Alcohol and Drug Services Study (ADSS)

The National Substance Abuse Treatment System: Facilities, Clients, Services, and Staffing

NOTE

The Alcohol and Drug Services Study (ADSS) provides an opportunity for researchers to explore and analyze a unique data base that can provide new insights into the relationships between substance abuse treatment clients and facilities. Great care has been taken by staff of SAMHSA's Office of Applied Studies (OAS) and its contractors to create ADSS public-use data sets that are as complete as possible and consistent with the statutory requirements to maintain and safeguard the confidentiality of individual and institutional records. These requirements have been balanced against the important need to make the ADSS data files available in a timely fashion and to facilitate electronic download and analysis by users. Accompanying these files is documentation that has been compiled into a series of ADSS reports. Several of these ADSS reports are being released as working documents to minimize delay. Every effort has been made to ensure the accuracy of the working documents, but errors may still remain. We request that you bring any errors to the attention of OAS staff.

DEPARTMENT OF HEALTH AND HUMAN SERVICES Substance Abuse and Mental Health Services Administration Office of Applied Studies

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Highlights

This report presents findings on the organizational characteristics of the substance abuse treatment system nationwide from Phase I of the Alcohol and Drug Services Study (ADSS). The key components of the national treatment system presented in this report are the treatment facilities (Chapter 1), the clients in treatment (Chapter 2), and the services and staffing resources of the facilities (Chapter 3). ADSS Phase I, a mail/telephone survey of a nationally representative sample of 2,395 treatment facilities, was conducted to study facility-level characteristics of substance abuse treatment in the United States. Facility-level data reported here include facility size, facility staffing patterns, facility certification, services offered, and revenue sources, all by treatment type. Later phases of ADSS are the Phase II client record abstract study, which studied the characteristics of the treatment population, including drugs of abuse, prior treatment, and length of stay, and the Phase III client follow-up survey to assess post-treatment status. The ADSS Cost Study is an in-depth report providing estimates of cost by type of care.

Highlights from this Phase I treatment system report follow:

Facilities (Chapter 1)

- An estimated 12,387 substance abuse treatment facilities were providing treatment on October 1, 1996 (Tables 1.1 and 1.2).
- An estimated 85 percent of facilities in the facility universe are single-modality (i.e., providing only one type of care: hospital inpatient, non-hospital residential, outpatient methadone, or outpatient non-methadone). Fifteen (15) percent of facilities provided a combination of types of care (Table 1.1).
- There was a median of 6 full-time-equivalent (FTE) direct care staff per treatment facility, ranging from a median of 5 FTEs in outpatient non-methadone facilities to 15 FTEs in facilities with more than one type of care (Table 1.1).
- The predominant type of care, outpatient non-methadone treatment, was provided at about 76 percent of facilities, either alone or in combination with another type of care (Table 1.2).
- The median number of clients in substance abuse treatment facilities was an estimated 40 clients per facility on October 1, 1996. Outpatient methadone facilities were the largest, with a median of 177 methadone clients in treatment; however, outpatient methadone treatment was provided at only about 6 percent of the facilities. Hospital inpatient facilities had the fewest clients, with a median of about 6 clients in treatment (Table 1.2).
- Most substance abuse treatment facilities (86 percent) reported some public funding among their sources of revenue (Table 1.3), with a mean of 62 percent of funding coming from public sources (Table 1.1).

• Seventy (70) percent of treatment facilities reported an affiliation with another organization, either as a parent facility of that other organization (21 percent) or some other legal connection (49 percent) (Table 1.3).

Clients (Chapter 2)

- An estimated 1,091,328 clients were in substance abuse treatment on October 1, 1996 (Tables 1.2 and 2.1).
- Most clients were in outpatient, non-methadone care, an estimated 76 percent or 824,507 clients; an additional 14 percent (151,882 clients) were in outpatient methadone treatment. About 9 percent of clients were in non-hospital residential care, and only about 1 percent were in hospital inpatient treatment (Tables 1.2 and 2.1).
- The majority of clients (60 percent) were treated in facilities owned by private non-profit organizations. About 19 percent received care in private for-profit facilities and 21 percent in publicly owned facilities (Table 2.1).
- More than two thirds of clients received treatment in facilities that received half or more of their revenue from public sources (Table 2.1).
- Half of all clients received care in facilities in large metropolitan areas (Table 2.1).
- Across all types of facilities, clients in substance abuse treatment programs were predominantly male (67 percent) and predominantly white non-Hispanic (61 percent), with alcohol as the principal substance of abuse (47 percent) (Table 2.2).
- For almost one half of all clients (47 percent), the primary expected source of payment was public funds, either Medicaid, Medicare, or other public payment. About one in five had private health insurance that was expected to pay for treatment, and almost one fourth were described as self-pay (Table 2.3).

Services and Staffing (Chapter 3)

- With the exception of detoxification and acupuncture, all treatment services were offered at 67 percent or more facilities. More than 90 percent of facilities offered treatment services, such as individual therapy, comprehensive assessment and diagnosis, and group therapy (Table 3.1).
- Individual therapy was the most frequently offered treatment service and was offered at 95 percent or more of facilities (Table 3.2a). It was offered least often in hospital inpatient facilities.
- Aftercare treatment services and relapse prevention were offered at fewer facilities than any of the counseling services (Table 3.2a).

- Support services were offered at less than 50 percent of facilities, with the exception of HIV/AIDS education/counseling/support, which was offered at 77 percent of facilities (Table 3.1).
- Support services such as transportation, employment counseling/training, and academic education/GED classes were not routinely offered in the substance abuse treatment system, but among the various types of care, they were offered more often in non-hospital residential facilities (Table 3.2b).
- Facilities with no public revenue tended to offer fewer support services, such as HIV/AIDS counseling, TB screening, and employment counseling (Table 3.2b).
- Facilities with high levels of support services were more likely to be non-hospital residential or combination facilities. Facilities with low levels were more likely to be outpatient non-methadone (Table 3.3).
- Facilities with low client-to-staff ratios offered more treatment and support services (Table 3.3).
- In terms of direct care staff, the substance abuse treatment system was staffed primarily with full-time M.A.- and B.A.-level counselors. Non-degreed counselors also played a large role. Higher level and more costly staff, such as physicians or doctoral level counselors, tended to be on staff as part-time or contract staff (Table 3.4).
- Low client-to-staff ratio was associated with facilities that offered high numbers of treatment and support services, facilities with inpatient types of care, and facilities with some public revenue (Table 3.6).
- The percentage of direct care staff certified in substance abuse tended to be low. In general, the percentage of certified staff was less than 50 percent of the treatment staff. The percentage of certified staff tended to be lower in methadone and hospital inpatient types of care, publicly owned facilities, and those facilities using public funding for 90 percent or more of their revenue (Table 3.7).
- The mean ratio of clients to certified staff was highest in facilities offering methadone type of care, larger facilities, public facilities, and facilities offering a low number of treatment services (Table 3.7).



Introduction

The Alcohol and Drug Services Study (ADSS) was designed to produce statistically unbiased national estimates that are representative of substance abuse treatment facilities and clients in treatment. Data reported here are based on reports of facility directors drawn from Phase I: The Facility Survey of the ADSS study conducted from December 1996 to June 1997. This study was conducted by mail/telephone interviews with facility directors at 2,395 facilities that represent 12,387 substance abuse treatment facilities nationwide. Substance abuse treatment facilities are those providing alcohol and/or drug treatment or recovery services using specified personnel, designated space or resources, and a specified budget. Types of treatment facilities excluded from the sample frame in this study are halfway houses without paid counselors, solo practitioners, correctional facilities, Department of Defense (DoD) facilities, Indian Health Service facilities, and facilities that are intake and referral only. This report presents national estimates of the number of facilities, number and characteristics of clients in substance abuse treatment facilities, as well as the staffing and services found in those facilities.

Methodology Overview

Phase I of ADSS consisted of a mail questionnaire collected by telephone interview with facility directors at a national, stratified random sample of alcohol and drug treatment facilities. The sample frame was the Substance Abuse and Mental Health Services Administration (SAMHSA) 1995 national inventory of substance abuse treatment facilities known to SAMHSA, supplemented with facilities identified from other sources, such as hospital listings, provider associations, and business directories. Facilities in the frame were stratified by treatment type: hospital inpatient, non-hospital residential, outpatient predominantly alcohol, outpatient predominantly methadone, all other outpatient facilities, and facilities with combined treatment types.

Phase I was conducted from December 1996 to June 1997, with data collected for a point prevalence date of October 1, 1996, and for the most recent 12-month reporting period of the facility. The Phase I response rate was 91.4 percent with 2,395 facilities responding. Because the Phase I sampling design incorporated a stratified random probability sample, weights were developed to produce national estimates of facilities. The sampling weights adjusted for facility non-response and for differential response rates within strata. Further information about the data collection methodology for the study is presented in Appendix A and in the ADSS Methodology Report. A description of analytic variable construction appears in Appendix B, and standard error tables are provided in Appendix C. Later phases of ADSS are the Phase II facility and client record subsample and the Phase III client follow-up study.

Chapter 1. Organizational Characteristics of Substance Abuse Treatment Facilities

This chapter examines the organization of the national substance abuse treatment system based on responses from substance abuse treatment facility directors in Phase I of the ADSS. It describes key organizational elements of substance abuse treatment facilities and provides national estimates of the size of the system as measured by the numbers of facilities and clients

and the characteristics of the system regarding ownership, urbanicity, facility licensing, and facility affiliation with other organizations.

Chapter 2. Client Populations in Substance Abuse Treatment Facilities

This chapter presents national estimates of the number and characteristics of clients in substance abuse treatment facilities in 1996 based on reports of facility directors. It examines the demographic and other characteristics of clients receiving treatment in varied types of care and treatment settings and in facilities owned publicly or by private for-profit and private non-profit organizations. The number of special population clients, such as women and adolescents, and the number of facilities providing special programs for those clients also are examined.

An estimated 1 million clients were receiving treatment in substance abuse treatment facilities across the Nation on October 1, 1996. Some 4.3 million admissions to treatment and 3.7 million discharges were made within the year. Three fourths of clients received treatment in outpatient non-methadone care, and almost 60 percent were treated in facilities owned by private non-profit organizations.

Young adults, males, and non-Hispanic whites predominated in treatment. Alcohol was the principal drug of abuse among treatment clients, although cocaine, heroin, and marijuana also were important. More than half of the clients received care for alcohol and drug abuse problems combined. Variations in the client populations of treatment facilities occurred by type of care, treatment setting, and ownership of facility. These data demonstrate that facilities served a variety of types of clients. Many clients in treatment were special populations, such as women and adolescents, who required specialized services. But these clients were not treated in all programs, nor did all programs provide special programs for them.

Chapter 3. Treatment Services and Staffing

This chapter documents the types of services offered to clients and the characteristics of staff providing treatment services to clients in the national substance abuse treatment system. It examines the relationship between facility characteristics and service patterns and staffing. Comprehensive assessment/diagnosis, individual therapy, and group therapy made up the cornerstone of the network of services. Services and staffing varied by facility characteristic, such as type of care, ownership, facility size, percent dependence on public revenue, urbanicity, level of affiliation, and facility setting. Generally, treatment services directly related to substance abuse were offered at more facilities than were support services, such as transportation, employment, and academic services. In addition, services offered after the client leaves treatment, such as aftercare and outcome follow-up, were offered at fewer facilities than services offered during treatment, such as counseling and comprehensive assessment and diagnosis.

Staffing in the substance abuse treatment system consisted primarily of master's and bachelor's level counselors, with non-degreed counselors playing a large role. Higher level professional staff, as measured by educational training, were less often on staff. High level and more costly staff tended to be hired as contract or part-time staff. The ratio of clients to direct care staff varied with facility characteristics.

Chapter 1. Organizational Characteristics of Substance Abuse Treatment Facilities

Helen J. Levine, Sharon Reif, Grant A. Ritter, Margaret T. Lee, Mary Ellen Marsden, and Constance M. Horgan

1.1 Introduction

This chapter examines the organization of the national substance abuse treatment system based on responses from substance abuse treatment facility directors in Phase I of the Alcohol and Drug Services Study (ADSS). It describes key organizational elements of substance abuse treatment facilities and provides national estimates of the size of the system as measured by the numbers of facilities and clients and the characteristics of the system regarding ownership, urbanicity, facility licensing, and facility affiliation with other organizations. ADSS Phase I, which was a telephone survey of a nationally representative sample of 2,395 substance abuse treatment facilities, collected data for October 1, 1996 and the facility's most recent 12-month reporting period. This study builds upon the work of the 1990 Drug Services Research Survey (DSRS) (Batten et al., 1993) with a more complete sampling frame, a larger facility sample, and improved measures of financing and organization.¹

1.2 Background

According to the Uniform Facility Data Set (UFDS), a periodic census survey sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA), the number of clients in the substance abuse treatment system more than doubled from 488,903 in 1980 (SAMHSA, 1997) to 940,141 in 1996 (SAMHSA, 1999). UFDS reported 6,866 treatment facilities in 1987 and 10,641 facilities in 1996 (SAMHSA, 1999). Prior research, reviewed below, has examined the distribution of types of care in the substance abuse treatment system, facility size, facility ownership, facility location relative to urban areas of the country, licensing and accreditation of facilities, and facility affiliations. ADSS contributes to this research with its extensive sample and detailed facility data.

Type of Care. Most clients receive outpatient substance abuse treatment (SAMHSA, 1999). In 1990, the DSRS showed that 87 percent of clients received care in outpatient facilities, 10 percent in residential care, and 3 percent in hospital inpatient facilities (Batten et al., 1993). In 1996, UFDS reported a similar distribution: 88 percent of clients in outpatient care, 10 percent in residential care, and 2 percent in hospital inpatient care. ADSS examines the distribution of types of care in the national substance abuse treatment system based on its enhanced sampling frame.

Facility Size. Most clients receive treatment in facilities with fewer than 100 clients (SAMHSA, 1999). From 1990 through 1996, facilities with fewer than 30 clients had about 40

¹ DSRS surveyed drug and alcohol/drug facilities and excluded alcohol-only facilities. ADSS Phase I includes alcohol-only, drug-only, and combined alcohol/drug facilities.

percent of clients in treatment, and facilities with 30 to 99 clients had about a third of clients (SAMHSA, 1999). Although larger facilities can take advantage of economies of scale, smaller ones may have more flexibility to address the needs of individual clients. For example, a Michigan survey (Mavis & Stoffelmayr, 1994) showed that larger outpatient programs were positively correlated with staff size, budget, the number of medical full-time equivalent (FTE) staff and staff role, and they were inversely related to the influence of Alcoholics Anonymous (AA) on the program. Larger programs also were related to improvement in patients' problems and patient satisfaction. Similarly, larger programs in residential facilities (Timko, 1995) were associated with clearly documented policies, more health and treatment services, and greater daily living assistance. However, larger residential programs offered less privacy to clients and fewer choices in daily activities. In ADSS, detailed analyses of the impact of facility organizational characteristics on treatment differences are presented.

