

# Characteristics of Outpatient and Residential Substance Use Disorder Treatment Facilities with a Tailored LGBT Program

Substance Abuse: Research and Treatment  
Volume 17: 1–7  
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DOI: 10.1177/11782218231181274



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**ABSTRACT:** Lesbian, gay, bisexual, and transgender (LGBT) individuals have a high prevalence of substance use disorders (SUDs) and experience unique barriers to treatment. Little is known about the characteristics of SUD treatment facilities providing LGBT-tailored programs at the outpatient and residential levels of care. The purpose of this study is to examine the availability of LGBT-tailored programs in outpatient and residential SUD treatment facilities. Using the National Survey of Substance Abuse Treatment Services 2020, we conducted logistic regression to examine facility characteristics, including ownership, pay assistance, region, outreach, and telehealth services, associated with having an LGBT-tailored program among SUD treatment facilities. Outpatient facilities that were for-profit, had pay assistance, had community outreach services, and provided telemedicine/telehealth were more likely to have an LGBT-tailored program. Those that were government-owned, in the Midwest, and that accepted Medicaid were less likely to have an LGBT-tailored program. Residential facilities that were in the West, for-profit, and had community outreach services were more likely to have an LGBT-tailored program. This study offers a national examination of the availability of LGBT-tailored programs in SUD treatment facilities. Differences in availability based on ownership, region, pay assistance, and outreach highlight potential gaps in treatment availability.

**KEYWORDS:** LGBT, outpatient, residential, sexual and gender minority, substance use disorder, treatment

**RECEIVED:** February 10, 2023. **ACCEPTED:** May 23, 2023.

**TYPE:** Original Research

**FUNDING:** The author(s) received no financial support for the research, authorship, and/or publication of this article.

**DECLARATION OF CONFLICTING INTERESTS:** The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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## Introduction

The growing burden of substance use disorders (SUDs) in the United States is a significant public health concern associated with substantial morbidity and mortality.<sup>1</sup> It is imperative to ensure equitable financial access to SUD treatment across different levels of care (outpatient and residential) to reduce potential harms associated with SUDs. A substantial body of research shows that individuals who identify as lesbian, gay, bisexual, and transgender (LGBT) are at a higher risk of having a SUD than individuals who identify as cisgender/heterosexual.<sup>2–5</sup> For example, a recent study reported that compared to heterosexual individuals, gay and lesbian persons had higher odds of experiencing a SUD in the past year.<sup>6</sup> A higher prevalence of experiences of discrimination, marginalization, social stigma, trauma, and lack of social support may contribute to an increased risk of SUD among LGBT individuals,<sup>2</sup> particularly among racial/ethnic LGBT individuals.<sup>7</sup> Existing research suggests healthcare discrimination, homophobic communications, medical mistrust, and cultural insensitivity are barriers to accessing healthcare services and treatment among LGBT individuals.<sup>8–10</sup> Given these social and health inequities, programmatic efforts, including LGBT-tailored services, may be an effective way to connect LGBT individuals to SUD treatment.<sup>11–13</sup>

Like other conditions, evidence-based treatment options for SUD exist.<sup>14–16</sup> However, treatment options that are not culturally responsive to the needs and experiences of marginalized

populations may be a barrier to accessing or continued engagement in SUD treatment.<sup>17</sup> Providing programs tailored for LGBT individuals may reduce the impact of SUDs on this population.<sup>4,5,18–23</sup> According to the National Survey of Substance Abuse Treatment Services (N-SSATS) 2020, approximately 24% of all SUD treatment facilities have a LGBT-tailored program.<sup>24</sup>

