

Smoking Cessation Practices in Community Treatment Programs

PROJECT REPORT

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EXECUTIVE SUMMARY

Given that the majority of individuals who receive substance abuse treatment also use tobacco products, addiction treatment programs are a potentially important site for the delivery of smoking cessation services and the implementation of the Public Health Service's clinical practice guideline, *Treating Tobacco Use and Dependence*. To date, there have only been a few studies about the availability of smoking cessation services in substance abuse treatment settings.

The purpose of this research project was to describe the implementation of the core elements of the PHS guideline and identify barriers to implementation. Telephone interviews were conducted with administrators of 897 treatment programs across the US. These programs were drawn from existing national samples of publicly funded treatment agencies, privately funded treatment organizations, and therapeutic communities. The response rate for the study was 85.2%.

The main focus of the study was on the organizational adoption of tobacco-related intake procedures and cessation services. Key findings from these telephone interviews with program administrators include the following:

- While nearly all programs ask clients about current smoking during intake (86%), adoption of other key intake procedures, such as advising tobacco users to quit (44%), assessing willingness to quit (45%), using motivational interventions to increase willingness to quit (26%), and developing quit plans (36%), was considerably lower.
- Few programs (15%) had adopted all five of these key intake procedures.
- About 43% of programs offer some type of formal smoking cessation services. Availability of cessation medications (37%) was greater than formal psychosocial cessation programs (18%).
- Adoption of nicotine replacement therapies (34%), which are available over-the-counter, was greater than adoption of medications that require a prescription, such as bupropion-SR (15%) and varenicline (6%).
- Only a minority of counselors (<20%) have received training about tobacco-related issues in the past year.
- Programs with higher rates of staff smoking were less likely to have adopted all five intake procedures, to offer smoking cessation services, to integrate tobacco issues into general substance abuse treatment, and to link clients with informal resources.
- Nearly all programs ban indoor tobacco use, but most still allow tobacco use in outdoor areas. About 21% of programs had a comprehensive tobacco ban, where both indoor and outdoor use was prohibited.

Section 1

Introduction to the Study

There is clear evidence that the majority of individuals who receive substance abuse treatment also use tobacco products. Rates of cigarette smoking among individuals treated for substance abuse tend to be between 70% and 80%, which is more than three times greater than the general adult population in the US (Kalman, et al., 2001; McCarthy, Collins, & Hser, 2002; Richter, Ahluwalia, Mosier, Nazir, & Ahluwalia, 2002; Williams & Ziedonis, 2004). Long-term studies of individuals with substance use disorders have found that they are at greater risk of premature death than the general population, but that the majority of these premature deaths are attributable to tobacco-related disease rather than their substances of abuse (Hser, Mccarthy, & Anglin, 1994; Hurt, et al., 1996).

In addition to these negative health consequences, there is growing evidence that continued smoking may actually be a risk factor for relapse following substance abuse treatment. It has been argued in the past that perhaps addressing smoking during treatment might put clients at risk, but research has shown that:

- 1) Smoking cessation does not increase the risk of relapse (Bobo, McIlvain, Lando, Walker, & Leed-Kelly, 1998; Burling, Burling, & Latini, 2001) and
- 2) Individuals who continue to smoke after discharge are actually more likely to relapse (Lemon, Friedmann, & Stein, 2003; McCarthy, et al., 2002; Prochaska, Delucchi, & Hall, 2004).

These studies suggest that smoking cessation services may actually improve clients' chances for recovery and improve their long-term health. Adoption and implementation of smoking cessation services within substance abuse treatment organizations is a key issue for ensuring that these services reach the clients who need them, since strategies that simply refer clients to other providers for wraparound services result in lower rates of utilization (Friedmann, D'Aunno, Jin, & Alexander, 2000).

While interest in smoking cessation as a clinical target for substance abuse treatment has been growing (Baca & Yahne, 2009; Reid, et al., 2007), the literature on the adoption of smoking cessation services by treatment organizations is relatively small. Some studies have focused on single modalities of treatment, such as outpatient programs (Friedmann, Jiang, & Richter, 2008) or methadone maintenance programs (McCool, Richter, & Choi, 2005; Richter, Choi, McCool, Harris, & Ahluwalia, 2004). Other

studies have looked at smoking cessation services within individual states (Hahn, Warnick, & Plemmons, 1999; Knapp, Rosheim, Meister, & Kottke, 1993) or have used non-random samples of treatment programs (Fuller, et al., 2007).

To summarize, there has been a dearth of studies on the adoption and implementation of smoking cessation services that include a wide range of treatment modalities from nationally representative samples. Additionally, the amount of information about how tobacco use is addressed as part of intake and assessment as well as during treatment has been limited. Specifically, little is known about the extent to which treatment programs are delivering smoking cessation services that are consistent with the Public Health Service's clinical practice guideline, *Treating Tobacco Use and Dependence: 2008 Update* (Fiore, Jaen, Baker, & Bailey, 2008). This guideline was developed to help healthcare providers to routinely address patients' tobacco use and promote cessation. This clinical practice guideline is available online and is free to download. (The guideline is available at http://www.tcln.org/cessation/pdfs/treating_tobacco_use08.pdf).

Core elements of the clinical practice guideline include:

- Asking all patients about current and former use of tobacco products
- Advising all current tobacco users of the need to quit
- Assessing the willingness of current tobacco users to make a quit attempt
- Assisting with quitting (including smoking cessation counseling, smoking cessation medications, and accessing telephone quitlines)
- Arranging for follow-up

This study sought to address these gaps in the literature by examining the adoption and implementation of these core elements of the Public Health Service's clinical practice guideline, *Treating Tobacco Use and Dependence*, in three large nationally representative samples of substance abuse treatment organizations. In addition, this project sought to measure tobacco-related policies within these facilities, such as environmental policies about indoor and outdoor tobacco use, and whether treatment organizations provide employees with insurance that covers smoking cessation services. Organizations in these three samples had previously participated in the National Treatment Center Study (NTCS), which is a family of health services research projects housed at the University of Georgia. Specifically, the three samples consist of:

- **Publicly-funded substance abuse treatment organizations.** These are specialty substance abuse treatment facilities that rely predominantly on governmental block grants and governmental contracts for their revenues. They include a

mixture of government-owned facilities and non-profit organizations that are highly dependent on governmental funding. The majority of these programs are freestanding facilities.

- ***Privately-funded substance abuse treatment organizations.*** These are specialty substance abuse treatment facilities that rely predominantly on insurance funding and fees directly paid by clients. They include both for-profit and non-profit programs. About half of these programs are located within hospital settings.
- ***Therapeutic communities.*** These are specialty substance abuse treatment facilities that self-identify as being based on the therapeutic community model (DeLeon, 2000). Nearly all of them are privately-owned non-profit organizations that are freestanding facilities in the community.

Full details about the study's methodology, including how programs were selected for the samples, can be found in Appendix A. To briefly summarize, these three samples of programs were re-contacted by telephone about this study of smoking cessation service delivery within substance abuse treatment organizations. Organization-level data on smoking cessation services were collected via telephone interviews with program administrators. A total of 897 treatment organizations participated in the study, which represents 85.2% of eligible programs. These interviews were conducted between September 2006 and January 2008.

In the following sections of this report, several key findings from this research are summarized. First, data on the adoption and implementation of the core elements of the PHS guideline are presented for the combined sample of 897 programs. Then, the three samples are compared with regard to these core elements of the PHS guideline. Issues related to implementation, including administrator support for smoking cessation services, counselor training, and organizational barriers, are then discussed. Finally, tobacco-related policies, in terms of smoking bans and employee insurance coverage, are described for the combined sample and then each of the three types of programs.

