

Variation in staff salary costs associated with characteristics of substance use disorder treatment facilities

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Key Findings

- Average 2016 annual cost of staff salaries per client caseload varied substantially across the three facility types analyzed, with outpatient opioid treatment programs (OTPs) having the lowest cost (\$4,576), followed by outpatient non-OTPs (\$16,873) and residential non-OTPs (\$33,927).
- For each of the three facility types examined, facilities in the lowest quartile for size had per-client salary costs 89 percent or more higher than the average facility of the same type.
- For outpatient OTPs, staff salary costs were not associated with the range of SUD testing and support services provided. For both outpatient and residential non-OTPs, the regression results indicate that facilities with the most limited provision of these services have the lowest costs.
- Outpatient non-OTPs that reported that they primarily focus on mental health services or general health care and provide a broad range of mental health services had higher staff salary costs than the average outpatient non-OTP. Residential non-OTPs that reported that they primarily focus on a mix of mental health and substance use disorder treatment services and provide a broad range of mental health services had higher staff salary costs than the average residential non-OTP.

In the context of the movement to value-based payment models that reimburse providers for a package of services rather than individual procedure codes, state Medicaid programs and substance use disorder (SUD) treatment facilities face the challenge of setting reimbursement rates that will adequately cover the cost of a range of SUD treatment services and client populations. Such uncertainty about payment rates inhibits facilities from entering into value-based payment arrangements and expanding services to underserved populations. Staffing is the main cost driver for facilities, but little information is available to states or facilities on how facility characteristics affect staffing levels. This analysis provides information on staffing costs that states and SUD treatment facilities can use to inform development of value-based payment approaches.

Specifically, this brief combined workforce data from the National Survey of Substance Abuse Treatment Services (N-SSATS) for 2016 (the most recent year in which N-SSATS collected workforce data) with national data on labor force costs for 2016 for professions involved in SUD treatment to examine variations in staffing costs associated with characteristics of SUD treatment facilities.

Methods

In this study we separately analyzed staffing costs for three types of facilities: 1) Federally-certified opioid treatment programs (OTPs) providing only outpatient services, which we refer to as “outpatient OTPs”, 2) SUD treatment facilities other than OTPs that provide only outpatient services, which we refer to as “outpatient non-OTPs”, and 3) SUD treatment facilities other than OTPs that provide only residential services, which we refer to as “residential non-OTPs.”

In the 2016 N-SSATS, facilities reported the hours worked for the week of March 27 to April 2 for each type of staff. We divided these hours by 40 to calculate full-time equivalents (FTEs) and then multiplied the FTEs for each type of staff by the median 2016 annual salary for the staff type derived from national sources (Appendix A).¹ (Note that salary costs do not include costs associated with payroll taxes or fringe benefits.) We then added the annual salary costs across staff types and calculate an annual staff salary cost for each facility assuming a consistent staffing level throughout the year. Facilities also reported the number of clients in treatment on March 31, 2016.² We divided the annual salary cost by the clients served on this day. Assuming the client counts for this representative day are a proxy for the facility's average daily census in the year, the result is an estimate of the annual cost of staff salaries per client in a facility's average daily census.

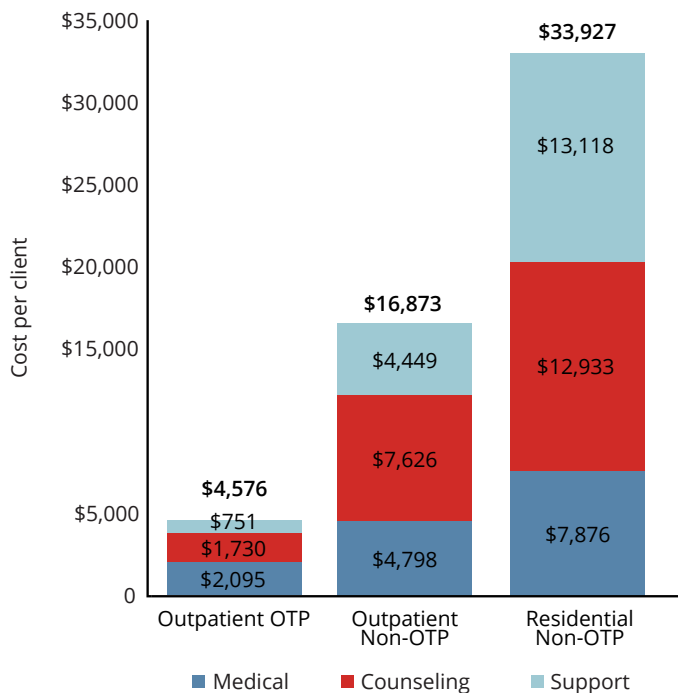
We used latent class analysis to group facilities with common service offerings (see Appendix B). Then, we estimated three multivariate regression models, one for each facility type, with overall staffing costs per client as the dependent variable and facility characteristics, including the groups the latent class analysis identified, as the independent variables (see Appendix C).

Average annual cost of staff salaries per client

As expected given differences in the intensity of treatment provided between the facility types, we found that average annual cost of staff salaries per client in the facility's daily census varied substantially across the three facility types (Figure 1) with outpatient OTPs having the lowest cost (\$4,576), followed by outpatient non-OTPs (\$16,873) and residential non-OTPs (\$33,927).

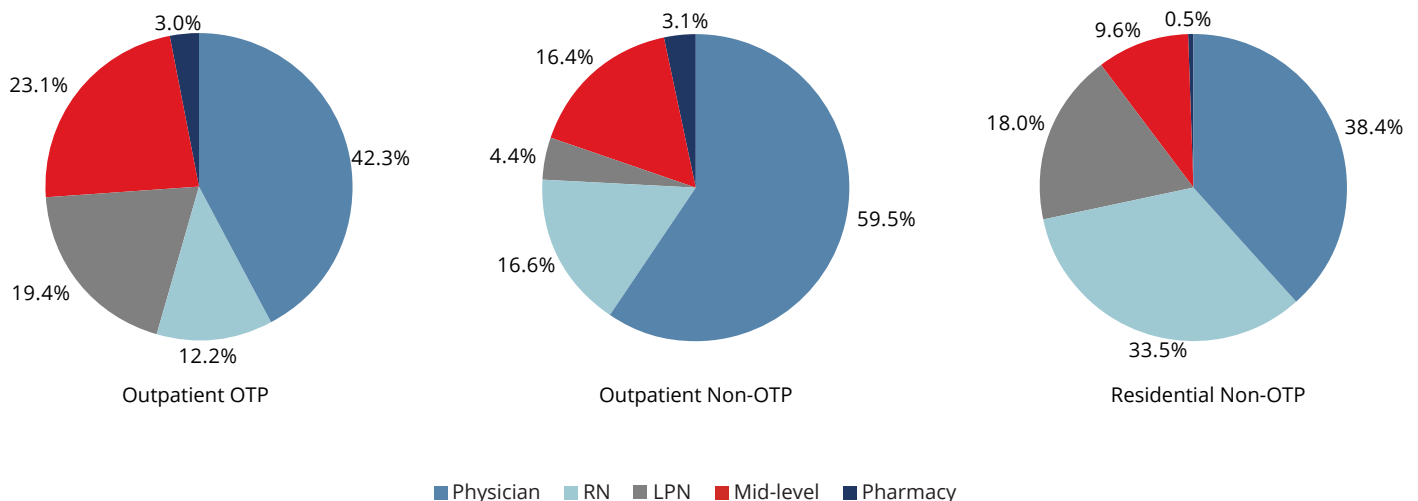
At outpatient OTPs, medical staff represented the highest share of costs (46 percent; percentages not shown) and counseling costs

Figure 1. Average annual staff salary cost per client by facility and staff type, 2016



Source: Estimated based on the 2016 N-SSATS data combined with labor costs from national sources.

Figure 2. Percent of medical staff salary cost per client, by profession and facility type, 2016



RN= Registered nurse, LPN= Licensed practical nurse

Source: Estimated based on 2016 N-SSATS data combined with labor costs from national sources.