On a policy level, LGBT-friendly state-level policies are associated with an increase in the proportion of tailored LGBT programs across mental health and SUD treatment facilities.<sup>25</sup> Another study found that SUD treatment facilities with LGBT-tailored programs were more likely to be in the Northeastern region of the USA, offer flexible payment options, and be for-profit.<sup>12</sup> However, little is known about the differences between facilities that have tailored programs for LGBT individuals based on the level of care, including outpatient treatment and residential treatment. It is important to examine tailored programs within these levels of care as residential treatment is recommended for individuals with greater acute intoxication and/or withdrawal potential, a heightened risk of return to use or continued use, and less environmental support and structure.<sup>26</sup> Outpatient treatment is often recommended for individuals with less severe acute intoxication and/or withdrawal potential, a lower risk of return to use/continued use, and more environmental support and structure comparatively.<sup>26</sup>



This study aimed to examine SUD treatment facility characteristics associated with having an LGBT-tailored programs to offer insights into mechanisms that can be leveraged to address potential treatment inequities. We used the N-SSATS 2020 dataset<sup>24</sup> to compare facilities with and without LGBT-tailored programs with respect to the region of the US, profit status, whether community outreach services are provided, payment options accepted, and whether telehealth services are provided. We conducted analyses separately for facilities that offer outpatient treatment and for facilities that offer residential treatment to identify facility characteristics associated with having an LGBT-tailored program within distinct levels of care. Our results add to the limited knowledge on structural and programmatic needs in 2 SUD levels of care, to further the efforts needed to reduce SUD treatment disparities among LGBT individuals.

## Methods

### *Sample*

This study used the nationally publicly available N-SSATS 2020 dataset which is provided by the Substance Abuse and Mental Health Services Administration (SAMHSA).<sup>24</sup> Each year, N-SSATS captures characteristics of SUD treatment facilities in the US and territories through a self-report survey delivered through the web, mail, and telephonic interview. In 2020, of the 18184 SUD treatment facilities eligible to complete the survey, 16066 (88.4%) responded and were included in the dataset by the SAMHSA.<sup>24</sup> Data are collected by SAMHSA from March to December 2020 and included 37 questions focusing on describing the facility and the available services.<sup>24</sup> Study procedures were considered Not Human Subjects Research by the University of North Carolina at Chapel Hill Institutional Review Board.

We included treatment facilities that 1) responded Yes or No to this study's outcome whether there is a LGBT-tailored program (not missing values), 2) responded yes to providing SUD treatment (some facilities may, for example, only provide screening or referrals and not SUD treatment), 3) are based in 50 states in the US or the District of Columbia, 4) have outpatient or non-hospital residential treatment, and 5) were not missing values for the facility characteristics of interest (the independent variables described in the data analysis section below) which resulted in a sample of N = 15 246. Analyses were also conducted separately for facilities with outpatient treatment (n = 12 798) and facilities with non-hospital residential treatment (n = 3554; further called residential) treatment.

### *Measures*

Variables included in the analyses are region, ownership, pay assistance, sliding fee scale, Medicaid, telemedicine/telehealth, community outreach services, and LGBT-tailored program. Region; this variable described which of the 4 regions of the

United States the facility was located. Using the "STATE" variable in N-SSATS 2020 which lists each state and the District of Columbia, we binned each jurisdiction into their corresponding United State Census region.<sup>27</sup> The 4 possible values are Northeast, Midwest, South, and West. Ownership; this variable was created using the "OWNERSHP" variable (identifies the facility profit status) included in the N-SSATS 2020 dataset that has the following 6 values: private for-profit, private non-profit, federal government, state government, local/county/community government, and tribal government. The latter 4 categories were collapsed into the category of government. The recoded variable included private for-profit, private non-profit, and government as values.

