



ANNUAL REPORT
PATIENT OUTCOMES

2021

NORTH DAKOTA





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Introduction

This 2nd Annual Patient Outcomes Report for North Dakota, published by Ideal Option, is intended to increase awareness about the effectiveness of office-based addiction treatment and to demonstrate that:

- Specialized measurement-based treatment yields verifiably positive recovery outcomes.
- Objective outcomes can be longitudinally measured over extended periods, a requisite for evaluating the efficacy of chronic disease treatment.
- Office-based addiction treatment is enabled by comprehensive toxicology.

This report relies on lab test results as a key indicator of treatment outcomes¹. It is important to emphasize, however, that unexpected test results do not lead to treatment discontinuation or to a judgmental response at Ideal Option. While accountability is an essential component of the therapeutic alliance, psycho-social support and guidance are also key elements of the treatment process. Return to use is recognized as a normal part of recovery and harm reduction is always the primary objective.

This report reveals:

- Low use of illicit substances and high medication adherence is demonstrated among maintenance stage patients, the majority of the Ideal Option census.
- Even as fentanyl has eclipsed heroin, medication has remained effective in combination with measurement-based treatment.
- Polysubstance (multiple drug) use remains prevalent among patients seeking treatment.
- Cocaine, methamphetamine, and benzodiazepine use all decline by stage of care in parallel with the decline in opioid use.

Synthetic
Drug Use is
Rising¹



95%
increased positive rate of
fentanyl at enrollment



49%
decreased positive rate of
heroin at enrollment

Polysubstance
Use is
Common²



40%
of new patients are
polysubstance users

Treatment
Works³



93%
less total opioid use



98%
less fentanyl use



95%
less heroin use



82%
less methamphetamine use



60%
less benzodiazepine use

¹ Based on all positive tests at first enrollment in Q1 2020 compared to Q4 2021

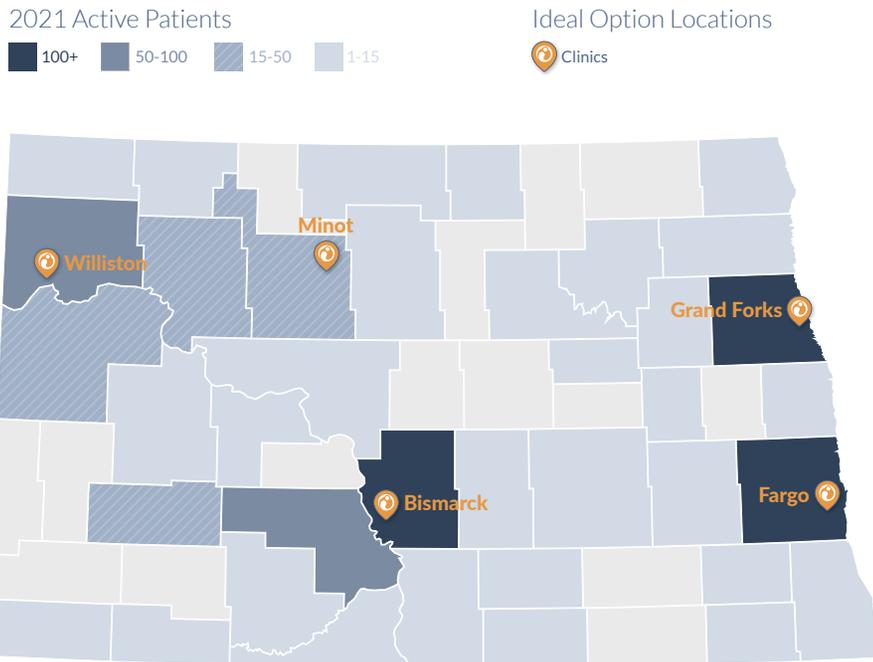
² Based on all 2021 positive tests at enrollment for more than one category of illicit substance (i.e., opioids, common stimulants, benzodiazepines but excluding alcohol, cannabis, and tobacco)

³ Based on the reduction in all positive tests at Maintenance Stage B compared to Initiation Stage during 2021

Our Patients

Geographical Reach

As of December 2021, Ideal Option served a patient census of 515 in five clinics in North Dakota. The map displays patient census concentration by county.