Ownership. The majority of substance abuse treatment facilities in the United States are private non-profit entities; however, a significant minority of facilities are either publicly owned or are under for-profit auspices. From 1990 through 1996, between 61 and 64 percent of facilities had private non-profit ownership, 17 to 19 percent had public ownership, and 17 to 22 percent had private for-profit ownership (SAMHSA, 1999). The Drug Abuse Treatment System Survey (DATSS), a panel study of 600 outpatient drug treatment facilities conducted in 1988, 1990, and 1995, showed the influence of ownership on treatment (Friedmann, Alexander, & D'Aunno, 1999; Price et al., 1991; Price & D'Aunno, 1992). DATSS data suggest that publicly owned or private non-profit facilities provided greater access to care for poorer clients (Wheeler, Fadel, & D'Aunno, 1992). Burke and Rafferty (1994) found that ownership influenced organizational outlook on profit maximization, access to care, and patient outcomes. Furthermore, facilities owned by private for-profit entities served a less impaired group of clients than facilities with private non-profit ownership. McCaughrin & Howard (1996) found shorter waiting times for treatment in facilities with a publicly funded client base. Data from the 1995 DATSS suggest that public units continued to offer greater access to treatment services than private for-profit units (Friedmann et al., 1999). ADSS contributes to the discussion of relationships between facility ownership and substance abuse treatment, based on a large sample of nationally representative public, private non-profit, and private for-profit facilities.

Urbanicity. The U.S. Bureau of the Census (1998) reported that about 80 percent of the U.S. population lived in metropolitan statistical areas (MSAs) in 1996. Similar to the distribution of the U.S. population, most substance abuse treatment is delivered in urban settings, and especially in densely populated States (Institute of Medicine [IOM], 1997). Behavioral health care facilities are more prevalent in urban or metropolitan areas, and they delivered more services there than in rural or non-metropolitan areas (Goldsmith et al., 1994). Goldsmith et al. (1994) also found that just over half of rural, non-metropolitan counties had behavioral health care facilities, and inpatient facilities were rare in rural counties. Similarly, substance abuse treatment facilities were rarely located in rural areas. D'Aunno, Folz, and Lin (1999) showed that almost no methadone facilities were located in rural areas. The size of the ADSS sample allows further investigation of the geographic spread of substance abuse treatment services and characteristics associated with treatment in less urban areas.

Licensing and Accreditation. Licensing is used by Federal, State, and local governments to regulate the delivery of substance abuse treatment and to set standards for care (IOM, 1997; McCarty, 1995). The Federal Government regulates methadone treatment, and State agencies such as departments of drug and alcohol abuse, mental health, and public health typically oversee State interests in regulating substance abuse treatment (IOM, 1995). State licensure is critical for facilities to obtain third-party reimbursement (IOM, 1997). Accrediting agencies representing medical establishments also regulate substance abuse treatment. The Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) accredits hospitals and has guidelines for substance abuse facilities and community mental health programs (IOM, 1997). In 1995, 24 percent of outpatient facilities were JCAHO accredited, linking substance abuse services and medical and mental health care (Friedmann et al., 1999). ADSS data provide a detailed examination of the relationship of licensing and accreditation to the organizational characteristics of substance abuse treatment facilities.

Affiliation. Historically, the treatment system was composed of small, freestanding facilities that operated independently of one another, but recent analyses point to greater integration among substance abuse treatment facilities and with other organizations (IOM, 1997). In 1990, 62 percent of facilities reported legal connections to other organizations (DSRS unpublished analyses, 1994). Integration can reduce costs and increase market flexibility (Bazzoli, Shortell, Dubbs, Chan, & Kralovec, 1999). Changes in organizational integration may lead to greater access to services for some clients, but gatekeeping mechanisms, used by some managed care organizations, may provide a barrier to any care for poorer clients (Friedmann et al., 1999). Questions in ADSS about facility affiliation with other organizations will extend this analysis.

In summary, the substance abuse treatment system is large, diverse, and complex. Freestanding community-based substance abuse treatment programs are facing stiff competition from larger behavioral health care entities and other for-profit organizations that emphasize fiscal accountability and professional accreditation (IOM, 1998). The era of managed care has increased the complexities of the relationship between ownership and funding streams and their potential impact on the delivery of services to clients (IOM, 1997). Because of its size and nationally representative character, ADSS provides an opportunity to examine these issues in greater depth and offers national estimates of the organizational attributes of the substance abuse treatment system.

The remainder of this chapter is organized into two sections. The first section discusses national estimates of substance abuse treatment facilities and clients for October 1, 1996, the point-prevalence date for Phase I of ADSS, and gives a snapshot of clients, staffing, and public funding for the major types of care within the system (Tables 1.1 and 1.2). The second section describes in detail organizational variation within the system by type of care, ownership, urbanicity, and certification and accrediting mechanisms (Tables 1.3 through 1.6), as well as patterns of facility affiliation with other organizations (Tables 1.7 and 1.8).

1.3 National Estimates

1.3.1 Treatment Facilities

Based on the ADSS Phase I sample data, an estimated 12,387 facilities² (Tables 1.A and 1.1) were providing substance abuse treatment to 1,091,328 clients (Table 1.2) on October 1, 1996. About 85 percent of the facilities provided only one type of care (i.e., either hospital inpatient, non-hospital residential, outpatient methadone, or outpatient non-methadone care), and an additional 15 percent provided more than one type of care, labeled "combination" facilities (Tables 1.1 and 1.A).

The predominant modality of treatment nationwide is outpatient non-methadone treatment. When the combination facilities are included in the counts of facilities providing each type of care, and thereby counted in more than one category (Table 1.2), an estimated 76 percent, or 9,384 of the total 12,387 facilities, were providing outpatient non-methadone care, either alone or in combination with another type of care. Six (6) percent of facilities (688 facilities) were providing outpatient methadone treatment, bringing the total proportion of facilities offering any type of outpatient care to 81 percent, or 10,073 facilities. An estimated 26 percent of facilities provided non-hospital residential care, and about 10 percent offered hospital inpatient care, either alone or with other types of care.

1.3.2 Clients in Treatment

The largely outpatient substance abuse treatment system is also evident for clients in treatment (Table 1.2), with an estimated 76 percent of clients in outpatient non-methadone treatment (824,507 clients) and an additional 14 percent of clients (151,882 clients) in outpatient methadone care, for a total of 90 percent of clients in some type of outpatient treatment. Only about 10 percent of clients were in hospital inpatient (1 percent) or non-hospital residential (9 percent) care.

² The number of facilities estimated from the ADSS sample (12,387 facilities) is somewhat higher than the number of facilities reported in SAMHSA's Uniform Facility Data Set (UFDS) survey for 1996 (10,641 facilities) for two reasons: (1) the ADSS Phase I sample survey adjusts for facility nonresponse, while UFDS reports for the facilities responding to the census survey without adjustment for non-response; and (2), the ADSS facility universe includes facilities identified through a search of provider and business listings for treatment facilities not on the main facility listings, while the 1996 UFDS reporting did not include the additional set of facilities. A small part of this increased ADSS coverage is offset by the exclusion of some facility types from ADSS that are not excluded from UFDS (i.e., intake/referral-only facilities, halfway houses without paid counseling staff, solo practices, correctional facilities, and Department of Defense, Indian Health Service, and Bureau of Prisons facilities). Overall, there are relatively small differences of only 2 or 3 percentage points in facility characteristics estimated from ADSS for the two facility universes—the full, expanded ADSS universe versus only the core universe covered in the 1996 UFDS report. For example, there was an estimated 23 percent of facilities with private for-profit ownership for the larger ADSS universe compared with about 20 percent for the core universe. There were no large differences for the distributions of facility type of care, revenue source, urbanicity, or affiliation with other facilities (see Appendix A).

Table 1.A Number and Percentage Distribution of Single and Multiple Modality Substance Abuse Treatment Facilities: National Estimates, ADSS Phase I Facility Survey, October 1, 1996

	Number of Facilities	Percent
Total, All Facilities	12,387	100.0
Single-Modality Facilities	10,501	84.8
Hospital inpatient only	378	3.1
Non-hospital residential only	2,135	17.2
Outpatient methadone only	464	3.8
Outpatient non-methadone only	7,524	60.7
Combination Facilities	1,886	15.2
Non-hospital residential/outpatient non-methadone	823	6.6
Hospital inpatient/outpatient non-methadone	663	5.4
Hospital inpatient/non-hospital residential/outpatient non-methadone	153	1.2
Hospital inpatient/non-hospital residential	23	0.2
Outpatient methadone and:		
Outpatient non-methadone	167	1.3
Non-hospital residential / outpatient non-methadone	25	0.2
Hospital inpatient/outpatient non-methadone	22	0.2
Hospital inpatient/non-hospital residential/outpatient non-methadone	7	0.1
Non-hospital residential	3	< 0.0

1.3.3 Average Staff Size

Table 1.1 shows substance abuse treatment facilities by two descriptive facility-level measures: the average number of full-time equivalent (FTE) direct-care staff per facility on October 1, 1996, and the average facility proportion of revenue received from public sources. The staffing data and sources of revenue were collected for the facility as a whole, and, therefore, are provided at the facility level for combination facilities, rather than within their individual treatment types.

The number of facility staff can be an indicator of facility resource intensity (Mavis & Stoffelmayr, 1994). Both the mean and median numbers of FTE direct-care staff per facility are presented in Table 1.1. Overall, substance abuse facilities had an average of 11.4 FTE direct-care staff providing substance abuse treatment. Hospital inpatient facilities served the fewest clients but had on average the most substance abuse staff (27.1 FTEs), more than double the overall average. In contrast, outpatient non-methadone facilities had a mean of 7.2 FTEs.

The mean is presented to show average value. However, the median value, the point above and below which half the facilities fall, provides another measure of central tendency and may provide a clearer picture of staffing patterns. Across all types of care, there was an estimated

median of six direct-care staff members per facility. Broken down by facility type of care, combination facilities and hospital inpatient-only facilities had the highest median staff size per facility, 15 and 14 staff members per facility, respectively, followed by outpatient methadone-only care, 10 staff members per facility. Non-hospital residential care and outpatient non-methadone had a median of fewer than six staff members per facility.

Median comparisons suggest that the majority of hospital inpatient facilities had many fewer FTEs (14 FTEs) than the mean indicates, but staffing differences remained. Median FTEs (5 FTEs) for outpatient non-methadone facilities were a third of those for hospital inpatient facilities (14 FTEs). Combination facilities, like hospital inpatient facilities, were staff intensive with a mean of 25.9 FTEs and a median of 15 FTEs.

1.3.4 Public Revenue

Public revenue, including Medicaid, Medicare, other Federal Government funds, and other public funds, is an important source of funding for substance abuse treatment. (See Appendix B for a more detailed description of the public revenue category.) The mean proportion of facility funding from public sources is presented in Table 1.1 along with the median percentage. Overall, public funds are the predominant revenue source for treatment facilities, with an estimated mean of two thirds to three quarters of substance abuse treatment facility revenue coming from public sources. Non-hospital residential facilities received the largest proportion of revenue from public sources, a mean facility proportion of 77 percent, and outpatient non-methadone facilities received the lowest mean proportion from public sources (58 percent). Overall, the mean proportion of public revenue was 62 percent. Looked at by the median percentage of public revenue, an estimated 76 percent of total treatment facility revenue came from public sources (i.e., half the facilities had higher than 76 percent of revenue from public sources and half had lower percentages), indicating that facilities with relatively high proportions of public revenue outnumber facilities with lower proportions and that public revenue may be more critical to facilities than the mean of 62 percent indicates.

1.4 Organizational Characteristics of Facilities

1.4.1 Key Facility Characteristics

Tables 1.3 through 1.7 present national estimates and percentage distributions of treatment facilities for five key facility organizational characteristics, respectively: facility type of care, facility ownership, facility urbanicity, facility certification or accreditation, and level of affiliation with other facilities. Within the tables, these key characteristics are shown by an array of other selected facility characteristics, including facility size, percent public revenue, number of treatment services, number of support services, client-to-staff ratio, and facility setting.

1.4.2 Definitions

The following list provides a general description of the facility characteristics used in this section; more detailed descriptions for the creation of the variables are provided in Appendix B.

- Facility type of care Facilities were sampled and analyzed by the following broad types of care: hospital inpatient; non-hospital residential; outpatient methadone-only; outpatient non-methadone-only; and combination facilities.
- Ownership Facilities were identified by their self-reported ownership type, collapsed into three categories: private for profit; private non-profit; and public (government ownership).
- Facility urbanicity Facilities were classified by location with respect to metropolitan or non-metropolitan county and by the size of the urban population in the county, based on a modification of the rural-urban continuum codes (see Section 1.5 and Appendix B).
- Facility certification or accreditation Facilities were identified by the organizational certifications they held, including State alcohol and drug agencies, hospital licencing authorities, drug and alcohol credentialing organizations, and the Joint Commission on the Accreditation of Healthcare Organizations (JCAHO).
- Level of affiliation with other facilities Facilities were classified by their relationships to other facilities, either as a parent of other facilities, or as some other type of affiliate (e.g., legally part of a hospital or other institution).
- Facility size Facilities were classified according to size based on their point-prevalence client count on October 1, 1996. Four size categories, each representing approximately one fourth of the treatment facilities, were created.
- *Percent public revenue* Facilities were classified by their proportion of substance abuse treatment revenue that came from public sources (e.g., Federal, State, or county funding, Medicare, Medicaid).
- *Number of treatment services* Facilities were classified by the types of selected treatment services they provide to patients (e.g., individual therapy, group therapy, relapse prevention). The number of services was grouped into low, medium, and high levels of services.
- Treatment Facilities also were categorized according to the level of selected treatment and support services they offered. Facilities reported whether they offered each of 19 services to clients in the previous year. The 19 services were categorized as either treatment services (11 services) or support services (8 services). The treatment services include comprehensive assessment/diagnosis, self-help or mutual-help groups, detoxification, individual therapy, group therapy other than relapse prevention, relapse prevention groups, family counseling, combined substance abuse and mental health treatment, acupuncture, aftercare, and outcome follow-up. Facilities were categorized into three treatment intensity groups based on the level of treatment services they offered. An estimated 12 percent of facilities offered a low level of treatment services (5 or fewer services); 52 percent offered a medium level (6 to 8 services); and 36 percent offered a high level (9 to 11 services) of treatment services.

- *Number of support services* Facilities were classified by types of selected support services they provide to patients (e.g., child care, transportation, employment counseling/training). The number of services was grouped into low, medium, and high levels.
- Support The eight services classified for ADSS as support services included child care, transportation, employment counseling/training, academic education/GED classes, HIV/AIDS education/counseling/support, TB screening, prenatal care, and smoking cessation. Facilities were categorized into four support service levels. Eleven (11) percent of facilities offered no support services; 37 percent of facilities offered a low level of support services (1 to 2 services); 35 percent offered a medium level (3 to 4 services); and 17 percent offered a high level of support services (5 to 8 services) (Table 1.4).³
- Client-to-staff ratio Facilities were classified by their ratio of substance abuse clients to direct-care substance abuse treatment staff. A client-to-staff ratio variable was created to examine the distribution of caseloads in the substance abuse treatment system. The point-prevalence client count was divided by the point-prevalence direct-care FTE staff count. One third of facilities was categorized as having a low client-to-staff ratio (4 clients or fewer per staff); one third had a medium client-to-staff ratio (5 to 14 clients per staff); and one third had a high client-to-staff ratio (more than 14 clients per staff).
- Facility setting Facilities were classified by the setting of the substance abuse treatment facility with respect to its location within a hospital organization or being freestanding apart from hospital organizations, in community health centers, non-hospital residential units, schools, or in outpatient organizations.