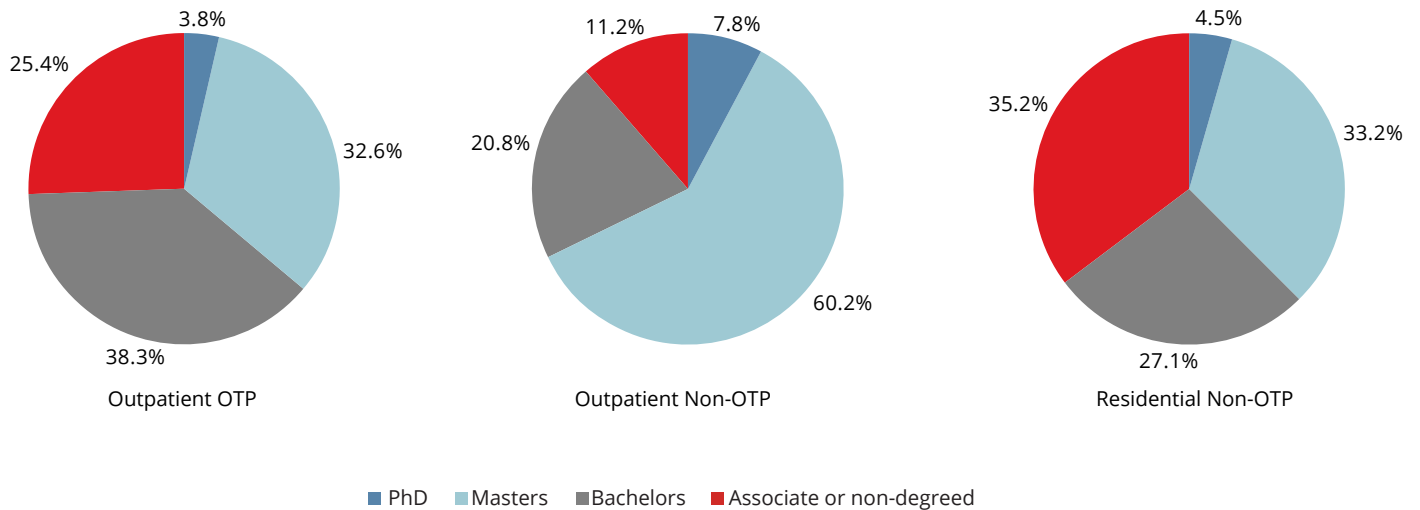
represented the second highest share (38 percent). In contrast, at outpatient non-OTPs, counseling staff represented the highest share of costs (45 percent) with medical (28 percent) and support staff (26 percent) representing similar shares. At residential non-OTPs, support staff represented the highest share of total costs (39 percent), but counseling costs were only a slightly lower share (38 percent).

Physician costs are the largest proportion of medical costs at all three facility types, but their share in outpatient non-OTPs is particularly substantial at 60 percent (Figure 2). Nursing costs also contribute significantly to medical costs per client. Across facility types, residential facilities had the highest share of medical costs deriving from nursing (including registered nurses and licensed practical nurses) at 52 percent compared to 21 percent in outpatient non-OTPs and 32 percent in outpatient OTPs. The share of costs for mid-level professionals (that is, nurse practitioners, physician assistants, and advanced practice nurses) is greatest for outpatient OTPs, followed by outpatient non-OTPs. Pharmacists represented a very small share of costs at all three facility types.

A substantially greater share of counselor costs in outpatient non-OTPs (68 percent) was associated with counselors who had the highest levels of education (a masters' or doctoral degree) relative to outpatient OTPs (37 percent) and residential non-OTPs (38 percent) (Figure 3). Residential non-OTPs had the highest share of counselor costs attributable to associate or non-degreed counselors (35 percent).

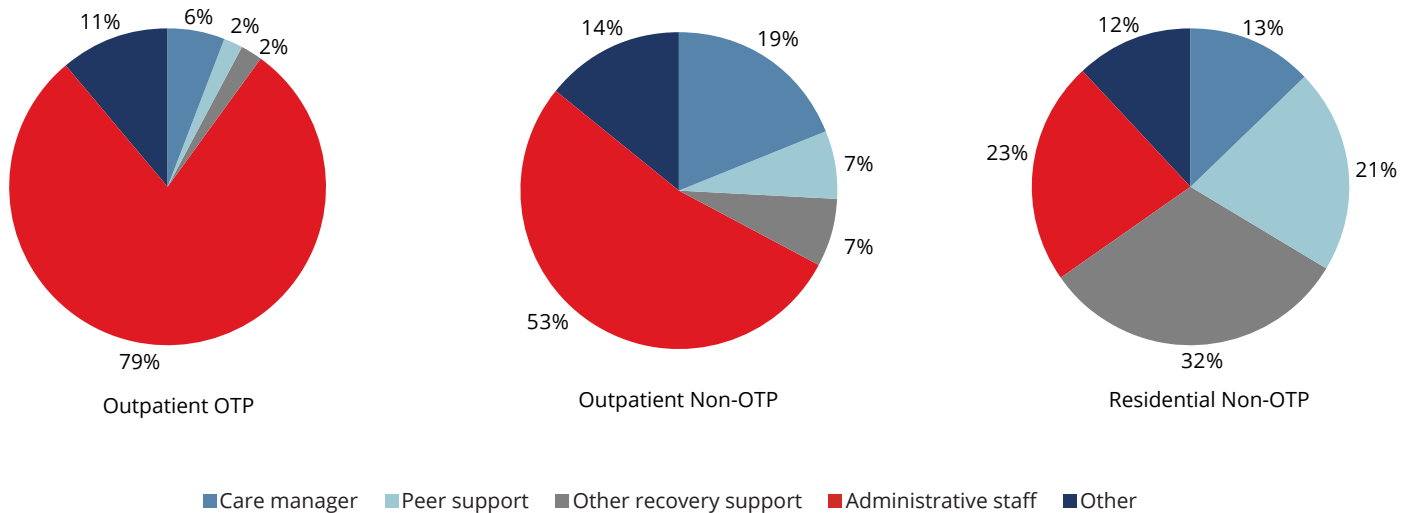
Administrative staff made up the largest share of support staff costs in outpatient OTPs (79 percent) and outpatient non-OTPs (53 percent) (Figure 4). In residential non-OTPs, other recovery support staff made up the largest share (32 percent) and administrative staff accounted for only 23 percent. Care management and peer support represented a larger share of support staff costs at outpatient non-OTPs (19 percent and 7 percent, respectively) and residential non-OTPs (13 percent and 21 percent, respectively) relative to outpatient OTPs (6 percent and 2 percent, respectively).

Figure 3. Percent of counseling staff salary cost per client by profession and facility type, 2016



Source: Estimated based on 2016 N-SSATS data combined with labor costs from national sources.

Figure 4. Percent of support staff salary cost per client by profession and facility type, 2016



Source: Estimated based on 2016 N-SSATS data combined with labor costs from national sources.

Factors influencing cost

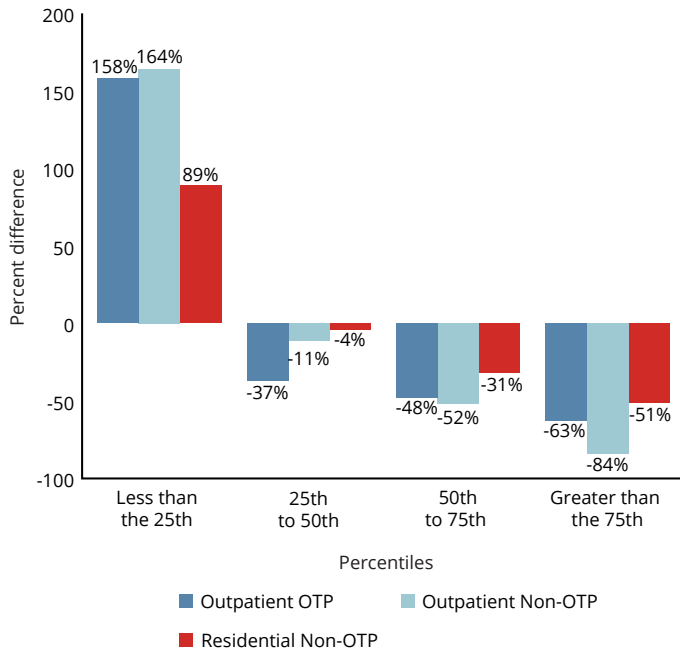
Economies of scale

To understand how facility size affects annual staff salary cost per client, our multivariate regression model included indicators for the quartile of the client count distribution in which the facility fell. The quartile distributions were developed separately for each of the three facility types. The model results indicate a statistically significant effect of facility size on staff salary costs per client (Figure 5). For each of the three facility types examined, facilities in the lowest quartile had costs 89 percent or more higher than that of a facility of the same type with average characteristics and those in the highest quartile had costs 51 percent or more lower than average.

Ownership

Our multivariate regression model included indicators for facility ownership. Private not for-profit and private for-profit were the most common ownership types. The effect of ownership on staff cost per client differed for the facility types (Figure 6). For outpatient OTPs, on average, staff salary cost per client was substantially higher at private not for-profits than at private for-profits. For residential non-OTPs, however, the opposite was true. These findings may be driven by unobserved features of the populations served and services provided that are correlated with ownership and vary according to treatment setting.

Figure 5. Percent difference from an average facility of the same type in annual staff salary cost per client, by facility size and type, 2016



Source: Regression analysis using data from the 2016 N-SSATS combined with labor costs from national sources. Percent difference for a given characteristic is calculated holding other characteristics constant at the mean for facilities of the same type.