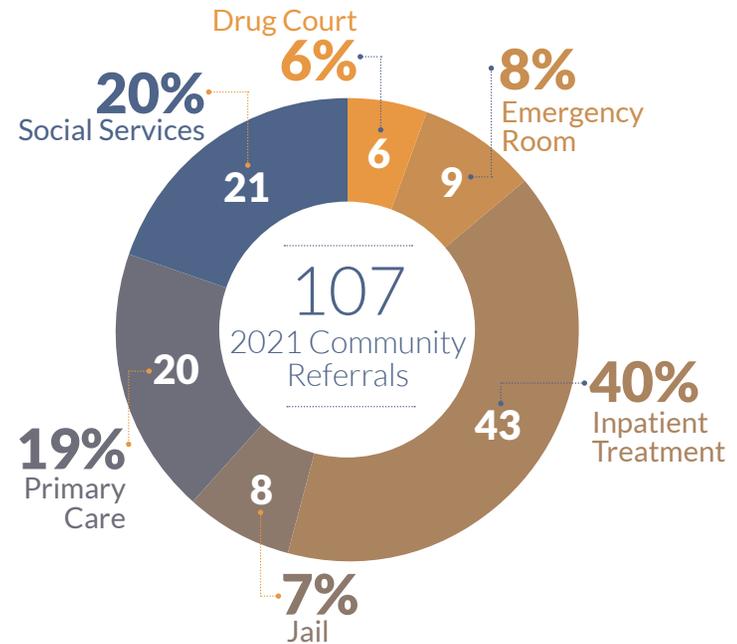


Community Referrals

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

Ideal Option in North Dakota is supported by a community outreach coordinator who works to develop relationships with community-based organizations. 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 15 organizations in North Dakota actively send warm handoff referrals to Ideal Option including Prairie St. John's, ShareHouse, North Dakota State Penitentiary, Heartview Foundation, Hope Manor, Grand Forks Public Health, Mid Dakota Clinic, and Spectra Health.



515
Patient Census
State of North Dakota



5
Clinics
State of North Dakota

Our Patients



Patient Characteristics

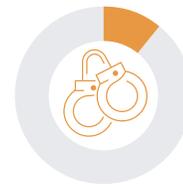
The characteristics of our North Dakota patients, self-reported at enrollment, illustrate the devastating societal impact of substance use disorder. Individuals afflicted with the disease of addiction are more likely to experience homelessness, unemployment, drug-related charges, and incarceration. Stability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



5.1%
Without Housing



51.2%
Unemployed



11.2%
Incarcerated in Past Year



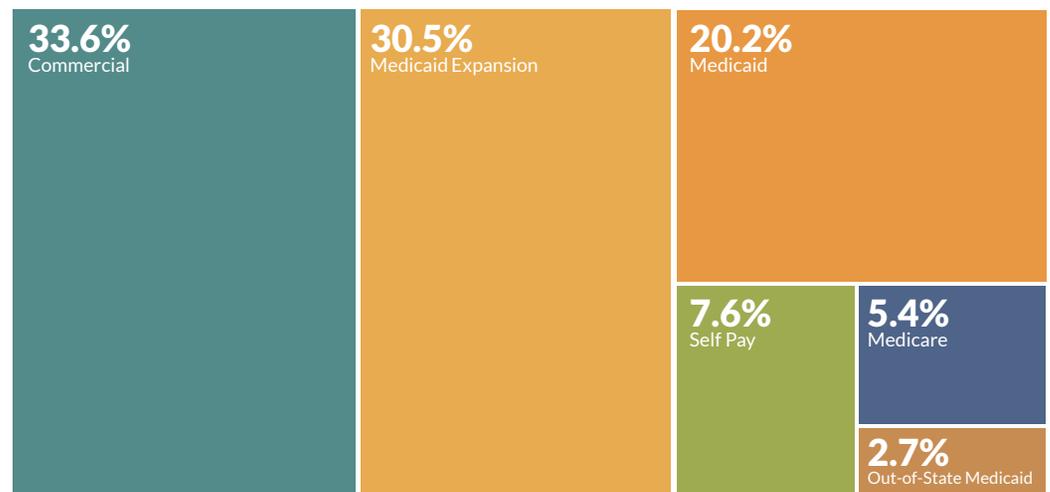
50.6%
Female
49.4%
Male



33 Median Age

Payor Coverage

The chart illustrates payor coverage for patients who were seen during 2021 based on visit billing.