1.4.3 Type of Care

Facilities were sampled and analyzed by the following broad types of care: hospital inpatient, non-hospital residential, outpatient methadone-only, outpatient non-methadone only, and combination facilities. National estimates of the number of facilities by type of care (Tables 1.1 and 1.3) indicate that on October 1, 1996, the treatment system was largely composed of outpatient non-methadone facilities. Of the estimated 12,387 facilities, 61 percent of facilities provided outpatient non-methadone-only care, and 17 percent offered non-hospital residential-only care. Less than 4 percent of facilities provided outpatient methadone-only care, and 3 percent of facilities offered hospital inpatient-only care. An additional 15 percent of facilities provided more than one type of care in combination facilities. Organizational characteristics of facilities differed by type of care. A detailed analysis of the facilities by type of care follows.

Hospital inpatient-only facilities were smallest. Seventy-two (72) percent had fewer than 17 clients on October 1, 1996. Nearly 60 percent of these hospital inpatient-only facilities were owned by private non-profit organizations. More hospital inpatient facilities (22 percent) had

³ Chapter 3 examines treatment and support services in greater detail.

public ownership than any other type of care. Like other types of care, the majority of hospital inpatient-only facilities were located in large or medium metropolitan areas (40 and 26 percent, respectively, of hospital inpatient-only facilities). However, they had a higher proportion of facilities (12 percent) in non-MSA urban areas compared with outpatient methadone-only (1 percent) and outpatient non-methadone-only facilities (7 percent). Hospital inpatient-only facilities were more likely to be legally part of another organization, as an affiliate (62 percent), than outpatient non-methadone-only facilities (48 percent) and combination facilities (44 percent). However, more than 20 percent of other types of facilities (except for outpatient methadone-only) reported as a parent facility compared with only 10 percent of hospital inpatient-only facilities.

Hospital inpatient-only facilities were categorized as offering the highest level of treatment services: 56 percent were in the high treatment services group (9 to 11 services), significantly more than all other types of care. Nearly all hospital inpatient-only facilities (97 percent) had client-to-staff ratios falling in the low (4 or less) category, considerably lower ratios than in all other types of care. Hospital inpatient-only facilities had a mean of 3.2 types of accreditation or license. Compared with other types of care, they were less likely to have licensing by State alcohol and drug agencies (65 percent). They were more likely than non-hospital residential and outpatient methadone to have licensing by State departments of mental health (39 percent vs. 15 and 13 percent, respectively), more likely than all others to have State hospital licensing authorities (62 percent) and JCAHO accreditation (85 percent).

Non-hospital residential-only facilities also were relatively small—50 percent had fewer than 17 clients in treatment on a given day. More than 80 percent had private non-profit ownership, the highest of any type of care. Eighty-four (84) percent received more than 50 percent of their funding from public revenue sources, also the highest proportion of any type of care. Almost half (48 percent) of residential facilities were situated in large metropolitan areas with populations over 1 million, significantly less frequently than outpatient methadone-only facilities (70 percent) but significantly more frequently than outpatient non-methadone facilities (40 percent). Fewer non-hospital residential-only facilities (53 percent) were affiliated with another organization than hospital inpatient-only facilities (62 percent). Thirty-five (35) percent of non-hospital residential facilities offered a high level of treatment services (9 to 11 treatment services), exceeding the level of treatment services for outpatient facilities but below the level for hospital inpatient-only facilities. Thirty-eight (38) percent reported a high level of support services (5 to 8 support services), significantly higher than any other type of care, except for combination facilities. Consistent with this, 60 percent of residential facilities had low client-to-staff ratios, second only to hospital inpatient-only facilities. Compared with other types of care, non-hospital residential-only facilities were least likely to have JCAHO accreditation (14 percent). However, they were considerably more likely to have licensing from State departments of public health (36 percent) than outpatient non-methadone facilities (21 percent), most likely because of the provision of housing and food services.

Outpatient methadone-only facilities differed from other types of care in many respects. They were the largest facilities: 82 percent had more than 100 clients in treatment on the survey point-prevalence date. They had the most private for-profit ownership (39 percent of facilities), and a larger percentage was located in large metropolitan areas (70 percent of facilities) than

other types of facilities. They were less likely to be a parent facility (12 percent) than all other types of care, except for hospital inpatient-only facilities (10 percent).

Outpatient methadone-only facilities reported lower levels of treatment services than any other type of care (23 percent, 5 or fewer treatment services). Consistent with a lower level of treatment services, client-to-staff ratios were higher among outpatient methadone-only facilities than any other type of care: 87 percent reported high client-to-staff ratios. Nearly three quarters of outpatient methadone-only facilities reported a medium or high level of support services, significantly more than outpatient non-methadone facilities (33 percent) but significantly less than non-hospital residential-only facilities (88 percent) or combination facilities (82 percent). Outpatient methadone-only facilities were more likely to have licensing from State alcohol and drug agencies (92 percent) and departments of public health (51 percent) than most other types of care.

Three quarters of facilities (76 percent) provided outpatient non-methadone care, either alone (60 percent of all facilities) or in combination with other types of care (an additional 15 percent). Outpatient non-methadone-only facilities had a great deal of organizational heterogeneity. While 59 percent had private non-profit ownership, 27 percent had private for-profit ownership, and 14 percent were publicly owned. Level of affiliation also varied among outpatient non-methadone facilities: 22 percent reported as parent facilities, 48 percent as having legal ties with other organizations, and 30 percent reported no affiliations. Outpatient non-methadone-only facilities were more likely than other types of care to be in community mental health centers (28 percent of outpatient non-methadone-only facilities).

Only about one quarter of outpatient non-methadone-only treatment facilities provided a high level of treatment services (i.e., 9 to 11 types of treatment service), and only 7 percent provided a high level of support services (i.e., 5 to 8 support services), a lower proportion than any other type of care. Outpatient non-methadone-only facilities were second only to outpatient methadone-only facilities in the proportion of facilities with high client-to-staff ratios. State licensing by alcohol and drug agencies was prevalent in outpatient non-methadone facilities (83 percent of facilities), but relatively few had JCAHO accreditation (22 percent of facilities).

Combination facilities also showed organizational variation. Almost all combination facilities included outpatient non-methadone treatment in combination with another type of care. The most frequent combinations were facilities that offered both residential and outpatient non-methadone care (7 percent of all facilities) and hospital inpatient and outpatient non-methadone care (5 percent of all facilities). About 2 percent of all facilities offered methadone treatment combined with some other type of care. When the number of methadone-combined facilities is added to the number of outpatient methadone-only facilities, the total estimated number of facilities that provide methadone to clients is 688 facilities.⁴

⁴ Estimates of the number of methadone treatment facilities and the number of clients they served are examined in greater detail in the ADSS Phase I report on methadone treatment facilities.

Combination facilities, almost all of which were outpatient facilities combined with other types of care, were somewhat larger than other facilities. More than half (57 percent) had more than 41 clients; only 15 percent reported fewer than 17 clients (Table 1.3). The rate of public funding was higher in combination facilities, with virtually all reporting some public revenue (98 percent).

Nearly half of combination facilities (868 of the 1,886 combination facilities) included hospital inpatient care, extrapolating from Table 1.A. Consistent with this finding, combination facilities offered a high proportion of facilities offering a high level of treatment services (74 percent), higher than any other type of care and 32 percent offered a high number of support services, significantly more than outpatient methadone-only (20 percent) and outpatient non-methadone-only (7 percent). The majority of combination facilities (54 percent) reported client-to-staff ratios of 4 or less, the lowest level, and half were located in hospital settings. They had higher rates of State alcohol and drug licensing (77 percent) than hospital inpatient-only facilities (65 percent) but lower rates than outpatient methadone-only facilities (92 percent).

1.4.4 Ownership

The substance abuse treatment system continued to be comprised largely of private non-profit organizations, as shown in Tables 1.3 and 1.4. There were an estimated 7,847 facilities with private non-profit ownership on October 1, 1996, or 63 percent of the total. Almost a quarter of the treatment system, an estimated 2,814 facilities or 23 percent of the total, were private for-profit organizations. Publicly owned facilities included 1,726 facilities, only 14 percent of all treatment facilities. This picture confirms the important role of private non-profit organizations, described by earlier studies (Batten et al., 1993; Hubbard et al., 1989; IOM, 1990).

ADSS data suggest important distinctions among facilities by ownership. For example, private for-profit facilities were less likely to provide non-hospital residential care (only 6 percent of facilities) than were private non-profit (23 percent of facilities) and publicly owned facilities (11 percent). A higher proportion of private for-profit organizations (71 percent) provided outpatient non-methadone care than did private non-profit facilities (57 percent). More private for-profit facilities (52 percent) were located in large metropolitan areas compared with private non-profit (42 percent) and public facilities (33 percent), which were more geographically dispersed. In keeping with their private status, more than 75 percent of private for-profit facilities reported receiving 50 percent or less of their revenue from public sources.

Facilities with private for-profit ownership reported lower rates of affiliation than other facilities. Only about half of private for-profit facilities were affiliated with another organization, either as a parent or through another affiliation, compared with three fourths of private non-profits and 80 percent of publicly owned facilities. The level of treatment services offered also varied by ownership. Twenty (20) percent of private for-profit facilities reported a low level of treatment services compared with 9 percent of private non-profit and 11 percent of publicly owned facilities. Similarly, few private for-profit facilities (7 percent) provided as high a level of support services as private non-profit and publicly owned facilities (20 percent of each provided a high level of support services). These results are consistent with research by Burke and Rafferty (1994), Friedmann et al. (1999), and Wheeler et al. (1992). Finally, a relatively low proportion of

private for-profit facilities were located in community mental health center settings (4 percent of facilities) compared with private non-profit or publicly owned facilities (21 and 30 percent, respectively).

As nearly two thirds of the treatment system was comprised of private non-profit facilities, it is not surprising that they had greater heterogeneity than for-profit or public facilities. Like the rest of the system, the majority of private non-profit facilities offered outpatient non-methadone care. However, private non-profit facilities were more likely to provide non-hospital residential care (23 percent of facilities) compared with private for-profit (6 percent) and public facilities (11 percent). Although about three fourths (76 percent) of private non-profit facilities were funded primarily from public revenue sources, nearly a quarter (22 percent) received up to half of their funding from private sources.

Private non-profit facilities were considerably more likely than private for-profit facilities to be affiliated with another organization, either as a parent facility (23 percent) or legally part of another organization (52 percent). More than 90 percent of private non-profit facilities offered a medium to high level of treatment services, and over half provided a medium to high level of support services. They were less likely to be located in hospital settings (13 percent) than public facilities (22 percent), but almost a third (31 percent) were in non-hospital residential settings, significantly more than private for-profit facilities (10 percent) or public facilities (17 percent).

Like privately owned facilities, the majority of publicly owned facilities provided outpatient non-methadone care. Publicly owned and private non-profit facilities shared several characteristics. Both were largely publicly funded, and almost 90 percent provided a medium to high level of treatment services. Also like private non-profit facilities, about a fifth of public facilities provided a high level of support services.

However, publicly owned facilities differed from private for-profit and non-profit facilities in that they were larger, with 38 percent of public facilities having over 100 clients in treatment on the point-prevalence date compared with only about 20 percent of others having over 100 clients. As expected, the majority of public facilities had more than 90 percent of their funding from public sources. While about half were located in large or medium metropolitan areas, publicly owned facilities were more likely than private for-profits or non-profit facilities to be in small urban non-MSA areas, 24 percent of public facilities compared with 5 percent of private for-profit and 12 percent of private non-profit facilities. Public facilities (80 percent) were also more likely to be affiliated with another organization than either private non-profit (75 percent) or private for-profit facilities (52 percent).

1.4.5 Urbanicity

Table 1.5 shows that most substance abuse treatment facilities were in urban areas.⁵ Almost 80 percent of all facilities were located in MSAs, consistent with similar estimates of the

⁵ The urbanicity category used for ADSS is a modification of the Beale Rural-Urban Continuum Codes (Economic Research Services, U.S. Department of Agriculture). (See Appendix B for a description of the urbanicity category.)

U.S. population living in metropolitan areas in 1996 as shown in Table 1.B (U.S. Bureau of the Census, 1998). More than 40 percent of facilities were in large metropolitan areas with populations of 1 million or more; about a fourth were in medium metropolitan areas where the population ranged from 250,000 to 1 million; and 12 percent were in small MSAs with populations of fewer than 250,000. Of the remaining 21 percent of facilities in non-MSA locations, most were in counties with urban populations between 2,500 and 19,999 individuals. The remaining facilities were in non-metropolitan counties with populations of 20,000 or more (7 percent of facilities) or were in non-MSA counties that were completely rural or had fewer than 2,500 urban population. (See Appendix B for description of the urbanicity categories.) In general, the distribution of facilities mirrored the distribution of the population by urbanicity setting.

Table 1.B Number and Percentage Distribution of Substance Abuse Treatment Facilities, and the Percentage Distribution of the U.S. Population, by Urbanicity Category: National Estimates, 1996

	Substanc	e Abuse Tr Facilities	U.S. Population Distribution, 1996		
Collapsed Beale Code	Number of Facilities	Percent	Cumula- tive Percent	Percent	Cumula- tive Percent
Large metro (1m+ pop)	5,359	43%	43%	49%	49%
Medium metro (250k to 1m pop)	2,981	24%	67%	22%	71%
Small metro (less than 250k)	1,418	12%	79%	8%	79%
Large urban, non-metro (20k+)	893	7%	86%	7%	86%
Small urban, non-metro (2.5k to 20k)	1,471	12%	98%	12%	98%
Rural, non-metro (less than 2.5k)	265	2%	100%	2%	100%
Total	12,387	100%		100%	

More than 5,000 facilities (43 percent) were located in large MSAs. They were more likely to offer outpatient methadone treatment (6 percent) than facilities in smaller or less urban areas, facilities in medium MSAs, and those facilities in rural and small urban non-MSAs. Fewer facilities in large MSAs (41 percent of facilities) offered no or low levels of support services than facilities in medium MSAs (50 percent) and those facilities in rural and small urban non-MSAs (72 and 61 percent, respectively). Nine (9) percent of facilities in small urban MSAs offered non-hospital residential care compared with up to 20 percent of facilities in MSAs and urban non-MSAs. Virtually no facilities in small urban or rural non-MSAs offered outpatient methadone-only care. This finding is consistent with results reported by D'Aunno et al. (1999).

Similar to the U.S. population, facilities in non-MSA rural areas comprised only 2 percent of the substance abuse treatment facilities. Like the facilities in small MSAs and urban non-MSAs, facilities in rural areas tended to be small, with 71 percent of facilities having 40 or fewer clients in treatment on October 1, 1996. A third were publicly owned. More than three fourths (78 percent) received more than half their funding from public revenue sources, similar to

other non-MSA facilities (compared with less than two thirds of MSA facilities). The majority of rural facilities offered a medium level of treatment services and a low level of support services. Rural facilities were most often located in community mental health centers (53 percent), a larger proportion than MSA facilities (9 to 21 percent of these facilities).

