Medication-Assisted Treatment Program

Inaugural Year Data & Impact Report

March 2024 - March 2025

City of Gainesville

Acknowledgements

We extend our heartfelt gratitude to all those who made the inaugural year of Gainesville Fire Rescue's Medication-Assisted Treatment (MAT) Program a success. We sincerely thank the dedicated leadership and administrative staff of Gainesville Fire Rescue, whose vision and commitment were essential in launching and sustaining this critical initiative.

We are deeply grateful to City Manager Cynthia W. Curry, the City of Gainesville, and the Gainesville City Commission for their steadfast support and belief in the importance of addressing opioid use disorder as a public health priority. Your continued backing has made it possible to bring hope and recovery to some of our community's most vulnerable members.

We also extend our appreciation to our invaluable partners, including Meridian Healthcare and the Florida Department of Health, whose collaboration, expertise, and resources have been instrumental in advancing the reach and impact of the MAT program.

Together, through partnership, innovation, and compassion, we are transforming lives and building a healthier, more resilient Gainesville.

About the Program

Medication-Assisted Treatment (MAT) is the use of medications for opioid use disorder (MOUD), alongside counseling and behavioral therapies, to treat substance use disorders. MAT provides a “whole-patient” approach to treat addiction to opioids such as heroin or prescription pain relievers.

MAT is not a standalone treatment. It combines medications with behavioral therapy, psychosocial supports, and other wraparound services, leading to the best outcomes.

MAT aids in the treatment of opioid use disorder (OUD) by interacting with dopamine receptors in the brain in a way that reduces cravings and withdrawal symptoms without producing the harmful effects of substance abuse. By doing so, MAT helps the brain heal and allows individuals to engage more fully in their recovery journey

Founded in January 2024, Gainesville Fire Rescue’s MAT program serves as a bridge by delivering medical intervention through the administration of FDA-approved MOUD, Suboxone, to assist at-risk and underserved populations in abstaining from opioid misuse until the patient can be transitioned into a long-term treatment program.

As one of the state’s first mobile MAT programs, our team provides additional wraparound services by assisting with pre-hospital physicals, laboratory evaluations, and emergency medical intervention in their environment, eliminating accessibility barriers associated with traditional brick-and-mortar programs in the community.

Mission

To provide **immediate, compassionate, and accessible** medication-assisted treatment to individuals affected by Opioid Use Disorder, **expanding treatment pathways to foster recovery** within our community.

Vision

To build a more resilient Gainesville where every individual experiencing substance use challenges can **access lifesaving treatment and personalized support**, regardless of their situation.

Program Goal

To bridge emergency response and long-term care by **delivering flexible, patient-centered, field-based treatment**, thereby promoting recovery and strengthening community well-being.

Key Drivers of Success

Flexible Mobilization

The MAT team operates with a field-first mindset, delivering services in tents, parking lots, encampments, as well as traditional and untraditional housing sites across Gainesville. Flexibility is key - offering **medication, support, and resources exactly when and where patients need them.**

This approach eliminates barriers to care, including transportation, stigma, and scheduling delays, allowing the MAT team to engage patients who otherwise slip through the cracks of traditional brick-and-mortar systems.

“Meeting them where they are”

The MAT program embraces the reality that **recovery is not linear**. While some patients enter the program readily embracing change, others needed additional support, encouragement, and time to build trust and readiness to seek long-term care.

Recognizing and respecting each patient’s unique timeline **reinforced patient support and empowered sustained recovery**. By providing unwavering support to patients despite setbacks, the program fosters resilience.

Establishing Trust and Support

The MAT team was able to build trust with their patients through **consistent and nonjudgmental treatment**. The team foster genuine relationships with patients through treating compassionately, respecting autonomy, and following through.

This foundation promoted **patient retention and willingness to engage in longer-term recovery options.** Patients who might have otherwise resisted formal care, **trusted MAT for help, referrals, and their overall well-being**.

Reaching our Community:

Referrals & Engagement

In our first year, the MAT team received a total of **93 patient referrals** from **16 different sources**, including a diverse mix of **11 community partners**, such as Meridian Behavioral Healthcare, GRACE Marketplace, and our own Gainesville Fire Rescue (GFR) and Community Resource Paramedicine (CRP) program crews.

