# CHAPTER 5: Substance Abuse Treatment Services in the Appalachian Region, 2005

### 5.1 Introduction

The National Survey of Substance Abuse Treatment Services (N-SSATS) enables researchers to view an annual snapshot of the character and composition of the substance abuse treatment delivery system in the United States. N-SSATS allows us to make comparisons across geographic areas and among different populations with substance abuse issues. Chapter 5 provides an overview of substance abuse treatment services in and outside of Appalachia on the reference date of March 31, 2005. The sample analyzed in this study includes 13,367 substance abuse treatment facilities from which data were collected in 2005. Of all these facilities, 980 (7.3%) were from the Appalachian region, and 12,391 (92.7%), were from the rest of the country. All analyses in this chapter are based on N-SSATS data.

We explore the following key research questions for facilities in Appalachia and facilities outside of Appalachia:

Do substance abuse facilities in Appalachia offer inpatient detoxification services?

What are the ownership structures for the Appalachian treatment facilities and how do they compare to those of other facilities?

What is the primary focus of Appalachian substance abuse facilities (e.g., substance abuse services, mental health services, general health care services, etc.)?

What types of health insurance do facilities accept (e.g., Medicare, Medicaid, state financed insurance, private health insurance)?

In Section 5.2, we provide an overview of the N-SSATS series, its uses, the measures relevant to this study, and any limitations specifically related to exploring admissions to substance abuse treatment in the Appalachian region. In Section 5.3, we discuss our methods. Section 5.4 contains the results of the analysis. Finally, Section 5.5 provides a discussion of key findings.

#### 5.2 Data

### 5.2.1 Overview

The National Survey of Substance Abuse Treatment Services (N-SSATS) collects data from public and private substance abuse treatment facilities in the United States. The term "facility" represents program-level, clinic-level, or multi-site respondents.<sup>83</sup> N-SSATS provides information such as substance abuse treatment facility characteristics and key characteristics of clients receiving substance abuse treatment or services.<sup>84</sup>

<sup>&</sup>lt;sup>13</sup> The Appalachian region is defined as the 410 designated counties in all of West Virginia and parts of 12 other states: Alabama; Georgia; Kentucky; Maryland; Mississippi; New York; North Carolina; Ohio; Pennsylvania; South Carolina; Tennessee; and Virginia

<sup>&</sup>lt;sup>14</sup> The data description from the user's guide showed 13,367 in-scope cases and our total analytic sample has 13,371 cases.

The objective of N-SSATS is to collect data that can be used by the Substance Abuse and Mental Health Services Administration (SAMHSA) and state and local governments to: (1) assist SAMHSA in assessing the nature and extent of services provided and in forecasting treatment resource requirements; (2) update SAMHSA's Inventory of Substance Abuse Treatment Services (I-SATS); (3) analyze general treatment services trends; and (4) generate the National Directory of Drug and Alcohol Abuse Treatment Programs and its online Abuse Treatment Facility Locator equivalent, the Substance Abuse Treatment Facility Locator. 85

Planned and directed by SAMHSA, N-SSATS was originally launched in the 1970s to collect information on the characteristics of treatment facilities, including their location and utilization of treatment facilities and services. N-SSATS collects data from the 50 states, the District of Columbia, and other U.S. jurisdictions (including the territories of American Samoa and Guam, the Federated States of Micronesia, the Republic of Palau, the Commonwealth of Puerto Rico, and the Virgin Islands of the United States). Data are collected on the following topics: ownership/operation; primary focus (substance abuse, mental health, both, general health, other); organizational setting; services offered; languages spoken other than English; programs or groups for special populations; type of treatment provided; types of payment accepted; managed care agreements; sources and amounts of revenue; number of clients under age 18; number of clients by age, sex, race and ethnicity; client substance abuse problem treated; and licensure/ certification of facility and staff.

The 2005 N-SSATS was conducted between March and October 2005. In 2005, a total of 13,371 substance abuse treatment facilities responded to N-SSATS.<sup>86</sup>

# **5.2.2 Sample Design**

N-SSATS is a point-prevalence survey, meaning that it provides information about the substance abuse treatment facilities on a particular reference date. For the 2005 N-SSATS, the reference date was March 31, 2005. The N-SSATS provides a snapshot of the substance abuse delivery system on this reference date.

The Inventory of Substance Abuse Treatment Services (I-SATS) provides the sampling frame for N-SSATS. The survey universe contains treatment facilities listed on the I-SATS six weeks prior to the reference data and those added by state substance abuse agencies or discovered during the first three weeks of the survey. The treatment facilities included are licensed, certified, or approved by the state substance abuse agency and facilities that state substance abuse agencies do not license or certify (e.g., private, for-profit, small group practices, or hospital-based programs).