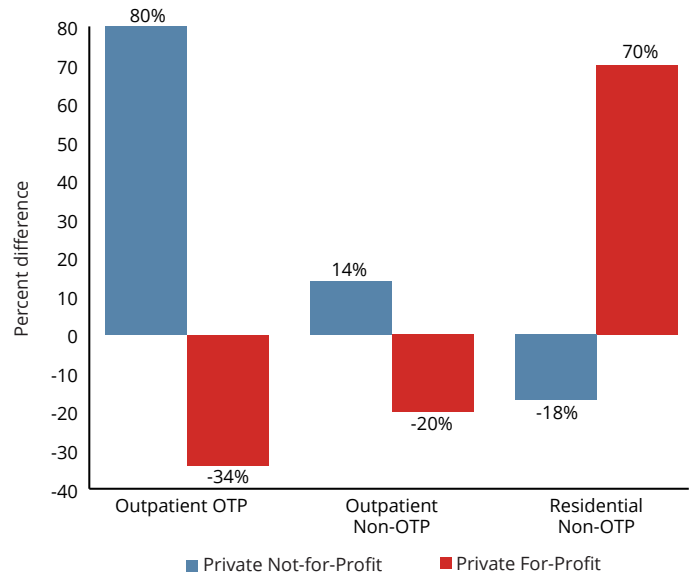
Note: The number of clients served at facilities in each quartile varies by facility type. For outpatient OTPs the 25th, 50th and 75th percentiles of the distribution are 175, 298, and 472, respectively. For outpatient non-OTPs these percentiles are 16, 40, and 93, respectively. For residential non-OTPs these percentiles are 10, 18, and 32, respectively.

Service Offerings

The latent class analysis yielded three groups based on the range of SUD screening, testing, health education, and recovery support services the facility provides. For outpatient OTPs, staff salary costs were not statistically significantly different among the three groups. For both outpatient non-OTPs and residential non-OTPs, the regression results indicate that facilities with the most limited provision of these services have the lowest costs (Figure 7).

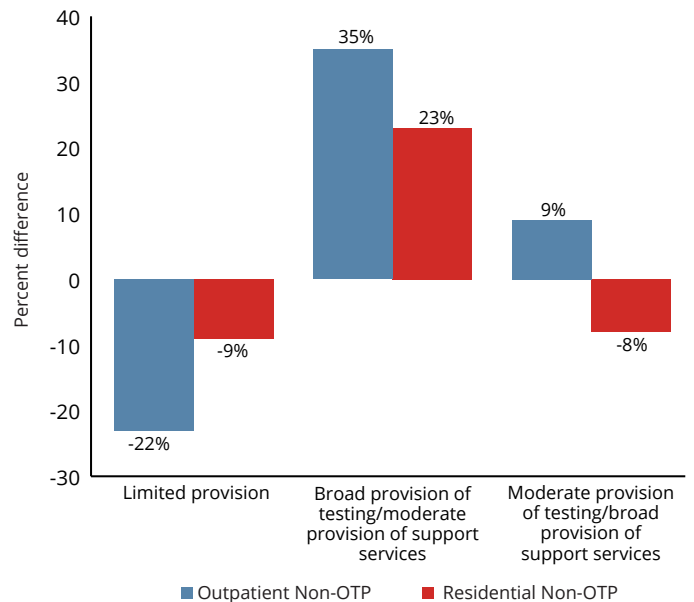
For outpatient OTPs, the variation in staff salary costs among groups the latent class analysis generated based on mental health services provided was not statistically significant. For outpatient non-OTPs, the latent class analysis grouped facilities into four categories related to primary facility focus and the range of mental health services provided. Facilities self-identified as having a primary focus on SUD treatment services, mental health services, a mix of mental health and SUD treatment services, or general health care. Outpatient non-OTPs categorized as primarily focused on mental health services or general health care and providing a broad range of mental health services had staff salary costs 175 percent higher than average (Figure 8). In contrast, those primarily focused on SUD treatment services, with limited or broad

Figure 6. Percent difference from the average facility of the same type in annual staff salary cost per client, by facility ownership, 2016



Source: Regression analysis using data from the 2016 N-SSATS combined with labor costs from national sources. Percent difference for a given characteristic is calculated holding other characteristics constant at the mean for facilities of the same type.

Figure 7. Percent difference from the average facility of the same type in annual staff salary cost per client, by range of SUD testing and support services provided, 2016



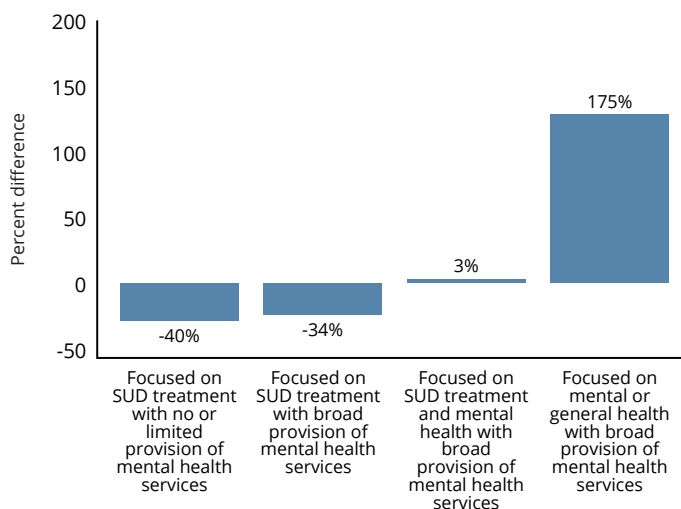
Source: Regression analysis using data from the 2016 N-SSATS combined with labor costs from national sources. Percent difference for a given characteristic is calculated holding other characteristics constant at the mean for facilities of the same type.

Note: Testing services included screening for mental health disorders, blood alcohol testing, urine screening, screening for hepatitis B and C, hepatitis education, counseling and support, tobacco use screening, smoking cessation, testing for sexually transmitted diseases, tuberculosis testing and health education for illnesses other than HIV and hepatitis. Support services included program for clients who have experienced sexual abuse, program for clients who have experienced intimate partner violence and domestic violence, after/continuing care, assistance obtaining social services, discharge planning, self-help group, employment counseling, housing assistance, case management, transportation assistance, outreach to individuals in the community, interim services if no space is available at facility, social skills training, and mentoring/peer support.

provision of mental health services, had lower staff salary costs than average. Primary facility focus may be associated with staff salary costs because it is a proxy for patient needs. For example, clients with more severe co-occurring mental or physical health conditions may be treated at facilities focusing primarily on mental health or general health rather than a facility focused primarily on SUD treatment.

For residential non-OTPs, the latent class analysis grouped facilities into three categories related to primary facility focus and the range of mental health services provided. Facilities categorized as focused on a mix of mental health and SUD treatment and providing a broad range of mental health services had staff salary costs 30 percent higher than average. These may represent specialized residential programs for clients with co-occurring substance use and mental health disorders, which may require more staff members or staff with more advanced credentials to ensure all needed expertise is available. Meanwhile, residential non-OTPs focused primarily on SUD treatment with limited provision of mental health services had staff salary costs 20 percent lower than average (Figure 9).

Figure 8. Percent difference from the average facility in annual staff salary cost per client among outpatient non-OTPs, by primary facility focus and range of mental health services provided, 2016



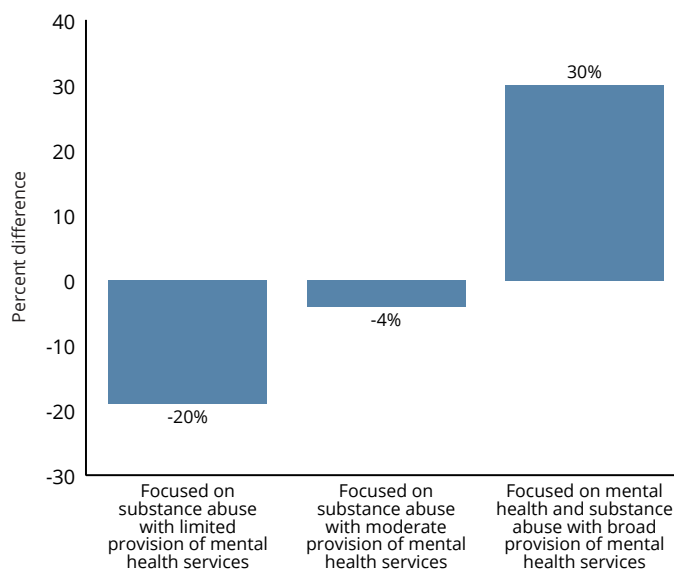
Source: Regression analysis using data from the 2016 N-SSATS combined with labor costs from national sources. Percent difference for a given characteristic is calculated holding other characteristics constant at the mean for outpatient non-OTPs.

Note: The indicators of mental health service provision included in our latent class analysis were whether the facility offers any mental health services, and if the facility offers mental health services, whether they provide comprehensive mental health assessment or diagnosis, medications for psychiatric disorders, and programs for clients with co-occurring mental health and substance use disorders. Also included was the extent to which the facility used the following clinical and therapeutic approaches: matrix model, motivational interviewing, rational emotive behavioral therapy, substance abuse counseling, trauma-related counseling, 12-step facilitation, relapse prevention, contingency management/motivational incentives, community reinforcement plus vouchers, cognitive behavior therapy, brief intervention, and anger management.