Section 2

Adoption & Implementation of the PHS Guideline: Results from the Combined Sample

Smoking cessation has been identified as an important issue for substance abuse treatment because individuals in treatment are highly likely to smoke and to be at significant risk of tobacco-related diseases (Baca & Yahne, 2009). To address tobacco use as a part of substance abuse treatment, however, means that treatment organizations need to adopt procedures that identify and engage clients in smoking cessation as well as deliver cessation services. The Public Health Service's clinical practice guideline, *Treating Tobacco Use and Dependence: 2008 Update*, describes a set of intake procedures that are recommended for implementation in all healthcare settings (Fiore, et al., 2008). These intake procedures include asking all patients about tobacco use, including current use as well as former use. All current users of tobacco should then be advised to quit. In addition, clinicians should assess whether the patient is willing to attempt to quit. For patients who are unwilling to make a quit attempt, a brief motivational intervention focused on increasing their willingness to quit should be delivered. For patients who are interested in quitting, a cessation plan should be developed.

In addition to these procedures for identifying and engaging clients in smoking cessation, it is also important that treatment programs adopt and deliver smoking cessation services. Smoking cessation services may include formal psycho-social counseling and pharmacotherapies (Fiore et al. 2008). Medications approved by the Food and Drug Administration (FDA) include nicotine replacement therapies (NRT) and sustained-release bupropion hydrochloride (e.g. Zyban[®]), which is an atypical antidepressant. Varenicline (e.g. Chantix[®]) has more recently received FDA approval and is now included in the 2008 update (Fiore, et al., 2008). Organizations can be described by a typology of smoking cessation services that categorizes treatment programs into those offering 1) no services, 2) a formal program without medications, 3) medications without a formal program, or 4) comprehensive services that include both medications and a formal psycho-social program (Friedmann, et al., 2008; Richter, et al., 2004). Comprehensive services that combine psychosocial counseling with pharmacotherapy are included in the National Institute on Drug Abuse's guideline about effective treatment practices (NIDA, 2000).

In addition to formal services, treatment programs may also use informal methods to assist clients in quitting. These informal services may include referring clients to a telephone quitline and providing clients with written materials related to

smoking cessation. As noted in the PHS clinical practice guideline, quitlines have the potential to help individuals who want to quit using tobacco. When quitlines are accessed by individuals, they have been shown to improve the likelihood that they will successfully quit smoking (Fiore et al., 2008).

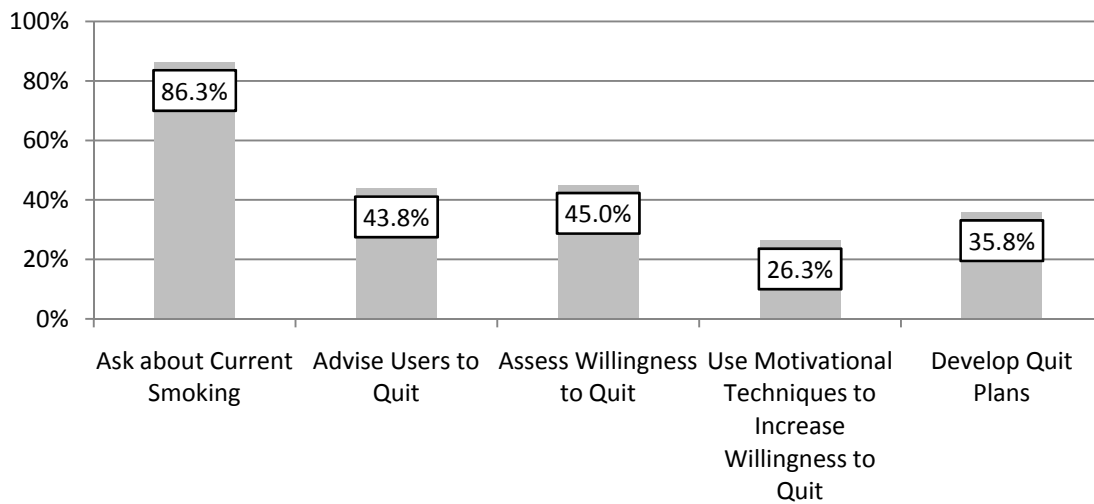
Our focus in this section is on organizational adoption of these tobacco-related procedures and services. For the most part, we wanted to know whether or not the treatment organization offered specific services or used certain procedures during the intake process. These are not measures of the percentage of clients who receive services, but rather whether an organizational decision has been made to make these services available.

Specifically, we present descriptive statistics for individual elements of the PHS guideline (e.g. the percentage of programs who ask all clients about tobacco use) as well as more comprehensive measures that integrate multiple indicators (e.g. the percentage of programs that have adopted all five tobacco-related intake procedures).

Intake Procedures Related to Smoking Cessation

In this section, we describe the adoption of the core elements of the PHS guideline that may be included as part of the intake procedures within treatment programs. Figure 1 presents the rates of adoption of five tobacco-related intake procedures.

Figure 1: Organizational Adoption of Tobacco-Related Intake Procedures



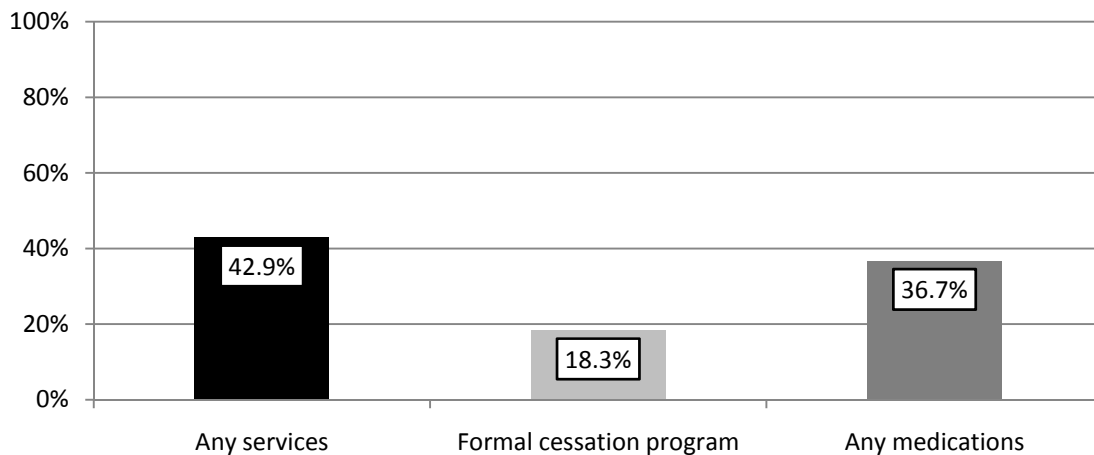
As seen in the previous graph, nearly all programs report that all clients are asked about whether they currently smoke during the intake/assessment process. However, some programs only ask about current smoking and do not ask about the use of other tobacco products such as smokeless tobacco. About two-thirds ask about current smoking as well as other tobacco use. Organizational adoption of the other intake procedures is somewhat lower. Not quite half of programs advise tobacco users to quit or assess willingness to make a quit attempt. About one-third develop tobacco-related quit plans with clients, and only about one-quarter use motivation-enhancing interventions to try to increase willingness to quit.

Another way to think about these intake procedures is in terms of the adoption of all five of the intake procedures described in the previous graph. Only a small minority of programs (14.6%) have adopted all five of these smoking-related intake procedures.

Formal Smoking Cessation Services

Program administrators were asked about two types of formal services: whether their program offered a cessation program and whether their program offered smoking cessation medications. Overall, 42.9% of programs offered some type of formal cessation services (e.g. a formal program, medications, or both). Just 18.3% of treatment organizations reported that they offered a formal program for smoking cessation, while 36.7% offered at least one medication for smoking cessation.