Several features of N-SSATS are important to note. First, the total number of patients treated does not represent the annual total number of clients at these facilities. This is because N-SSATS provides a snapshot of treatment facilities on a single day. As a result, we do not have information about the annual number of clients treated, nor can we assume that facilities were treating clients at their full capacity. Second, N-SSATS collects data about substance abuse treatment facilities, rather than individual clients. Third, N-SSATS does not include treatment programs in jails or prisons. Finally, client data are aggregated for each facility that reports to N-SSATS.

Data for N-SSATS are collected by Mathematica Policy Research, Inc. For 2005, N-SSATS questionnaires were distributed via mail to 16,418 facilities. 88 The facilities that received the mail

questionnaire were believed to offer substance abuse treatment services. Approximately 10 percent of these facilities had closed or were not providing substance abuse treatment on the reference date, and were therefore deemed ineligible to participate. Of the remaining 14,747 facilities, 95.3% completed the survey. Of these, an additional 680 facilities were considered out of scope or had no facility information. The final sample size was 13,367 (90.6 percent of the survey universe). The response rate was 44.5 percent for the mail survey. The same survey was offered in telephone and Web-based formats. The response rate for the telephone survey was 22.1 percent, slightly lower than the 33.4 percent response rate for the Web-based questionnaire. Upon completion of data collection, Synectics for Management Decisions, Inc., prepares the file for release.

#### **5.2.3** Uses of the N-SSATS

N-SSATS enables researchers to explore the demographic and substance abuse characteristics of admissions to and discharges from substance abuse treatment. SAMSHA releases an annual report based on the N-SSATS data as well as a national profile. The annual report explores trends in facility characteristics, client characteristics, and facility services. The national profile provides a high level overview of the N-SSATS data. N-SSATS data were also used to develop The National Directory of Drug and Alcohol Abuse Treatment Programs 2005, a searchable directory of 10,000 drug and alcohol treatment programs across the country. 94

N-SSATS data have been used to explore a number of research questions related to substance abuse treatment. A recent study used N-SSATS data to examine the relationships between state authorization type (certification/accreditation versus licensure with and without deemed status) and outpatient treatment program practices, for example. 95

N-SSATS has also been used to explore the distribution of specialized programs or groups in substance abuse treatment facilities across the United States. Studies have examined services and programs available for adolescents, criminal justice clients, and pregnant or postpartum women. Research has also focused on the availability of the treatment services (including clinical, social, and health services) for clients with co-occurring mental health and substance abuse disorders at these facilities. 100

Other studies that have applied N-SSATS data have explored profit status and the effects on the provision of drug treatment services, <sup>101</sup> opioid treatment programs, <sup>102</sup> and the role of state policies in the adoption of naltrexone for substance abuse treatment. <sup>103</sup>

The Office of Applied Studies (OAS) at SAMHSA also releases the Drug and Alcohol Services Information System (DASIS) Series report annually on drug and alcohol services. The DASIS is the primary source of national data on substance abuse treatment, developed from N-SSATS, the Treatment Episode Data Set (TEDS), and the Inventory of Substance Abuse Treatment Services (I-SATS).

# **5.2.4** N-SSATS Measures Used in this Study

Next, we define the measures used from the 2005 N-SSATS, and explore the potential limitations with respect to using these measures for our purpose – exploring the characteristics of and services provided by substance abuse treatment facilities in the Appalachian region and other regions

nationally. We explore a number of variables related to services offered, groups treated, and payment/ insurance options.

We explored measures indicating which substance abuse treatment facilities offer inpatient detoxification and looked at the primary focus of facilities – specifically, whether they offered substance abuse services, mental health services, a mix of mental health and substance abuse services, or general health care services. Next, we looked at which facilities accept adolescents for treatment. In terms of payment, we examined which facilities use a sliding fee scale and which facilities offer free or no charge treatment. Finally, we provide N-SSATS data on facilities that accept Medicare, Medicaid, state financed health insurance, and private insurance.

### **5.2.5 Limitations of the N-SSATS**

There are several limitations with respect to using N-SSATS to explore the composition and characteristics of substance abuse treatment facilities in Appalachian counties as compared to other counties nationally.