The payment option variables included in this study: Pay assistance, Sliding fee scale, and Medicaid were not mutually exclusive. Therefore, a facility could select yes or no to any of the 3 variables. Pay assistance; this variable is binary, with the options "yes" and "no" indicating whether a facility offers free or minimal charges for individuals without the ability to pay for treatment. The corresponding N-SSATS 2020 variable is "PAYASST." Sliding fee scale; as a binary variable, the values are "yes" and "no," indicating whether a facility offers a sliding fee scale to pay for treatment. The corresponding N-SSATS 2020 variable is "FEESCALE." Medicaid; this variable is binary, with the options "yes" and "no" indicating whether a facility accepts Medicaid as a payment option for treatment. The corresponding N-SSATS 2020 variable is "REVCHK5."

Telemedicine/telehealth services. As a binary variable, the values are "yes" and "no," indicating whether a facility frequently utilizes telemedicine or telehealth services. The "TELEMED" variable from N-SSATS 2020 is the corresponding variable. Community outreach services. This variable was also binary with the options "yes" and "no," and indicated if the facility engages in outreach for persons that may need treatment services which was captured by the N-SSATS 2020 variable "SRVC91." LGBT-tailored program. This is the outcome variable with "yes" and "no" as values identifying if the facility has a program for LGBT individuals based on the N-SSATS 2020 variable "SRVC62."

### *Data analysis*

Descriptive statistics were used to describe the full sample and facilities with outpatient treatment, residential treatment, and both outpatient and residential treatment. The analyses included 2 multivariable binary logistic regression models. The first binary logistic regression model was among facilities with outpatient treatment and the second was among facilities with residential treatment.

The outcome variable in both models was whether a facility had a LGBT-tailored program. Independent variables in both models included region (reference: South), ownership (reference: Private non-profit), pay assistance (reference: No),

**Table 1.** Facility characteristics of substance use disorder treatment programs.

VARIABLE	ALL FACILITIES N, (%)	FACILITIES WITH OUTPATIENT TREATMENT N, (%)	FACILITIES WITH RESIDENTIAL TREATMENT N, (%)	FACILITIES WITH OUTPATIENT AND RESIDENTIAL TREATMENT N, (%)
Sample size	15 246 (100)	12 798 (100.0)	3 554 (100.0)	1 106 (100.0)
Region				
Northeast	2 791 (18.3)	2 210 (17.3)	671 (18.9)	90 (8.1)
Midwest	3 647 (23.9)	3 311 (25.9)	682 (19.2)	346 (31.3)
South	4 508 (29.6)	3 936 (30.8)	980 (27.6)	408 (36.9)
West	4 300 (28.2)	3 341 (26.1)	1 221 (34.4)	262 (23.7)
Ownership				
Private for-profit	6 374 (41.8)	5 635 (44.0)	1 120 (31.5)	381 (34.4)
Private non-profit	7 649 (50.2)	6 061 (47.4)	2 238 (63.0)	650 (58.8)
Government	1 223 (8.0)	1 102 (8.6)	196 (5.5)	75 (6.8)
Accepted payments				
Pay assistance	6 797 (44.6)	5 671 (44.3)	1 657 (46.6)	531 (48.0)
Sliding fee scale	9 017 (59.1)	7 876 (61.5)	1 740 (49.0)	599 (54.2)
Medicaid	10 920 (71.6)	9 631 (75.3)	1 981 (55.7)	692 (62.6)
Services provided				
Outpatient treatment	12 798 (83.9)	12 798 (100.0)	1 106 (31.1)	1 106 (100.0)
Residential treatment	3 554 (23.3)	1 106 (8.6)	3 554 (100.0)	1 106 (100.0)
Telemedicine/Telehealth services	9 041 (59.3)	8 003 (62.5)	1 714 (48.2)	676 (61.6)
Community outreach services	10 170 (66.7)	8 805 (68.8)	2 174 (61.2)	809 (73.1)
Tailored LGBT Program	3 735 (24.5)	2 942 (23.0)	1 156 (32.5)	363 (32.8)

Abbreviation: LGBT, lesbian, gay bisexual, and transgender. Percentages are column percentages.