Figure 2: Adoption of Smoking Cessation Services



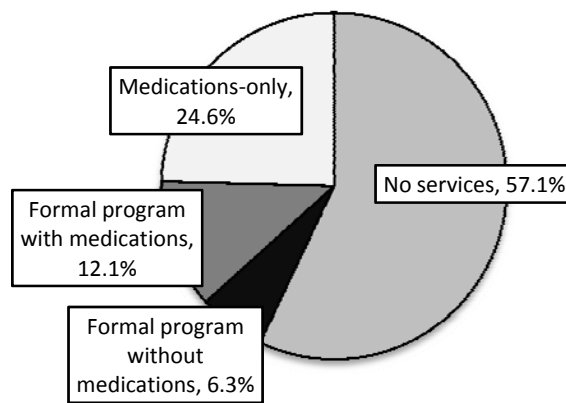
Based on information about the adoption of a formal program for smoking cessation

and the adoption of pharmacotherapies, we were able to categorize treatment organizations into a typology of formal smoking cessation services. Specifically, we divided organizations into those which:

- Offered a formal cessation program combined with medications
- Offered a formal cessation program but did not offer medications
- Only offer medications
- Offered no formal services

The following chart (Figure 3) presents the frequencies of these four categories in our sample of treatment organizations.

Figure 3:
Typology of Formal Smoking Cessation Services



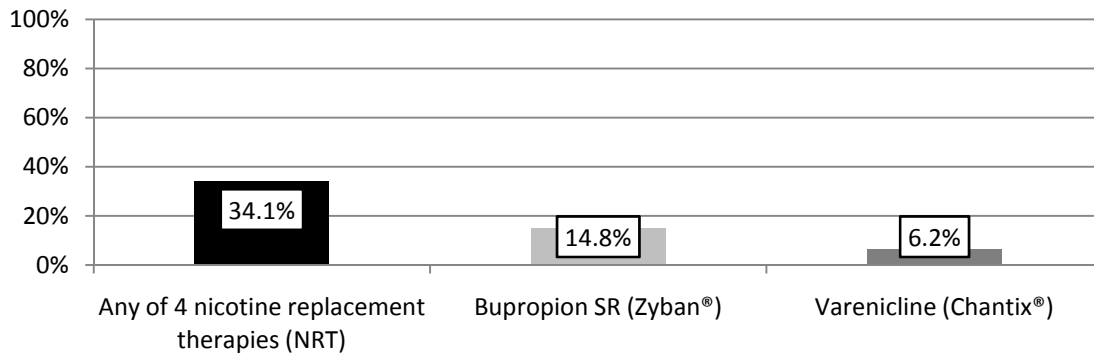
Note: Total exceeds 100% due to rounding.

Formal smoking cessation programs nearly always included group counseling (84.6% of those with formal programs). Individual counseling was somewhat less common but still endorsed by more than half of those organizations with a formal cessation program (57.2% of those with formal programs).

In addition to asking about the adoption of any medications, we also asked program administrators about several of the FDA-approved medications for nicotine dependence. We asked about four nicotine replacement therapy (NRT) products: nicotine gum, nicotine patch, nicotine inhaler, and nicotine spray. As seen in the next graph (Figure 4), about 34.1% of treatment organizations reported that they had adopted at least one of the four NRT products. Rates of adoption for the two FDA-medications that require a prescription were much lower. About 14.8% of programs indicated they used bupropion-SR (e.g. Zyban®) and even fewer used varenicline (e.g.

Chantix®), perhaps because varenicline was brand new to the market while data were being collected.

**Figure 4:
Adoption of Smoking Cessation Medications**



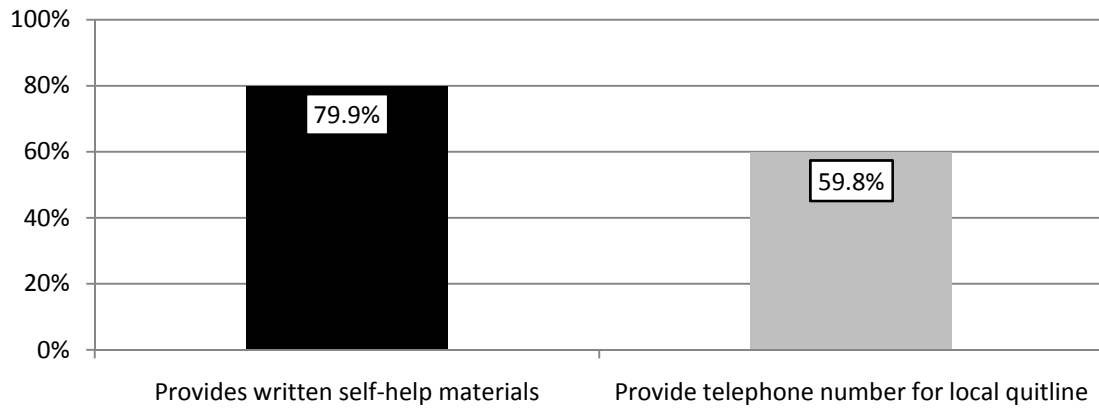
Of the four types of NRT products, the nicotine patch (31.5%, n = 279 of all programs) and nicotine gum (21.7%, n = 192) were the most popular. In contrast, just 29 organizations reported using the nicotine inhaler and 31 used nicotine spray.

Informal Services

In addition to delivering formal services in the form of a cessation program or offering medications for smoking cessation, treatment programs may have informal methods for addressing clients' tobacco use. One possibility is that tobacco use is dealt with on an ad-hoc basis during counseling sessions. We asked administrators to rate the extent to which "counselors include smoking cessation/nicotine dependence issues as a part of general substance abuse treatment program." Possible responses ranged from 0 indicating "no extent" to 5 representing "a very great extent." The average for this measure was 2.2, which is less than the midpoint of the scale, suggesting somewhat low levels of informal counseling about tobacco-related issues being integrated into the usual substance abuse treatment services.

Another possibility is that treatment programs may direct clients toward other resources that may help them with quitting smoking. We asked about two types of informal resources: providing clients who are interested in quitting with written self-help materials and providing clients with the telephone number of the local "quitline." Both of these types of informal services were fairly common, as seen in Figure 5 on the following page.

Figure 5: Adoption of Informal Services



Section 3

Comparing the Three Samples

On the Adoption and Implementation of the PHS Guideline

The previous section provided information about smoking cessation services for the combined sample. In this section, we present data on adoption across the three types of programs: publicly funded treatment organizations, privately funded treatment organizations, and therapeutic communities (TCs). Our analyses focus on this central question: Are these three types of treatment facilities similar in their adoption of smoking cessation services or are there significant differences between these different types of organizations? We attempt to answer this question by examining whether differences are “statistically significant,” which has to do with how certain we are that the differences are not simply due to chance.

Intake Procedures by Program Type

As in the previous section, our first set of comparisons is focused on the adoption of intake procedures related to tobacco. In the following table, we present the rates of adoption for the three types of treatment facilities.

Table 1: Adoption of Specific Intake Procedures & the Bundle of Intake Procedures

	Public Centers %	Private Centers %	Therapeutic Communities %
Ask all clients if they are current smokers ^{a,b}	83.9%	91.3%	81.6%
Advise current smokers/ tobacco users to quit ^{a,b}	38.7%	49.5%	38.6%
Assess willingness to quit ^b	44.7%	48.7%	36.6%
Use motivational techniques with clients who are unwilling to make a quit attempt	28.9%	22.6%	25.0%
Develop a quit plan for clients willing to make a quit attempt ^b	35.3%	39.9%	30.0%
Program has adopted bundle of all five intake procedures	14.7%	14.4%	14.9%

^aSignificant difference between private and public centers (p<.05, two-tailed test)

^bSignificant difference between private centers and TCs (p<.05, two-tailed test)