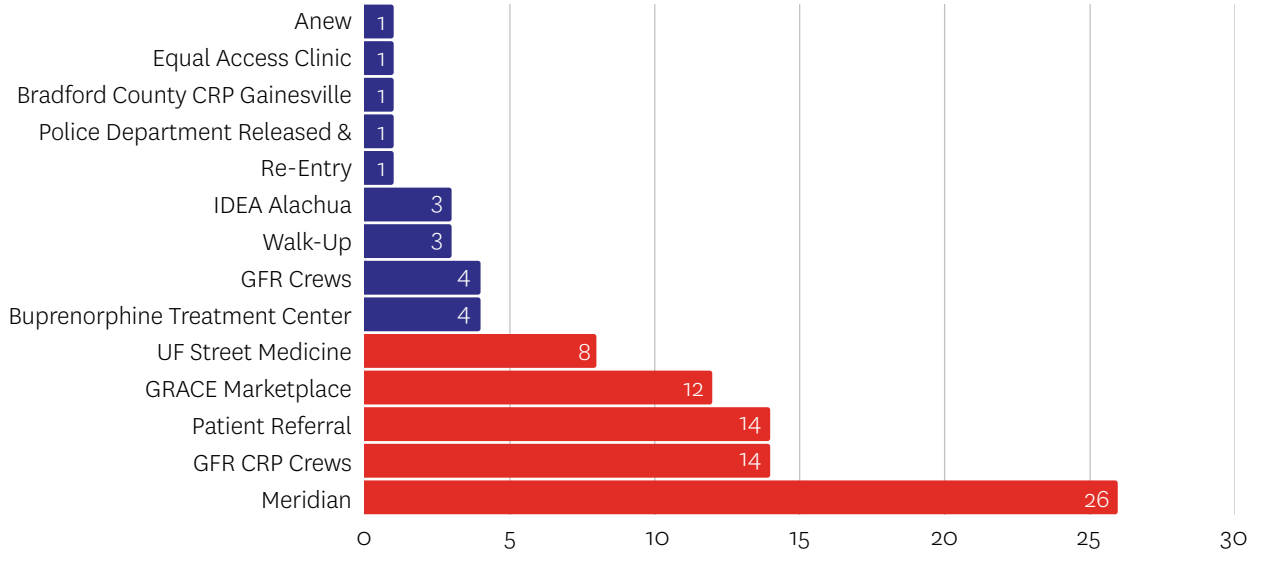


Figure 1: Bar chart of number of referrals by source.

Word of mouth referrals and repeat partner engagement demonstrate **growing community trust** in the program.

From these referrals, **46 individuals (49%)** were successfully enrolled as program patients, representing a strong conversion rate for a new, voluntary care model.

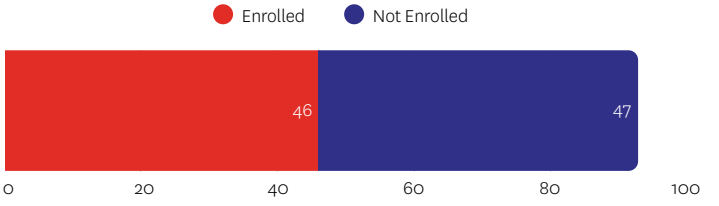
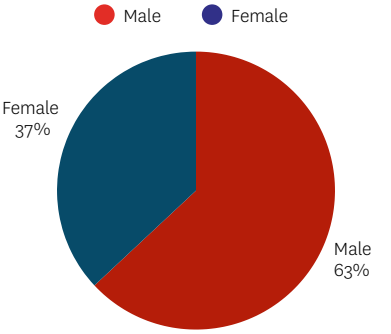


Figure 2: Stacked bar chart of candidates by enrollment status.