Substance Use

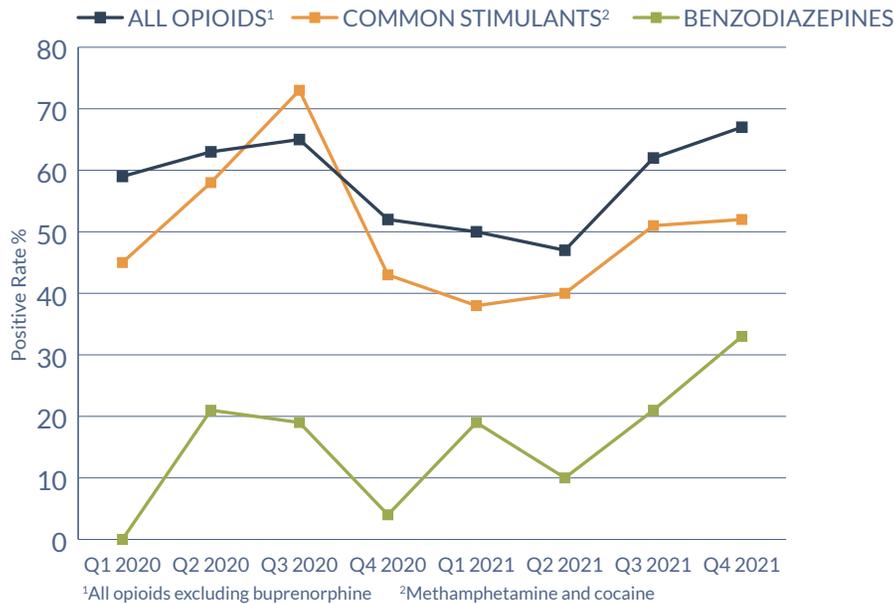
Substance Use at First Enrollment

Test results at program enrollment are indicative of substance use trends in North Dakota. Ideal Option data over the 2020-21 period reveals escalation in synthetic drug use which corroborates national and local reports of rapidly changing drug trafficking trends. Street drugs increasingly contain a combination of substances, often including fentanyl, in a format masquerading as prescription tablets and capsules. Over the 2020-21 period, positive rates for fentanyl increased in the enrolling population, while positive rates for heroin and all other opioid decreased.