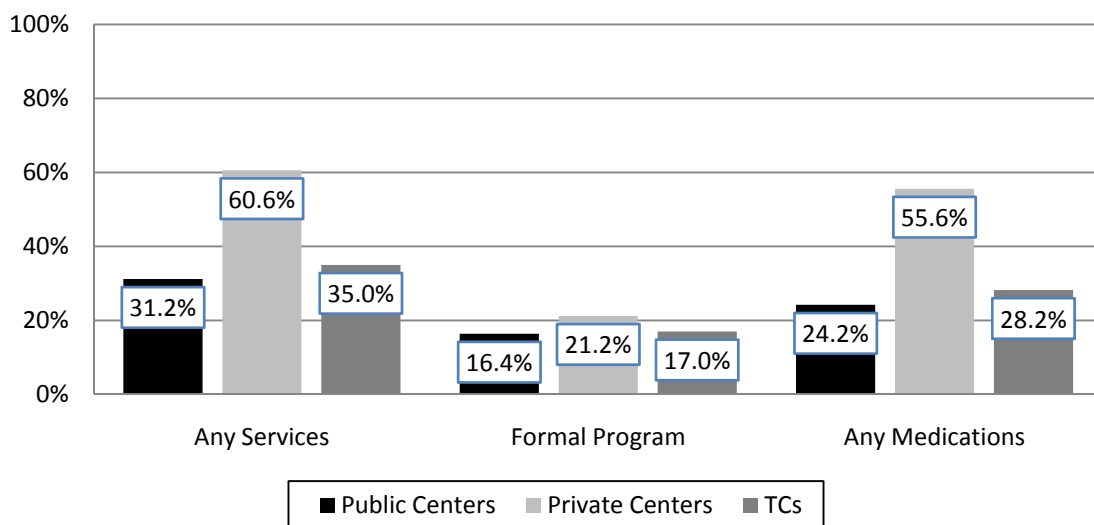
There were some significant differences in adoption of the specific intake procedures by center type. Privately funded programs were more likely than public programs and TCs to ask clients about current smoking. They were also more likely to advise tobacco users to quit. Also, privately funded programs were more likely than TCs to assess willingness to quit and to develop quit plans with clients who want to try to quit using tobacco.

Despite these differences in specific intake procedures, the rates of adoption of the bundle of all five intake procedures (ask, advise, assess, motivate, and quit plan) was similar across the three types of programs.

Formal Smoking Cessation Services by Program Type

We next compared the three types of programs in terms of their adoption of any smoking cessation services (formal program or medications), the adoption of a formal program, and the adoption of any of the medications for smoking cessation. The results appear in Figure 6. There were some notable differences. In particular, privately funded programs were significantly more likely than publicly funded programs and TCs to have adopted any smoking cessation services. These large differences appear to be attributable to the major difference in adoption of any medications, particularly since the differences in adoption of a formal program were not statistically significant.

Figure 6: Adoption of Smoking Cessation Services by Program Type



In the next table, we present data on the typology of services in which programs were categorized into 1) those that had a formal program and also offered some type of medication, 2) those that had a formal program but used no medications, 3) those that only used medications, and 4) those offering no services. Similar to the previous graph, private programs were more likely than the others to offer a formal programs that include medications and to offer medication-only services. There were not differences between the three types of centers on offering a formal program without medications. None of the differences between public centers and TCs were statistically significant.

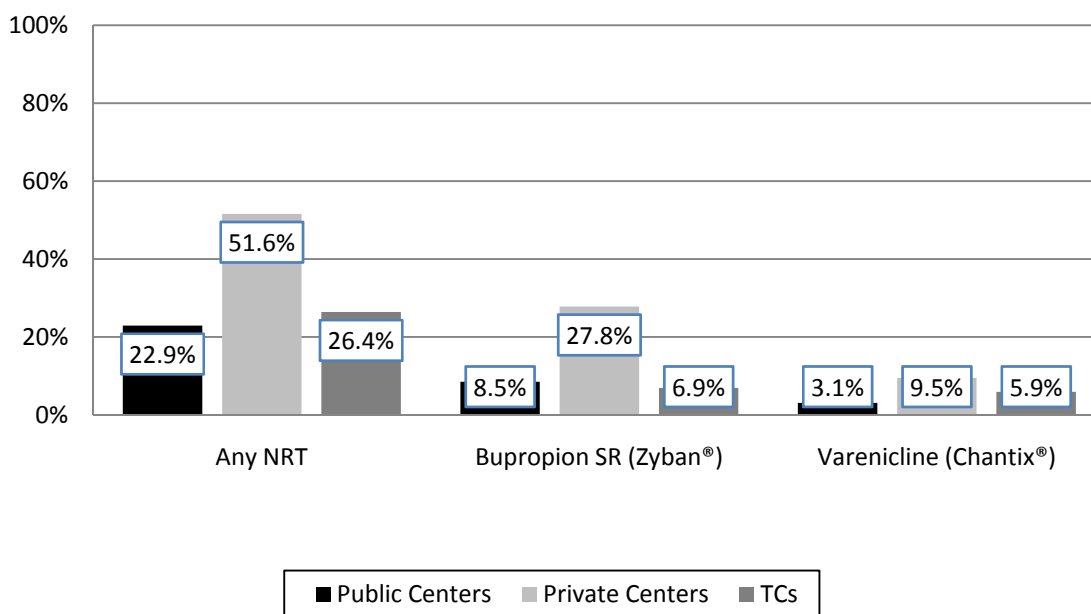
Table 2: Typology of Smoking Cessation Services by Center Type

	Public Centers %	Private Centers %	Therapeutic Communities %
Formal Program with Medications	9.4%	16.3%	10.1%
Formal Program without Medications	7.1%	5.0%	6.9%
Medications-Only	14.8%	39.4%	18.1%
No Services	68.8%	39.4%	65.0%

Note: Totals exceed 100% due to rounding.

Next we examined the adoption of medications in greater detail (see Figure 7 on the next page). As would be expected based on the previous analyses, privately funded programs were significantly more likely than public centers and TCs to have adopted any of the for nicotine replacement therapies (NRT). They were also more likely than the other two types of programs to have adopted bupropion-SR (e.g. Zyban®), which is a cessation medication that requires a prescription. Privately funded programs were more likely than publicly funded programs to have adopted varenicline (e.g. Chantix®) which is the newest prescription medication for smoking cessation. The difference between privately funded programs and TCs was not statistically significant. Notably, there were no differences between publicly funded programs and TCs on any of these measures of medication adoption.

Figure 7: Adoption of Medications by Program Type

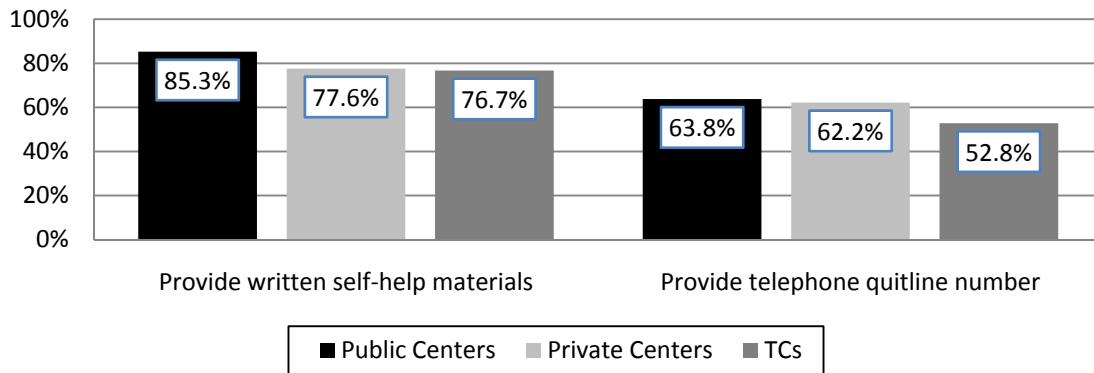


Informal Services by Program Type

Finally, we considered whether there were differences in informal services. When we examined the extent to which counselors integrate tobacco-related issues into their usual substance abuse treatment counseling by center type, there were no significant differences between the three types of programs.

Then we examined the use of the two informal services—providing written self-help materials to clients interested in quitting smoking and providing the local quitline telephone number—by program type. As seen in the following graph (Figure 8), there were some notable differences. Publicly funded programs were significantly more likely than TCs to provide written self-help materials. They also tended to be more likely than privately funded programs to provide clients with written self-help materials. The difference between privately funded programs and TCs was not statistically significant.

**Figure 8: Adoption of Informal Services
by Program Type**



In terms of providing clients with the telephone number for the local quitline, there were some differences. Publicly funded programs were more likely than TCs to have adopted this type of informal service. Also, privately funded programs tended to be more likely to provide clients with the quitline number than TCs.