One serious limitation is that N-SSATS does not capture data from all of the substance abuse treatment facilities that may be relevant to this study. Several types of facilities were excluded from the 2005 N-SSATS analyses, including: halfway houses that do not provide substance abuse treatment; jails, prisons, or other organizations that treat incarcerated patients only; individual practitioners that were not recommended by the State substance abuse agency for inclusion; and other facilities whose client counts were included within the counts of other facilities. In addition to excluding certain facilities, state licensure and certification policies also may affect which facilities are in the N-SSATS survey universe. Finally, N-SSATS is a voluntary survey, and thus, does not reflect all substance abuse treatment facilities in the United States. The response rate is very high overall (about 95%), however. In this study, no adjustments have been made for facility non-response (approximately 5%) so non-response bias may affect results.

For these reasons, it is important to note that the N-SSATS does not capture data from all of the facilities that may be relevant to this study. This limitation is particularly problematic for this study because we are making comparisons between the Appalachian counties and all other counties nationally. If facilities in states in the Appalachian region submit data less often than other states, then our findings may be skewed.

A second limitation is that N-SSATS is a point-prevalence survey. Thus, the data do not reflect the annual total number of clients receiving treatment at substance abuse facilities, but rather they provide a snapshot based on a single reference date.

There are several limitations related to the survey's design and content. For certain variables (e.g., services provided and specialized programs), facilities can enter multiple responses. However, the data only reflect the total number of treatment facilities that entered each response. In addition, N-SSATS only reports that a service, such as inpatient detoxification, is offered. The data do not in

\_

<sup>&</sup>lt;sup>15</sup> According to project staff at the Office of Applied Studies, which funded and governed the data collection, the state licensure policies are not an important data concern. While the state is charged with helping to identify substance abuse treatment facilities, encouraging facilities to respond to the survey, and determining eligibility for inclusion in the published directory, they do not determine which agencies are actually surveyed.

any way reflect the quality of the service delivered, or whether the service has been received by the patient. Thus, our findings cannot speak to the quality of care received in Appalachian treatment facilities versus other facilities nationwide. One last limitation to note is that some financial data originally collected through the survey have been omitted from the public use file for confidentiality reasons.

### 5.3 Methods

# 5.3.1 Study Sample

The sample analyzed in this study includes 13,371 substance abuse treatment facilities from which data were collected in 2005. Of all these facilities, 891 (7.3%) were from the 318 counties in the Appalachian region, <sup>16</sup> and 12,391 (92.7%), were from the rest of the country. <sup>17</sup>

### **5.3.2 Statistical Methods**

Appalachian Regional Status. A key purpose of analyzing the N-SSATS is to obtain an overview of the characteristics of the substance abuse treatment facilities in the Appalachian region, as compared to substance abuse treatment facilities located outside of the Appalachian region. Our first step of the analysis is to match the census county FIPS codes in the 2005 N-SSATS with the FIPS codes of the 410 Appalachian counties as defined by the Appalachian Regional Commission. This creates a regional status flag variable to group all substance abuse treatment facilities into one of two groups – facilities located in the Appalachian region and facilities outside of the Appalachian region.

Research Variables. Research variables for the analysis covered the following characteristics of the substance abuse treatment facilities: availability of inpatient detoxification services; primary substance abuse treatment facility focus areas; provision of services for adolescents; availability of a sliding fee scale; availability of no-cost treatment; acceptance of Medicare; acceptance of Medicaid; acceptance of state financed health insurance; and acceptance of private health insurance.

Analysis. Data were analyzed using descriptive statistics. Cross-tabulations were examined to assess the distribution of aggregated frequencies and proportions of various facility characteristics between facilities in the Appalachian region and those outside of the Appalachian region. Chi-square tests were performed for tabulations to test for statistical significance of the differences. Data were compiled and analyzed with SPSS statistical software version 14.0 (SPSS Inc., Chicago, IL).

#### 5.4 Results

\_

Next, we present our results for substance abuse treatment facilities in Appalachia and outside of Appalachia. We present other findings in Section 5.4.1 about the ownership of substance abuse treatment facilities, characteristics of these facilities; a comparison of services offered in the

<sup>&</sup>lt;sup>16</sup> The Appalachian region is defined as the 410 designated counties in all of West Virginia and parts of 12 other states: Alabama; Georgia; Kentucky; Maryland; Mississippi; New York; North Carolina; Ohio; Pennsylvania; South Carolina; Tennessee; and Virginia

<sup>&</sup>lt;sup>17</sup> The data description from the user's guide showed 13,367 in-scope cases and our total analytic sample has 13,371 cases.

inpatient, outpatient, and non-hospital residential care settings; pharmacotherapies provided; and types of services offered at facilities, generally. In Section 5.4.2, we describe a series of figures that illustrate comparisons between Appalachian treatment facilities and non-Appalachian treatment facilities. We provide figures showing our findings related to inpatient detoxification services, the primary focus of facilities; and health insurance and payment options available at the treatment facilities (e.g., free or no charge, Medicare, Medicaid, state financed health insurance, and private health insurance).