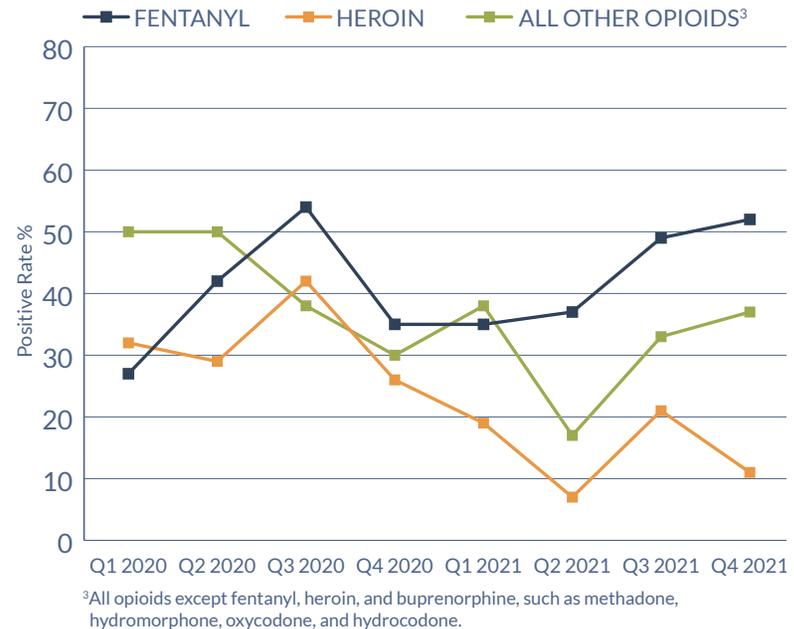
Substance Category

2020-2021 | NORTH DAKOTA
POSITIVE RATES AT FIRST ENROLLMENT



Opioids

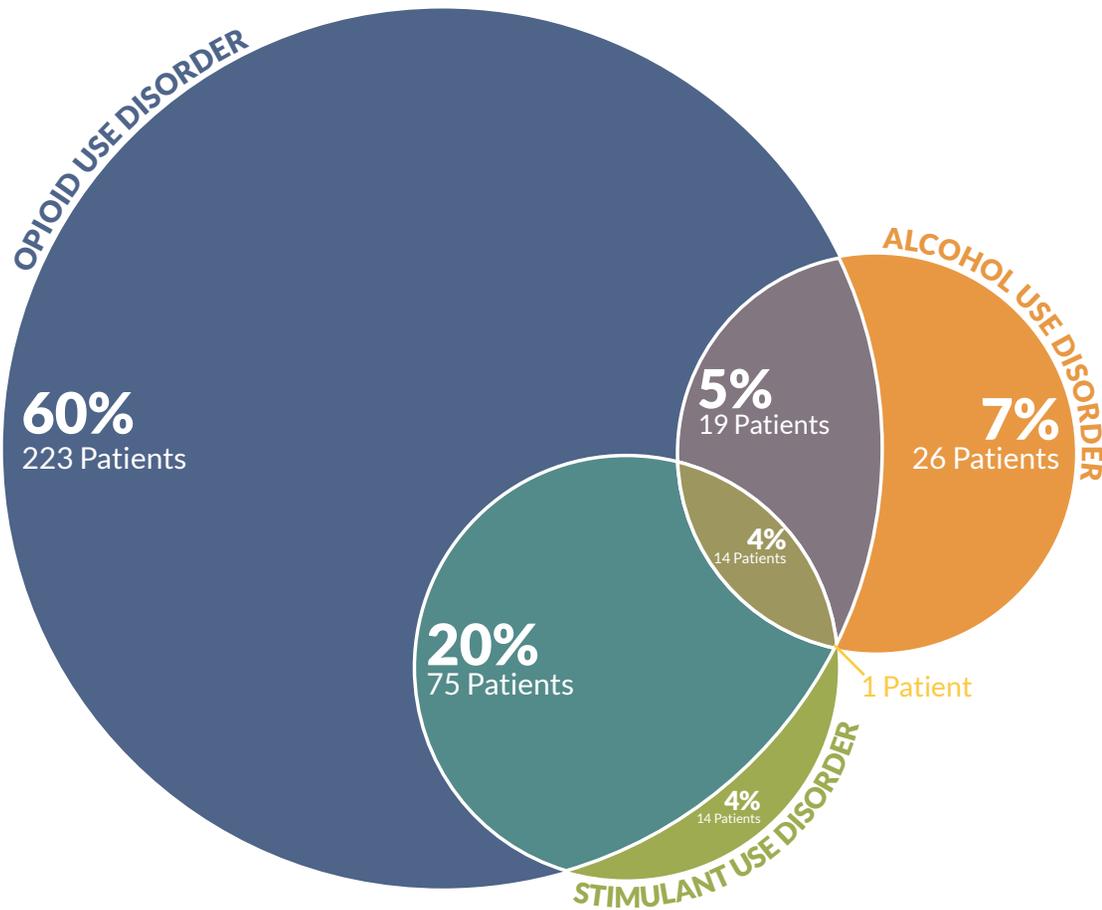
2020-2021 | NORTH DAKOTA
POSITIVE RATES AT FIRST ENROLLMENT



Substance Use

Treatment Diagnosis

In 2021, 89% of patients were diagnosed with opioid use disorder either solely, or in combination with stimulant use disorder, alcohol use disorder, or both. At 28%, stimulant use disorder was also a common diagnosis, usually in combination with opioid use disorder. Alcohol use disorder was diagnosed in 16% of patients, often in combination with opioid use disorder and/or stimulant use disorder.