sliding fee scale (reference: No), Medicaid (reference: No), community outreach (reference: No), and telemedicine/telehealth services (reference: No). Region and ownership were included in the model to examine the association of a facility's geographic location and profit status with the outcome of a LGBT-tailored program. The pay assistance, sliding fee scale, and Medicaid variables were selected for the model to examine the association between financial access and the presence of a LGBT-tailored program. These 3 variables were included to consider individuals who may not have health insurance or the ability to self-pay for services. Community outreach was selected as a variable in the model because it highlights a facility's direct engagement with the community to provide treatment for individuals who may need services. The telemedicine/telehealth services variable was added to examine accessibility for outpatient treatment and the potential for follow-up services after a discharge from residential treatment. All the independent variables were added as a single

block, and adjusted odds ratios (AOR) were interpreted. To adjust for the large sample size,  $P < .001$  was considered statistically significant.

## Results

Facility characteristics may be found in Table 1, describing the full sample, outpatient subsample, residential subsample, and outpatient/residential subsample. In the full sample, most facilities were based in the South (29.6%) and West (28.2%). Approximately half (50.2%) were private non-profit facilities. Less than three-fourths (71.6%) of facilities accepted Medicaid as a payment option. More than half of the facilities provided telemedicine/telehealth services (59.3%), and two-thirds provided community outreach services (66.7%). Approximately one-quarter (24.5%) of all SUD treatment facilities had a LGBT-tailored program.

Results from the first logistic regression model among the 12 798 facilities with outpatient services may be found in

**Table 2.** Logistic regression analyses predicting having LGBT programs among facilities with outpatient treatment.

FACTOR	ADJUSTED ODDS RATIO	P-VALUE	STANDARD ERROR	95% CONFIDENCE INTERVAL
Region (ref: South)				
Northeast	1.118	.079	0.064	0.987-1.267
Midwest	0.680	<.001*	0.061	0.603-0.766
West	1.091	.114	0.055	0.979-1.216
Ownership (ref: Private non-profit)				
Private for-profit	1.813	<.001*	0.051	1.640-2.003
Government	0.719	<.001*	0.090	0.603-0.858
Pay assistance (ref: No)				
Yes	1.263	<.001*	0.050	1.146-1.393
Sliding fee scale (ref: No)				
Yes	1.167	.002	0.049	1.059-1.285
Medicaid (ref: no)				
Yes	0.774	<.001*	0.053	0.698-0.858
Community outreach (ref: No)				
Yes	1.927	<.001*	0.052	1.740-2.133
Telemedicine/telehealth services (ref: No)				
Yes	1.190	<.001*	0.046	1.088-1.302

N=12 798.

\*Due to the large sample size,  $P < .001$  was deemed statistically significant.

Table 2. This analysis found that facilities in the Midwest (AOR=0.680,  $P < .001$ , 95% confidence interval [95% CI]=0.603-0.766) had lower odds of having an LGBT-tailored program compared to facilities in the South.

Private for-profit facilities had higher odds of having an LGBT-tailored program than private non-profit facilities (AOR=1.813,  $P < .001$ , 95% CI=1.640-2.003). Alternatively, government facilities had lower odds of having an LGBT-program program than private non-profit facilities (AOR=0.719,  $P < .001$ , 95% CI=0.603-0.858). Facilities that offered pay assistance (AOR=1.263,  $P < .001$ , 95% CI=1.146-1.393) had higher odds of having an LGBT-tailored program. However, facilities accepting Medicaid (AOR=0.774,  $P < .001$ , 95% CI=0.698-0.858) had lower odds of having an LGBT-tailored program. Facilities that had community outreach services (AOR=1.927,  $P < .001$ , 95% CI=1.088-1.302) or offered telemedicine/telehealth (AOR=1.190,  $P < .001$ , 95% CI=1.088-1.302) had higher odds of having an LGBT-tailored program.