Table 5.1. Ownership and Other Characteristics of Substance Abuse Treatment Facilities

#### **5.4.1 Tables**

	Region				
	Appalachia N=891		Non-Appalachia N=12,480		p-value
	N	%	N	%	
Ownership					
Private for-profit organization	204	22.90	3,367	26.98	
Private non-profit organization	557	62.51	7,355	58.93	
State government	40	4.49	413	3.31	<0.0001
Local, county, or community government	65	7.30	882	7.07	
Tribal government	3	0.34	167	1.34	
Federal government	22	2.47	296	2.37	
Other Characteristics	1	•	•	•	
Receives public funds <sup>1</sup>	868	70.05	12,480	65.32	0.0046

#### NOTES:

organizations<sup>2</sup>

Arrangements/contracts with managed care

842

58.08

11,869

49.10

< 0.0001

SOURCE: U.S. Dept. of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Applied Studies. National Survey of Substance Abuse Treatment Services (N-SSATS), 2005.

**Table 5.1** describes the ownership and other characteristics of substance abuse treatment facilities in the Appalachian region and in the non-Appalachian region in 2005. The majority of substance abuse treatment facilities in Appalachia (62.51%) and outside of Appalachia (58.93%) are owned by private non-profit organizations. Proportionately, more Appalachian facilities are owned by the federal government (2.47%) than facilities outside of the Appalachian region (2.37%). Proportionately more Appalachian facilities are owned by a state government (4.49%) or a local, county or community government (7.30%) than treatment facilities outside of Appalachia (3.31% and 7.07%, respectively). Fewer Appalachian facilities than non-Appalachian facilities are owned by a private-for-profit organization (22.90% vs. 26.98%) or tribal government (0.34% vs. 1.34%). Results are statistically significant at the 99% confidence level.

<sup>&</sup>lt;sup>1</sup> Public funds include federal, state, county, or local government funds for substance abuse treatment programs.

<sup>&</sup>lt;sup>2</sup> Managed care organizations have agreements with certain health care providers who provide services to plan members (e.g., managed behavioral health care organizations, health maintenance organizations, and preferred provider organizations).

Proportionately more treatment facilities in Appalachia than outside of Appalachia receive public funds for their treatment programs, though more Appalachian facilities than non-Appalachian facilities receive these funds; results are statistically significant at the 95% confidence level. Proportionately more facilities in Appalachia have contracts or arrangements with managed care organizations (58.08%) than facilities outside of Appalachia (49.10%); results are statistically significant (p<0.0001).

**Table 5.2 Characteristics of Substance Abuse Treatment Facilities, 2005** 

	Region				
	Appalachia		Non-Appalachia		p-value
	N	%	N	%	
Accredited by the Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) <sup>1</sup>	891	27.38	12,480	22.92	0.0023
Accredited by Commission on Accreditation of Rehabilitation Facilities (CARF) <sup>2</sup>	891	13.69	12,480	16.51	0.0277
Licensed/certified by public health department	891	44.78	12,480	38.65	0.0003
Licensed/certified by state mental health department	891	44.00	12,480	29.78	< 0.0001
Licensed/certified by state substance abuse agency	891	69.14	12,480	81.35	< 0.0001

#### NOTES:

SOURCE: U.S. Dept. of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Applied Studies. National Survey of Substance Abuse Treatment Services (N-SSATS), 2005.

**Table 5.2** describes the characteristics of substance abuse treatment facilities in the Appalachian region and outside of Appalachia in 2005. Proportionately more Appalachian than non-Appalachian treatment facilities are accredited by the Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) (27.38% vs. 22.92%) (p<0.05). Proportionately less Appalachian facilities (13.6%) than non-Appalachian facilities (16.51%) are accredited by the Commission on Accreditation of Rehabilitation Facilities (CARF) (p<0.05). Approximately 45% of Appalachian treatment facilities are licensed or certified by a public health department as compared to 38.65% of facilities outside of Appalachia (p<0.001). Forty-four percent of Appalachian facilities are licensed or certified by the state mental health department, as opposed to 29.78% of non-Appalachian facilities (p<0.0001). Proportionately fewer Appalachian facilities (69.14%) are licensed or certified by the state substance abuse agency than non-Appalachian facilities (81.35%); results are statistically significant (p<0.0001).