Who We Served:

Patient Demographics & Lived Experience



After one year of treatment, our patient demographics reveal a trend of at-risk individuals seeking help:

- **Gender:** The majority of our patients were **male (29, 63%)**, aligning with national opioid use trends.
- **Age:** The majority of our patients were **aged 35-54 (34, 74%).**

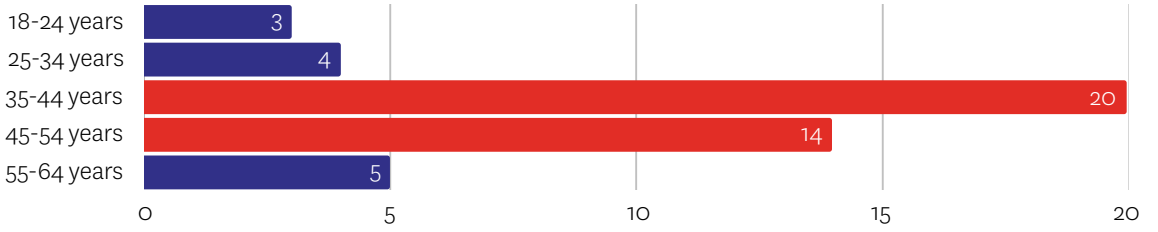


Figure 4: Bar chart of number of patients by age group.

- **Housing Status:** 50% of patients were **unhoused** at the time they began treatment.
  - Some patients have reported becoming housed after treatment and rehabilitation.
- **Polysubstance Use:** The majority of our patients engaged in **polysubstance use (37, 80.4%)**, or the use of 2 or more substances within a short period of time.
  - Most patients reported using **2-3 substances (76%)** at the time of intake, with a few disclosing up to **6 different substances**.
    - Typically, consisted of a mix of opioids and either a stimulant, psychoactive, or alcohol.

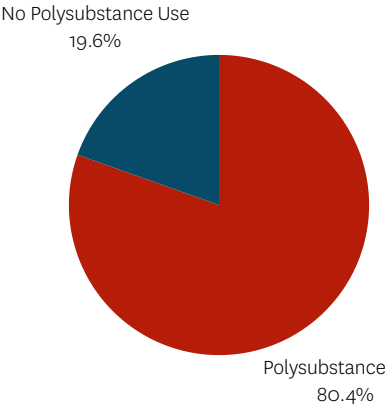


Figure 5: Pie chart of patients by polysubstance use.

What Our Data Revealed:

Substance Use Trends

Our protocols include a thorough screening process to ensure **patient safety and eligibility** for receiving MAT.

- Patients who are **alcohol- or benzodiazepine-dependent** are not eligible to receive MAT due to the risk of respiratory depression and treatment complication.

As of March 6, 2025, our 46 patients reported the use of **17 different substances** during intake, including **depressants, stimulants, and psychoactives**, which have been broken down in the charts on the right.

From our data analysis, we identified several trends and insights:

- Several patients have reported the use of **Kratom**, which can act as a stimulant if consumed in low doses and a depressant if consumed in high doses.
- Starting in May 2024, all but 5 patients reported the use of non-prescription Suboxone, suggesting that individuals seeking recovery are facing **barriers to obtaining treatment** and highlighting the need for MAT services.
- In various occasions, our patients were utilizing combinations of substances that may make them ineligible for traditional long-term treatment centers, emphasizing **the need for flexible treatment options** like MAT.

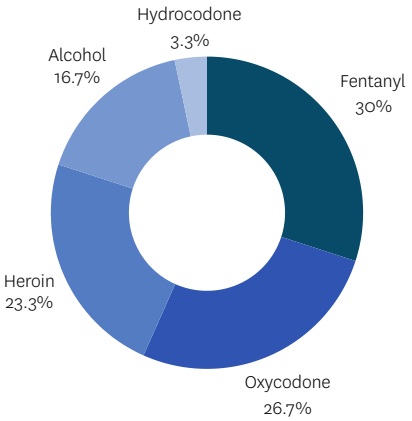


Figure 6: Chart of **depressants** reported at intake.

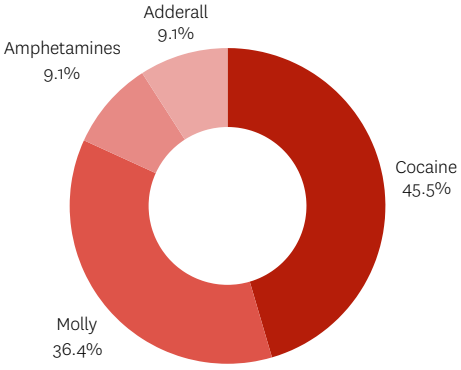


Figure 7: Chart of **stimulants** reported at intake.