Patient Census

“For most substance-using individuals, progress through the stages of change is circular or spiral in nature, not linear. In this model, recurrence is a normal event because many clients cycle through the different stages several times before achieving stable change.”ⁱⁱ

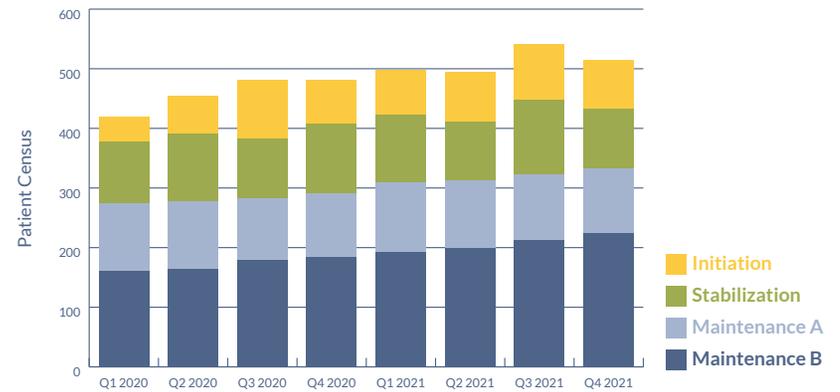
“Stage of Care” is defined by visit frequency as determined by Ideal Option’s providers based on an assessment of each patient’s stability. As evidence of stability improvesⁱⁱⁱ, patients move from Initiation to Stabilization, then to Maintenance A, and finally to Maintenance B, with each stage resulting in a decline in visit frequency. If stability reverses, patients will return to an earlier stage and a corresponding increase in visit frequency. As of December 2021, the Ideal Option patient census was distributed by Stage of Care as follows:

AS OF DECEMBER 2021 | NORTH DAKOTA Stage of Care Distribution

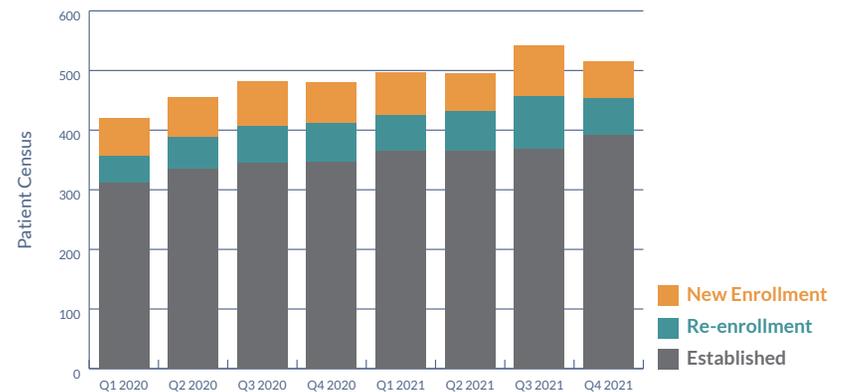
Stage of Care	Definition	Census %
Initiation	Recently enrolled or re-enrolled; at least 1 visit every 6 days	16.1
Stabilization	Inconsistent progress; 1 visit between 7 and 13 days	19.2
Maintenance A	Consistent progress; 1 visit between 14 and 20 days	21.0
Maintenance B	Long-term progress; 1 visit per month	43.7

Ideal Option’s patient census in North Dakota increased by 24% from the beginning of 2020 to the end of 2021. The accompanying charts illustrate census stratification by stage of care and enrollment status for each calendar quarter during the two-year period. Over the two-year period, the number of patients in the Maintenance Stages of Care (both A and B) increased by 23% to 65% of total census. The Maintenance Stages of Care typically indicate long-term recovery and are correlated with outstanding outcomes (see Treatment Outcomes).

2020-2021 | NORTH DAKOTA Census by Stage of Care



2020-2021 | NORTH DAKOTA Census by Enrollment Status



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.”^{iv}

Recovery from substance use disorder typically requires sustained treatment. However, return-to-use episodes are common in the treatment histories of patients who achieve long-term recovery. Retention is also constrained by the voluntary nature of outpatient treatment and the wide variability of readiness to change among individuals over time. Despite these obstacles, the determination and resilience of patients is reflected in the outcomes. Since 2017, 90% of North Dakota patients returned for a second visit, 52% of patients who returned for a second visit were in treatment after 12 months, and 64% percent of those retained for 12 months were in the Maintenance Stage of Care (A or B).

Re-enrollments follow gaps in treatment of 42 days or longer and these treatment gaps decrease significantly with Stage of Care progress.