<sup>&</sup>lt;sup>1</sup> JCAHO sets standards for healthcare organizations and issues accreditation to organizations that meet those standards.

<sup>&</sup>lt;sup>2</sup> CARF is an independent, non-profit organization that reviews and grants accreditation services nationally and internationally per the request of facilities or programs.

	Region				
	Appalachia		Non-Appalachia		p-value
	N	%	N	%	
Hospital Inpatient Care					
Inpatient care located in or operated by a hospital	890	14.16	12,456	13.18	0.407
Inpatient substance abuse care offered	891	8.53	12,480	7.29	0.172
Inpatient detoxification care offered	891	7.74	12,480	6.13	0.0542
Outpatient Care		•			•
Any outpatient substance abuse care offered currently	891	83.28	12,479	80.66	0.0548
Outpatient detoxification offered	891	7.41	12,478	11.13	0.0006
Regular outpatient care offered	891	72.36	12,479	72.49	0.93
Intensive outpatient care offered	891	38.95	12,479	42.88	0.0217
Non-Hospital Residential Care		1	-1	1	
Non-hospital residential substance abuse care	891	21.66	12,480	27.92	< 0.000
Non-hospital residential short-term treatment	891	8.19	12,480	12.07	0.0005
Non-hospital residential long-term treatment	891	16.05	12,480	23.17	< 0.000

**Table 5.3** describes the inpatient, outpatient, and non-hospital residential care services offered by substance abuse treatment facilities in the Appalachian region and outside of Appalachia in 2005.

Applied Studies. National Survey of Substance Abuse Treatment Services (N-SSATS), 2005.

In Appalachia, proportionately fewer facilities offer outpatient detoxification (7.41%) as opposed to facilities outside of Appalachia (11.13%). Approximately 38.95% of treatment facilities in Appalachia and 42.88% of facilities outside of Appalachia offer intensive outpatient care. Results are statistically significant (p<0.05). Non-hospital residential substance abuse care is provided in proportionately fewer facilities in Appalachia (21.66%) than outside of Appalachian (27.92%). About 8% of facilities in Appalachia offer non-hospital short-term residential treatment, less than the 12% of facilities that offer this service outside of Appalachia. Long-term treatment is also offered in proportionately fewer facilities in Appalachia (16.05%) than outside of Appalachia (23.17%). Results are statistically significant (p<0.001).

Table 5.4 Counseling and Pharacotherapies Available at Treatment Facilities, 2005							
	App	Appalachia		Non-Appalachia			
	N	%	N	%			
Pharmacotherapies Provided by Facility							
Antabase	876	18.49	12,293	15.88	0.0417		
Naltrexone	874	16.59	12,233	12.07	< 0.0001		
Campral	874	13.73	12,185	7.96	< 0.0001		
Methadone	874	8.24	12,270	9.94	0.103		
Buprenorphine-Suboxone	871	8.15	12,190	7.85	0.75		
Buprenorphine-Subutex	863	5.10	12,160	5.25	0.85		

**Table 5.4** describes the pharmacotherapies provided by substance abuse treatment facilities in the Appalachian region and outside of Appalachia in 2005. Naltrexone is provided at 16.59% in Appalachian and 12.07% of facilities outside of Appalachia (p<0.0001). Almost 14% of Appalachian treatment facilities provide Campral, compared to just under 8% of facilities outside of Appalachia (p<0.0001).

SOURCE: U.S. Dept. of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of

Applied Studies. National Survey of Substance Abuse Treatment Services (N-SSATS), 2005.

Table 5.5 Services Available at Treatment Facilities, 2005

		Region			
	Appa	Appalachia		Non-Appalachia	
	N	%	N	%	
Substance abuse treatment	891	98.3	12480	98.2	0.719
Intake/ assessment/ referral	891	94.28	12,478	93.56	0.397
Assessment of mental health	847	51.59	11,918	44.66	< 0.0001
Comprehensive substance abuse assessment	890	93.3	12434	93.0	0.793
After care counseling	875	80.3	12311	78.5	0.191
Substance abuse relapse prevention therapy	875	78.9	12325	81.4	0.062
Substance abuse individual therapy	888	95.6	12436	94.8	0.291
Substance abuse family counseling	886	83.07	12,309	76.19	< 0.0001
Substance abuse group therapy	887	90.5	12403	90.3	0.842

SOURCE: U.S. Dept. of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Applied Studies. National Survey of Substance Abuse Treatment Services (N-SSATS), 2005.