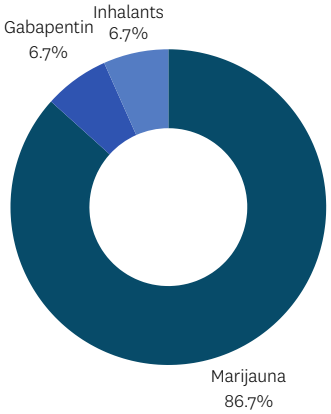


Figure 8: Chart of **psychoatives** reported at intake.

Dismantling Barriers:

Insights Into Our Care Delivery

Treatment durations varied in length, ranging from patients completing treatment in **1 day up to 65 days** until being connected to long-term treatment.

Most patients completed treatment within **14-26 days** of treatment start and were then connected to long-term treatment (refer to Appendix A: Boxplot of Treatment Duration in Days). The patients that received treatment for the longest period of time, remained in treatment for **59 days and 65 days** (refer to Appendix A: Boxplot of Treatment Duration in Days).

All **four quadrants of Gainesville were served** by the MAT team, with highest demand in the **northeast quadrant (39%)**, especially ZIP Code 32609.

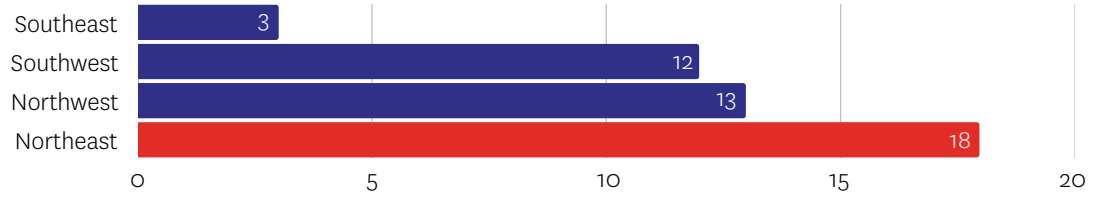


Figure 9: Bar chart of number of patients treated by city quadrant.

The MAT team's discrete ambulance allows for fully mobile, flexible, field-based treatment which enabled patients to **adhere to treatment wherever they are located.**

Program Impact:

Patient Engagement & Outcomes

The goal of the MAT program is to at-risk and underserved populations in **abstaining from drug misuse** through pre-hospital physicals, laboratory evaluations, emergency medical interventions, and MAT **until the patient can be transitioned into a long-term treatment program**.

The MAT program successfully transitioned **40 of the 46 (87%)** patients enrolled in its inaugural year to long-term treatment. This group of patients are recognize as **program graduates**.

Program graduates have been referred and admitted to **out-patient facilities (47.5%)**, **prescribed OUD treatment (45%**), and referred to other **mobile units for patient convenience (7.5%)**.

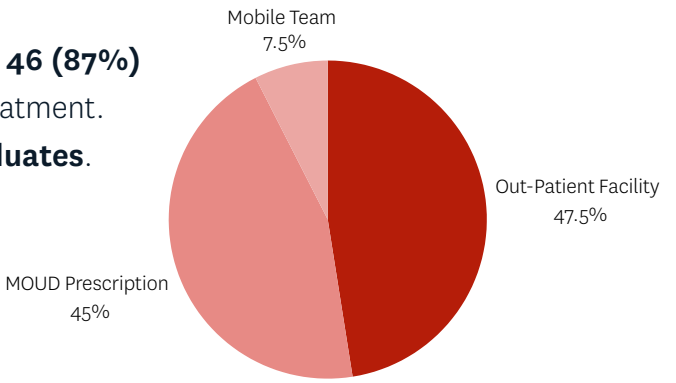


Figure 10: Pie chart of program graduate outcomes

There were **5 patients (11%)** in the inaugural year that did not complete treatment and were not transitioned to long-term care.

Some of the reasons that patients did not complete treatment were:

- MAT team lost contact
  > MAT offers services and resources to transient individuals who may not have a set schedule or a cellular phone to communicate with
- Patient relocated with no notification to MAT team
- Patient passed away from a non-substance related medical emergency
- Patient was methamphetamine-dependent, substantially complicating treatment
  > Patient was referred to UF's Street Medicine program for individualized treatment

Our team recognizes that **recovery is not a linear journey** as addiction is a complex condition.