1.4.6 Facility Licensing, Approval, and Certification or Accreditation

Licensure or other facility certification or accreditation is influenced by differences in State regulatory requirements and also is related to facility type of care, percent of public revenue received, and services offered. Table 1.6 shows types of facility licensing, approval, and certification or accreditation by facility organizational characteristics. Ninety-five (95) percent of all facilities (11,732 facilities) reported being licensed, certified, or accredited by some organization. Most facilities (82 percent) were licensed by State alcohol and drug abuse agencies. More than a fourth reported licensing by a State mental health agency and over a quarter by State public health agencies. About 29 percent had JCAHO accreditation, similar to findings of Friedmann et al. (1999). Ten (10) percent of facilities were licensed by a hospital licensing authority. Twenty-three (23) percent of facilities reported licensing by some other organization. Most facilities had more than one type of licensing or accreditation (Table 1.3).

Two thirds of substance abuse treatment facilities licensed by State mental health agencies (68 percent of these facilities) offered outpatient non-methadone care, more than 4 times as frequently as those that offered combination care (17 percent). They were least likely to offer outpatient methadone care (2 percent). These facilities were also most likely to have 50 to 90 percent of their funding from public sources (37 percent) than any other category of facilities with or without public revenue.

Substance abuse treatment facilities with licensing from State public health departments were more likely to provide outpatient non-methadone or non-hospital residential care (44 and 21 percent, respectively) than hospital inpatient care (4 percent) or outpatient methadone care (2 percent). More than a third (37 percent) had between 50 and 90 percent of public revenue, and 42 percent provided a high level of treatment services. In fact, very few, 8 percent, offered a low level of treatment services. Twenty-six (26) percent of these facilities offered a high level of support services, and no other facilities with different licensing or accreditation characteristics offered this high a percentage. More commonly, however, facilities licensed by State public health departments offered a medium level of support services (35 percent). In keeping with the generous provision of treatment and support services, they were significantly more likely to offer a low client-to-staff ratio (42 percent) than a high client-to-staff ratio (23 percent).

More than a third of facilities with hospital authority licensing (38 percent) had a low level of public funding (less than half of their funding from public sources), a significantly greater proportion than the 10 percent of facilities reporting the highest level of public funding (more than 90 percent of public revenue). They had a high level of treatment services (78 percent), exceeding facilities in any other licensing or accreditation category. They were more likely to provide a medium level of support services than a high level (48 vs. 20 percent, respectively). A greater proportion of facilities with hospital authority licensing (70 percent) had a low client-to-staff ratio than facilities with other types of licensing.

Similar to facilities with hospital authority licensing, a third of facilities with JCAHO accreditation received less than half their funding from public revenue sources. JCAHO-accredited facilities were significantly more likely to receive limited public funding compared with JCAHO-accredited facilities with more than 90 percent of public funding (23 percent). More than half of JCAHO-accredited facilities provided a high level of treatment services (57 percent) and low client-to-staff ratios (53 percent).

1.4.7 Level of Facility Affiliation

Table 1.7 shows reported affiliation with other organizations among substance abuse treatment facilities. More than two thirds of facilities (70 percent) reported having a legal connection to another organization. Twenty-one (21) percent reported they were a parent organization with one or more facilities that provided substance abuse treatment services. Nearly half (49 percent of facilities) reported they were legally a part of another organization but were not a parent organization. These facilities are designated in this report as affiliated organizations. Thirty (30) percent of substance abuse treatment facilities reported no affiliation with another organization.

Facilities reporting as parent organizations tended to be larger (63 percent had more than 40 clients vs. 44 percent of affiliated facilities and 50 percent with no affiliations). Affiliated non-parent organizations were more likely than non-affiliated facilities to be small (30 vs. 22 percent of non-affiliated facilities) and to be publicly owned (18 vs. 9 percent of non-affiliated facilities). Twenty-one (21) percent of affiliated organizations were situated in a hospital setting, twice as many as parent organizations and also significantly more than non-affiliated organizations (13 percent).

Non-affiliated organizations, those reporting being neither a parent nor a part of another organization, differed from parent and affiliated organizations. More than a third were private for-profit facilities (37 percent), and they were more likely than parent facilities to offer a low level of treatment services (16 percent of non-affiliated facilities vs. 9 percent of parent facilities).

1.4.8 Services Provided by Other Organizations

Table 1.8 shows facilities that were legally part of another facility and received services from another organization. Facilities that reported being parent organizations but had no other affiliations (about 7 percent of all facilities) are excluded from this table. Affiliated facilities in this table include 63 percent of all facilities (7,748 facilities). Hospital inpatient-only facilities received a higher proportion of services from another organization (72 percent of facilities) than facilities that offered outpatient non-methadone or combination types of care (61 percent of each of these). Because facilities could be linked to more than one type of organization, or the organization could have multiple designations (i.e., administrative office and a government agency), column distributions may add to greater than 100 percent.

Over half (55 percent of affiliated facilities) reported being connected to another organization that is an administrative office. Thirty (30) percent were connected with another

substance abuse treatment facility, 20 percent with a hospital, and 27 percent with another type of organization. Fewer than 12 percent were linked to a government agency. Not surprisingly, hospital inpatient-only facilities (65 percent) were most likely to be connected to a hospital. About two thirds of non-hospital residential-only and outpatient methadone-only facilities with affiliations reported links to administrative offices. Non-hospital residential-only facilities (38 percent of facilities) also were significantly more likely than other types of care, except for outpatient non-methadone facilities, to report an affiliation with another substance abuse treatment facility.

Nearly all affiliated facilities (92 percent) received some type of administrative services from an affiliated organization. More than 80 percent received financial services (88 percent) or personnel services (82 percent). Two thirds of all affiliated facilities received pricing services. Hospital inpatient-only facilities (79 percent) were more likely than other types of care, except for combination facilities, to receive pricing services. Combination facilities (76 percent) were more likely to receive pricing services than outpatient methadone-only and non-hospital residential facilities (60 percent of each of these types of facilities).

The majority of affiliated facilities (54 percent) received treatment protocols from other organizations. Outpatient methadone-only and outpatient non-methadone-only facilities (63 and 57 percent, respectively) received treatment protocols significantly more often than hospital inpatient-only facilities (46 percent) and combination facilities (39 percent). Non-hospital residential facilities (56 percent) also received treatment protocols more often than combination facilities. Less than a third of affiliated facilities (30 percent) received client intake assessment services. Hospital inpatient-only facilities were more likely to receive client intake assessment services (40 percent) than outpatient methadone-only and combination facilities (22 and 23 percent, respectively).

1.5 Conclusion

Consistent with findings from earlier studies (Batten et al., 1993; Hubbard et al., 1989; IOM, 1990; SAMHSA, 1999), ADSS confirms that outpatient and private non-profit facilities remain most prevalent in the substance abuse treatment system. Also consistent with other studies (Batten et al., 1993; Hubbard et al., 1989; IOM, 1990; Price & D'Aunno, 1992), ADSS estimates indicate that two of three facilities (64 percent) delivered outpatient care and 63 percent had private non-profit ownership. Two thirds received more than 50 percent of their revenue from public sources. Ownership was associated with differences in service delivery, with private for-profit facilities delivering a lower level of support services than public or non-profit facilities (Friedmann et al., 1999; Hubbard et al., 1989; Wheeler et al., 1992). Consistent with the distribution of the U.S. population, 79 percent of facilities were in MSAs, and urban locations were associated with a higher level of support services (Goldsmith et al., 1994).

Earlier studies noted the importance of facility licensure or certification in service delivery (IOM, 1998). ADSS data show substantial licensing or accreditation in the substance abuse treatment system. Most facilities were licensed by State alcohol and drug abuse agencies. Although private for-profit facilities tended to report less licensing by State agencies than other facilities, JCAHO accreditation was more prevalent among this group, perhaps reflecting the fact

that they were more likely to be hospital-based or be methadone facilities. The dominant licensing group included State alcohol and drug agencies, but mental health and medical organizations also licensed or certified a quarter of all substance abuse treatment facilities.

The influence of the private sector also was evident. In contrast to earlier studies that indicated methadone treatment was largely delivered by publicly owned facilities (Hubbard et al., 1989; IOM, 1990), 39 percent of outpatient methadone facilities had private for-profit ownership, the highest rate of private for-profit ownership among all types of care.

Outpatient non-methadone facilities that treat almost two thirds of all clients are more diverse than other types of care. They were spread geographically in highly urban and less urban areas, represented a mix of public and private funding, and a broad range in the numbers of treatment and support services provided.

ADSS results also point to linkages between substance abuse treatment facilities and other organizations. Seventy (70) percent of facilities reported some type of affiliation with other organizations. For the majority of affiliated substance abuse treatment facilities, other organizations provided administrative and other services, such as providing treatment protocols or client intake and assessment services. Facilities affiliated with other organizations reported more public dollars and more support services.

ADSS confirms the size, diversity, and complexity of the U.S. substance abuse treatment system. More than 12,000 facilities treated more than a million clients on October 1, 1996. While dominated by outpatient care in private non-profit settings, there also was a substantial presence of private ownership and funding, particularly in outpatient methadone treatment. More than two thirds of facilities were linked to other organizations, potentially extending their accessibility and their range of services. Licensing or accreditation was prevalent across the system. The substance abuse treatment system is diverse and complex as reflected in the heterogeneity of outpatient non-methadone care, the mix of public and private ownership, as well as the relationship between affiliation and level of services.

1.6 References for Chapter 1

Batten, H. L., Horgan, C. M., Prottas, J. M., Simon, L. J., Larson, M.J., Elliott, E. A., Bowden, M. L., & Lee, M. T. (1993). *Drug Services Research Study, Phase I final report:*Non-correctional facilities (revised; submitted to the National Institute on Drug Abuse; available at http://www.samhsa.gov/oas/dsrs.htm). Waltham, MA: Institute for Health Policy, Brandeis University.

Bazzoli, G. J., Shortell, S. M., Dubbs, N., Chan, C., & Kralovec, P. (1999). A taxonomy of health networks and systems: Bringing order out of chaos. *Health Services Research*, *33*, 1683-1717.

Burke, A. C., & Rafferty, J. A. (1994). Ownership differences in the provision of outpatient substance abuse services. *Administration in Social Work*, 18, 59-91.

D'Annuo, T., Folz-Murphy, N., & Lin, X. (1999). Changes in methadone treatment practices: Results from a panel study, 1988-1995. *American Journal of Drug and Alcohol Abuse*, 25, 681-699.

Drug Services Research Survey (DSRS) unpublished analyses. (1994). Levine-Batten, H., Marsden, M. E., Simon, L., Horgan, C. M.

Friedmann, P. D., Alexander, J. A., & D'Aunno, T. A. (1999). Organizational correlates of access to primary care and mental health services in drug abuse treatment units. *Journal of Substance Abuse Treatment*, 16, 71-80.

Goldsmith, H. F., Wagenfeld, M. O., Manderscheid, R. W., Stiles, D. J., Windel, C., & Witkin, M. J. (1994). The ecology of mental health facilities in metropolitan and nonmetropolitan counties. In R. W. Manderscheid & M. A. Sonnenschein (Eds.), *Mental health, United States*, 1994 (DHHS Publication No. SMA 94-3000, pp. 126-134). Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.

Hubbard, R. L., Marsden, M. E., Rachal, J. V., Harwood, H. J., Cavanaugh, E. R., & Ginzburg, H. M. (1989). *Drug abuse treatment: A national study of effectiveness*. Chapel Hill, NC: University of North Carolina Press.

Institute of Medicine. (1990). *Treating drug problems: Volume 1* (D. Gerstein & H. Harwood, Eds.). Washington, DC: National Academy Press.

Institute of Medicine. (1995). *Federal regulation of methadone treatment* (R. A. Rettig & A. Yarmolinsky, Eds.). Washington, DC: National Academy Press.

Institute of Medicine. (1997). *Managing managed care: Quality improvement in behavioral health* (M. Edmunds, R. Frank, M. Hogan, D. McCarty, R. Robinson-Beale, & C. Weisner, Eds.). Washington, DC: National Academy Press.

Institute of Medicine. (1998). *Bridging the gap between practice and research: Forging partnerships with community-based drug and alcohol treatment* (S. Lamb, M. R. Greenlick, & D. McCarty, Eds.). Washington, DC: National Academy Press.

Mavis, B. E., & Stoffelmayr, B. E. (1994). Program factors influencing client satisfaction in alcohol treatment. *Journal of Substance Abuse*, *6*, 345-354.

McCarty, D. (1995). The effects of state and federal policies and practices on the cost and utilization of services for alcohol abuse and alcohol dependency (Working Paper). Waltham, MA: Institute for Health Policy.

McCaughrin, W. C., & Howard, D. L. (1996). Variation in access to outpatient substance abuse treatment: Organizational factors and conceptual issues. *Journal of Substance Abuse*, 8, 403-415.

Price, R. H., Burke, A. C., D'Aunno, T. A., Klingel, D. M., McCaughrin, W. C., Rafferty, J. A., & Vaughn, T. E. (1991). Outpatient drug abuse treatment services, 1988: Results of a national survey. In R. W. Pickens, C. G. Leukefeld, & C. R. Schuster (Eds.), *Improving drug abuse treatment* (DHHS Publication No. ADM 91-1754, NIDA Research Monograph 106, pp. 63-92). Rockville, MD: National Institute on Drug Abuse.

Price, R. H., & D'Aunno, T. A. (1992). The organization and impact of outpatient drug abuse treatment services. In R. R. Watson (Ed.), *Drug and alcohol abuse reviews, Volume 3: Treatment of drug and alcohol abuse* (pp. 1-22). Totowa, NJ: Humana Press, Inc.

Substance Abuse and Mental Health Services Administration. (1997). *Uniform Facility Data Set* (*UFDS*): *Data for 1996 and 1980-1996*. Rockville, MD: Office of Applied Studies.

Substance Abuse and Mental Health Services Administration. (1999). *Uniform Facility Data Set (UFDS): 1997. Data on substance abuse treatment facilities* (DHHS Publication No. SMA 99-3314, Drug and Alcohol Services Information System Series S-6; available as a PDF, http://www.samhsa.gov/97ufds/ufds1997report.pdf, from http://www.samhsa.gov/oas/dasis.htm#nssats2). Rockville, MD: Office of Applied Studies.

Timko, C. (1995). Policies and services in residential substance abuse programs: Comparisons with psychiatric programs. *Journal of Substance Abuse*, 7, 43-59.

U.S. Bureau of the Census. (1998). *Statistical abstract of the United States 1998* (available online as a PDF at http://www.census.gov/statab/www/). Washington, DC: U.S. Government Printing Office, Superintendent of Documents. [See No. 40, Metropolitan and Nonmetropolitan Area Population: 1970-1996, p. 39.]

Wheeler, J. C, Fadel, H., & D'Aunno, T. A. (1992). Ownership and performance of outpatient substance abuse treatment centers. *American Journal of Public Health*, 82, 711-718.