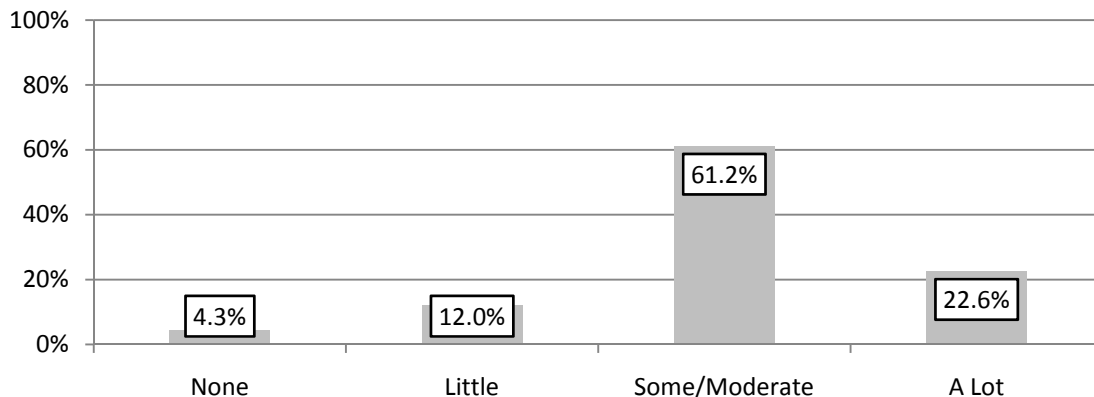
Section 4: Administrator Attitudes and Organizational Barriers to Smoking Cessation Services

In this section, we describe the findings related to attitudinal and organizational barriers to smoking cessation services. First, we present data on administrators' own attitudes about the integration of smoking cessation into substance abuse treatment. Then, we describe the extent to which counselors received training on smoking cessation-related topics in the past year. Finally, we provide information on organizational barriers to smoking cessation services as described by program administrators.

Administrator Attitudes toward Smoking Cessation Services

We asked administrators two questions about their own attitudes toward smoking cessation as part of substance abuse treatment. First, we asked administrators, "Thinking about smoking cessation in the context of substance abuse treatment, how much emphasis should be placed on smoking cessation during the treatment for a non-nicotine substance problem?" As seen in the graph below (Figure 9), most administrators were supportive of some emphasis being placed on smoking cessation during substance abuse treatment. Very few administrators were unsupportive of including smoking cessation during treatment. There were no differences between the three types of programs.

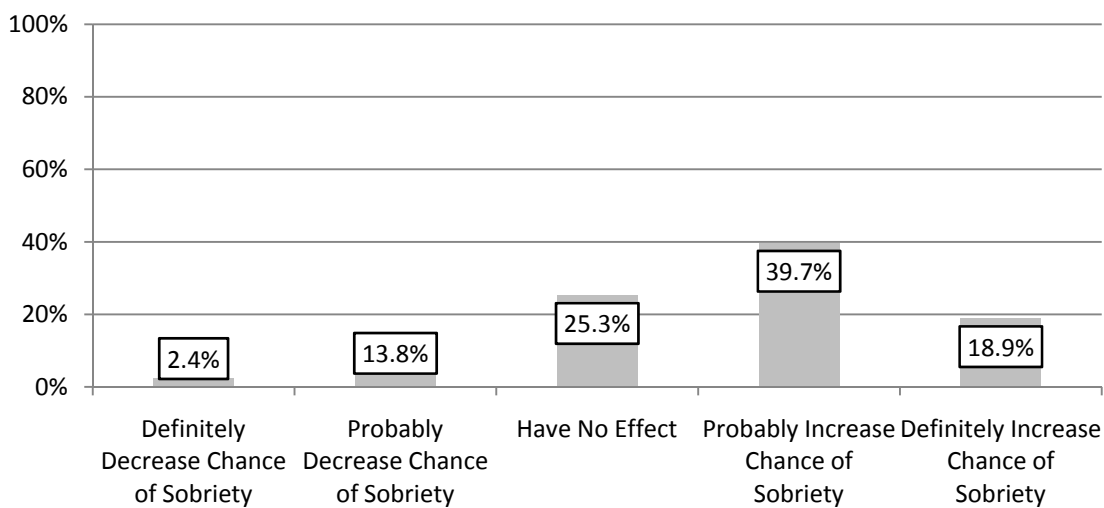
**Figure 9: How Much Emphasis Should Be Put on
Smoking Cessation During Substance Abuse
Treatment?**



Note: Total exceeds 100% due to rounding.

Then we asked administrators about their beliefs about how smoking cessation during treatment would impact clients' chances for sobriety from their alcohol or other drug problem one-year after treatment (Figure 10). Only 16.2% of administrators perceived there would be a negative impact on the likelihood of recovery, while 58.6% perceived that smoking cessation would have a positive impact on clients' recovery one-year after treatment. There were no differences between the three types of centers on administrators' perceived impact of smoking cessation on substance abuse recovery.

Figure 10: Perceived Impact of Smoking Cessation on Client Outcomes after One Year



Note: Total exceeds 100% due to rounding.

Staff Training about Smoking Cessation

Program administrators were asked about whether counselors in their treatment program had received training about smoking cessation-related topics in the prior year. We asked about the percentage of counselors receiving training in four areas:

1. Medications related to smoking cessation/nicotine abstinence
2. Counseling approaches to promote smoking cessation/nicotine abstinence
3. The benefits of achieving smoking cessation/nicotine abstinence during substance abuse treatment
4. The effects of counselor attitudes toward smoking cessation and counselor smoking behavior on clients' treatment

The average percentage of counselors receiving training in these four areas in the past year was low, averaging between 15-19% of counselors. In part, these low

percentages reflect the large number of programs in which none of the counselors had received smoking cessation-related training in the past year. The percentage of programs in which none of their counselors had received training ranged from 56-68%.

Table 3: Counselor Training on Smoking Cessation-Related Issues in the Past Year

	Average Percentage of Counselors Who Received Training in the Past Year	Percentage of Programs Where <u>No</u> Counselors Were Trained in the Past Year
Training about medications	18.7	56.3%
Training about counseling approaches	16.6	59.6%
Training about benefits of smoking cessation during treatment	18.8	60.5%
Training about effects of counselors' attitudes and behaviors	15.1	68.3%

For the most part, the three types of centers did not differ in the percentage of counselors receiving training in the past year. The only exception was for the percentage of counselors receiving training about medications. A higher percentage of counselors in private centers (mean = 23.9% of counselors) received training about medications when compared to public centers (mean = 16.7% of counselors) and TCs (mean = 14.8% of counselors).

If programs reported that some of their counselors were trained in the past year, we then asked administrators about the number of hours that counselors received in these four areas. Administrators typically described counselors as receiving between four to five hours of training on each of these areas.

Staff Smoking as a Barrier to Service Delivery

We asked administrators about the percentage of their clinical staff who currently smoke or use tobacco. On average, administrators reported that about 21.7% of clinical staff currently smoke. Interestingly, we conducted a survey with counselors in many of these programs, and on average about 20.4% of the counselors who responded to the survey said that they were current tobacco users. This high degree of similarity suggests that administrators were reasonably accurate in their assessment of the clinical staff smoking rate.

When we compared the three types of programs on clinical staff smoking rates, we found that the smoking rate was significantly higher in TCs (mean = 28.4% of clinical staff) than in publicly funded programs and in privately funded programs. The rates for publicly funded programs (19.3%) and privately funded programs (18.1%) were similar.

But is staff smoking a barrier to the adoption of smoking cessation services? After conducting a series of analyses, we found that:

- Programs with a higher rate of staff smoking were less likely to have adopted the bundle of tobacco-related intake procedures.
- Programs with a higher rate of staff smoking were less likely to offer some type of formal cessation services (i.e. formal program, medications, or both).
- Programs with a higher rate of staff smoking indicated that counselors were less likely to integrate tobacco-related issues into their substance abuse counseling services.
- Programs with a higher rate of staff smoking were less likely to report that they provide written self-help materials to clients who are interested in cessation.
- Programs with a higher rate of staff smoking were less likely to report that they provide clients with the number of the local quitline.