- We encourage all of our patients to remain engaged with the program and offer gap services and continued support to all enrolled patients.
- However, some patients decide to disengage with the program, at which point we offer referrals to more specialized resources.

Supporting Patients through Critical Transitions:

Gap Services

Gap services are the provision of treatment to an already established patient, who has graduated from the program, until the patient is able to receive their next **reliable and legal source of medication.**

The MAT team began offering gap services to enrolled patients in August 2024, due to challenges that arise from the **rigidity of traditional healthcare systems**.

Gap services are provided to reduce the risk of relapse through:

- Delays in appointment scheduling
- Delays in prescription fill or refill
- Period between insurance plans
- Insurance coverage gaps
- Transition between physicians, pharmacies or facilities

The team provided gap services **17 different program graduates in 27 separate instances**.

- 10 patients requested gap services in one single occasion
- 7 patients requested gap services in multiple occasions
  - The number of doses provided to patients through gap services varied, from a single dose to 24 doses

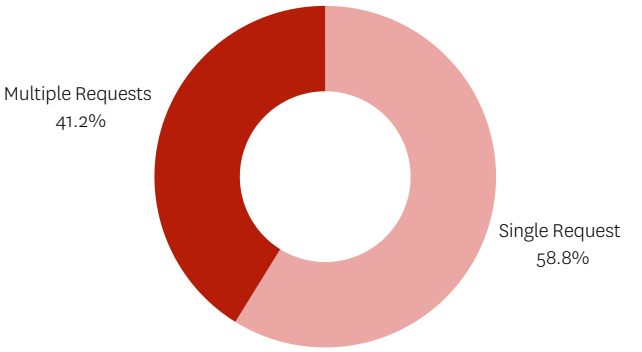


Figure 11: Pie chart of gap services by number of requests

Patterns Emerging from the Data:

Screening Tools and Score Insights

To personalize care and monitor patient needs, the MAT team administers several mental health and substance use screening tools at intake, including:

- **Brief Addiction Monitor (BAM):** Measures frequency of substance use, risk behaviors, and protective factors.
- **Patient Health Questionnaire (PHQ-9):** Screens for depression severity. Generalized
- **Anxiety Disorder Assessment (GAD-7):** Measures anxiety symptoms.
- **Drug Abuse Screening Test (DAST-10):** Gauges substance use severity and risk behaviors.

Each patient's intake assessments results were combined to calculate a Composite Risk Score. Scores were analyzed using Principal Component Analysis (PCA) - a statistical method that looks for underlying patterns in complex data to better understand how mental health and substance use overlap.

The Principal Component Analysis grouped data into two major components driving scores:

- **Mental Health & Behavioral Risk:** driven by high PHQ-9, GAD-7, BAM Risk scores
- **Substance Use Severity:** driven by BAM Use and DAST-10 scores

The Correlation Analysis of Composite Risk Scores revealed that:

- Patients with **higher protective scores** (e.g., strong support networks, employment, housing, etc.) were more likely to graduate and stay engaged in recovery efforts.
- Patients with **higher behavioral risk scores** were more likely to disengage with the program, and treatment overall.

These findings help us personalize care and set realistic goals based on each individual's risk profile.

Refer to the appendix page for more detailed information and visuals from the statistical analyses conducted to reach these conclusions.

Eyes on the Future:

Lessons Learned & MAT Moving Forward

Lessons Learned & Year-One Wins:

Shorter Treatment Lengths:

- Over the past year, treatment lengths have gradually shortened, reflecting a more structured and stable path for patient recovery.
- This suggests that patients are reaching treatment milestones more efficiently while still maintaining the necessary support for long-term recovery.

Growing Utilization and Demand for Suboxone:

- A notable increase in the number of patients who have previously been exposed to Suboxone highlights a growing trend in pre-existing medication familiarity and adherence.
- Additionally, patient demand for legal Suboxone continues to rise, reinforcing its effectiveness as a core treatment option for opioid use.
- The program's ability to meet this demand ensures that more individuals have access to essential medication, contributing to improved patient stability and long-term recovery.