52%
of patients who returned
for a second visit
remained in treatment
after 12 months
NORTH DAKOTA

AS OF DECEMBER 2021 | NORTH DAKOTA Retention by Stage of Care

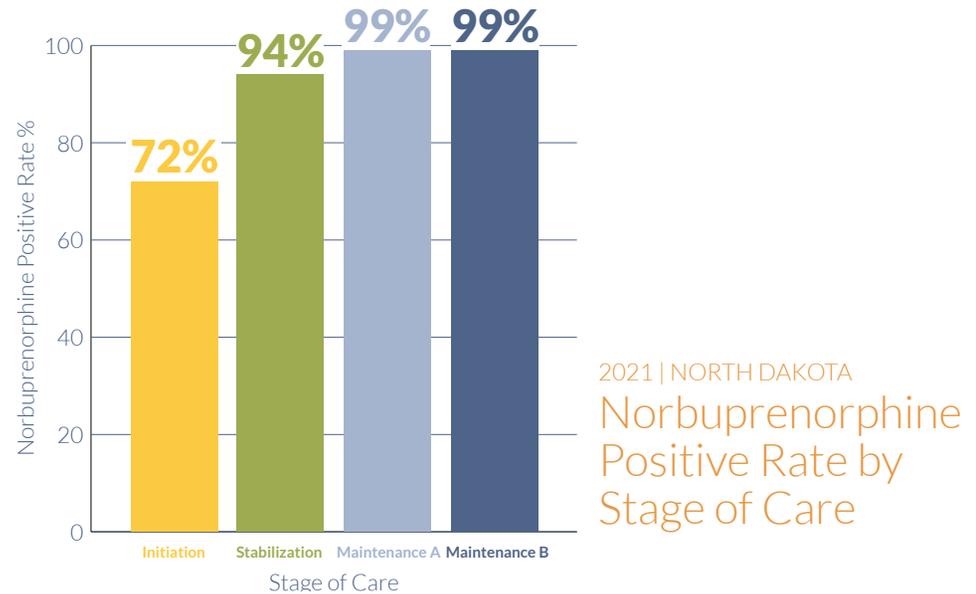
	Patient Count	Average Number of Enrollments	Average Months Since First Enrollment	Average Months Since Last Enrollment
Initiation	83	1.9	14.4	4.2
Stabilization	99	1.9	18.7	8.5
Maintenance A	108	1.4	19.8	15.0
Maintenance B	225	1.3	28.7	24.7

Medication Adherence



“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.”^v

— PAYEL JHOOM ROY, MD, MSC
Assistant Professor of Medicine, Clinical Director of the Addiction
Medicine Consult Service, University of Pittsburgh



Studies have repeatedly demonstrated that buprenorphine adherence correlates with recovery from opioid use disorder, and this is confirmed by Ideal Option patient outcomes. Adherence 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, 99% of Ideal Option patients in the Maintenance B Stage of Care are adherent to buprenorphine as shown by definitive testing results for the drug’s metabolite, norbuprenorphine.

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. On average, 35% 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 Stage, and 99% in the Maintenance Stages of Care. Medication adherence, which is assisted by test result accountability, correlates with improved outcomes, as described in Treatment Outcomes.