Organizational Barriers to Smoking Cessation Services

In addition to asking administrators about their own beliefs and attitudes toward smoking cessation as part of substance abuse treatment, we asked them to describe the larger treatment center that they manage. Specifically, we asked about a variety of potential barriers to smoking cessation services. We included questions about whether smoking was a part of the staff culture within the treatment program and whether the workplace culture did not place importance on smoking as a treatment issue. We also asked about whether a lack of time and lack of reimbursement were barriers. Finally, we asked about whether staff lacked training or interest in smoking cessation.

The following table (Table 4) presents the averages for each of these questions for the combined sample of all three types of treatment programs. When there were significant differences between the three types of programs, the averages for each type of program is presented.

Table 4: Organizational Barriers to Smoking Cessation Services

<i>On a scale of 0 to 5, with 0 being no extent and 5 being a very great extent, to what extent are the following true about your center?</i>	All Programs Average	Public Centers Average	Private Centers Average	TCs Average
Smoking is an accepted part of the staff culture at this treatment program. ^{a,b}	2.03	1.96	1.80	2.38
Smoking and tobacco use are not important issues in the successful treatment of other substance abuse problems.	1.98	No Difference	No Difference	No Difference
Our treatment protocol is so demanding that there would be little or no time for adding smoking cessation activities.	1.61	No Difference	No Difference	No Difference
Allowing clients to continue their smoking or other tobacco use facilitates successful treatment of their primary substance abuse issues.	2.07	No Difference	No Difference	No Difference
It is very difficult to be reimbursed for staff time devoted to clients' smoking cessation. ^a	2.96	2.85	3.30	2.67
Our staff generally does not have the skills to provide smoking cessation treatments to clients. ^a	2.20	2.14	2.05	2.43
Our staff does not have interest in providing our clients with smoking cessation treatments.	1.89	No Difference	No Difference	No Difference

^aSignificant difference between private centers and TCs ($p < .05$, two-tailed test)

^bSignificant difference between public centers and TCs ($p < .05$, two-tailed test)

Overall, the most strongly endorsed barrier was difficulties in being reimbursed for staff time related to smoking cessation services. In part, this is being driven by the significantly greater endorsement of this barrier by privately funded treatment programs when compared to TCs. The next highest barrier was the lack of staff training, which was significantly higher in TCs when compared to private centers. The least endorsed barrier was the lack of time available to add smoking cessation.

Section 4

Tobacco-Related Policies and Culture in Substance Abuse Treatment Programs

Environmental Tobacco Policies

In addition to delivering smoking cessation services to clients, treatment organizations may have varying organizational policies related to tobacco. One important set of policies are rules related to tobacco use in the facility and on its grounds. Specifically, substance abuse treatment centers may vary in terms of whether they ban the indoor use of tobacco or allow smoking and other tobacco use within specific indoor areas. In addition, programs may allow or ban the use of tobacco in outdoor areas that are within the program's property.

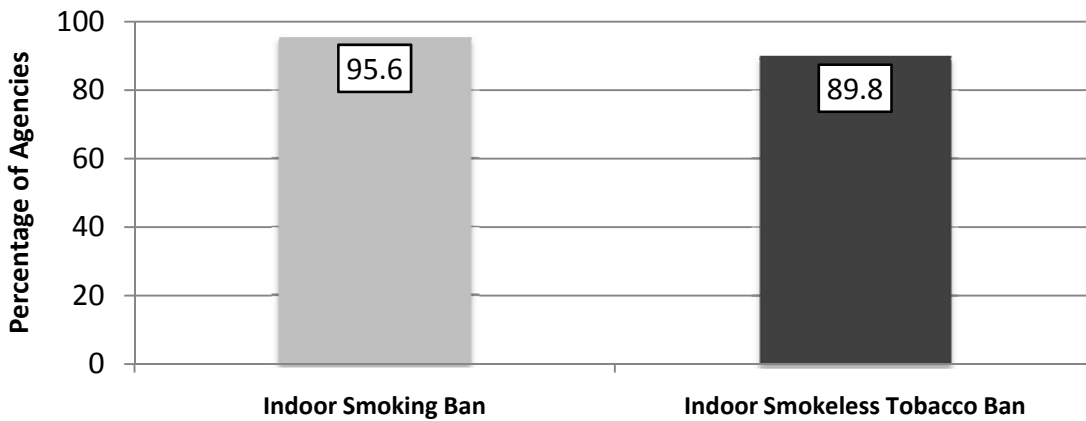
These tobacco-related policies may have important implications for human health. First, banning smoking indoors reduces exposure to all employees and clients, including smokers and non-smokers (Hopkins, et al., 2001; Longo, Johnson, Kruse, Brownson, & Hewett, 2001). Research in different types of organizations has shown that smoking bans reduce rates of smoking and amounts of cigarette consumption by employees (Fee & Brown, 2004; Longo, et al., 1996). Smoking bans have been shown to increase quit attempts as well as successful cessation (Brownson, Hopkins, & Wakefield, 2002; Farkas, Gilpin, Distefan, & Pierce, 1999; Moskowitz, Lin, & Hudes, 2000). In a panel longitudinal study, Longo et al. (2001) found significantly higher rates of smoking cessation among hospital workers who worked in environments where smoking was prohibited relative to employees who worked in settings without smoking bans. Restrictions that limit smoking to certain areas have some beneficial effects on cessation, but bans are more effective (Levy & Friend, 2001).

There is little prior research on environmental tobacco policies that currently implemented within substance abuse treatment settings. Early studies focused on case studies of smoking bans in individual treatment units (Patten, Martin, & Owen, 1996). Data collected from counselors in Kentucky suggests variability across programs, with about 52% of counselors reporting that smoking was not permitted indoors, and about half indicating that smoking was allowed in outdoor areas (Hahn, et al., 1999). We expected that indoor bans were likely to have become more common because such bans are a condition of accreditation by the Joint Commission and more localities have passed indoor smoking bans for workplaces (Levy & Friend, 2003; Longo, et al., 1996).

As seen in the following chart (Figure 11), we found that nearly all programs ban

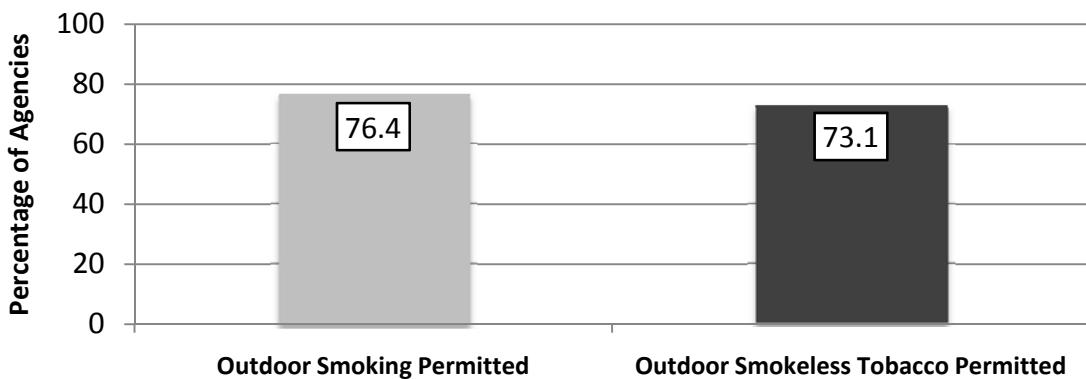
smoking in all indoor areas (95.6%). Similarly, the vast majority of programs also ban the use of smokeless tobacco products in all indoor areas. There was a modest but significant difference between publicly funded and privately funded programs, with publicly funded programs (98.0%) being more likely than privately funded programs (93.5%) to ban smoking in all areas. About 95.7% of TCs reported that smoking is banned in all indoor areas. There were not significant differences by center type on the measure of banning smokeless tobacco in all indoor areas.