Table 1.1 Number of Substance Abuse Treatment Facilities, Average Number of Direct-Care Staff per Facility, and Average Facility Percentage of Public Revenue, by Facility Type of Care: National Estimates

	Unweighted Number of Facilities				Average Number of Direct-Care Staff (FTE) per Facility on October 1, 1996		Average Percentage of Facility Revenue from Public Sources ^b	
Facility Type of Care ^a	Sample n	Weighted N	(± SE)	%	Mean	Median	Mean	Median
Total, All Facilities	2,395	12,387	267.4	100.0	11.4	6	62.3	76.1
Type of Care			- 40	(A)				
Hospital Inpatient Only	203	378	25.0	3.1	27.1	14	64.1	70.4
Non-Hospital Residential Only	428	2,135	107.7	17.2	10.2	6	76.7	87.8
Outpatient Methadone Only	324	464	24.8	3.8	11.7	10	59.9	73.4
Outpatient Non-Methadone Only	1,083	7,524	236.3	60.7	7.2	5	57.9	73.0
Combination Facilities	357	1,886	113.7	15.2	25.9	15	63.8	69.9

^a Because Table 1.1 presents data on facility staffing and revenue available only at the overall facility level, rather than within each type of care, the facilities are categorized by their overall type of care (i.e., facilities with only one type of care are counted by that type of care and facilities with more than one type of care are classified as "combination" facilities, except methadone facilities, which are included in the outpatient methadone category if 70 percent or more of their clients are in methadone treatment). Therefore, the counts of facilities offering a specific type of care in Table 1.1 generally include only the single-modality facilities and do not represent all facilities with that type of care; those with a type of care in combination with another modality are counted in the "combination" category. For a count of all facilities providing a particular type of care, whether alone or in combination with another type of care, see Table 1.2.

Exclusions: ADSS Phase I excludes intake/referral-only facilities, halfway houses without paid counseling staff, solo practices, correctional facilities, and Department of Defense and Indian Health Service facilities.

Source: Alcohol and Drug Services Study (ADSS), Phase I facilities data (weighted). Office of Applied Studies, Substance Abuse and Mental Health Services Administration.

^b At least 97 percent of facilities provided source of revenue data for their most recent 12-month reporting period.

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Table 1.2 Number of Facilities and Number of Clients, and the Average Number of Clients per Facility, by Client Type of Care: National Estimates

	Unweighted Facility	Weighted Facilities with Each Type of Care ^b		National Estimates of Clients in Treatment, by Facility Type, on October 1, 1996		Number of Clients per Facility	
Client Type of Care ^a	Sample (n) ^b	N	%	N	%	Mean	Median
Total	2,395	12,387	100.0	1,091,328	100.0	88	40
Type of Care	10.75						
Hospital Inpatient	343	1,247	10.1	14,649	1.3	12	6
Non-Hospital Residential	598	3,169	25.6	100,290	9.2	32	13
Outpatient Methadone	418	688	5.6	151,882	13.9	221	177
Outpatient Non-Methadone	1,435	9,385	75.8	824,507	75.6	88	29

^a Because clients in combination facilities can be counted by their specific treatment modality within the facility, there is no "combination" type of care category, as there is for facility type of care in Table 1.1.

b This table presents estimates of the number of facilities providing each type of care, whether provided alone or in combination with other types of care (i.e., facilities providing more than one type of care are counted in more than one category). Therefore, the unweighted and weighted numbers of facilities providing each type of care add to more than the total, and the percentages offering each type of care add to more than 100 percent.

Table 1.3 Percentage Distribution of Substance Abuse Treatment Facilities, by Selected Facility Characteristics and by Facility Type of Care: National Estimates, October 1, 1996

Characteristics and by Fa	cinty Typ	Type of Care: National Estimates, October 1, 1996								
				cility Type of		1				
	Total	Hospital Inpatient Only	Non- Hospital Residential Only	Outpatient Methadone Only	Outpatient Non- Methadone Only	Combination Facilities				
Number of Facilities (weighted estimate)	12,387	378	2,135	464	7,524	1,886				
Percent of Facilities	100.0	3.1	17.2	3.8	60.7	15.2				
Facility Size ^a (on October 1, 1996)										
Small (<17 clients)	25.7	72.0	49.8	0.9	20.7	15.3				
Medium (17-40)	24.4	20.5	32.8	1.9	22.8	27.6				
Large (41-100)	26.4	6.9	14.2	15.2	30.8	29.0				
Very Large (>100)	23.5	0.7	3.3	82.0	25.7	28.1				
Ownership ^a		- 6			- 5	Z-				
Private For-Profit	22.7	18.7	7.7	38.9	26.6	21.2				
Private Non-Profit	63.4	59.1	83.2	48.7	59.0	62.8				
Public	13.9	22.2	9.2	12.5	14.4	16.0				
Percent Public Revenue ^a										
0%	13.6	6.6	7.4	18.1	18.5	1.6*				
1 - 50%	18.8	26.6	7.0	17.4	18.4	32.6				
51 - 90%	33.7	29.4	42.7	29.5	31.7	33.7				
91 - 99%	18.6	18.3	27.2	30.7	15.0	20.3				
100%	12.4	8.8	14.4	2.1	13.4	9.6				
Unknown %	2.8	10.4	1.3*	2.2	3.1	2.2*				
Urbanicity ^a										
Metro: Large Metro (1 million+ pop)	43.3	40.4	48.3	69.5	39.8	45.6				
Medium Metro (250,000 - 1 million pop)	24.1	25.9	22.3	24.6	24.0	25.8				
Small Metro (< 250,000 pop)	11.5	8.3	13.6	4.5	10.8	13.9				
Non-metro: Urban (20,000+ pop)	7.2	12.2	8.4	1.4	6.9	7.7				
Small Urban (2,500 - 19,999	11.0	11.0	C 4	0.0	150	5.5				
pop)	11.9 2.1	11.0 2.1*	6.4	0.0	15.8 2.7	5.5 1.5*				
Rural (< 2,500 pop)	2.1	2.1**	1.0**	0.0	2.1	1.5				
Level of Affiliation ^a	21.4	10.4	21.3	11.8	21.8	24.8				
Parent Facility		62.2								
Affiliate Non-Affiliate	49.0 29.6	27.4	53.4 25.3	55.5 32.7	47.9 30.3	44.2 31.0				
Number of Treatment Services ^a	29.0	21.4	23.3	32.1	30.3	31.0				
Low (0-5)	11.7	9.9	11.3	23.2	13.7	2.0*				
Medium (6-8)	51.8	34.1	53.5	46.0	59.6	23.9				
High (9-11)	36.4	55.9	35.3	30.9	26.7	74.1				
111511 (> 11)	50.7	55.7	33.3	30.7	20.7	77.1				

Table 1.3 (continued)

Table 1.5 (continued)			Fa	cility Type of	f Care	
	Total	Hospital Inpatient Only	Non- Hospital Residential Only	Outpatient Methadone Only	Outpatient Non- Methadone Only	Combination Facilities
Number of Support Services ^a						
None	10.7	7.9	0.7*	0.2*	16.8	1.0*
Low (1-2)	36.9	21.9	11.7	28.0	50.3	17.0
Medium (3-4)	35.4	47.1	49.7	52.0	26.0	49.9
High (5-8)	17.1	23.2	37.9	19.8	6.9	32.1
Client-to-Staff Ratio (Direct-Care FTEs) ^a						
Low (4 or less)	32.9	97.2	59.5	2.9	18.9	53.8
Medium (>4 to 14)	33.9	2.5*	38.2	10.6	36.4	30.8
High (more than 14)	33.2	0.4	2.3	86.5	44.8	15.4
Facility Setting ^{a,b}	7					
Hospital (inpatient or outpatient)	16.1	95.8	2.7	11.6	7.7	49.9
Non-Hospital Residential, Therapeutic Community or Halfway House	24.2	2.9	96.1	0.9	1.7	42.3
Community Mental Health Center	18.5	2.3*	2.2*	5.0	28.2	4.7
Other Outpatient	45.5	1.2*	1.1*	83.0	60.3	36.3
Other	11.4	2.2	7.6	4.4	15.1	4.6
Certification Type ^{a,b}						
State Alcohol or Drug Agency	82.4	65.3	86.0	92.1	82.8	77.3
State Dept. of Mental Health	28.8	39.1	15.3	12.7	32.1	32.7
State Dept. of Public Health	29.1	56.3	35.6	50.8	21.2	43.3
Hospital Licensing Authority	10.3	62.1	2.0*	6.2	4.6	33.4
JCAHO	28.7	85.4	14.3	27.7	21.9	61.0
Other	22.5	20.4	22.6	40.1	18.2	36.0
Mean Number of Licenses or Accreditation	1.9	3.2	1.6	1.9	1.7	2.6

^a See Appendix B for definition of variables.

^b Categories are not mutually exclusive and may add to greater than 100.0 percent.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table 1.4 Percentage Distribution of Substance Abuse Treatment Facilities, by Selected Facility Characteristics and by Facility Ownership: National Estimates, October 1, 1996

Characteristics and by Facility (<u>)wnership:</u>	National Estimates, October 1, 1996						
		F	acility Ownership					
	Total	Private For-Profit	Private Non-Profit	Public				
Number of Facilities (weighted estimate)	12,387	2,814	7,847	1,726				
Percent of Facilities	100.0	22.7	63.4	13.9				
Facility Type of Care ^a								
Hospital Inpatient Only	3.1	2.5	2.9	4.9				
Non-Hospital Residential Only	17.2	5.8	22.6	11.4				
Outpatient Methadone Only	3.8	6.4	2.9	3.4				
Outpatient Non-Methadone Only	60.7	71.1	56.6	62.9				
Combination Facilities	15.2	14.2	15.1	17.5				
Facility Size ^a (on October 1, 1996)			1					
Small (<17 clients)	25.7	28.9	25.8	20.2				
Medium (17-40)	24.4	28.7	23.8	19.9				
Large (41-100)	26.4	22.8	28.6	21.8				
Very Large (>100)	23.5	19.7	21.7	38.1				
Percent Public Revenue ^a			000					
0%	13.6	39.6	6.8	2.4*				
1 - 50%	18.8	35.3	15.3	7.8				
51 - 90%	33.7	14.3	40.7	33.7				
91 - 99%	18.6	2.5	22.2	28.4				
100%	12.4	1.4*	13.1	27.3				
Unknown %	2.8	6.9	1.9	0.4				
Urbanicity ^a	4							
Metro: Large Metro (1 million+ pop)	43.3	52.3	42.4	32.5				
Medium Metro (250,000 - 1 million pop)	24.1	27.0	24.6	16.6				
Small Metro (< 250,000 pop)	11.5	11.5	11.2	12.6				
Non-metro: Urban (20,000+ pop)	7.2	3.9*	8.0	8.9				
Small Urban (2,500 - 19,999 pop)	11.9	5.0	11.6	24.4				
Rural (< 2,500 pop)	2.1	0.3*	2.2	5.0*				
Level of Affiliation ^a								
Parent Facility	21.4	17.9	23.1	19.6				
Affiliate	49.0	33.9	51.7	61.3				
Non-Affiliate	29.6	48.2	25.2	19.1				
Number of Treatment Services ^a								
Low (0-5)	11.7	20.0	8.8	11.4				
Medium (6-8)	51.8	38.1	57.1	50.2				
High (9-11)	36.4	41.9	34.1	38.4				

Table 1.4 (continued)

		F	acility Ownership	•
	Total	Private For-Profit	Private Non-Profit	Public
Number of Support Services ^a				
None	10.7	21.2	8.2	5.0
Low (1-2)	36.9	45.8	34.9	31.0
Medium (3-4)	35.4	26.2	37.1	42.6
High (5-8)	17.1	6.8	19.8	21.4
Client-to-Staff Ratio (Direct-Care FTEs) ^a				
Low (4 or less)	32.9	34.1	32.4	33.7
Medium (>4 to 14)	33.9	34.9	34.7	28.4
High (more than 14)	33.2	31.0	33.0	37.8
Facility Setting ^{a,b}	A 9			100
Hospital (inpatient or outpatient)	16.1	21.2	13.0	21.8
Non-Hospital Residential, Therapeutic Community or Halfway House	24.2	9.7	31.0	16.8
Community Mental Health Center	18.5	4.4	21.0	30.1
Other Outpatient	45.5	56.7	43.6	36.0
Other	11.4	26.8	6.8	7.2

^a See Appendix B for definition of variables.

^b Categories are not mutually exclusive and may add to greater than 100.0 percent.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table 1.5 Percentage Distribution of Substance Abuse Treatment Facilities, by Selected Facility Characteristics and by Urbanicity: National Estimates, October 1, 1996

Characteristics and	by Ciban		iai Estillati	Urban			
			Metropolitan		N	on-Metropolita	n
	Total	Large Metro (1 million+)	Medium Metro (250,000 - 1 million)	Small Metro (< 250,000)	Urban (20,000+)	Small Urban (2,500 - 19,999)	Rural (<2,500)
Number of Facilities (weighted estimate)	12,387	5,359	2,981	1,418	893	1,471	265
Percent of Facilities	100.0	43.3	24.1	11.5	7.2	11.9	2.1
Facility Type of Care ^a							
Hospital Inpatient Only	3.1	2.9	3.3	2.2	5.2	2.8	3.0*
Non-Hospital Residential Only	17.2	19.2	16.0	20.4	20.1	9.3	8.3*
Outpatient Methadone Only	3.8	6.0	3.8	1.5	0.7	0.0	0.0
Outpatient Non-Methadone Only	60.7	55.9	60.6	57.4	57.8	80.8	77.9
Combination Facilities	15.2	16.1	16.3	18.5	16.2	7.0	10.9*
Facility Size ^a (on October 1, 1996)							
Small (<17 clients)	25.7	22.0	24.4	38.7	29.4	24.6	40.5
Medium (17-40)	24.4	25.7	24.7	13.3	26.2	27.5	30.4*
Large (41-100)	26.4	25.9	26.0	25.7	24.5	32.2	16.6*
Very Large (>100)	23.5	26.4	24.9	22.3	19.9	15.7	12.4*
Ownership ^a		7	7				
Private For-Profit	22.7	27.5	25.5	22.9	12.4*	9.5	2.8*
Private Non-Profit	63.4	62.1	64.9	61.8	70.5	61.9	64.3
Public	13.9	10.5	9.6	15.3	17.1	28.6	32.9
Percent Public Revenue ^a		_		b:			
0%	13.6	16.4	14.4	10.5	10.2*	9.4	1.2*
1 - 50%	18.8	18.3	20.6	25.4	14.6	13.5	16.8*
51 - 90%	33.7	27.1	35.5	29.1	42.7	52.5	37.6
91 - 99%	18.6	20.8	16.6	18.9	18.0	15.4	15.9*
100%	12.4	13.4	11.4	13.6*	13.0*	7.3	24.1*
Unknown %	2.8	4.1	1.5	2.5*	1.5*	1.9*	4.4*
Level of Affiliation ^a		35					
Parent Facility	21.4	21.2	23.1	18.2	19.9	23.9	17.3*
Affiliate	49.0	46.3	50.1	51.2	56.2	50.9	44.1
Non-Affiliate	29.6	32.5	26.8	30.6	24.0	25.3	38.6
Number of Treatment Services ^a							
Low (0-5)	11.7	12.6	11.4	13.4	12.4	6.7*	14.7*
Medium (6-8)	51.8	49.1	49.1	56.9	51.4	61.8	57.3
High (9-11)	36.4	38.4	39.5	29.8	36.2	31.4	28.0*

Table 1.5 (continued)

				Urban	nicity ^a						
		Metropolitan Non-Metropolitan									
	Total	Large Metro (1 million+)	Medium Metro (250,000 - 1 million)	Small Metro (< 250,000)	Urban (20,000+)	Small Urban (2,500 - 19,999)	Rural (<2,500)				
Number of Support Services ^a											
None	10.7	7.7	8.7	12.0	12.0*	22.7	17.1*				
Low (1-2)	36.9	33.6	40.8	39.8	31.5	38.2	54.4				
Medium (3-4)	35.4	39.7	33.9	27.7	41.8	28.1	23.8*				
High (5-8)	17.1	19.0	16.7	20.5	14.8	11.0	4.6*				
Client-to-Staff Ratio (Direct-Care FTEs) ^a						1					
Low (4 or less)	32.9	30.8	34.7	39.3	37.2	29.1	29.9*				
Medium (>4 to 14)	33.9	37.6	28.3	34.2	36.4	29.6	34.8				
High (more than 14)	33.2	31.6	37.1	26.5	26.4	41.3	35.3				
Facility Setting ^b	-										
Hospital (inpatient or outpatient)	16.1	16.2	17.9	14.3	18.9	14.0	5.8*				
Non-Hospital Residential, Therapeutic Community or Halfway House	24.2	26.5	21.5	30.6	29.8	12.3	19.1*				
Community Mental Health Center	18.5	9.1	16.3	21.3	28.5	42.2	52.6				
Other Outpatient	45.5	51.9	49.0	33.4	36.3	35.5	29.6*				
Other	11.4	11.6	11.9	17.4	4.2	8.9	6.4*				

^a See Appendix B for definition of variables.