Patient Retention Surged:

- One of the most significant indicators of program success is the exceptionally low withdrawal rate from the program.
- Since June 2024, MAT responders have observed zero patient dropouts, suggesting that the intake process is highly effective in identifying patients who are well-suited for the program.

MAT Moving Forward

- The GFR MAT program will be integrated into the Alachua County CORE Network.
- Ongoing analysis of patient status and outcomes will be used to inform community health initiatives
- Continue to expand advocacy for systemic change across social and healthcare systems.

Appendix

Test 1: Point Biserial Correlation

Correlations

		Graduation Status	BAM Use	BAM Risk	BAM Protective	PHQ9	GAD7	DAST10
Graduation Status	Pearson Correlation	1	-.061	-.352*	.332*	-.123	-.203	-.157
	Sig. (2-tailed)		.685	.016	.024	.415	.181	.304
	N	46	46	46	46	46	45	45

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

The Correlation Analysis Table shows that **higher BAM Risk Factor scores have a statistically significant moderate negative relationship (r=-0.352) with graduation status**, meaning that patients with higher risk factors are less likely to graduate while **high BAM Protective Factor scores have a statistically significant moderate positive relationship (r=0.332) with graduation status**, meaning that patients with higher protective factors are more likely to graduate from the MAT program.

These findings are consistent with public health literature which states that the prevalence of protective factors (i.e. self-efficacy, self-help behaviors, religion/spirituality, work/school participation, adequate income, or a sober support system) over risk factors (i.e. cravings, risky situations, family/social problems) are associated with a lower likelihood of negative outcomes.

Test 2: Descriptive Analysis of Composite Risk Scores

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
CompositeRisk	45	-17.00	77.00	31.3778	20.03552
Valid N (listwise)	45				

Patient composite risk scores for those enrolled in the program between March 6, 2024, and March 6, 2025 ranged from -17.00 to +77.00 with a mean of 31.3778, indicating variability in risk levels for patients treated in the program's inaugural year. The distribution of Composite Risk Factor Scores can be seen in the table above.

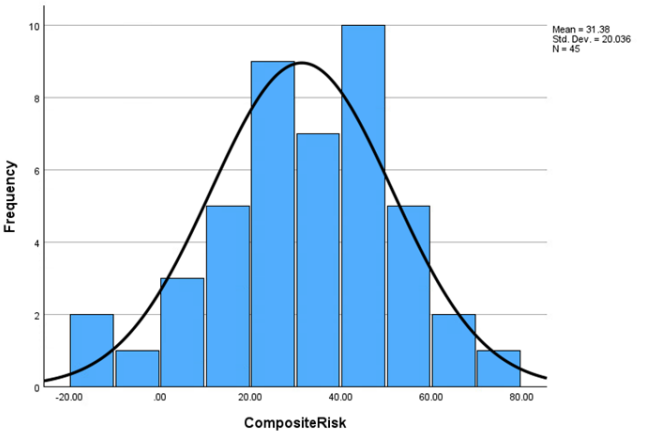
- P041 (-17.00) by far had the lowest composite risk score which suggests that the high presence of protective factors (20), low risk factors (3), and lack of mental health or substance abuse challenges were pivotal to the patient's speedy treatment. Ultimately, P041 completed the program within 2 days of treatment start and was bridged to Meridian Healthcare for continued treatment through prescription.
- P014 (+77.00) by far had the highest composite risk score, being the only patient with a protective factor score of 0 and high scores for risk factor (BAM Risk: 23), mental health challenges (PHQ9: 24; GAD7: 19), and substance use (DAST10: 8). Ultimately, P014 disengaged from the program after the MAT team failed to locate and contact the patient for treatment.

Appendix

Test 2: Descriptive Analysis of Composite Risk Scores (continued)

The histogram to the right displays a bell-shaped distribution of Composite Risk Scores among patients from the inaugural year by combining their intake assessment results.

Mean: 31.38
Standard Deviation: 20.036
Range: -17.00 to 77.00



The histogram shows that the majority of patients had Composite Risk Scores clustered around the middle of the scale **(between 20.00 and 40.00)**, which is reflected in the peak of the curve. A smaller number of patients scored **lower than 20.00 or higher than 40.00** and still provides a roughly symmetrical curve, which suggests that **our patient population is fairly balanced** – with some patients at high risk, others at low risk, but most within the moderate risk range.