As depicted in **Table 5.5**, there were statistically significant differences between Appalachian and non-Appalachian facilities in terms of whether they offered assessment of mental health and substance abuse family counseling (p<0.0001).

# 5.4.2 Figures

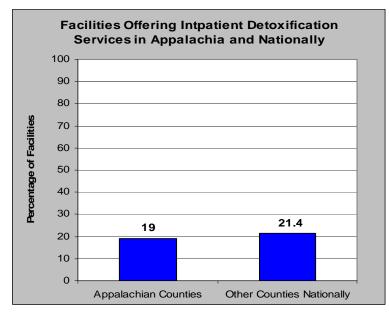


Figure 5.1: Facilities Offering Inpatient Detoxification Services

Figure 5.1 shows that 19% of the 891 substance abuse treatment facilities in Appalachian counties offered inpatient detoxification services, as compared to 21.4% of the 12,480 substance abuse treatment facilities in all other counties nationally.

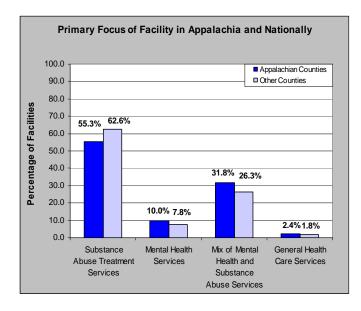
The 2.4% difference between Appalachian facilities and non-Appalachian facilities is not statistically significant (p<0.085).

SOURCE: National Survey of Substance Abuse Treatment Services, 2005.

Figure 5.2: Primary Focus of Substance Abuse Facilities

Figure 5.2 shows the primary focus of substance abuse treatment facilities in Appalachian counties versus all other counties in the U.S. Treatment facilities were asked: "What is the primary focus of this facility?"

In Appalachia, proportionately more treatment facilities had a primary focus of providing mental health services, a mix of mental health services, and general health care services than treatment facilities outside of Appalachia. Fewer facilities in Appalachia had a primary focus of providing substance abuse treatment services than outside of Appalachia.



SOURCE: National Survey of Substance Abuse Treatment Services, 2005.

About 2% of facilities in Appalachia and other counties nationally reported general health care services as their primary focus. Results are statistically significant (p<0.0001).

Figure 5.3: Facilities Using a Sliding Fee Scale

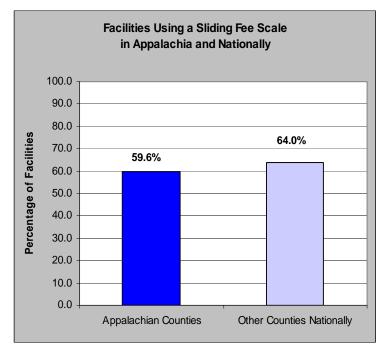


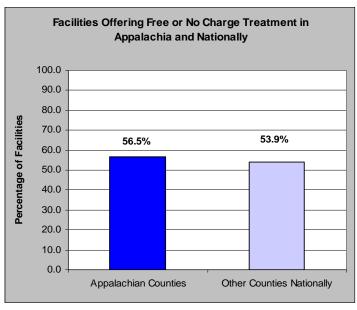
Figure 5.3 shows that proportionately fewer Appalachian substance abuse treatment facilities (59.6%) offered a sliding fee scale to clients than facilities outside of Appalachia (64%).

The total number of Appalachian facilities for this variable was 979. The total number for facilities outside of Appalachia was 12,343.

The difference between Appalachian facilities and non-Appalachian facilities is statistically significant (p<0.05).

SOURCE: National Survey of Substance Abuse Treatment Services, 2005.

Figure 5.4: Facilities Offering Free or No Charge Treatment



SOURCE: National Survey of Substance Abuse Treatment Services, 2005.

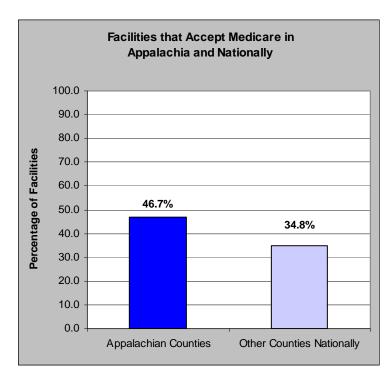
Figure 5.4 indicates that proportionately more substance abuse treatment facilities in Appalachian counties offered free or no charge treatment to clients who cannot afford to pay, in comparison to facilities in counties outside of Appalachia. Slightly more than half of the facilities (56.5% in Appalachia and 53.9% in other counties nationally) offered free or no charge treatment. Results were not statistically significant at the 95% confidence level.