Results from the second logistic regression model among the 3554 facilities with residential services may be found in Table 3. Facilities in the West (AOR=1.625,  $P < .001$ , 95% CI=1.351-1.956) had higher odds of having an

LGBT-tailored program than facilities in the South. Compared to private non-profit facilities, private for-profit facilities (AOR=1.581,  $P < .001$ , 95% CI=1.321-1.893) had higher odds of having an LGBT-tailored program. Facilities with community outreach services (AOR=1.983,  $P < .001$ , 95% CI=1.694-2.322) had higher odds of having an LGBT-tailored program.

## Discussion

This study examined factors associated with the availability of LGBT-tailored programs in SUD treatment facilities, and if these differ in facilities that provide outpatient or residential services. The results suggest there are geographical differences in the availability of LGBT-tailored programs at SUD treatment facilities in the US. In our sample, compared to the South, outpatient facilities in the Midwest were less likely to provide LGBT-tailored programs, whereas, among residential facilities, those in the West were more likely to provide LGBT-tailored programs compared to the South. Some support for our finding exists in the literature, where Qeadan et al<sup>28</sup> found that SUD treatment facilities located in the West were more likely to have LGBT-specific programs than all other regions.

**Table 3.** Logistic regression analyses predicting having LGBT programs among facilities with residential treatment.

FACTOR	ADJUSTED ODDS RATIO	P-VALUE	STANDARD ERROR	95% CONFIDENCE INTERVAL
Region (ref: South)				
Northeast	1.354	.008	0.115	1.082-1.696
Midwest	0.952	.671	0.117	0.757-1.197
West	1.625	<.001*	0.094	1.351-1.956
Ownership (ref: Private non-profit)				
Private for-profit	1.581	<.001*	0.092	1.321-1.893
Government	0.670	.027	0.181	0.470-0.956
Pay assistance (ref: No)				
Yes	1.146	.106	0.084	0.971-1.352
Sliding fee scale (ref: No)				
Yes	0.821	.014	0.080	0.701-0.961
Medicaid (ref: No)				
Yes	1.051	.550	0.084	0.892-1.239
Community outreach (ref: No)				
Yes	1.983	<.001*	0.080	1.694-2.322
Telemedicine/telehealth services (ref: No)				
Yes	1.239	.004	0.076	1.069-1.437

N=3554.

\*Due to the large sample size,  $P < .001$  was deemed statistically significant.

Studies also show that LGBT-tailored programs were more likely to be offered at SUD treatment facilities in the Northeast compared to the Midwest and South.<sup>12,28</sup> Our study did not find facilities in the Northeast as being more likely to have LGBT-tailored programs compared to facilities in the South. Our findings indicate that the same significant differences observed across all treatment facilities in other studies<sup>12,28</sup> may not necessarily be seen when examining specific levels of care (outpatient and non-hospital residential treatment). Regional-level differences in the availability of LGBT-tailored programs may relate to population-level factors. Some of these factors may include sociocultural beliefs and norms around gender and sexuality.<sup>28</sup> It may very well be the case that geographic sociocultural views affect the availability of programs and services designed to support LGBT people along with policies.<sup>11,12,25,29</sup>

Results from our analyses also found that community outreach as a programmatic characteristic is positively associated with providing LGBT-tailored programs at SUD facilities. Research suggests that engaging in community outreach to advertise LGBT-tailored programs can help raise awareness of the SUD treatment facilities providing these services. A study focused on LGBT-friendly providers' recommendations for tobacco treatment identified community outreach as an

important step towards providing LGBT-tailored tobacco treatment services.<sup>19</sup> Our results align with this study, showing that SUD treatment facilities with community outreach are more likely to have an LGBT-tailored program.