Discussion

This analysis highlights the substantial variation in staffing costs across SUD treatment facilities. We found annual staff salary costs per client associated with the level of care provided, whether the facility was an OTP, facility size, ownership, the range of SUD testing and support services offered, and primary facility focus and mental health services provided. While this study identified some facility characteristics that are associated with staffing cost differences, development of value-based payment models will require more rigorous analysis of the treatment and staffing approaches that achieve the best outcomes for patients with specific needs. It will also require analysis of how characteristics of facilities that cannot be altered, such as location in a rural area or serving a disproportionate share of low income clients, affect costs so that facilities are not penalized or rewarded based on these characteristics. The data available from N-SSATS are insufficient to address these issues because N-SSATS offers limited information on client needs, the intensity of services provided to clients, and client outcomes. However, this study does highlight and quantify some key facility characteristics that are drivers of staffing costs.

Figure 9. Percent difference from the average facility in annual staff salary cost per client among residential non-OTPs, by primary facility focus and range of mental health services provided, 2016



Source: Regression analysis using data from the 2016 N-SSATS combined with labor costs from national sources. Percent difference for a given characteristic is calculated holding other characteristics constant at the mean for residential non-OTPs.

Note: The indicators of mental health service provision included in our latent class analysis were whether the facility offers any mental health services, and if the facility offers mental health services, whether they provide comprehensive mental health assessment or diagnosis, medications for psychiatric disorders, and programs for clients with co-occurring mental health and substance use disorders. Also included was the extent to which the facility used the following clinical and therapeutic approaches: matrix model, motivational interviewing, rational emotive behavioral therapy, substance abuse counseling, trauma-related counseling, 12-step facilitation, relapse prevention, contingency management/motivational incentives, community reinforcement plus vouchers, cognitive behavior therapy, brief intervention, and anger management.

Endnotes

- 1 Wage data were obtained from the Bureau of Labor Statistics report for 2016, if available. If data were not available from BLS for a particular profession data were obtained from the American Psychological Association and Glassdoor.
- 2 For outpatient facilities the count of clients includes clients who received treatment in March 2016 and were still enrolled in treatment on March 31, 2016. For residential facilities the count of clients includes clients receiving residential (non-hospital) treatment at the facility on March 31, 2016.

Appendix A: Development of Cost Estimates

We calculated the estimated cost per client for each facility by multiplying the number of full-time equivalent staff of each type by the median annual wage for that staff type, summing these estimates across staff types, and then dividing this estimate by the number of clients in care at the facility. For facilities that provide outpatient services, the client counts comprise clients who received services at the facility in March 2016 and were still in care at the facility on March 31, 2016. For facilities that provide residential services, the client counts comprise clients receiving residential treatment at the facility on March 31, 2016.

Appendix Table A.1 shows the data source for the median annual wage for each staff type. For staff types whose wage data were available from the 2016 Bureau of Labor Statistics (BLS) report, we used these values. The 2016 BLS data are available at https://www.bls.gov/oes/2016/may/oes_nat.htm. For staff types whose wage data were not available in the BLS, we used the average wage reported for that occupation in Glassdoor. Values obtained from Glassdoor represent means rather than medians. We retrieved Glassdoor wage data on April 27, 2021; because Glassdoor regularly updates wages to account for inflation, wage rates might change over time.

Appendix Table A.1. Median annual wage by staff type

Staff type	Median annual wage	Data source and notes
<i>Medical staff</i>		
Physician	\$210,170	Obtained from 2016 BLS. Category: "Physicians and Surgeons" ^a
Registered nurse	\$68,450	Obtained from 2016 BLS. Category: "Registered Nurses"
Licensed practical nurse	\$44,090	Obtained from 2016 BLS. Category: "Licensed Practical and Licensed Vocational Nurses"
Mid-level medical personnel	\$92,865	Obtained from Glassdoor. Category: "Physician Assistant" https://www.glassdoor.com/Salaries/physician-assistant-salary-SRCH_KO0,19.htm
Pharmacist	\$122,230	Obtained from 2016 BLS. Category: "Pharmacists"
<i>Counseling staff</i>		
Doctoral-level counselor	\$61,500	Obtained from American Psychological Association. https://www.apa.org/gradpsych/2016/04/salaries Reported the average of the median Ph.D. wage and the Psy.D. wage.
Masters-level counselor	\$45,000	Obtained from American Psychological Association. https://www.apa.org/gradpsych/2016/04/salaries
Other degreed counselor	\$41,070	Obtained from 2016 BLS. Category: "Substance Abuse and Behavioral Disorder Counselors"
Associate degree or non-degreed counselor	\$41,070	Obtained from 2016 BLS. Category: "Substance Abuse and Behavioral Disorder Counselors"
<i>Support staff</i>		
Pharmacy assistant	\$31,920	Obtained from Glassdoor. Category: "Pharmacy Assistant" https://www.glassdoor.com/Salaries/pharmacy-assistant-salary-SRCH_KO0,18.htm#:~:text=The%20national%20average%20salary%20for,Glassdoor%20by%20Pharmacy%20Assistant%20employees
Care manager patient navigator	\$44,650	Obtained from Glassdoor. Category: "Patient Navigator" https://www.glassdoor.com/Salaries/patient-navigator-salary-SRCH_KO0,17.htm
Peer support staff	\$32,959	Obtained from Glassdoor. Category: "Peer Support Specialist" https://www.glassdoor.com/Salaries/peer-support-specialist-salary-SRCH_KO0,23.htm
Other recovery support worker	\$32,626	Obtained from Glassdoor. Category: "Recovery Support Staff" https://www.glassdoor.com/Salaries/recovery-support-staff-salary-SRCH_KO0,22.htm
Administrative staff	\$34,050	Obtained from 2016 BLS. Category: "Office and Administrative Support Occupations"
Interns, contractors/per diem staff and intake coordinators	\$38,553	Obtained from Glassdoor. Category: "Intake Coordinator Salary" https://www.glassdoor.com/Salaries/intake-coordinator-salary-SRCH_KO0,18.htm
Other clinical staff	\$48,768	Obtained from Glassdoor. Category: "Clinical Staff Salary" https://www.glassdoor.com/Salaries/clinical-staff-salary-SRCH_KO0,14.htm

^a Hourly and annual median wages for "Physicians and Surgeons" were suppressed in the BLS because the wage was equal to or greater than \$100.00 per hour or \$208,000 per year. We used the mean annual wage from BLS for "Physicians and Surgeons" (rather than the median wage) because the mean wage was available.

BLS = Bureau of Labor Statistics.

Appendix B: Methods for the Latent Class Analysis

This study uses latent class analysis (LCA) to group facilities with common service offerings or programs. The LCA methodology is a type of structural equation modeling that identifies the number and nature of unobserved subgroups, or latent classes, by assessing the model fit statistics and interpretability of the extracted classes. It models the probability, P , of the latent class membership, c , given observed pattern of answers on a set of categorical variables, y , for each unit of analysis:

$$P(L=c|Y=y)$$

This probabilistic approach enables us to find the most likely latent class memberships for each National Survey of Substance Abuse Treatment Services (N-SSATS) facility in our sample based on the facility's characteristics. The characteristics were defined by a set of dichotomous survey responses, each of which indicated whether a facility provided or did not provide a certain type of service or program. The different latent class memberships could help explain the different types of facilities because each class membership would represent a distinct, class-specific response profile.

We estimate LCA models separately for three groups of facilities: (1) opioid treatment programs (OTPs)—facilities operating in 2011 and 2016 that are OTPs and only provide outpatient services), (2) non-OTP outpatient—facilities operating in 2016 that are not OTPs and only provide outpatient services, and (3) non-OTP residential—facilities operating in 2016 that are not OTPs and only provide residential services. For each group of facilities, we observed that there were services and programs specific to (1) people with HIV/AIDS or identifying as LGBTQ, (2) women, (3) people with mental health disorders, and (4) none of the aforementioned groups but rather generic services. Because of the distinct nature of these services and programs, we decided to develop classes separately rather than use a single model.

HIV/AIDS-related services and programs

For all three groups of facilities, OTP, non-OTP outpatient only, and non-OTP residential only, for HIV/AIDS-related services and programs, the models with four latent classes provide the most meaningful interpretations of the classes. We labeled these groups as follows: (1) facilities offering no programs but a broad provision of services, (2) those offering programs but limited provision of services, (3) those offering programs and a broad provision of services, and (4) those offering no programs and limited provision of services.

The four class models also achieved high probabilities of correct class membership assignments and overall summary measures of classification quality or *Entropy* coefficient. *Entropy* ranges from 0 to 1, and values approaching 1 indicate clear delineation of classes (Celeux and Soromenho 1996). Values above 0.8, which correspond to 80 percent correct classification, are considered adequate (Clark and Muthén 2009; Muthén and Muthén 2007). For all three groups of facilities, we observed *Entropy* values near 0.8 and above, suggesting reliable classification models. For the exact values of *Entropy*, refer to Appendix Table B.1.