^b Categories are not mutually exclusive and may add to greater than 100.0 percent.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table 1.6 Percentage Distribution of Substance Abuse Treatment Facilities, by Selected Facility Characteristics and by Facility Certification: National Estimates, October 1, 1996

Characteristics an	u by ra	cinty Certii	ication: Nati					
			•		tification ^a [Q-		1	ı
	Total	Facilities with Any Certification	State Alcohol or Drug Abuse Agency	State Mental Health Agency	State Public Health Facility	Hospital Certification Authority	ЈСАНО	Other
Number of Facilities (weighted								
estimate)	12,387	11,732	10,177	3,527	3,573	1,255	3,523	2,739
Percent of Facilities	100.0	94.7	82.4	28.8	29.1	10.3	28.7	22.5
Percent of Facilities with	,							
Certification Type	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Facility Type of Care ^a				APPL				
Hospital Inpatient Only	3.1	3.2	2.4	4.1	5.9	18.6	9.2	2.8
Non-Hospital Residential Only	17.2	17.0	18.0	9.1	21.0	3.3*	8.5	17.3
Outpatient Methadone Only	3.8	3.9	4.2	1.6	6.5	2.2	3.5	6.7
Outpatient Non-Methadone Only	60.7	59.8	61.2	67.8	44.0	27.0	46.5	49.2
Combination Facilities	15.2	16.1	14.3	17.3	22.6	48.9	32.3	23.9
Facility Size ^a (on October 1, 1996)		. 4			4			
Small (<17 clients)	25.7	25.3	24.3	23.8	28.6	33.6	32.2	26.6
Medium (17-40)	24.4	24.0	22.4	32.1	26.9	34.9	27.7	26.4
Large (41-100)	26.4	26.5	27.9	23.3	23.0	18.9	19.5	22.7
Very Large (>100)	23.5	24.2	25.4	20.8	21.4	12.7	20.7	24.4
Ownership ^a		6.9						
Private For-Profit	22.7	21.8	20.2	21.2	21.1	31.9	29.4	22.2
Private Non-Profit	63.4	64.0	66.8	62.2	68.3	55.5	57.6	66.9
Public	13.9	14.2	13.0	16.5	10.6	12.6	12.9	10.9
Percent Public Revenue ^a								
0%	13.6	12.6	12.6	8.5	9.7	9.1*	10.4	11.1
1 - 50%	18.8	19.2	18.5	21.9	19.1	37.8	32.8	16.6
51 - 90%	33.7	34.7	35.4	37.0	36.8	30.5	28.8	36.3
91 - 99%	18.6	19.4	20.6	20.6	23.7	6.4	11.4	19.9
100%	12.4	11.6	10.9	8.0	8.6	4.1	11.2	12.1
Unknown %	2.8	2.5	2.1	4.1	2.2*	12.1*	5.5*	3.93*
Urbanicity ^a								
Metro: Large Metro (1 million+ pop)	43.3	42.9	43.7	33.0	42.8	45.5	42.1	55.6
Medium Metro (250,000 - 1 million pop)	24.1	23.8	22.5	23.8	26.7	26.9	29.6	17.6
Small Metro (< 250,000 pop)	11.5	11.5	11.9	11.3	10.0	6.7	9.9	10.9
Non-metro: Urban (20,000+ pop)	7.2	7.4	7.6	10.6	7.0	10.4	6.7	7.2
Small Urban (2,500 - 19,999 pop)	11.9	12.3	12.4	17.7	11.8	9.2*	10.2	8.1
Rural (< 2,500 pop)	2.1	2.1	1.9	3.6*	1.6*	1.2*	1.6*	0.6*

Table 1.6 (continued)

				Type of Cer	tification ^a [Q-	A7]		
	Total	Facilities with Any Certification	State Alcohol or Drug Abuse Agency	State Mental Health Agency	State Public Health Facility	Hospital Certification Authority	ЈСАНО	Other
Level of Affiliation ^a								
Parent Facility	21.4	21.9	22.9	19.8	23.0	15.5	18.6	20.2
Affiliate	49.0	50.0	49.2	53.9	51.0	62.1	60.0	50.4
Non-Affiliate	29.6	28.1	27.9	26.4	26.0	22.5	21.5	29.5
Number of Treatment Services ^a								
Low (0-5)	11.7	11.0	11.1	8.6	7.5	2.3*	6.2	7.1
Medium (6-8)	51.8	51.6	54.4	48.9	44.9	19.4	36.4	47.7
High (9-11)	36.4	37.5	34.5	42.4	47.6	78.3	57.3	45.3
Number of Support Services ^a					1.00	- 64		
None	10.7	10.4	10.2	11.7	9.3	2.8*	8.5	5.7
Low (1-2)	36.9	36.2	37.4	39.2	30.4	29.6	35.0	32.4
Medium (3-4)	35.4	35.8	34.3	33.9	34.8	47.6	36.9	29.5
High (5-8)	17.1	17.6	18.2	15.2	25.5	19.9	19.6	22.4
Client-to-Staff Ratio (Direct- Care FTEs) ^a					A			
Low (4 or less)	32.9	32.9	30.2	35.3	42.4	69.9	52.8	38.1
Medium (>4 to 14)	33.9	33.5	34.0	34.9	34.2	18.3	23.2	30.9
High (more than 14)	33.2	33.6	35.8	29.7	23.3	11.8	24.0	31.0
Facility Setting ^{a,b}								
Hospital (inpatient or outpatient)	16.1	17.0	13.5	17.9	23.3	87.7	50.4	19.2
Non-Hospital Residential, Therapeutic Community or Halfway House	24.2	24.4	25.7	16.3	31.8	4.4	13.8	30.1
Community Mental Health Center	18.5	19.2	19.3	45.9	14.1	2.7*	15.8	14.0
Other Outpatient	45.5	44.8	47.9	27.5	40.4	12.7	28.0	46.8
Other	11.4	9.8	9.8	12.5	11.1	3.7*	3.6	10.1

^a See Appendix B for definition of variables.

^b Categories are not mutually exclusive and may add to greater than 100.0 percent.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table 1.7 Percentage Distribution of Substance Abuse Treatment Facilities, by Selected Facility Characteristics and by Level of Affiliation with Other Facilities: National Estimates, October 1, 1996

		L	evel of Affiliation	a
	Total	Parent	Affiliate	None
Number of Facilities (weighted estimate)	12,387	2,657	6,067	3,661
Percent of Facilities	100.0	21.4	49.0	29.6
Percent of Facilities with Affiliation Type	100.0	100.0	100.0	100.0
Facility Type of Care ^a				
Hospital Inpatient Only	3.1	1.5	3.9	2.8
Non-Hospital Residential Only	17.2	17.1	18.8	14.8
Outpatient Methadone Only	3.8	2.1	4.3	4.1
Outpatient Non-Methadone Only	60.7	61.8	59.3	62.3
Combination Facilities	15.2	17.6	13.8	16.0
Facility Size ^a (on October 1, 1996)				
Small (<17 clients)	25.7	22.1	29.6	21.9
Medium (17-40)	24.4	15.1	26.1	28.4
Large (41-100)	26.4	35.9	22.9	25.2
Very Large (>100)	23.5	27.0	21.4	24.6
Ownership ^a				
Private For-Profit	22.7	19.0	15.7	37.1
Private Non-Profit	63.4	68.3	66.9	53.9
Public	13.9	12.7	17.5	9.0
Percent Public Revenue ^a				
0%	13.6	12.5	10.2	20.2
1 - 50%	18.8	17.5	18.1	20.8
51 - 90%	33.7	38.9	33.1	31.1
91 - 99%	18.6	21.0	20.6	13.7
100%	12.4	8.4	15.5	10.3
Unknown %	2.8	1.8*	2.6	4.1*
Urbanicity ^a				
Metro: Large Metro (1 million+ pop)	43.3	42.8	40.9	47.5
Medium Metro (250,000 - 1 million pop)	24.1	25.9	24.6	21.8
Small Metro (< 250,000 pop)	11.5	9.7	12.0	11.9
Non-metro: Urban (20,000+ pop)	7.2	6.7	8.3	5.9
Small Urban (2,500 - 19,999 pop)	11.9	13.2	12.3	10.2
Rural (< 2,500 pop)	2.1	1.7*	1.9*	2.8
Number of Treatment Services ^a				
Low (0-5)	11.7	8.8	10.6	15.7
Medium (6-8)	51.8	51.3	51.7	29.9
High (9-11)	36.4	40.0	37.7	31.8

Table 1.7 (continued)

		Level of Affiliation ^a				
	Total	Parent	Affiliate	None		
Number of Support Services ^a						
None	10.7	10.3	9.4	13.2		
Low (1-2)	36.9	35.8	36.1	38.9		
Medium (3-4)	35.4	32.1	36.7	35.6		
High (5-8)	17.1	21.8	17.8	12.4		
Client-to-Staff Ratio (Direct-Care FTEs) ^a						
Low (4 or less)	32.9	28.6	38.1	27.4		
Medium (>4 to 14)	33.9	35.9	30.3	38.4		
High (more than 14)	33.2	35.5	31.6	34.3		
Facility Setting ^{a,b}						
Hospital (inpatient or outpatient)	16.1	10.0	20.7	12.8		
Non-Hospital Residential, Therapeutic Community or Halfway House	24.2	27.6	22.5	24.4		
Community Mental Health Center	18.5	20.3	22.0	11.5		
Other Outpatient	45.5	48.7	39.0	54.1		
Other	11.4	10.8	6.4	20.0		

^a See Appendix B for definition of variables.

^b Categories are not mutually exclusive and may add to greater than 100.0 percent.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table 1.8 Number and Percentage of Substance Abuse Treatment Facilities with Affiliation with Other Organizations, and Service Provided by Affiliated Organizations, by Facility Type of Care: National Estimates, October 1, 1996

			F	acility Type o	f Care	
Affiliations	All Facilities	Hospital Inpatient Only	Non- Hospital Residential Only	Methadone Only	Outpatient Non- Methadone Only	Combination Facilities
Total Number of Facilities (national estimates)	12,387	378	2,134	464	7,524	1,886
Number of Facilities with Affiliations ^a	7,748	271	1,460	294	4,570	1,153
Percent with Affiliations	62.6	71.7	68.4	63.3	60.7	61.1
Types of Organizations Affiliated with ^{a,b}			Percent of	Affiliated Faci	lities	
Hospital	20.0	65.2	6.6	22.0	16.9	38.7
Substance abuse treatment facility	29.7	10.4	38.0	28.2	30.1	22.0
Administrative office	55.3	40.7	65.6	65.4	52.9	52.0
Government agency	11.5	12.9	7.1	11.1	12.8	12.2
Other	27.1	12.6	21.7	13.6	33.5	14.5
Types of Services Provided by Other Organization ^{a,b}		1				
Financial	88.4	89.1	91.0	90.0	88.3	84.7
Personnel	82.4	84.1	82.5	90.9	82.5	79.5
Pricing	67.2	78.7	59.7	59.5	67.1	76.2
Treatment protocols	54.0	45.9	55.8	63.0	57.0	39.4
Client intake/assessment	29.7	39.8	27.8	22.2	32.0	22.9

^a Facilities with affiliations are those that indicated in ADSS Phase I question A11 that they were legally part of another organization.

^b Not mutually exclusive categories.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Chapter 2. Client Populations in Substance Abuse Treatment Facilities

Mary Ellen Marsden, Sharon Reif, Maria Pieroni, Helen J. Levine, Margaret T. Lee, Grant A. Ritter, and Constance M. Horgan

2.1 Introduction

This chapter presents national estimates of the number and characteristics of clients in substance abuse treatment facilities in 1996 based on reports of facility directors. Substance abuse treatment facilities are facilities providing alcohol or drug abuse treatment or recovery services using specified personnel, designated space or resources, and a specified budget for such services. Types of facilities excluded from this study are halfway houses without paid counselors, solo practitioners, correctional facilities, Department of Defense (DoD) facilities, Indian Health Service facilities, and facilities that are intake and referral only. This chapter examines the demographic and other characteristics of clients receiving treatment in varied types of care and treatment settings and in facilities that are owned publicly or by private for-profit and private non-profit organizations. The number of special population clients, such as women and adolescents, and the number of facilities providing special programs for those clients also are examined. Data reported here are drawn from Phase I: The Facility Survey of the Alcohol and Drug Services Study (ADSS). ADSS Phase I is a study of a nationally representative sample of substance abuse facilities across the Nation, and it builds upon the work of the 1990 Drug Services Research Survey (DSRS) (Batten et al., 1993) with a more complete sampling frame, enhanced sampling design, and improved measures of financing and organization. ADSS uses the same sample frame as that of the Uniform Facilities Data Set (UFDS) (Substance Abuse and Mental Health Services Administration [SAMHSA], 1997b), augmented to yield the universe of substance abuse treatment facilities in the United States. Facilities providing treatment for both illicit drug and alcohol problems are included in the study, as are publicly and privately owned facilities. ADSS was designed to produce statistically unbiased national estimates of substance abuse treatment facilities and clients in treatment.

The data reported on here are based on reports from facility directors regarding their client populations and are not aggregated from data about individual clients within those facilities. In the tables appearing at the end of this chapter, the Phase I questionnaire numbers from which the data were drawn are noted as Q-x. Information about the data collection methodology of the ADSS Phase I study and about methodone facilities will be presented in separate reports. Findings from Phase II on the cost of treatment and on detailed client-level treatment record abstract data will be presented in subsequent reports.