Figure 11: Indoor Tobacco Use Policies



While indoor tobacco use was nearly universally banned, most programs did allow clients to use tobacco products in outdoor areas (Figure 12). As seen in the next chart, about three-quarters of programs allow clients to smoke or use smokeless tobacco products in outdoor areas. There were no differences between the three types of programs.

Figure 12: Outdoor Tobacco Use Policies



Finally, we examined the percentage of programs that had a comprehensive ban on tobacco products at their facility. We defined a comprehensive ban as having indoor

bans on smoking and smokeless tobacco as well as not permitting clients to smoke or use smokeless tobacco in outdoor areas. Our data revealed that 21.4% had a comprehensive ban on the use of tobacco products at their facility.

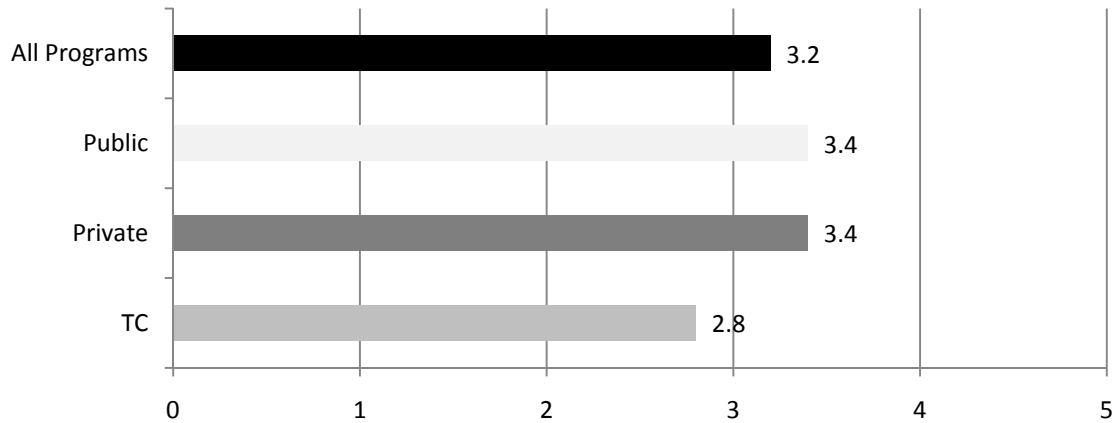
Support for Smoking Cessation By Staff and Employee Insurance Coverage

In addition to promoting smoking cessation among clients, treatment programs may also provide assistance to employees who wish to stop using tobacco products. An important set of organizational policies related to tobacco is the availability of employee insurance coverage that includes smoking cessation services (Manley et al., 2003). Research has demonstrated that insurance coverage for smoking cessation services such as pharmacotherapies and counseling increases utilization of such services (Boyle, Solberg, Magnan, Davidson, & Alesci, 2002; H. H. Schauffler, et al., 2001). Coverage for smoking cessation services by managed care plans is far from universal (Schauffler, Mordavsky, & McMEnamin, 2001; Taylor & Curry, 2004). The use of these services by employees, however, is likely to be contingent on their awareness of such coverage (Curry, Grothaus, McAfee, & Pabiniak, 1998).

In addition to improving employee health, policies that promote smoking cessation by staff members may have implications for the implementation of smoking cessation services that are aimed at clients. Some research suggests that the delivery of smoking cessation services to clients is less likely to occur when clinicians are current smokers (Bobo & Davis, 1993; Friend & Levy, 2004; Hahn, et al., 1999). Thus, organizational efforts to promote smoking cessation among center staff may reinforce the delivery of smoking cessation services to clients.

In our telephone interviews, we included measures related to organizational culture and policies related to tobacco use by staff. First, we asked two attitudinal items about the culture related to staff tobacco use. Administrators were asked to use a 0 to 5 scale (where 0 = no extent and 5 = a very great extent) to rate the extent to which the program discourages staff from smoking and using tobacco products. The graph below (Figure 13) shows the average rating for all programs as well as the averages for the three types of programs. In general, administrators endorsed this item to a moderate level. However, administrators of TCs reported significantly lower discouragement of staff tobacco use than administrators of publicly-funded and privately-funded programs.

**Figure 13:
Program Discourages Staff Tobacco Use**

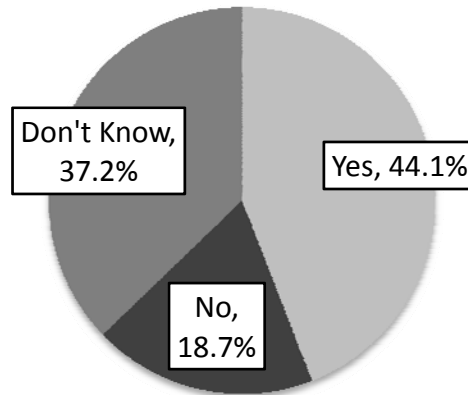


The second question we asked was the extent to which programs provide support and assistance to employees who wish to stop using tobacco products. Responses ranged from 0 indicating “no extent” to 5 representing “a very great extent.” The endorsement of this question was again at about the midpoint of the scale (mean = 3.3). However, there were not any significant differences between the three types of programs on this measure.

To provide more tangible measures of support for employee smoking cessation, we asked three questions about whether treatment programs provided employees with health insurance that covered smoking cessation interventions. Specifically, we asked if the program provided insurance that covered smoking cessation medications, individual counseling, and group counseling. In addition to answering “yes” or “no” to these questions, we included a “don’t know” option for each particular smoking cessation intervention. If programs do not provide health insurance to their employees, then they are categorized as not covering the smoking cessation intervention.

As seen in the following pie chart (Figure 14), slightly less than half of programs indicated that the health insurance that they provide to their staff members does cover smoking cessation medications. However, about one-third of administrators did not know whether their employee insurance plan covered these medications. There were no significant differences between the three types of programs on this measure of insurance coverage for smoking cessation medications.

Figure 14: Does Employee Insurance Cover Smoking Cessation Medications?



Administrators were somewhat less likely to know about insurance coverage for counseling services related to smoking cessation. As seen in the following table, only about one-quarter of administrators indicated that that employee insurance covered the two types of counseling for smoking cessation. There were no significant differences between the three types of programs on these measures.

Table 5: Does Employee Insurance Cover Smoking Cessation Counseling?

	Insurance Coverage for Individual Counseling	Insurance Coverage for Group Counseling
Yes	26.5%	25.9%
No	28.4%	27.1%
Don't Know	45.2%	47.0%

Note: Totals may exceed 100% due to rounding.

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APPENDIX A

Study Methodology

This study of smoking cessation services in substance abuse treatment organizations was conducted with programs that had previously participated in the National Treatment Center Study (NTCS). The family of studies within the NTCS, which is led by Dr. Paul M. Roman at the University of Georgia, focus on service delivery in specialty substance abuse treatment organizations over time.

Three of the samples of organizations in the NTCS were the focus of this study of smoking cessation services. Specifically, we collected data from the NTCS samples of publicly funded treatment centers, privately-funded treatment centers, and therapeutic communities. (Full details on eligibility criteria and sampling are described in later sections of this appendix.) When combined, these three samples included 1,145 treatment organizations that had previously participated in the NTCS.

In the process of contacting these organizations by telephone, it was ascertained that 92 organizations had closed, meaning that they had ceased operations completely or no longer offered substance abuse treatment services. Thus, there were 1,053 organizations that were open and eligible for the present study. Of these 1,053 organizations, 53 administrators (5.0%) refused to participate in the telephone interview about smoking cessation services. An additional 103 administrators (9.8%) were unable to be contacted for interviews after repeated attempts. Overall, 85.2% of open and eligible programs participated in the telephone interviews about organization-level adoption and implementation of smoking cessation services. These 897 interviews included 299 administrators of publicly-funded centers, 321 administrators of privately-funded centers, and 277 administrators of therapeutic communities. Interviews were conducted between September 2006 and January 2008. Participating treatment organizations received an honorarium of US\$25. These research procedures were approved by the Institutional Review Boards of the University of Georgia and the University of Kentucky.