Appendix Table B.2, B.4, and B.6 provide the average latent class assignment probabilities for the facilities assigned to each of the four predicted latent classes for each of the three groups of facilities. Values closer to 1.0 on the diagonal of the matrix indicate that facilities are classified into their appropriate latent classes with high certainties on average.

Appendix Table B.3, B.5, and B.7 show the average probabilities that a service or program is offered by a facility in the respective latent class. For example, in Appendix Table B.3, we see that there is an 83 percent chance that an OTP facility in latent class 1 provides HIV testing services.

Appendix Table B.1. Entropy summary, HIV/AIDS model

	OTP	Non-OTP outpatient	Non-OTP residential
<i>Entropy</i>	0.832	0.886	0.795

Appendix Table B.2. OTP: Average latent class probabilities for most likely latent class membership (row) by latent class (column), HIV/AIDS model

	Class 1	Class 2	Class 3	Class 4
Class 1	0.852	0	0.001	0.146
Class 2	0	0.859	0.141	0
Class 3	0	0.03	0.97	0
Class 4	0.066	0.001	0	0.933

Appendix Table B.3. OTP: Probability of offering service by latent class, HIV/AIDS model

	Class 1 (N=945)	Class 2 (N=83)	Class 3 (N=424)	Class 4 (N=720)
<i>HIV testing</i>	0.8339	0.1687	0.8892	0.09736
<i>HIV/AIDS education, counseling, and support</i>	1	0.4699	1	0.5722
<i>Special program for HIV or AIDS</i>	0	1	1	0
<i>Special program for LGBT clients</i>	0.03188	0.6506	0.4214	0.03226
<i>Early intervention for HIV</i>	0.6999	0.01205	0.7972	0.02643

Appendix Table B.4. Non-OTP outpatient: Average latent class probabilities for most likely latent class membership (row) by latent class (column), HIV/AIDS model

	Class 1	Class 2	Class 3	Class 4
Class 1	0.915	0.01	0	0.075
Class 2	0.003	0.938	0.059	0
Class 3	0.018	0.061	0.922	0
Class 4	0.045	0	0	0.955

Services and programs for women

To identify the number and nature of the facilities' latent classes with respect to their services and programs for women, we looked at two of the three groups of facilities: non-OTP outpatient only and non-OTP residential only. We did not analyze the OTP facilities because a few key survey responses were not measured for these facilities.

Based on the interpretability of the extracted classes and model fit statistics such as *Entropy*, we selected the three class solutions for programs and services for women for both non-OTP outpatient-only facilities and non-OTP residential only facilities. The non-OTP outpatient-only facilities can be classified into three subgroups: (1) facilities with moderate availability, (2) those with a broad availability and (3) those with limited availability of programs and services for women. The non-OTP residential-only facilities can be classified into similar three subgroups: (1) facilities with a broad availability of programs and services for women, (2) those with no programs specifically for women but with a broad availability of programs and services for those who have experienced violence or abuse, and (3) those with limited availability of programs and services for women.

We present the values of *Entropy* in Appendix Table B.8. Appendix Table B.9 and B.11 provide the average latent class assignment probabilities for the facilities assigned to each of the three predicted latent classes. Appendix Table B.10 and B.12 show the average probabilities that a service or program is offered by the three latent classes.

Appendix Table B.5. Non-OTP outpatient: Probability of offering service by latent class, HIV/AIDS model

	Class 1 (N=1615)	Class 2 (N=708)	Class 3 (N=409)	Class 4 (N=6488)
<i>HIV testing</i>	0.5882	0.04944	0.6112	0.03761
<i>HIV/AIDS education, counseling, and support</i>	0.9901	0.3545	0.9951	0.2955
<i>Special program for HIV or AIDS</i>	0.1017	1	1	0
<i>Special program for LGBT clients</i>	0.04901	0.959	1	0.05591
<i>Early intervention for HIV</i>	0.7449	0.01836	0.8386	0.009095

Appendix Table B.6. Non-OTP residential: Average latent class probabilities for most likely latent class membership (row) by latent class (column), HIV/AIDS model

	Class 1	Class 2	Class 3	Class 4
Class 1	0.906	0	0.024	0.07
Class 2	0.013	0.872	0.114	0
Class 3	0.042	0.065	0.882	0.011
Class 4	0.103	0	0.004	0.893

Appendix Table B.7. Non-OTP residential: Probability of offering service by latent class, HIV/AIDS model

	Class 1 (N=657)	Class 2 (N=176)	Class 3 (N=337)	Class 4 (N=1019)
<i>HIV testing</i>	0.7291	0.07386	0.7211	0.07066
<i>HIV/AIDS education, counseling, and support</i>	0.9939	0.5625	0.9852	0.4298
<i>Special program for HIV or AIDS</i>	0	1	0.8869	0
<i>Special program for LGBT clients</i>	0	0.767	0.7024	0.06785
<i>Early intervention for HIV</i>	0.7002	0.02273	0.8131	0.006869

Appendix Table B.8. Entropy summary, women model

	Non-OTP outpatient	Non-OTP residential
<i>Entropy</i>	0.729	0.881

Appendix Table B.9. Non-OTP outpatient: Average latent class probabilities for most likely latent class membership (row) by latent class (column), women model

	Class 1	Class 2	Class 3
Class 1	0.803	0.02	0.177
Class 2	0.06	0.94	0
Class 3	0.117	0	0.882

Appendix Table B.10. Non-OTP outpatient: Probability of offering service by latent class, women model

	Class 1 (N=1735)	Class 2 (N=1641)	Class 3 (N=5844)
<i>Special program for clients who had experienced sexual abuse (2016 only)</i>	0.1487	1	0.01047
<i>Special program for clients who had experienced intimate partner violence or domestic violence (2016 only)</i>	0.2697	1	0
<i>Special program for pregnant or postpartum women</i>	0.3187	0.6161	0
<i>Special program for adult women</i>	0.8375	0.908	0.2037
<i>Domestic violence</i>	0.7445	0.6441	0.2678

Appendix Table B.11. Non-OTP residential: Average latent class probabilities for most likely latent class membership (row) by latent class (column), women model

	Class 1	Class 2	Class 3
Class 1	0.891	0.103	0.007
Class 2	0.014	0.906	0.08
Class 3	0.012	0.011	0.977

Mental health–related services and programs

The models with three latent classes provide the most meaningful interpretations of the classes for two of the three groups of facilities, OTP and non-OTP residential only, and the four class solution was more meaningful for the non-OTP outpatient-only facilities. Appendix Table B.13 shows all three models' *Entropy* values.

OTP facilities are categorized into three groups: (1) facilities with a broad provision of services, (2) those with no or limited provision, and (3) those with a moderate provision of clinical and therapeutic services. The non-OTP outpatient-only facilities, on the other hand, are classified into four groups: (1) those focused on substance abuse with no or limited provision of services, (2) those focused on substance abuse with a broad provision of services, (3) those focused on substance abuse and mental health with a broad provision, and (4) those focused on mental or general health with a broad provision. Lastly, the non-OTP residential-only facilities form three subgroups: (1) those focused on mental health and substance abuse with a broad provision of services, (2) those focused on substance abuse with a limited provision, and (3) those focused on substance abuse with a moderate provision.

Appendix Table B.14, B.16, and B.18 show the average latent class assignment probabilities for the facilities assigned to each of the predicted latent classes. Appendix Table B.15, B.17, and B.19 show the average probabilities that the latent classes offer a service or program.

Appendix Table B.12. Non-OTP residential: Probability of offering service by latent class, women model

	Class 1 (N=462)	Class 2 (N=277)	Class 3 (N=1450)
<i>Special program for clients who had experienced sexual abuse (2016 only)</i>	0.8961	0.9386	0.01589
<i>Special program for clients who had experienced intimate partner violence or domestic violence (2016 only)</i>	0.9481	0.704	0
<i>Special program for pregnant or postpartum women</i>	0.6126	0	0.08984
<i>Special program for adult women</i>	0.9805	0	0.3511
<i>Domestic violence</i>	0.6667	0.4188	0.2766

Appendix Table B.13. Entropy summary, mental health model

	OTP	Non-OTP outpatient	Non-OTP residential
<i>Entropy</i>	0.811	0.949	0.908

Appendix Table B.14. OTP: Average latent class probabilities for most likely latent class membership (row) by latent class (column), mental health model

	Class 1	Class 2	Class 3
<i>Class 1</i>	0.968	0.009	0.023
<i>Class 2</i>	0.006	0.88	0.113
<i>Class 3</i>	0.027	0.065	0.908

Appendix Table B.15. OTP: Probability of offering service by latent class, mental health model