2.1.1 Background

According to UFDS, almost 1 million people receive treatment in substance abuse treatment facilities on a given day, and this number had grown over the prior decade. On October 1, 1996, 940,141 people were receiving treatment for substance abuse compared with 614,123 on October 30, 1987 (Alcohol, Drug Abuse, and Mental Health Administration [ADAMHA], 1989;

SAMHSA, 1997b). Increases in the number of clients in treatment reflected dramatic increases in public expenditures for treatment over the prior decade (Huber, Pope, & Dayhoff, 1994), as well as the growth in private-sector facilities (Schmidt & Weisner, 1993). These increases in expenditures marked an intensified Federal commitment to drug control activities, as well as an attempt to increase the number of individuals receiving treatment. Part of the increase in the numbers of clients in treatment may, however, be related to improved data collection procedures in studies on which knowledge of treatment populations is based. Although the growth in the private sector leveled off during the 1990s, the increase in private-sector clients coupled with targeted treatment for women changed the character of the client population (Weisner, Greenfield, & Room, 1995). The client population is aging and becoming more female, although males constitute about 70 percent of the treatment population. The racial and ethnic composition of the client population has, however, changed little in recent years (SAMHSA, 1997b).

The drugs of abuse of the treatment population also are changing. Although heroin abusers were the largest group of drug abuse treatment clients during the 1970s and 1980s (Hubbard et al., 1989), they were superseded by cocaine abusers during the 1990s (Craddock, Rounds-Bryant, Flynn, & Hubbard, 1997). A doubling of heroin-related emergency room episodes between 1990 and 1996 may foreshadow increases in heroin abusers among the treatment population (SAMHSA, 1997c). Among clients in substance abuse treatment facilities, according to the Treatment Episode Data Set (TEDS), treatment admissions are dominated by four primary substances of abuse: alcohol, cocaine, heroin and other opiates, and marijuana. Alcohol accounted for about half of all treatment admissions in 1996, according to TEDS (SAMHSA, 1998a). Because TEDS includes predominantly publicly owned facilities, these findings might differ somewhat if a broader representation of facilities were included. Substance abuse treatment clients are, however, more likely to abuse both alcohol and drugs than either alone, and the proportion who abuse both is increasing, according to UFDS data. In 1996, 28 percent of substance abuse treatment clients had abused alcohol only, 29 percent had abused drugs only, and 43 percent had abused alcohol and drugs. The proportion of clients who abused both alcohol and other drugs increased from 26 to 43 percent during the 1990s, while corresponding decreases were found in the proportion who abused alcohol only (SAMHSA, 1997b). The proportion abusing drugs only was more stable.

The majority of clients receive care in outpatient facilities and in facilities that are largely publicly funded (SAMHSA, 1997b). The characteristics of clients receiving care differ by type of facility. The Institute of Medicine (IOM, 1990b), for example, documented the fact that public clients were less likely to be employed and had lower levels of education, higher severity substance abuse problems, and more involvement with the criminal justice system. Clients in inpatient and residential settings also are more likely to have greater problem severity than clients in outpatient settings (Hubbard et al., 1989). Facilities with private-only funding reported higher proportions of men, white, and Hispanic clients (SAMHSA, 1997b, p. 29).

Many clients are thought to require special treatment services to remain in treatment and for treatment to be effective. These "targeted population" clients include women, adolescents, indigent clients, and racial/ethnic minorities, among others (IOM, 1990a). Women, for example, reported more psychiatric symptoms and depression, were less likely to be employed, and were less likely to have been arrested (Wallen, 1992). They may benefit from services such as child

care and transportation to remain in treatment (SAMHSA, 1994). The AIDS epidemic has had a dramatic effect on the delivery of services in substance abuse treatment as the importance of drug abuse treatment in reducing the spread of AIDS and the special treatment needs of AIDS clients were recognized (Fletcher, Tims, & Brown, 1997). More emphasis is being placed on getting substance abusers into treatment and not lapsing into risky behaviors (Sorensen & Miller, 1996). Racial/ethnic groups may benefit from culturally appropriate treatment programs that take into account their differential patterns of substance abuse (Arciniega, Arroyo, Miller, & Tonigan, 1996). Criminal justice clients may require close supervision in treatment, and their involuntary stay may affect the treatment process, although they typically stay longer in treatment than other clients (IOM, 1990b). Although adolescents constitute less than 10 percent of the treatment client population according to most studies, they are often treated in separate programs and indeed may not benefit from standard treatment approaches (Kaminer & Frances, 1991).

2.1.2 Methodology Overview

Phase I of ADSS consisted of a mail questionnaire collected by telephone interview with facility directors at a random sample of 2,395 non-correctional alcohol and drug treatment facilities representing 12,387 facilities nationwide, stratified by type of care within the substance abuse treatment system. The sample frame was SAMHSA's 1995 National Master Facility Inventory (NMFI), augmented to yield the universe of substance abuse treatment facilities known to SAMHSA. As mentioned in the introduction, treatment facilities excluded from the sampling frame were halfway houses without paid counselors, solo practitioners, correctional facilities, DoD facilities, Indian Health Service facilities, and facilities that are intake and referral only.

Phase I: The Facility Survey was conducted from December 1996 to June 1997, with data collected for a point-prevalence date of October 1, 1996, and for the most recent 12-month reporting period of the facility. The point-prevalence date was chosen to be the same as the 1996 UFDS (SAMHSA, 1997a). The questionnaire was mailed out in advance so that the director had a chance to gather information to fill out the questionnaire. The responses then were collected by telephone. The Phase I response rate was 91.4 percent of 2,603 facilities eligible for ADSS.

Because the Phase I sampling design incorporates a stratified random probability sample, weights have been developed to produce national estimates of facilities. The sampling weights adjust for facility non-response and for differential response rates within strata. The data in this report were imputed to account for missing values on several key variables. Overall, item non-response was very low, about 3 percent for client counts and about 10 percent for cost and revenue. Further information about the data collection methodology for the study is presented in Appendix A. Variable definitions appear in Appendix B, and standard error tables are presented in Appendix C. Information on imputation of missing data also is presented in the separate report titled *Sample Design, Selection and Estimation for Phase I of ADSS* (Mohadjer, Yansaneh, Krenzke, & Dohrmann, 2000, Chapter 5). In analyses presented here, only statistically significant differences are discussed.¹

¹ All comparisons reported in this chapter are significant, except where noted otherwise, using the Bonferroni correction to p = .05 based on the number of comparisons.

2.1.3 Organization of the Chapter

First, the chapter presents national estimates of the number of clients in substance abuse treatment, according to point-prevalence and annual admissions and discharge data gathered from facility directors. These estimates are examined by selected facility characteristics, including type of care, treatment setting, ownership of facility, percent public revenue, urbanicity, and level of affiliation of the facility with other organizations. In these analyses, attention focuses on the size of the client population in treatment facilities and the types of facilities in which clients receive care. Second, demographic and other client characteristics are reviewed by type of care, treatment setting, and ownership of the facility providing treatment. These analyses examine the extent to which the client populations differ in types of facilities. Third, the number of special population clients, such as women and adolescents, and the nature of facilities providing treatment to these populations are discussed. Special population clients may require specialized treatment services to aid in their recovery. The chapter ends by summarizing findings on the characteristics of clients in substance abuse treatment facilities.

2.2 Findings on the Number of Clients in Treatment

On October 1, 1996, about 1 million individuals were receiving treatment in substance abuse treatment programs across the Nation, according to reports of facility directors in ADSS. Some 4.3 million admissions to treatment and about 3.7 million discharges were reported within the recent year (see Table 2.1). Note, however, that the definition of a treatment admission or discharge may vary across treatment facilities, affecting the reporting of the number of admissions and discharges. There is particularly likely to be variation in reporting the number of discharges in outpatient facilities; while some facilities may officially discharge a client who has not received treatment within a month or other specified period of time, other facilities may keep those clients as part of the active client population.

The estimate of 1,091,328 clients in treatment on October 1, 1996, derived from ADSS, is slightly higher than the estimate provided by UFDS for the same date: 940,141 (SAMHSA, 1997b). The difference of about 150,000 between the two point-prevalence estimates from ADSS and UFDS is related to how facility response was handled and to differences in sampling frames (see footnote 2 in Chapter 1, Section 1.3.1). Although ADSS omits certain types of facilities that are included in the UFDS study (halfway houses without paid counselors, solo practitioners, correctional facilities, DoD facilities, Indian Health Service facilities, and facilities that are intake and referral only), the ADSS frame augmentation process increased the number of facilities surveyed and thereby the number of clients. Indeed, 12,387 facilities are represented in ADSS and 10,641 facilities in UFDS for 1996. Further, the more intensive mail/telephone data collection procedures utilized by ADSS may have affected the estimates of the size of the client treatment population.

The number of annual admissions and discharges to treatment is generally several times higher than the number of clients in a 1-day census. As shown in Table 2.1, facility directors reported 4,295,815 admissions to treatment in substance abuse treatment facilities during the most recent 12-month period and 3,680,566 discharges from those facilities in that year. Thus,

the number of admissions is 3.9 times higher and the number of discharges 3.4 times higher than the 1-day census of clients in this study.

Note also that the numbers of admissions and discharges are not unduplicated counts of clients. That is, individual clients could have been admitted or discharged more than once during the year, contributing more than once to the total number of admissions or discharges during the year. According to the ADSS Phase II client abstract data, for example, about 30 percent of clients in substance abuse treatment had been in treatment during the 12 months prior to the treatment episode in question (SAMHSA, unpublished data). The actual number of individual clients admitted or discharged during the year is therefore smaller than the total number of admissions or discharges.

Table 2.1 also presents information about the distribution of clients among types of facilities, based on point-prevalence data from October 1, 1996, as well as data on annual admissions and discharges. Only the findings from the point-prevalence data are discussed here.

2.2.1 Type of Care

Data from the client census on October 1, 1996, show that clients were in predominantly outpatient types of care: 824,507 clients or 76 percent of the client population of about 1 million were in outpatient non-methadone treatment and 14 percent were in outpatient methadone treatment for a total of 90 percent of clients in outpatient care. Few clients were being treated in hospital inpatient (1.3 percent) or in residential (9 percent) care. Data from the 1996 UFDS study (SAMHSA, 1997b) similarly indicate that the majority of clients were in outpatient treatment.

2.2.2 Setting

Consistent with the distribution of clients by type of care, the majority of clients received treatment in outpatient settings: 18 percent were receiving outpatient care in community mental health centers and 60 percent were in treatment in other outpatient settings. Only 13 percent of clients were receiving treatment in hospitals, and 15 percent were receiving treatment in other residential settings, such as non-hospital residential, therapeutic communities, or halfway houses. Most clients were thus receiving care in community-based non-hospital settings on an outpatient basis. Note that these types of settings are not mutually exclusive and therefore do not add to 100 percent. Note also that the current treatment may not be the first or only treatment episode or setting; substance abusers may have multiple treatment episodes during their lifetimes in varied treatment settings (Anglin, Hser, & Grella, 1997).

2.2.3 Ownership

The majority of clients (60 percent) were being treated in facilities owned by private non-profit organizations, as shown in Table 2.1. About 19 percent of clients received care in private for-profit facilities and 21 percent in publicly owned facilities. The IOM (1990b) documented the relative stability of the number of publicly owned facilities during the 1980s, contrasted with the growth in the private tier of programs that includes private non-profit and private for-profit programs.

2.2.4 Percent Public Revenue

Consistent with the high proportion of clients who received treatment in private non-profit facilities, the majority of clients were receiving treatment in facilities with largely public funding. More than two thirds of clients (68 percent) received treatment in facilities that received half or more of their revenue from public sources. Relatively few clients (14 percent) received treatment in facilities that received none of their revenue from public sources.

2.2.5 Urbanicity²

Half of all clients (49 percent) were receiving care in facilities in large metropolitan areas (metropolitan statistical areas [MSAs] with a population of 1 million or more), according to the distribution of clients among categories of metropolitan and non-metropolitan areas defined by the Beale index (Butler & Beale, 1994). Another one fourth (25 percent) received care in medium-sized MSAs (counties with populations of 250,000 to 1 million). About 15 percent of clients received care in facilities located in non-metropolitan areas—in rural, small urban, or urban areas. Data from the National Household Survey on Drug Abuse (NHSDA) indicate that about 48 percent of those who needed treatment lived in large metropolitan areas and about 55 percent of those who received treatment in the past year lived in large metropolitan areas (SAMHSA, 1997a).

2.2.6 Level of Affiliation³

A higher proportion of clients were being treated in facilities that are affiliates of other treatment organizations (44 percent) than in facilities that are parent organizations (26 percent) or not affiliated with other facilities (31 percent). The level of services appears to be higher in treatment facilities that are affiliated with other organizations. Lee et al., as seen in Chapter 3 of this report, found that parent and affiliate facilities tend to offer more services; similarly, Alexander, Anderson, and Lewis (1985) found that units that were owned or affiliated with another entity offer more services.

2.3 Findings on Client Characteristics

Demographic characteristics, primary source of payment, referral source, and principal drug of abuse reported by facility directors for clients in substance abuse treatment on October 1, 1996, are presented in Tables 2.2 to 2.4 by type of care (Table 2.2), treatment setting (Table 2.3), and ownership of facility (Table 2.4). Additional information about whether clients are receiving treatment for alcohol abuse, drug abuse, or both is presented in Table 2.5.

Across all types of facilities, as shown in Table 2.2, clients in substance abuse treatment programs were predominantly males (67 percent), white non-Hispanic clients (61 percent), and

² See Appendix B for the definition of "urbanicity."

³ See Appendix B for the definition of "facility level of affiliation."

primarily alcohol abusers (47 percent). About 1 in 5 were primarily cocaine abusers (19 percent), about 1 in 10 were marijuana/hashish/THC abusers (12 percent), and 1 in 10 were heroin/other opiate abusers (10 percent). Most clients were relatively young: More than half (58 percent) were under the age of 35, and one fourth were under the age of 25 (26 percent), including 11 percent under the age of 18. About one third (38 percent) were aged 35 or older (4 percent were of unknown age). Table 2.2 also includes information on clients' primary expected source of payment for treatment, as reported by facility directors. For almost one half of clients (47 percent), the primary expected source of payment for treatment reported by facility directors was public funds, either Medicaid, Medicare, or other public payment. About one in five (19 percent) had private health insurance that was expected to pay for treatment, while almost one fourth (23 percent) were described as self-pay. About one third (34 percent) were referred to treatment by the criminal justice system, while more than one in four were referred by another treatment program, health care organization, or social service agency. About one in five (21 percent) were self-referred to treatment or came to treatment voluntarily.

Findings regarding the percentage distribution of clients by gender, race/ethnicity, and age are highly similar to those reported in UFDS for 1996 (SAMHSA, 1997b) and TEDS for 1996 (SAMHSA, 1998). Because ADSS and UFDS facilities are based on generally the same universe of facilities, their similarity is expected. ADSS and TEDS, however, are not directly comparable because private facilities are underrepresented in TEDS, which primarily includes facilities that receive public funding and report to State substance abuse agencies, not all of which report for private for-profit facilities. Data from UFDS show that the proportion of women increased between 1980 and 1996, while the treatment population aged overall and the racial/ethnic composition was relatively stable.