Test 3: Omnibus Tests of Model Coefficients

Due to the large sample size of patients served during MAT's inaugural year, a logistic regression analysis was conducted using Composite Risk Factor Scores as a predictor of graduation status. The Omnibus Tests of Model Coefficients show that a patient's composite risk score significantly predicted whether they completed the program **(p=0.04)**, suggesting that **overall risk level plays a role in treatment outcomes**.

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	4.207	1	.040
	Block	4.207	1	.040
	Model	4.207	1	.040

Test 4: Classification Table

The Classification Table shows that the model correctly identified all program graduates with **100% accuracy**, but it was significantly less effective at correctly identifying program non-graduates with an accuracy of **16.7%**. Overall, the model was **88.9%** accurate at identifying graduation outcomes for patients enrolled in the program.

Classification Table[a]

			Predicted		
			Graduation Status		Percentage Correct
	Observed		0	1	
Step 1	Graduation Status	0	1	5	16.7
		1	0	39	100.0
	Overall Percentage				88.9

Appendix

Table 5: Variables in the Equation

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	CompositeRisk	-.051	.027	3.464	1	.063	.950
	Constant	3.806	1.273	8.939	1	.003	44.984

a. Variable(s) entered on step 1: CompositeRisk.

As seen in the Variables in the Equation table, the negative **B value (-0.051)** indicates that as Composite Risk Score increases, a patient's odds of graduation decrease. The odds ratio **(Exp(B) = 0.95)** indicates that for each additional point on the risk scale, the odds of graduating was reduced by 5%, a trend that was nearly **statistically significant (p = 0.063)** but not quite for a sample of this size. Overall, patients with mental health and substance use challenges were less likely to complete the program.

Factor Analysis (PCA)

To better understand the challenges our patients face, we analyzed data from several screening tools (BAM, PHQ9, GAD7, and DAST10) to explore the grouping of scores and whether they reveal underlying patterns in our patient population.

Test 6: Kaiser-Meyer-Olkin Measure of Sampling Adequacy

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.768
Bartlett's Test of Sphericity	Approx. Chi-Square	95.018
	df	15
	Sig.	<.001

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy Test was **0.768**, which is above the accepted threshold of 0.6, suggesting that the data and sample size are suitable for identifying underlying patterns.

The Bartlett's Test of Sphericity was **highly significant (p < 0.001)**, confirming that the scores collected from each screening are sufficiently related to one another, and thus, it is reasonable to identify common components.

Test 7: Total Variance Explained

Total Variance Explained

Component	Initial Eigenvalues Total	% of Variance	Cumulative %	Rotation Sums of Squared Loadings Total	% of Variance	Cumulative %
1	3.084	51.408	51.408	2.820	46.993	46.993
2	1.098	18.303	69.712	1.363	22.719	69.712
3	.731	12.180	81.891			
4	.536	8.941	90.833			
5	.302	5.041	95.874			
6	.248	4.126	100.000			

Extraction Method: Principal Component Analysis.

The Total Variance Explained Table shows that two of the six identified components dominate the scores in terms of overall risk: Component 1 **(3.084 Eigenvalue, 46.993%Variance)** and Component 2 **(1.098 Eigenvalue, 22.719)**.

This suggests that all 6 variables measure a 2 underlying factors, mental health & behavioral risk and substance use severity, respectively.

Appendix

Table 8: Rotated Component Matrix

From the Rotated Component Matrix, we identified component 1 as mental health and behavioral risk due to the strong contributions from PHQ-9 (0.883) which evaluates depression, GAD-7 (0.854) which evaluates anxiety, BAM Risk (0.840) which evaluates overall behavioral risk, and DAST-10 (0.447) which evaluates the degree of problems related to substance use.

Component 2 was identified as substance use severity with strong contributions from BAM Use (0.878) and DAST-10 (0.652) which evaluate substance use frequency and severity. By identifying these two components, we are able to distinguish patients with high substance use tendencies from those whose challenges were more behavioral or psychological in nature.

Rotated Component Matrix[a]

	Component	
	1	2
BAM Use	-.053	.878
BAM Risk	.840	.264
BAM Protective	-.635	-.311
PHQ9	.883	.036
GAD7	.854	-.024
DAST10	.447	.652

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.