	Class 1 (N=546)	Class 2 (N=445)	Class 3 (N=1181)
<i>Sometimes, often, or always uses anger management</i>	0.8393	0.2162	0.8379
<i>Sometimes, often, or always uses brief intervention</i>	0.8324	0.5011	0.8938
<i>Sometimes, often, or always uses cognitive behavior therapy</i>	0.9721	0.5828	0.9815
<i>Sometimes, often, or always uses community reinforcement plus vouchers</i>	0.1594	0.02257	0.1296
<i>Sometimes, often, or always uses contingency management/motivational incentives</i>	0.6561	0.3806	0.7603
<i>Focused on MH</i>	0.009158	0	0
<i>Focused on other or general health</i>	0.01099	0.01573	0
<i>Focused on SA</i>	0.7198	0.9843	1
<i>Focused on both MH and SA</i>	0.2601	0	0
<i>Sometimes, often or always uses matrix model</i>	0.3916	0.06834	0.4364
<i>No clients are offered MH treatment</i>	0	0.6117	0.3704
<i>Sometimes, often, or always uses motivational interviewing</i>	0.9814	0.6372	0.9816
<i>Sometimes, often, or always uses rational emotive behavioral therapy</i>	0.4364	0.1131	0.4768
<i>Sometimes, often, or always uses relapse prevention</i>	0.9852	0.8781	0.9826
<i>Sometimes, often, or always uses SA counseling</i>	0.9926	0.9685	0.9923
<i>Offers MH services</i>	0.9725	0.1056	0.1685
<i>Provides comprehensive MH assessment or diagnosis</i>	0.7784	0.05869	0.02629
<i>Program for clients with co-occurring MH/SA</i>	0.5712	0.1197	0.3151
<i>Medications for psychiatric disorders</i>	0.7656	0.02247	0.02971
<i>Sometimes, often, or always uses trauma-related counseling</i>	0.8202	0.1481	0.7281
<i>Sometimes, often, or always uses 12-step facilitation</i>	0.6942	0.4376	0.7606

Appendix Table B.16. Non-OTP outpatient: Average latent class probabilities for most likely latent class membership (row) by latent class (column), mental health model

	Class 1	Class 2	Class 3	Class 4
Class 1	0.943	0.055	0	0.002
Class 2	0.069	0.927	0	0.004
Class 3	0	0	1	0
Class 4	0.003	0	0	0.996

Appendix Table B.17. Non-OTP outpatient: Probability of offering service by latent class, mental health model

	Class 1 (N=2296)	Class 2 (N=1844)	Class 3 (N=4044)	Class 4 (N=1036)
<i>Sometimes, often, or always uses anger management</i>	0.6711	0.9158	0.8967	0.8631
<i>sometimes, often, or always uses brief intervention</i>	0.7426	0.8996	0.8706	0.8101
<i>Sometimes, often, or always uses cognitive behavior therapy</i>	0.8839	0.9934	0.9808	0.961
<i>Sometimes, often, or always uses community reinforcement plus vouchers</i>	0.05428	0.1895	0.1297	0.09295
<i>Use frequency of computerized substance abuse treatment</i>	0.07887	0.2007	0.1755	0.1251
<i>Sometimes, often, or always uses contingency management/motivational incentives</i>	0.4216	0.6599	0.5599	0.4385
<i>Focused on MH</i>	0.0004355	0	0	0.7712
<i>Focused on other or general health</i>	0.02439	0	0	0.2172
<i>Focused on SA</i>	0.973	1	0	0.01158
<i>Focused on both MH and SA</i>	0.002178	0	1	0
<i>Sometimes, often, or always uses matrix model</i>	0.3941	0.5703	0.5001	0.299
<i>No clients are offered MH treatment</i>	0.4885	0	0.0002473	0
<i>Sometimes, often, or always uses motivational interviewing</i>	0.871	1	0.9435	0.9056
<i>Sometimes, often, or always uses rational emotive behavioral therapy</i>	0.4008	0.5859	0.5001	0.3545
<i>Sometimes, often, or always uses relapse prevention</i>	0.9641	0.9951	0.9796	0.9051
<i>Sometimes, often, or always uses SA counseling</i>	0.9887	1	0.996	0.9574
<i>Offers MH services</i>	0.08449	0.7565	0.9649	0.9826
<i>Comprehensive MH assessment or diagnosis</i>	0.02265	0.5027	0.8098	0.8716
<i>Program for clients with co-occurring MH/SA</i>	0.1723	0.6047	0.5535	0.4424
<i>Medications for psychiatric disorders</i>	0.02485	0.3918	0.5364	0.6911
<i>Sometimes, often, or always uses trauma-related counseling</i>	0.485	0.913	0.9053	0.9057
<i>Use frequency of dialectical behavior therapy</i>	0.3124	0.649	0.6468	0.5841
<i>Sometimes, often, or always uses 12-step facilitation</i>	0.7275	0.8171	0.6819	0.5271

Appendix Table B.18. Non-OTP residential: Average latent class probabilities for most likely latent class membership (row) by latent class (column), mental health model

	Class 1	Class 2	Class 3
Class 1	0.997	0.003	0
Class 2	0.004	0.905	0.091
Class 3	0	0.039	0.961

Appendix Table B.19. Non-OTP residential: Probability of offering service by latent class, mental health model

	Class 1 (N=438)	Class 2 (N=448)	Class 3 (N=1303)
<i>Sometimes, often, or always uses anger management</i>	0.9161	0.5293	0.949
<i>Sometimes, often, or always uses brief intervention</i>	0.8061	0.6033	0.8316
<i>Sometimes, often, or always uses cognitive behavior therapy</i>	0.9401	0.5556	0.9844
<i>Sometimes, often, or always uses community reinforcement plus vouchers</i>	0.1971	0.06635	0.1997
<i>Use frequency of computerized substance abuse treatment</i>	0.1751	0.02871	0.1277
<i>Sometimes, often, or always uses contingency management/motivational incentives</i>	0.7277	0.3278	0.7413
<i>Focused on MH</i>	0.1119	0	0
<i>Focused on other or general health</i>	0.0274	0.07143	0
<i>Focused on SA</i>	0.002283	0.9286	1
<i>Focused on both MH and SA</i>	0.8584	0	0
<i>Sometimes, often, or always uses matrix model</i>	0.4587	0.1135	0.4419
<i>No clients are offered MH treatment</i>	0.006849	0.4799	0.1282
<i>Sometimes, often, or always uses motivational interviewing</i>	0.9375	0.6636	0.9891
<i>Sometimes, often, or always uses rational emotive behavioral therapy</i>	0.5359	0.1322	0.5669
<i>Sometimes, often, or always uses relapse prevention</i>	0.9653	0.8907	0.9946
<i>Sometimes, often, or always uses SA counseling</i>	0.9725	0.907	1
<i>Offers MH services</i>	0.9041	0.1183	0.5741
<i>Comprehensive MH assessment or diagnosis</i>	0.6233	0.0625	0.3078
<i>Program for clients with co-occurring MH/SA</i>	0.7466	0.132	0.5204
<i>Medications for psychiatric disorders</i>	0.7443	0.1387	0.551
<i>Sometimes, often, or always uses trauma-related counseling</i>	0.8817	0.3634	0.9046
<i>Use frequency of dialectical behavior therapy</i>	0.677	0.08293	0.5995
<i>Sometimes, often, or always uses 12-step facilitation</i>	0.831	0.7391	0.9262

Generic services and programs

For all three groups of facilities, the models with three latent classes provide the most meaningful interpretations of the classes and achieve high probabilities of correct class membership assignments as well as Entropy values as shown Appendix Table B.20.

The OTP facilities can be classified into (1) facilities with a limited provision of testing and support services; (2) those with limited provision of screening, testing, and health education and a broader provision of outreach, peer support, and support developing social skills and connecting with housing and social services; or (3) those with a broad provision of screening and testing and a broader provision of interim services, transportation, and programs for sexual abuse. For both non-OTP groups, the facilities are classified into one of the three subgroups: (1) facilities with a limited provision of testing and support services, (2) those with a broad provision of screening, testing, and health education and moderate provision of support services, or (3) those with a moderate provision of screening, testing, and health education and a broad provision of support services.

The average latent class assignment probabilities and the average probabilities that each latent class offers a service or program are presented here in a similar way.