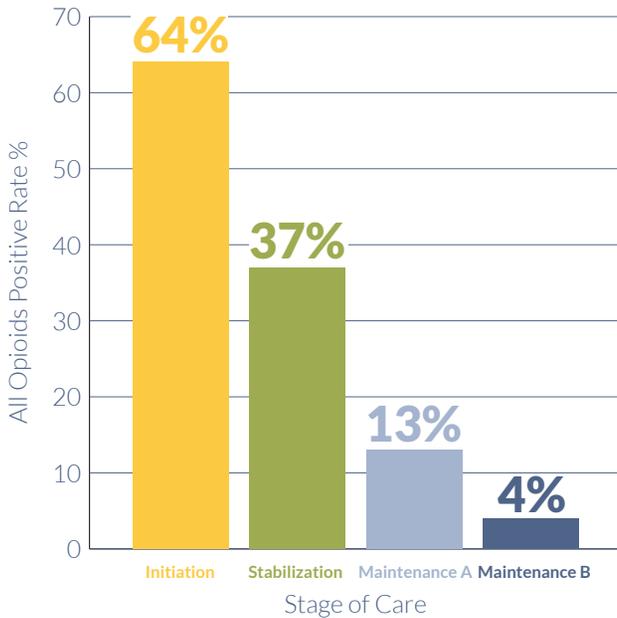
Treatment Outcomes



2021 | NORTH DAKOTA

All Opioids

Note: All opioids excluding buprenorphine



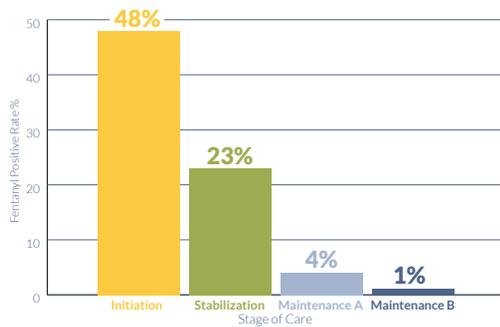
Fentanyl, Heroin, and Other Opioids¹

A significant correlation exists between Stage of Care progression and reduced positive rates of fentanyl, heroin, and other opioids. 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, and positive reinforcement.

¹Includes opioids such as methadone, hydromorphone, oxycodone, and hydrocodone. It does not include heroin, fentanyl, or buprenorphine. Patients commonly test positive for several different types of opioids.