Another study simulated the experience of identifying LGBT-tailored opioid use disorder treatment and found that only 28% of treatment facilities that advertised LGBT-tailored services actually had these services.<sup>21</sup> Thus, additional work is needed to determine the actual proportion of SUD treatment facilities actually providing LGBT-tailored programs and the nature and quality of these programs.<sup>30</sup> Outpatient facilities that provided telemedicine/telehealth services were more likely to have an LGBT-tailored program. While this was not significant in residential programs, adding telemedicine/telehealth in residential programs may increase the possibilities of reaching populations with limitations to accessing in-person and follow-up care upon discharge from residential treatment.

Another noteworthy finding was that private for-profit facilities were more likely to have LGBT-tailored programs in both outpatient and residential programs. Limited access to LGBT services at private non-profit and government facilities suggests that LGBT people needing culturally responsive services may have limited options. Among outpatient providers, payment assistance was associated with having



LGBT-tailored services, whereas facilities accepting Medicaid were less likely to have LGBT-tailored services. Moreover, no flexible payment options were associated with having LGBT-tailored services among residential facilities. These findings highlight potential financial barriers to treatment that may be inequitable to working-class LGBT people, which often includes LGBT people of color, who are particularly affected by SUDs and being oppressed.<sup>17</sup>

Research on intersectional oppression identifies multiple minoritized population sources of stressors and stigma arising from membership in multiple minority identities and experiences.<sup>31,32</sup> For example, LGBT people of color, compared to their White peers, experience a heightened burden of SUD, and report greater medical mistrust, and lower levels of health-care access.<sup>10,33,34</sup> Similarly, LGBT people who experience housing instability, or with a potential migratory status report higher rates of SUD than their peers.<sup>9,35-37</sup> Presence of these multiple marginalized experiences further elevates their risk of developing a SUD, and at the same time, highlights the economic and social burden of accessing and paying for SUD treatment and services, and the lack of culturally responsive services (such as an LGBT-tailored program).<sup>9,36,38-40</sup> We believe that in addition to private for-profit SUD treatment facilities, the facilities operated by the Government and those accepting Medicaid must include focused LGBT-tailored programs<sup>17</sup> to address the social and health inequities faced by LGBT people with multiple minority identities and experiences. Government-owned facilities have the capacity to expand the availability and accessibility of SUD treatment to LGBT individuals across the country and to reach out to those with limited financial resources. Current SUD treatment programs offered by government and private non-profit organizations must prioritize adding programs to facilitate the uptake of services by LGBT individuals and develop non-stigmatizing and intersectional approaches to offering SUD treatment services.

### Limitations and Future Research

One limitation may be the geographic breadth of the analyses. We focused on 4 regions; however, treatment facilities with LGBT services likely vary by state<sup>25</sup> and even regions within states, which may relate to urban and rural differences. Although the response rate and data inclusion for N-SSATS 2020 is high (88.4%), we could not examine differences between facilities that completed the survey and included in the data versus those that were not, which may present the potential for bias. However, we also included a more stringent level of significance by using  $P < .001$  instead of the standard  $P < .05$ . While we included a variable about community outreach, it is unclear what types of community outreach are being conducted by facilities and if this outreach also reaches LGBT persons. Another limitation concerned the simple binary nature of facilities having or not having an LGBT-tailored

program. This may be a subjective assessment by respondents, and we do not have more specific information on how the programming is responsive to the needs of LGBT persons. Regarding these subjective responses, 1 study from 2007 found that of treatment facilities identified as having a tailored LGBT program, only 7% actually had services for LGBT individuals.<sup>30</sup> Future research could identify components of LGBT services for SUDs (e.g., group counseling for LGBTQ persons) and then examine how the use of those services is related to treatment outcomes for LGBT persons among current SUD treatment providers.

### Conclusion

This study offers a national examination of the availability of LGBT-specific services at 2 SUD treatment levels of care: outpatient and residential. Several vital issues around geography, access, affordability, and outreach have been raised. Further research is needed to understand and improve health equity for LGBT populations regarding SUDs.

### Author Contributions

All authors have contributed to the design, preparation, and editing of the manuscript.

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