Appendix Table B.20. Entropy summary, generic model

	OTP	Non-OTP outpatient	Non-OTP residential
<i>Entropy</i>	0.851	0.896	0.881

Appendix Table B.21. OTP: Average latent class probabilities for most likely latent class membership (row) by latent class (column), generic model

	Class 1	Class 2	Class 3
<i>Class 1</i>	0.927	0.046	0.027
<i>Class 2</i>	0.05	0.918	0.032
<i>Class 3</i>	0.03	0.021	0.948

Appendix Table B.22. OTP: Probability of offering service by latent class, generic model

	Class 1 (N=681)	Class 2 (N=533)	Class 3 (N=958)
Blood alcohol testing	0.6461	0.8161	0.8483
Self-help group	0.1909	0.4972	0.4875
Hepatitis education, counseling, and support	0.6055	0.8333	0.9679
Smoking cessation	0.1904	0.357	0.6311
Screen tobacco	0.4476	0.4398	0.7816
Urine Screen	0.9941	0.9775	0.9958
Special program for clients who had experienced sexual abuse (2016 only)	0.06402	0.2308	0.303
Special program for clients who had experienced intimate partner violence and domestic violence (2016 only)	0.06707	0.2657	0.2784
Sexually transmitted disease testing	0.4515	0.3696	0.8182
Tuberculosis screen	0.9325	0.9193	0.9906
After/continuing care	0.6608	0.8255	0.8413
Assistance obtaining social services	0.2702	0.8571	0.8299
Discharge planning	0.9706	0.9925	0.9958
Employment counseling	0.0837	0.666	0.6405
Housing assistance	0.2265	0.8386	0.7505
Case management	0.7518	0.9644	0.9259
Transportation assistance	0.06902	0.2669	0.4071
Screening for hepatitis B	0.3735	0.03571	0.9362
Screening for hepatitis C	0.4405	0.1407	0.9979
Screen for MH	0.2445	0.4353	0.6911
Outreach to comm	0.3221	0.7989	0.7129
Interim services when no space available	0.09853	0.3021	0.3657
Social skills	0.3847	0.9231	0.8715
Mentoring/peer support	0.1235	0.621	0.5313
Health education not for HIV, hepatitis	0.4324	0.8462	0.9311

Appendix Table B.23. Non-OTP outpatient: Average latent class probabilities for most likely latent class membership (row) by latent class (column), generic model

	Class 1	Class 2	Class 3
Class 1	0.946	0.001	0.052
Class 2	0.005	0.983	0.012
Class 3	0.045	0.006	0.949

Table 24. Non-OTP outpatient: Probability of offering service by latent class, generic model

	<i>Class 1 (N=3691)</i>	<i>Class 2 (N=1273)</i>	<i>Class 3 (N=4256)</i>
<i>Blood alcohol testing</i>	0.4619	0.7148	0.5496
<i>Self-help group</i>	0.1753	0.4666	0.3961
<i>Hepatitis education, counseling, and support</i>	0.1	0.7486	0.4664
<i>Smoking cessation</i>	0.2076	0.7078	0.5211
<i>Screen tobacco</i>	0.4444	0.8555	0.7378
<i>Urine Screening</i>	0.6941	0.9403	0.8393
<i>Sexually transmitted disease testing</i>	0.007586	0.6237	0.02115
<i>Tuberculosis screening</i>	0.06042	0.8272	0.1567
<i>After/continuing care</i>	0.8181	0.9246	0.9384
<i>Assistance obtaining social services</i>	0.1477	0.7486	0.7855
<i>Discharge planning</i>	0.8978	0.9497	0.9894
<i>Employment counseling</i>	0.05393	0.4588	0.5242
<i>Housing assistance</i>	0.05854	0.6434	0.7054
<i>Case management</i>	0.5718	0.8916	0.9394
<i>Transportation assistance</i>	0.07778	0.5821	0.5444
<i>Screening for hepatitis B</i>	0.01057	0.9317	0.003055
<i>Screening for hepatitis C</i>	0.0168	0.9906	0.01974
<i>Screening for MH</i>	0.6534	0.9034	0.8597
<i>Outreach to community</i>	0.3499	0.7274	0.8099
<i>Interim service because no space available</i>	0.2886	0.6667	0.6866
<i>Social skills</i>	0.4832	0.824	0.9154
<i>Mentoring/peer support</i>	0.2195	0.6316	0.6814
<i>Health education not for HIV, hepatitis</i>	0.107	0.78	0.5848

Table 25. Non-OTP residential: Average latent class probabilities for most likely latent class membership (row) by latent class (column), generic model

	<i>Class 1</i>	<i>Class 2</i>	<i>Class 3</i>
<i>Class 1</i>	0.91	0.005	0.085
<i>Class 2</i>	0.008	0.975	0.017
<i>Class 3</i>	0.049	0.007	0.943

Table 26. Non-OTP residential: Probability of offering service by latent class, generic model

	Class 1 (N=515)	Class 2 (N=597)	Class 3 (N=1077)
Blood alcohol testing	0.6388	0.8291	0.7725
Self-help group	0.6699	0.9129	0.8561
Hepatitis education, counseling, and support	0.1417	0.8358	0.688
Smoking cessation	0.1825	0.7018	0.6221
Screening tobacco	0.268	0.7722	0.649
Urine Screening	0.8757	0.9849	0.9805
Sexually transmitted disease testing	0.05631	0.7471	0.06685
Tuberculosis screening	0.2369	0.9079	0.3705
After/continuing care	0.6272	0.7906	0.7809
Assistance obtaining social services	0.4078	0.7722	0.8654
Discharge planning	0.9417	0.9933	0.9916
Employment counseling	0.2117	0.5913	0.6825
Housing assistance	0.4058	0.8057	0.8765
Case management	0.7068	0.9263	0.9406
Transportation assistance	0.3223	0.7404	0.7372
Screening for hepatitis B	0.03883	0.9062	0.004643
Screening for hepatitis C	0.05437	1	0.03064
Screening for MH	0.3107	0.742	0.6017
Outreach to community	0.2718	0.5829	0.5692
Interim services because no space available	0.1165	0.3635	0.3185
Social skills	0.6544	0.9313	0.9749
Mentoring/peer support	0.5631	0.8693	0.8617
Health education not for HIV, Hepatitis	0.1767	0.8961	0.8143

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Appendix C: Descriptive Statistics and Regression Results

Below is the distribution of facilities included in our analyses across the categories for each measure included in the regression model (Appendix Table C.1).

Appendix Table C.1. Distribution of facilities across categories for each measure included in the regression model

Facility Characteristics	Number of facilities		
	Outpatient Only OTP	Outpatient Only Non-OTP	Residential Only Non-OTP
<i>Facility Size (using percentile values within class)</i>			
Less than 25th percentile	238	1550	374
25th to 50th percentile	264	1903	526
50th to 75th percentile	265	1926	489
More than 75th clients	265	1880	486
<i>Ownership</i>			
Private-for-profit	305	3571	1438
Private not for-profit	677	2801	301
State government	10	130	70
Local government	31	438	42
Tribal government	3	170	15
Veterans administration	6	66	5
Department of defense	0	66	0
Indian health service	0	17	4
<i>Hospital or owned or operated by a hospital</i>			
Yes	83	429	59
<i>Type of medication offered</i>			
Methadone only	420	11	11
Oral Naltrexone	162	1524	534
Buprenorphine	580	1211	579
Injectable Naltrexone	190	1215	399
<i>Facility offers a substance abuse treatment program or group specifically tailored for clients in listed category</i>			
Program for Adolescents	43	2600	218
Program for adult men	523	3143	842
Program for adult women	573	3349	843
Program for seniors/older adults	222	1367	311
Program for pregnant/postpartum women	586	1291	359
Program for Criminal Justice clients (other than DUI/DWI)	226	2724	631
Program for clients who have experienced trauma	284	2485	824
Offers childcare services for clients children	55	52	399
<i>Groups from the latent class model</i>			
<i>Supplemental SA treatment services</i>			
Limited provision	302	2874	435
Moderate provision	266	3359	936
Broad provision	464	1026	504
<i>Programs, intervention, or support services related to HIV/AIDs</i>			
No programs, broad provision of services	416	1318	572
Has programs, limited provision of services	50	566	146
Has programs, broad provision of services	220	347	274
No programs, limited provision of services	346	5028	883

<i>Offers Mental health services</i>			
<i>No or limited provision, focus on SA</i>	183	1950	361
<i>Moderate provision, focus on SA</i>	595	NA	1147
<i>Broad provision, focus on SA or MH/SA</i>	254	NA	NA
<i>Broad provision, focus on SA</i>	NA	1570	NA
<i>Broad provision, focus on SA and MH</i>	NA	3044	367
<i>Broad provision, focus on MH or general health</i>	NA	695	NA
<i>Offers services targeted to Women</i>			
<i>Limited provision</i>	NA	4516	1246
<i>Moderate provision</i>	NA	1391	229
<i>Broad provision</i>	NA	1352	400
<i>Region</i>			
<i>New England</i>	91	429	170
<i>Mid Atlantic</i>	173	934	322
<i>South Atlantic</i>	118	1206	166
<i>East North Central</i>	41	677	137
<i>East South Central</i>	249	1182	274
<i>West North Central</i>	37	402	91
<i>West South Central</i>	83	427	130
<i>Mountain</i>	66	807	140
<i>Pacific</i>	174	1195	445
<i>Urban/Rural 2006</i>			
<i>Large central metro</i>	383	1668	591
<i>Large fringe metro</i>	202	1577	334
<i>Medium metro</i>	240	1422	431
<i>Small metro</i>	113	734	212
<i>Micropolitan</i>	74	1034	213
<i>Noncore</i>	20	824	94
<i>Urban/Rural 2013</i>			
<i>Large central metro</i>	389	1718	600
<i>Large fringe metro</i>	206	1603	350
<i>Medium metro</i>	251	1471	427
<i>Small metro</i>	105	740	217
<i>Micropolitan</i>	63	945	196
<i>Noncore</i>	18	782	85
<i>Number of Facilities</i>	1032	7259	1875

Below are the cut-off points used to define the facility size categories based on the number of clients served at each facility included in the model (Appendix Table C.2).