# Figure 5.5: Facilities that Accept Medicare

Figure 5.5 indicates that proportionately more treatment facilities in Appalachian counties accepted Medicare as payment than facilities in other counties nationally.

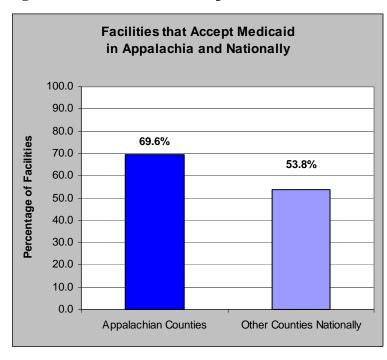
Of the 848 Appalachian facilities responding to this item, approximately 47% reported accepting Medicare for payment. About 35% of the 11,818 facilities in all other counties nationally accepted Medicare.

The difference is statistically significant at the 99% confidence level.



SOURCE: National Survey of Substance Abuse Treatment Services, 2005.

Figure 5.6: Facilities that Accept Medicaid



The difference is statistically significant at the 99% confidence level.

facilities in all other counties

nationally accepted Medicaid.

Figure 5.7 shows that proportionately

facilities in other counties nationally.

responding to this item, approximately

70% reported accepting Medicaid for payment. About 54% of the 12,027

more substance abuse treatment

facilities in Appalachian counties accepted Medicaid than treatment

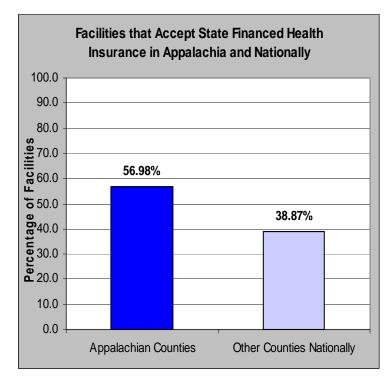
Of the 861 Appalachian facilities

SOURCE: National Survey of Substance Abuse Treatment Services, 2005.

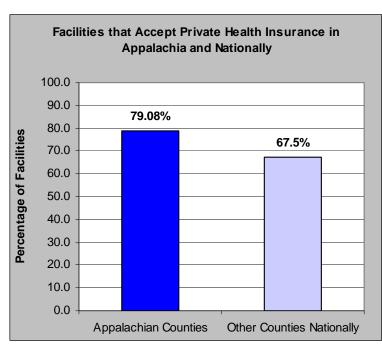
Figure 5.7: Facilities that Accept State Financed Health Insurance

Figure 5.7 demonstrates that proportionately more substance abuse treatment facilities in Appalachian counties accepted state financed health insurance than facilities in other counties nationally. For this variable, a state financed health insurance plan does not include Medicaid. Examples of state financed plans are the State Children's Health Insurance Program and other state financed high risk insurance pools.

Of the 809 Appalachian facilities responding to this item, approximately 57% reported accepting state financed health insurance for payment. About 39% of the 11,278 facilities in all other counties nationally accepted state financed health insurance. The difference is statistically significant (p<0.01).



SOURCE: National Survey of Substance Abuse Treatment Services, 2005.



 $SOURCE: National\ Survey\ of\ Substance\ Abuse\ Treatment\ Services,\ 2005.$ 

Figure 5.8: Facilities that Accept Private Health Insurance

Figure 5.8 shows that more substance abuse treatment facilities in Appalachian counties accepted private health insurance than facilities in other counties nationally.

Of the 870 Appalachian facilities responding to this item, approximately 79.08% reported accepting private health insurance for payment. About 67.5% of the 12,123 facilities in all other counties nationally accepted private health insurance. The difference is statistically significant (p<0.01).

#### 5.5 Discussion

In presenting our discussion of the findings for this chapter, we again want to recognize that the N-SSATS has limitations as a data source for this study. Due to the voluntary nature of the survey and differences in reporting practices within states, it is difficult to ascertain the reliability of the data. Despite the limitations of the survey, the N-SSATS is the only survey that explores substance abuse treatment services and practices at the facility level. Thus, we view the N-SSATS as a limited, yet important data source for this study of substance abuse and mental health issues, and access to treatment in Appalachia.

