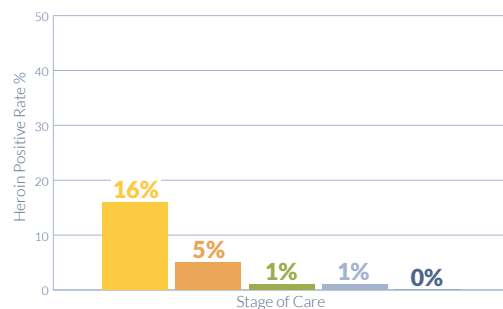
2022 | MARYLAND

Prescription Pain Pills



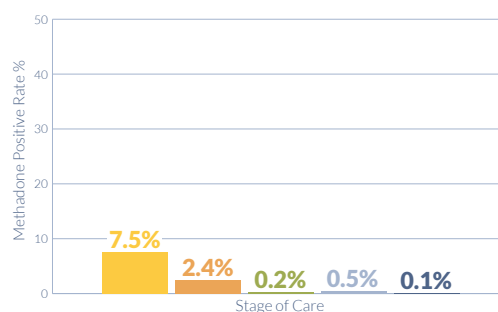
2022 | MARYLAND

Heroin



2022 | MARYLAND

Methadone

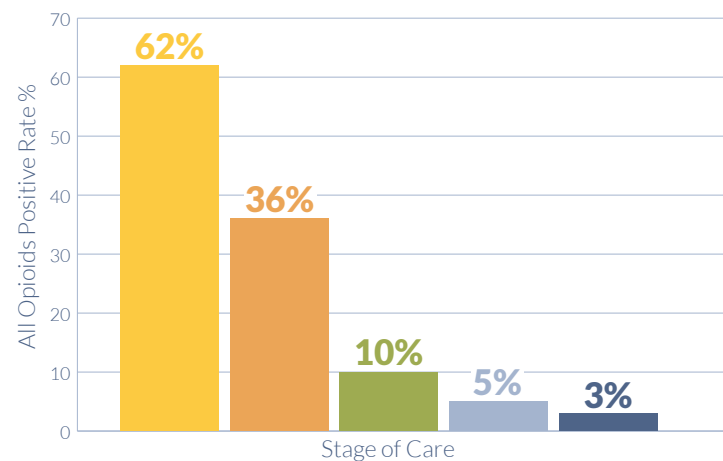


Initiation Stabilization A Stabilization B Maintenance A Maintenance B

2022 | MARYLAND

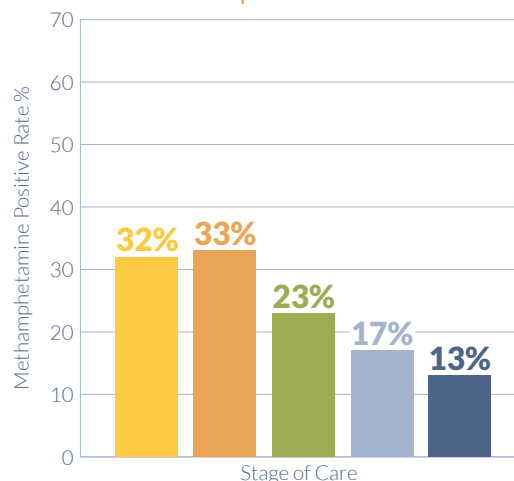
All Opioids

Note: All opioids excluding buprenorphine

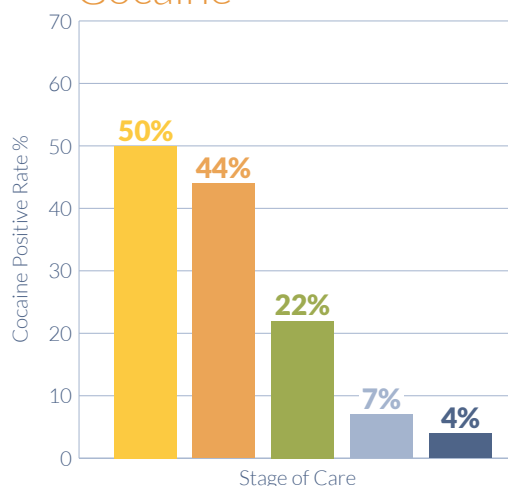


Treatment Outcomes

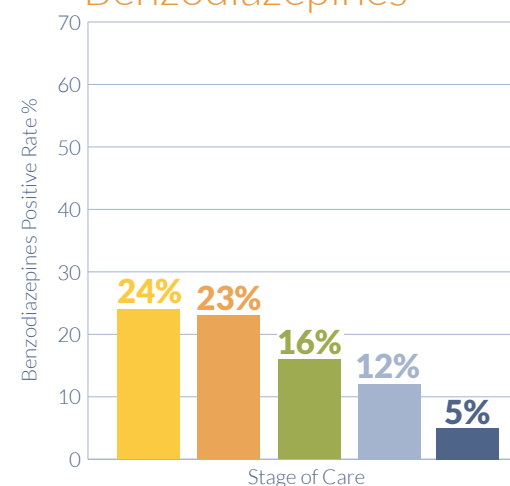
2022 | MARYLAND
Methamphetamine



2022 | MARYLAND
Cocaine



2022 | MARYLAND
Benzodiazepines