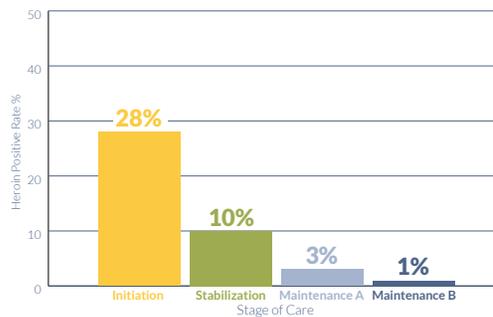
2021 | NORTH DAKOTA

Fentanyl



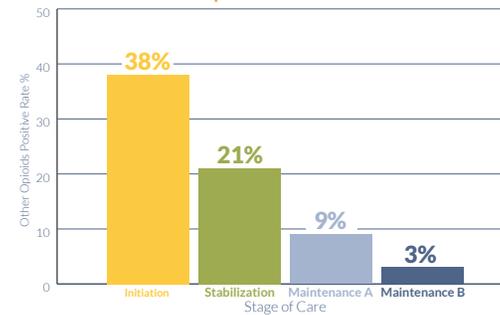
2021 | NORTH DAKOTA

Heroin



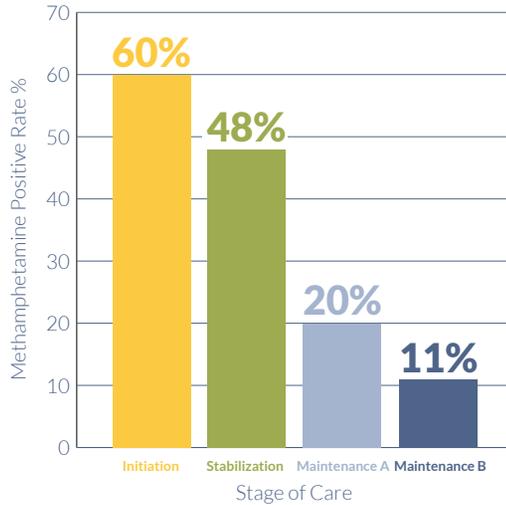
2021 | NORTH DAKOTA

Other Opioids

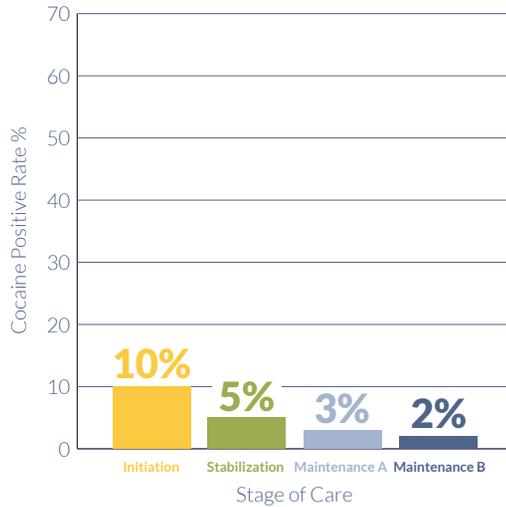


Treatment Outcomes

2021 | NORTH DAKOTA
Methamphetamine



2021 | NORTH DAKOTA
Cocaine

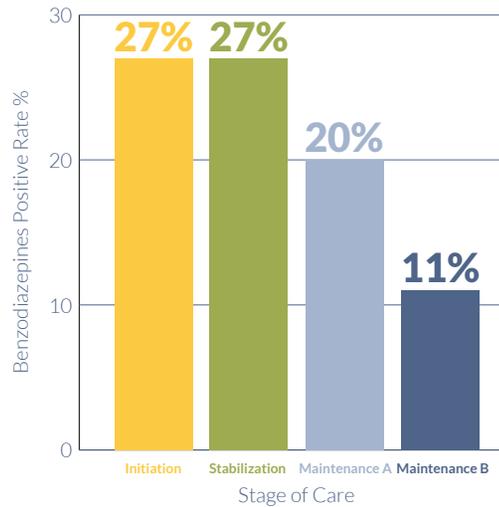


Methamphetamine and Cocaine

Methamphetamine use in North Dakota was widespread in 2021 as shown by an average positive rate at first enrollment of 41%. Although no FDA approved medication currently exists for treating stimulant use disorder, Ideal Option patients have shown significant reductions in methamphetamine use as reflected in the accompanying chart. These outcomes are attributable to a therapeutic alliance with patients that includes psycho-social support and guidance, test result accountability, and positive reinforcement.



2021 | NORTH DAKOTA Benzodiazepines



Benzodiazepines

Benzodiazepines, also known as sedatives or tranquilizers, are commonly prescribed for anxiety and related conditions and are often misused. In addition to street diversion of prescribed medication, the drug supply now includes illicitly manufactured benzodiazepines, often with extremely high potency. Benzodiazepines can lead to acute physical and mental dependency and when consumed in combination with other substances, particularly opioids, increase the probability of overdose.

FDA-approved medications are currently unavailable for treating benzodiazepine use disorder. However, as reflected in the accompanying chart, many patients are able to reduce and eventually discontinue benzodiazepine use as they progress to the Maintenance Stages of Care. These outcomes are attributable to a therapeutic alliance with patients that includes psycho-social support and guidance, test result accountability, and positive reinforcement.

About Ideal Option



Ideal Option was founded in 2012 and has treated more than 50,000 patients. The Company now operates over 75 specialized outpatient treatment clinics in 10 states and employs over 500 personnel, almost half of whom are healthcare professionals, including DATA 2000 X-waivered addiction medicine providers, medical assistants, nurse care managers, and behavioral health counselors. Ideal Option 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. To rapidly supply comprehensive and accurate clinical information to providers, Ideal Option 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.

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. To facilitate patient access to food, housing, employment, transportation, and other resources, Ideal Option partners with community-based organizations, government agencies, law enforcement, and leaders at the local, state, and national level.

TO LEARN MORE: idealooption.com | 1.877.522.1275 | info@idealooption.net

Endnotes

ⁱ This 2nd Annual Report is developed from data derived from comprehensive lab testing. In patient care today, practitioners often are not permitted to access the complete scope of clinical data that is captured from patient samples by modern laboratory methods. This is because laboratories now find it faster and cheaper to perform uniform comprehensive definitive assays on all samples rather than to execute narrowly formulated customized tests ordered by providers striving to comply with payor guidelines. Consequently, comprehensive laboratory data is available for population-level outcomes reporting even if not always for individual patient treatment. A comparison of provider-ordered lab results to the full scope of available laboratory data reveals that even specialized addiction practitioners under-monitor patient substance use. This deficiency could be remedied by payment reform that a) fixes per patient testing costs shifting the risk of testing frequency and intensity from payers to providers, b) broadens practitioner access to comprehensive data needed to address rapidly changing substance use trends, and c) mandates longitudinal outcomes reporting.

ⁱⁱ Center for Substance Abuse Treatment. Clinical Guidelines for the Use of Buprenorphine in the Treatment of Opioid Addiction. Treatment Improvement Protocol (TIP) Series 40. DHHS Publication No. (SMA) 04-3939. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2004.

ⁱⁱⁱ Patient stability is evidenced by testing results indicative of medication adherence and limited unexpected substance use, along with positive clinical presentation and lifestyle changes.

^{iv} NIDA. 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.

^v 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/>



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