Our study found that the primary focus area of the majority of substance abuse treatment facilities was providing substance abuse treatment services only, rather than a mix of services. Even so, this was less likely to be the case among Appalachian facilities, with 55% listing substance abuse treatment only as their primary focus area, compared to approximately 63% for facilities nationally. In contrast, Appalachian substance abuse treatment facilities were more likely to list mental health treatment and a mix of substance abuse treatment and mental health treatment as the primary focus. Unique barriers to accessing treatment in the Appalachian region, such as distance and lack of public transportation, may provide the impetus for facilities to offer a broader array of co-located services.

A consistent finding from this chapter is that Appalachian facilities are significantly less likely than non-Appalachian facilities to use a sliding fee scale (p<0.01). However, analyses also show a significantly greater acceptance of government financed payment sources including Medicare, Medicaid, and state financed insurance (p<0.01). While proportionately more facilities accept these payment sources, we do not know the breadth of coverage within the region. Similarly, proportionately more Appalachian facilities accept private health insurance (p<0.05), but the breadth of coverage is also unknown. Future studies analyzing cost and insurance issues within the Appalachian region could provide more specificity in terms of facility rationale, breadth of coverage, and service implications.

In terms of facility ownership, we found that the majority of substance abuse treatment facilities in Appalachia and outside of Appalachia are owned by private non-profit organizations. Proportionately, more Appalachian facilities are owned by the local, county or community government, state government, or federal government than facilities outside of Appalachia.

Of our findings related to the characteristics of services provided at treatment facilities, we found that more Appalachian treatment facilities are licensed or certified by a public health department than non-Appalachian treatment facilities (p<0.001), and more Appalachian facilities receive public funds than non-Appalachian facilities (p<0.01).

More than 98% of Appalachian facilities offered substance abuse treatment. More Appalachian facilities offered assessment of mental health and substance abuse family counseling than non-Appalachian facilities, and the differences are statistically significant (p<0.01).

Future studies on substance abuse and mental health issues in Appalachia would benefit from better data at the substance abuse treatment facility level. The N-SSATS does provide important information about the types of services offered in facilities - for example, that Appalachian facilities are more likely to accept payment from Medicare, Medicaid, state financed health insurance, and private insurance. However, the N-SSATS does not provide data on other potentially useful topics such as wait-listing practices at different types of substance abuse facilities (residential, inpatient, and outpatient), cost of different services, and expected source of payment.

# REFLECTIONS FROM PRACTITIONERS

From the Coalition on Appalachian Substance Abuse Policy



Challenges Associated with Using the National Survey for Substance Abuse Treatment Services (N-SSATS) to Explore Substance Abuse in Appalachia

- The completeness of the N-SSATS data depends on state registration policies. A substance abuse treatment facility with multiple sites may register each site individually with the state, or register all sites in aggregate. For example, Kentucky engages in site-based licensing; facilities register with the state individually, and therefore, each facility completes the N-SSATS. In contrast, in Ohio, multiple facilities in multiple counties may register with the state under one license. Thus, individual facilities do not complete the N-SSATS. N-SSATS data for each state may depend greatly on whether the data is aggregated across all facilities or reported by individual facilities.
- The federal government does not exert pressure on states to comply with N-SSATS reporting. The N-SSATS is a voluntary survey. According to CASAP, given that the federal government does not require states to complete the N-SSATS, the survey has limitations as a tool for decision making about substance abuse issues.
- CASAP practitioners described the N-SSATS as not being a reliable source
  of data on referrals from one substance abuse facility to another, nor a
  reliable source of data regarding trends in access to substance abuse
  treatment. These limitations are partly the due to states' differing
  reporting practices.

Upon review of our findings for this

chapter, the Coalition on Appalachian Substance Abuse Policy (CASAP) suggested a brief consumer-oriented telephone survey of facilities within Appalachia in order to gather some of these data elements. While the suggested survey activity is outside the scope of this study, such an effort would be beneficial to future studies of substance abuse at the facility level. Furthermore, efforts to augment the data available at the substance abuse treatment facility level would provide new opportunities to explore trends within the Appalachian region, and across the nation.

Contrary to feedback from CASAP, according to staff at the Office of Applied Studies (OAS) (Alderks, 2008: through personal communication), the completeness of coverage of N-SSATS should have very little to do with state registration policies. Each year OAS and its data contractor perform augmentation activities using various directories such as the American Business Index and the American Hospital Association survey files in an effort to locate any unknown substance abuse treatment facilities. All identified and known facilities are then sent a survey at the location level. For example, a network of 15 facilities would receive 15 questionnaires, one for each facility location. In some cases, client count numbers may be combined for a few facilities, but it is known which facilities are included in those combined numbers. This would affect only information determining size of facility, not characteristics about services provided by the facility.