■ Initiation ■ Stabilization A ■ Stabilization B ■ Maintenance A ■ Maintenance B

Stimulants and Sedatives

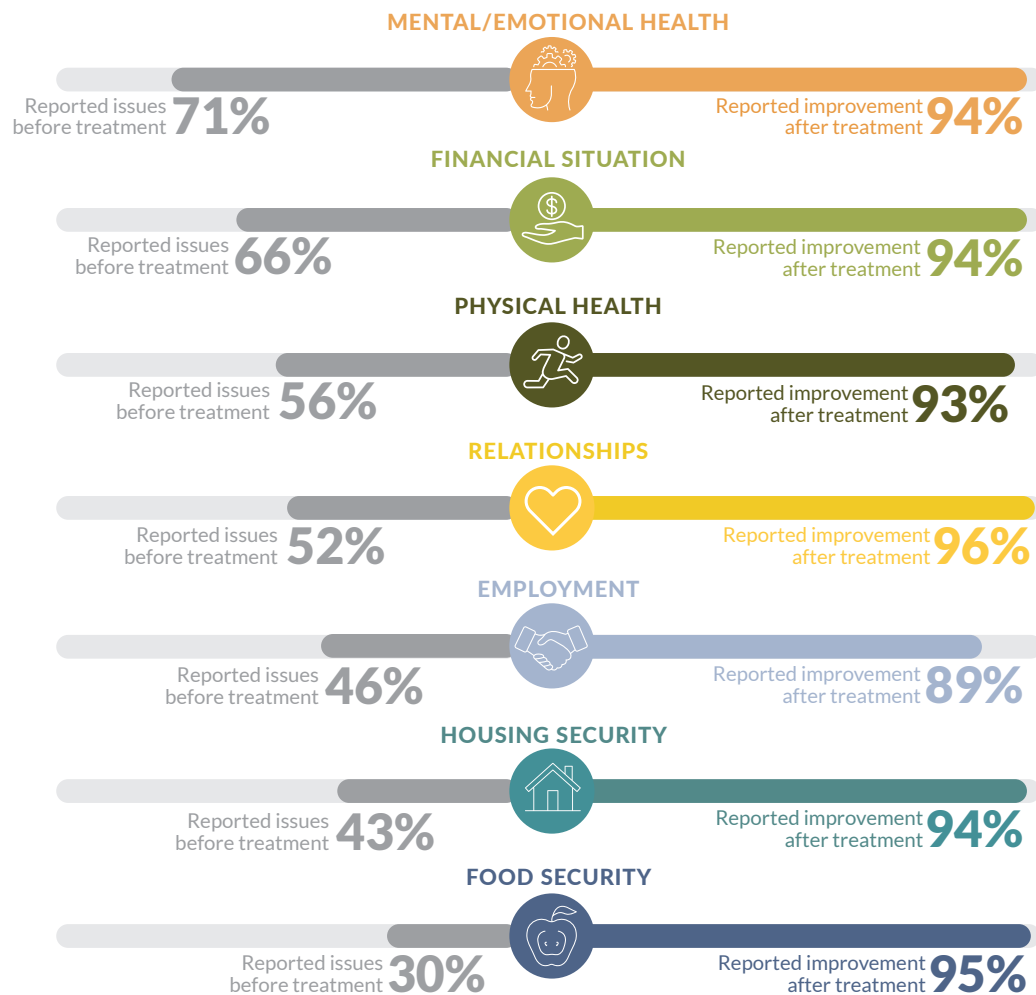
Widespread use of stimulants and sedatives continued in 2022. No FDA approved medication currently exists for treating stimulant or sedative use disorders. However, as reflected in the accompanying charts, Ideal Option patients have shown significant use reductions in these substances with stage of care progression. Ideal Option attributes these positive outcomes to its therapeutic alliance with patients which includes psycho-social support and guidance, test result accountability, contingency management, and positive reinforcement.