Publicly-Funded Treatment Centers: Eligibility, Sampling, and Response Rate

The sample of publicly funded treatment centers was originally constructed between 2002 and 2004 through grant support from the National Institute on Drug Abuse (NIDA, R01DA14482). To be eligible for the public center study, programs were required to meet three criteria. First, they were required to be open to the public, which excluded treatment organizations in the Veterans Administration healthcare system and programs located within correctional institutions. Second, programs were required to

offer treatment for alcohol and drug problems by providing a level of care at least equivalent to structured outpatient programming as defined by the American Society of Addiction Medicine patient placement criteria (Mee-Lee et al. 1996). This criterion excluded counselors in private practice, halfway houses, detoxification-only programs, driver-under-the-influence (DUI) programs, and facilities offering exclusively methadone maintenance services from the study. The third criterion was that programs had to receive more than half of their revenues from governmental block grants and/or contracts. Examples of governmental grant and contract funding include state-administered federal block grant funds, contracts with criminal justice, and contracts with single state agencies to provide treatment services. It is important to note that for this study, Medicaid and Medicare were excluded from our definition of “public funding.” The rationale for excluding Medicaid and Medicare funding from our definition of “public funding” is that those programs largely operate like managed care plans in reimbursing patient care. Data from this sample revealed that the average public center program received about 80% of their funding from governmental grants and contracts.

The sample was constructed through a two-stage strategy. First, US counties were sorted into ten population-based strata, and then counties were randomly selected in order to be representative of the US population. Within sampled counties, all treatment facilities were enumerated using the Substance Abuse and Mental Health Services Administration’s (SAMHSA) National Facility Locator, directories provided by single state agencies, yellow pages listings, and Employee Assistance Program referral directories. Treatment organizations were then randomly selected and screened by telephone for eligibility.

Eligible publicly-funded treatment organizations were then invited to participate in the NTCS, which primarily relies upon face-to-face interviews for data collection. Interviews were conducted with administrators of 363 publicly-funded treatment organizations, which represented 80% of those programs that were deemed eligible for this early NTCS study. A summary report of key findings from this earlier study is available online at:

<http://www.uga.edu/ntcs/reports/NTCS%20summary%20reports/NTCS%20Report%20No.%207.pdf>.

These 363 publicly-funded programs were re-contacted via telephone about participating in this study of smoking cessation services. Of these 363 programs, 24 organizations had closed, leaving 339 eligible organizations for the present study. Of these 339 programs, 299 (88.2%) participated in the telephone interviews, 19 (5.6%) refused, and 21 (6.2%) were unable to be contacted after repeated attempts.

Privately-Funded Treatment Centers: Eligibility, Sampling, and Response Rate

The sample of privately-funded treatment centers was constructed for data collection that was conducted between 2002 and 2004. It represented a continuation of an earlier study of privately-funded treatment programs that began in 1994 and has continued over time. This private center study was supported by a grant from the National Institute on Drug Abuse (NIDA, R01DA13110).

To be eligible for the private center study, programs were required to meet three criteria. The first two criteria are the same as in the study of publicly-funded study. First, programs were required to be open to the public. Second, programs were required to offer treatment for alcohol and drug problems by providing a level of care at least equivalent to structured outpatient programming. This criterion excluded counselors in private practice, halfway houses, detoxification-only programs, driver-under-the-influence (DUI) programs, and facilities offering exclusively methadone maintenance services from the study. The third criterion was that programs had to receive less than half of their revenues from governmental block grants and/or contracts; on average, these programs received less than 9% of their funding from governmental grants and contracts. In effect, this criterion meant that programs received the majority of their funding from private insurance and fees that were directly paid by clients. Because Medicaid and Medicare largely operate like managed care plans, these sources of funding were included in our definition of “private funding.”

The sample of privately-funded programs was initially constructed in 1994 and has been replenished over time to maintain a sample size of approximately 400 organizations. US counties were randomly selected in order to be representative of the US population. Within sampled counties, all treatment facilities were enumerated using the Substance Abuse and Mental Health Services Administration’s (SAMHSA) National Facility Locator, directories provided by single state agencies, yellow pages listings, and Employee Assistance Program referral directories. Treatment organizations were then randomly selected and screened by telephone for eligibility.

Eligible privately-funded treatment organizations were then invited to participate in the face-to-face interviews as part of the NTCS. Interviews were conducted between 2002 and 2004 with administrators of 403 privately-funded treatment organizations, which represented 88% of those programs that were deemed eligible for this early NTCS study. Key findings from this earlier study of privately funded programs can be found at: <http://www.uga.edu/ntcs/reports/NTCS%20summary%20reports/NTCS%20Report%20No.%208.pdf>.

These 403 privately-funded programs were re-contacted via telephone about participating in this study of smoking cessation services. Of these 403 programs, 42 organizations had closed, leaving 361 eligible organizations for the present study. Of these 361 programs, 324 (89.8%) participated in the telephone interviews, 16 (4.4%) refused, and 24 (6.6%) were unable to be contacted after repeated attempts.

Therapeutic Communities: Eligibility, Sampling, and Response Rate

The sample of therapeutic communities (TCs) was constructed between 2002 and 2004 and employed much of the same methodology as the public and private center studies. This research on TCs was supported by the National Institute on Drug Abuse (NIDA, R01DA14976). As with the public and private center studies, TCs were required to be open to the public and to offer drug and alcohol treatment that was at least equivalent to the ASAM definition of outpatient treatment. The key distinction for the TC sample was that programs self-identify as therapeutic communities. As the public and private center samples were being constructed, any sampled program that self-identified as a therapeutic community was placed in this third sample, regardless of its mixture of funding sources. While data on adherence to the classic TC model were collected (DeLeon, 2000; Melnick & De Leon, 1999), self-identification as a TC was used for eligibility purposes so as to capture the full range of TCs within the US.

Eligible therapeutic communities (TCs) were invited to participate in the face-to-face interviews as part of the NTCS. Interviews were conducted between 2002 and 2004 with administrators of 379 TCs, which represented 86% of those programs that were deemed eligible to participate. Key findings from this prior study of TCs can be found at: <http://www.uga.edu/ntcs/reports/NTCS%20summary%20reports/NTCS%20Report%20No.%209.pdf>.

These 379 therapeutic communities were re-contacted via telephone about participating in this study of smoking cessation services. Of these 379 programs, 25 therapeutic communities had closed, leaving 354 eligible organizations for the present study. Of these 354 programs, 278 (78.5%) participated in the telephone interviews, 18 (5.1%) refused, and 58 (16.4%) were unable to be contacted after repeated attempts.

Organizational Characteristics of the Three Samples

Each of the three samples has distinctive features in terms of organizational characteristics, such as ownership, profit status, organizational affiliation and levels of care offered. For example, the publicly-funded sample contains more government-

owned facilities than the other two samples (see table below). The privately-funded sample is distinctive in its representation of for-profit facilities and location of programs in hospital settings. Therapeutic communities are notable in the high prevalence of residential-only programs and low prevalence of outpatient-only services.

Table 6: Organizational Characteristics of Substance Abuse Treatment Centers

	All Centers %	Private Centers %	Public Centers %	TCs %
Ownership***				
Government-owned	11.8%	2.2%	24.6%	9.3%
Privately-owned	88.2%	97.8%	75.4%	90.7%
Profit status***				
For-profit	13.7%	27.2%	4.9%	7.4%
Non-profit	86.3%	72.8%	94.1%	92.6%
Organizational affiliation***				
Hospital-Based	21.0%	51.3%	3.9%	4.1%
Community mental health center	5.0%	4.5%	10.2%	0.0%
Freestanding organization	74.0%	44.2%	86.0%	95.9%
Levels of care***				
Inpatient/residential-only	28.8%	10.4%	24.7%	54.5%
Mixed levels of care	38.4%	48.2%	29.2%	36.9%
Outpatient-only	32.8%	41.4%	46.1%	8.6%

***Significant chi-square difference by center type, p<.001