Appendix Table C.2. Percentiles for number of clients served, by facility type

<i>Percentile</i>	<i>Outpatient OTP</i>	<i>Outpatient Non-OTP</i>	<i>Residential Non-OTP</i>
<i>25th</i>	175	16	10
<i>50th</i>	298	40	18
<i>75th</i>	472	93	32

Below are the estimates and standard errors for the regression models used to estimate the percent change in facility cost (Appendix Table C.3).

Appendix Table C.3. Staffing cost per client regression results

Variable	OP OTP		OP Only Non OTP		Res Only Non OTP	
	Estimate	Standard Error	Estimate	Standard Error	Estimate	Standard Error
<i>< 25th percentile of size. (Reference)</i>						
<i>25th to 50th percentile of size</i>	-8,934.2	2,976.3	-29,490.2	2,277.1	-31,492.2	3,229.4
<i>50th to 75th percentile of size</i>	-9,411.0	3,031.9	-36,394.6	2,382.7	-40,760.8	3,350.8
<i>>=75th percentile of size</i>	-10,093.4	3,130.0	-41,777.4	2,490.6	-47,564.9	3,431.9
<i>Facility is a hospital or is located in or operated by a hospital</i>	-2,091.3	4,539.1	-1,701.0	3,646.6	7273.6	6767.7
<i>Facility offers a program or group specifically tailored for clients in the listed category</i>						
<i>Adolescents</i>	-899.5	5,473.3	277.8	1,770.5	10,854.2	4,130.4
<i>Adult men</i>	460.5	4,185.7	-1,369.9	2,135.3	-7,609.3	2,665.1
<i>Adult women</i>	-2,514.0	4,159.8	NA	NA	NA	NA
<i>Seniors or older adults</i>	141.2	3,681.7	-6,370.2	3,029.3	565.7	3,754.6
<i>Pregnant/postpartum women</i>	-1,614.3	2,408.9	NA	NA	NA	NA
<i>Criminal justice associated</i>	-618.7	3,425.0	-1,610.4	2,046.8	-3,742.3	3,014.7
<i>Have experienced trauma</i>	1,692.6	3,933.3	1,870.4	2,450.3	2,666.9	3,407.1
<i>Have experienced sexual abuse</i>	-306.2	5,036.9	NA	NA	NA	NA
<i>Have experienced intimate partner or domestic violence</i>	-838.5	4,810.8	NA	NA	NA	NA
<i>Offers services for domestic violence</i>	1,124.2	2,402.2	NA	NA	NA	NA
<i>Offers childcare for clients' children</i>	-2,703.3	4,944.9	-7,312.2	3,680.2	-2,834.7	3,905.3
<i>Medication</i>						
<i>Offers oral naltrexone</i>	336.8	3,615.5	7,806.0	3,005.6	-1,952.4	3,631.5
<i>Offers buprenorphine</i>	808.2	6,254.3	6,642.5	2,740.1	5,942.0	3,242.9
<i>Offers injectable naltrexone</i>	-1,320.0	3,412.0	1,283.3	3,129.4	5,974.3	3,661.2
<i>Offers Methadone Only</i>	-2,737.0	6,500.5	6,677.0	20,575.6	-1,627.0	15,018.9
<i>Ownership</i>						
<i>Private-for-profit. (Reference)</i>						
<i>Private not for-profit</i>	-5,241.3	2,822.7	-5,876.9	1,887.0	30,001.7	3,414.3
<i>State government</i>	-6,461.4	10,474.5	-5,121.0	6,123.3	19,288.5	6,109.2
<i>Local government</i>	-3,122.5	6,239.4	340.7	3,499.7	12,868.0	7,692.4
<i>Tribal government</i>	-7,310.9	19,161.5	-918.4	5,439.3	4,119.0	13,119.3
<i>Veterans administration</i>	-9,189.0	14,007.8	-20,963.3	8,980.1	-14,931.1	22,721.5
<i>Department of defense</i>	NA	NA	15,681.0	8,537.3	NA	NA
<i>Indian health service</i>	NA	NA	-8,029.6	16,575.4	65,299.3	24,855.1
<i>Region</i>						
<i>New England. (Reference)</i>						
<i>Mid Atlantic</i>	1,140.2	4,489.7	1,668.4	4,095.1	-5,402.7	4,728.8
<i>South Atlantic</i>	1,093.9	4,839.6	10,414.9	3,867.5	-2,051.2	5,523.9
<i>East North Central</i>	-425.3	6,354.3	13,724.8	4,276.1	-9,342.9	5,881.8
<i>East South Central</i>	137.6	4,256.7	10,308.7	3,909.1	808.3	4,978.1
<i>West North Central</i>	463.6	6,575.8	4,510.3	4,775.0	7,175.7	6,571.8
<i>West South Central</i>	11,322.8	5,369.0	8,073.8	4,738.2	-4,441.7	5,990.2
<i>Mountain</i>	-1,429.8	5,594.7	7,216.2	4,114.5	-5,939.1	5,952.4
<i>Pacific</i>	3,849.5	4,598.5	6,083.9	3,990.1	1,932.3	4,742.9

<i>Urban/Rural status</i>						
<i>Large central metro. (Reference)</i>						
<i>Large fringe metro</i>	1,155.3	3,024.5	-2,483.7	2,435.6	334.7	3,492.6
<i>Medium metro</i>	6,143.1	2,813.7	4,090.6	2,498.0	4,949.7	3,217.2
<i>Small metro</i>	917.9	3,659.0	-4,393.7	3,061.3	3,608.6	4,100.0
<i>Micropolitan</i>	-231.9	4,384.2	-1,650.3	2,792.4	5,861.4	4,077.3
<i>Noncore</i>	-78.9	7,776.0	-7,889.6	3,075.3	-367.3	5,689.3
<i>Supplemental substance abuse treatment services</i>						
<i>Limited provision of testing and support services. (Reference)</i>						
<i>Limited provision of screening/testing/health education and broader provision of outreach, peer support, and support developing social skills and connecting with housing and social services</i>	-2,393.1	2,978.5	NA	NA	NA	NA
<i>Broad provision of screening/testing and broader provision of interim services, transportation and programs for sexual abuse</i>	-964.1	2,980.6	NA	NA	NA	NA
<i>Broad provision of screening/testing/health education and moderate provision of support services</i>	NA	NA	9,679.7	3,025.4	10,954.7	3,901.6
<i>Moderate provision of screening/testing/health education and broad provision of support services</i>	NA	NA	5,229.7	1,929.2	433.4	3,080.8
<i>Programs, intervention, or support services related to HIV/AIDs</i>						
<i>No programs, broad provision of services. (Reference)</i>						
<i>Has programs, limited provision of services</i>	-759.0	5,977.4	-485.5	4,358.8	7,070.0	5,464.0
<i>Has programs, broad provision of services</i>	924.9	3,565.3	11,071.5	4,705.7	282.8	4,478.3
<i>No programs, limited provision of services</i>	822.7	2,675.7	-2,913.8	2,403.3	3,395.5	3,049.3
<i>Offers mental health services</i>						
<i>Broad provision of clinical and therapeutic services</i>	Reference	group for OP OTP	NA	NA	NA	NA
<i>No or limited provision of clinical and therapeutic services</i>	-1,460.8	3835.0	NA	NA	NA	NA
<i>Moderate provision of clinical and therapeutic services</i>	939.2	2997.4	NA	NA	NA	NA
<i>Focused on substance abuse with no or limited provision</i>	NA	NA	Reference Group for OP Only non OTP		-16,941.2	3,960.6
<i>Focused on substance abuse with broad provision</i>	NA	NA	1,006.4	2,465.3	Reference group for Res Only Non OTP	
<i>Focused on substance abuse and mental health with broad provision</i>	NA	NA	7,387.6	2,135.5	NA	NA
<i>Focused on mental or general health with broad provision</i>	NA	NA	36,390.2	3,133.5	NA	NA
<i>Focused on substance abuse with moderate provision</i>	NA	NA	NA	NA	-11,519.2	3,070.7
<i>Offers services for women</i>						
<i>Moderate availability</i>	NA	NA	Reference Group for OP Only non OTP		NA	NA
<i>Broad availability</i>	NA	NA	-252.8	3,338.4	Reference group for Res Only Non OTP	
<i>Limited availability</i>	NA	NA	-561.7	2,503.2	5,763.6	4,261.4
<i>No programs specifically for women but with broad availability of programs/ services for violence or abuse</i>	NA	NA	NA	NA	1,984.1	4,455.9
Intercept	15,042.2	7,969.7	31,355.6	5,536.0	58,029.1	8,304.7