Methamphetamine is readily available, very inexpensive, and likely the most widely consumed illicit drug in the U.S. Cocaine, while more expensive, remains available in many markets. Both methamphetamine and cocaine are often contaminated with other substances, including fentanyl.

Benzodiazepines, also known as sedatives or tranquilizers, are commonly prescribed for anxiety and related conditions, but they can lead to acute physical and mental dependency. Benzodiazepines are often misused and prone to street diversion. The drug supply now includes illicitly manufactured benzodiazepines, typically with extremely high potency, which are sometimes contaminated with other substances, including fentanyl. When consumed in combination with other substances, particularly opioids, benzodiazepines increase the probability of overdose.

Social Determinants of Health Outcomes

Ideal Option's mission is to help people recover in their lives. Self-reported survey outcomes, while subjective, are helpful in revealing progress in quality of life among the patient population. In 2022, 2,153 patients participated anonymously in a survey offered to over 15,000 patients who had received treatment for six months or more. Ideal Option patients treated for similar durations generally demonstrate high medication adherence and low illicit substance use. The encouraging finding is that objective toxicology outcomes demonstrating patient recovery also correspond to self-reported advancement in social determinants of health, as summarized below.



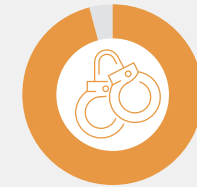
97%

Report their **quality of life** has improved



92%

Report **no visits to the ER for drug-related medical care** since starting treatment



96%

Report **no drug-related arrests or charges** since starting treatment



98%

Report they feel confident in their ability to **remain in recovery** long-term



About Ideal Option



Ideal Option was founded in 2012 and has treated more than 65,000 patients. The Company:

-  Operates over 80 specialized outpatient treatment clinics in 10 states.
-  Employs over 650 personnel, almost half of whom are healthcare professionals, including addiction medicine providers, medical assistants, nurse care managers, and behavioral health counselors.
-  Is a member of the American Society of Addiction Medicine (ASAM) and its providers regularly complete ASAM trainings and reference current guidelines to deliver evidence-based treatment.
-  Employs a highly qualified staff of laboratory managers, quality specialists, analysts, and ASCP registered clinical scientists who operate two high-complexity CAP-accredited toxicology and medical labs, and three CLIA-certified moderate-complexity labs to rapidly supply comprehensive and accurate clinical information to providers.

Ideal Option's goal is to deliver cost-effective, outcomes-based addiction treatment that improves patients' lives while materially reducing the financial and social burden associated with untreated, or ineffectively treated, substance use disorder. As part of its mission, the Company:

-  Diagnoses and treats Hepatitis C, sexually transmitted infections and other communicable diseases, and provides reporting to public health agencies.
-  Facilitates patient access to food, housing, employment, transportation, and other resources by partnering with community-based organizations, government agencies, law enforcement, and leaders at the local, state, and national level.