These findings support those found in a number of studies about the predominance of young adults, males, and non-Hispanic whites in substance abuse treatment, as well as the importance of public funds in paying for treatment. Alcohol is the major problem substance, although cocaine, heroin, and marijuana also are important. A large proportion of clients continue to be referred to treatment by the criminal justice system. Note, however, that recent changes in Federal legislation, which now disallows Supplemental Security Income and Social Security Disability Insurance to those disabled by substance abuse only without a disabling psychiatric or medical condition, may bring changes in the substance abuse treatment population and funding for treatment (IOM, 1997).

2.3.1 Clients in Types of Care

The characteristics of clients by or within types of care are similar to those found for all types of facilities, as shown in Table 2.2, with several exceptions. In each of the types of care (hospital inpatient, residential, outpatient methadone, and outpatient non-methadone), about two thirds of clients are male and half to two thirds are non-Hispanic whites. However, the client populations of types of facilities differ as to age composition. Clients in outpatient methadone facilities are on average older: 66 percent are aged 35 or older and only 5 percent are under age 25. Residential and outpatient non-methadone facilities have higher proportions of clients under age 18 than other types of facilities. The older age of methadone clients is consistent with findings from the Drug Abuse Treatment Outcome Study (DATOS) in which outpatient

methadone clients were older on average than clients in other modalities (mean age of 37 years vs. an overall mean of 33 years) and the most likely to have had prior substance abuse treatment (74 percent vs. less than 50 percent in other modalities) (Anglin et al., 1997).

Although the primary source of payment reported by facility directors for almost half of clients in most types of care is public funds, for residential facilities, the proportion is almost two thirds. Client self-payment is the primary source of payment for a relatively large proportion of outpatient methadone clients (39 percent); relatively few clients in residential and outpatient methadone facilities pay for treatment with private health insurance. In contrast to the one third of clients across all types of facilities who are referred to treatment by the criminal justice system, only 10 percent of hospital inpatient or outpatient methadone clients are so referred. More than one in five residential clients are referred to treatment by other treatment programs. The primary drug of abuse for clients in outpatient methadone facilities is as expected overwhelmingly heroin and other opiates, while the proportion of clients who are cocaine abusers is highest in residential facilities.

These differences in the client populations of types of facilities reflect variations in funding, treatment needs, and the long-term nature of methadone treatment. It is possible that different types of care may need to offer different types of services to meet the needs of their client populations.

2.3.2 Clients in Treatment Settings

The characteristics of clients by treatment setting are similar to those found for all types of facilities for gender, race/ethnicity, and age, as shown in Table 2.3. However, there are some differences by treatment setting for other client characteristics. A higher proportion of clients in hospital settings pay for treatment with private insurance (41 percent), while relatively few clients in non-hospital residential or related facilities or in community mental health centers do so. Almost two thirds of clients in non-hospital residential and related facilities pay for treatment with public money, a much higher proportion than in other settings. More than 40 percent of clients in community mental health centers and other outpatient settings are referred to treatment by the criminal justice system compared with about one fourth of clients in residential facilities and 14 percent in hospital settings. Clients in community mental health centers are more likely to have alcohol as the primary drug of abuse, while cocaine abusers are more common in non-hospital residential and related facilities than other types of facilities.

2.3.3 Clients in Ownership Types

There was relatively little variation in client characteristics by ownership of facility; clients in private for-profit, private non-profit, and public facilities were similar on most characteristics (Table 2.4). The major exception was source of payment as reported by facility directors. Clients in private for-profit facilities were reported to be more likely to self-pay (32 percent) and to pay for treatment with private health insurance (41 percent) and less likely to have treatment covered by public sources (22 percent) than were clients in other types of facilities. Relatively few clients in private non-profit and public facilities paid for treatment with private health insurance. Private for-profit facilities treated slightly higher proportions of males

and non-Hispanic whites, while private non-profit facilities treated higher proportions of adolescents than other types of facilities. These findings suggest that the client populations of ownership types of facilities are similar, at least on the characteristics considered here. However, clients who are able to pay for their care themselves or with private insurance are more likely to receive treatment in private for-profit facilities. Indeed, facilities are now likely to accept a range of types of clients who pay with both public and private funds.

2.3.4 Treatment for Alcohol and Drug Abuse

More than half of clients in substance abuse treatment facilities on October 1, 1996 (51 percent) were receiving treatment for both alcohol and drug abuse (Table 2.5). Almost one third (29 percent) were receiving treatment for alcohol abuse but not drug abuse, while about one in five (19 percent) were receiving treatment for drug abuse but not alcohol abuse. Alcohol abusers were more common in outpatient non-methadone facilities and community mental health centers; in facilities with lower proportions of public revenue; and in facilities in rural and small urban non-metropolitan areas. Drug-only abusers were more common in outpatient methadone facilities and in facilities in large metropolitan areas. Combined alcohol and drug abusers were more common in residential facilities and in non-hospital residential and therapeutic community settings; in private non-profit facilities and facilities with larger proportions of public funding; and in non-metropolitan urban and metropolitan areas. Combined alcohol and drug abusers increased in treatment programs during the 1990s (SAMHSA, 1997b).

2.4 Findings on Special Population Clients and Programs

Many clients in treatment for substance abuse are members of special populations, such as women and adolescents who bring to treatment special needs and may require specialized services to meet those needs. As shown in Table 2.6, of the more than 4.2 million clients admitted to treatment during the most recent 12-month period at the time of the survey, about 1.2 percent were pregnant women, 9 percent were receiving Supplementary Security Income (SSI) or Social Security Disability Income (SSDI) payments, 0.2 percent had active tuberculosis, and 2.1 percent were HIV-positive. Although these special populations constitute relatively small proportions of the client population of substance abuse treatment facilities, they may require highly specialized services.

During the recent 12-month period, not all facilities admitted clients who fell into the groups considered to be special populations. About two thirds of facilities reported that they admitted SSI/SSDI clients, slightly more than one half admitted pregnant women, half admitted HIV-positive clients, and one third admitted those diagnosed with AIDS. Fewer (15 percent) admitted clients with active tuberculosis.

Less than half of all substance abuse treatment facilities reported that they provided special programs for these types of clients, also shown in Table 2.6. About 40 percent provided special programs for dual-diagnosis clients (those with combined substance abuse and mental health problems), while about one third provided special programs for women, one third had programs for adolescents, and one third had programs for clients driving while impaired or under the influence (DWI/DUI). About one in five facilities provided special programs for clients with

HIV or AIDS, and one in five had programs for pregnant women. Thus, although facilities may admit clients who fall into special populations, they do not necessarily provide special programs for those clients.

<u>2.4.1</u> <u>Special Population Clients in Types of Facilities</u>

Table 2.7 shows the characteristics of facilities that admit special population clients during the 12 months before the survey or for which selected types of clients are included in their treatment populations. As noted above, more than half of all facilities admitted SSI/SSDI clients, pregnant women, or HIV-positive clients, while fewer admitted AIDS-diagnosed or active tuberculosis clients. Women are included in the treatment populations of about 90 percent of all facilities, while about 80 percent include dual-diagnosis clients. Adolescents received treatment in about 40 percent of all facilities. The types of facilities admitting or having in their treatment populations these types of clients varied:

- Pregnant women were more often admitted to hospital inpatient and outpatient programs than other residential types of care, publicly owned facilities, facilities with largely public funding, and parent facilities compared with affiliates or non-affiliates.
- SSI/SSDI clients were more often admitted to hospital inpatient and outpatient methadone facilities, community mental health centers, publicly owned facilities, and facilities with largely public funding.
- Clients with active tuberculosis were more often admitted to hospital inpatient facilities
 or outpatient methadone facilities, facilities in hospital settings or non-hospital residential
 facilities, and publicly owned facilities or facilities with a larger proportion of public
 funding.
- Clients who are HIV-positive or AIDS-diagnosed are more often admitted to hospital
 inpatient facilities or outpatient methadone facilities, hospital settings, publicly owned
 facilities or facilities with a larger proportion of public funding, and facilities in large
 metropolitan areas.
- Women are more often included in the client populations of outpatient (methadone and non-methadone) facilities and settings other than non-hospital residential facilities.
- Adolescents are more often included in the client populations of outpatient non-methadone facilities, community mental health centers, publicly owned facilities, facilities in rural and small urban areas compared with medium and large metropolitan areas and parent facilities compared with affiliates.
- Dual-diagnosis clients are more often included in the client populations of outpatient methadone and outpatient non-methadone facilities, non-hospital residential and hospital settings, and publicly owned facilities and facilities with a larger proportion of public funding.

Overall, publicly owned and funded facilities are more likely to admit special population clients and include them in their client populations, but these types of clients are not consistently related to other facility characteristics. Women, adolescents, and dual-diagnosis clients are often treated in outpatient settings, while clients with medical problems, such as active tuberculosis or HIV/AIDS status, are more often included in inpatient facilities or outpatient methadone facilities.

2.4.2 Programs for Special Population Clients

Not all facilities that admitted special population clients provide special programs for them, as shown in Table 2.8. Comparing the findings presented in Tables 2.7 and 2.8, although almost 40 percent of facilities reported that they accept adolescents, only about two thirds of those facilities that include adolescents in their treatment population offer special programs for them. Of the almost 80 percent of facilities that accept dual-diagnosis clients, about half of facilities with dual-diagnosis clients reported that they provide special programs for them. Although women are included in the client populations of about 90 percent of all facilities, only about 40 percent of facilities with women clients offer special programs for women. Of the half of all facilities that admitted pregnant women, only about one third of those who admitted them offer special programs. Of the almost 54 percent of facilities that admitted HIV-positive clients or almost 33 percent that admitted AIDS-diagnosed clients, about one third offer programs for AIDS/HIV-positive clients.

The provision of special programs for special population clients is not consistently related to facility characteristics. However, public and private non-profit facilities, publicly funded facilities, facilities in metropolitan areas, and parent facilities are generally more likely to provide specialized programs for special population clients. Provision of specialized programs in public facilities is in part a reflection of block grant requirements and mandates for services for special populations (IOM, 1998).

2.5 Conclusions

More than 1 million individuals were receiving treatment in substance abuse treatment facilities on October 1, 1996. Almost 4.3 million admissions to treatment and about 3.7 million discharges from treatment were made in the recent year. Three quarters of clients were receiving treatment in outpatient non-methadone, and another 14 percent in outpatient methadone facilities, for a total of about 89 percent being treated in outpatient facilities. Relatively few were in hospital inpatient or residential treatment. The majority of clients received care in facilities owned by private non-profit organizations and in facilities with largely public funding. Most clients were treated in facilities in metropolitan areas. Across all types of facilities, clients were largely males, white non-Hispanics, and more than half were under 34 years of age. Cocaine, marijuana, and heroin were common drugs of abuse, and more than half of clients in substance abuse treatment facilities were receiving care for both alcohol and drug abuse. The client population of substance abuse treatment facilities varied by type of care, treatment settings, and ownership of facilities. Clients with private insurance were more likely to receive care in inpatient settings, while others were more likely to receive outpatient care. Residential and

inpatient facilities were more likely to admit clients with special medical problems, such as tuberculosis, HIV, and AIDS.

Although many facilities admitted special population clients, such as women or adolescents, not all offered special programs for those types of clients. Of the more than 4 million admissions to treatment during the most recent year, about 9 percent were receiving SSI or SSDI payments, about 2.1 percent were HIV-positive, about 1.2 percent were pregnant women, and 0.2 percent had active tuberculosis. Publicly owned and funded facilities were more likely to admit special population clients as well as provide special programs for them. Some public funding carries requirements that may include services for special populations.

Findings presented in this chapter illustrate the diversity of types of clients receiving care in substance abuse treatment facilities. Clients in treatment are at varying stages of their overall recovery process. For many, the treatment received in these facilities will not be their only treatment episode, and they may be in treatment multiple times in response to their abuse of alcohol or drugs or both.

2.6 References for Chapter 2

Alcohol, Drug Abuse, and Mental Health Administration. (1989). *National Drug and Alcoholism Treatment Unit Survey (NDATUS): 1987 final report* (DHHS Publication No. ADM 89-1626). Rockville, MD: U.S. Department of Health and Human Services.

Alexander, J. A., Anderson, J. G., & Lewis, B. L. (1985). Toward an empirical classification of hospitals in multihospital systems. *Medical Care*, 23, 913-932.

Anglin, M. D., Hser, Y.-I., & Grella, C. E. (1997). Drug addiction and treatment careers among clients in the Drug Abuse Treatment Outcome Study (DATOS). *Psychology of Addictive Behaviors*, *11*, 308-323.

Arciniega, L., Arroyo, J., Miller, W., & Tonigan, J. S. (1996). Alcohol, drug use and consequences among Hispanics seeking treatment for alcohol-related problems. *Journal of Studies on Alcohol*, *57*, 613-618.

Batten, H. L., Horgan, C. M., Prottas, J. M., Simon, L. J., Larson, M. J., Elliott, E. A., Bowden, M. L., & Lee, M. (1993). *Drug Services Research Survey. Phase I final report: Non-correctional facilities* (revised; submitted to National Institute on Drug Abuse; available at http://www.samhsa.gov/oas/dsrs.htm). Waltham, MA: Institute for Health Policy, Brandeis University.

Butler, M. A., & Beale, C. L. (1994). *Rural-urban continuum codes for metropolitan and nonmetropolitan counties, 1993* (Staff Report No. AGES 9425; codes also available at http://www.ers.usda.gov:80/briefing/rural/data/code93.txt). Washington, DC: U.S. Department of Agriculture, Economic Research Service.

Craddock, S. G., Rounds-Bryant, J. L., Flynn, P. M., & Hubbard, R. L. (1997). Characteristics and pretreatment behaviors of clients entering drug abuse treatment: 1969 to 1993. *American Journal of Drug and Alcohol Abuse*, 23, 43-59.

Fletcher, B. W., Tims, F. M., & Brown, B. S. (1997). Drug Abuse Treatment Outcome Study (DATOS): Treatment evaluation research in the United States. *Psychology of Addictive Behaviors*, 11, 216-229.

Hubbard, R. L., Marsden, M. E., Rachal, J. V., Harwood, H. J., Cavanaugh, E. R., & Ginzburg, H. (1989). *Drug abuse treatment: A national study of effectiveness*. Chapel Hill, NC: University of North Carolina Press.

Huber, J. H., Pope, G. C., & Dayhoff, D. A. (1994). National and state spending on specialty alcoholism treatment: 1979 and 1989. *American Journal of Public Health*, 84, 1662-1666.

Institute of Medicine. (1990a). The treatment of special populations: Overview and definitions. In Institute of Medicine (Ed.), *Broadening the base of treatment for alcohol problems* (pp. 344-355). Washington, DC: National Academy Press.

Institute of Medicine (D. Gerstein & H. Harwood, Eds.). (1990b). *Treating drug problems*. *Volume 1*. Washington, DC: National Academy Press.

Institute of Medicine (M. Edmunds, R. Frank, M. Hogan, D. McCarty, R. Robinson-Beale, & C. Weisner, Eds.). (1997). *Managing managed care: Quality improvement in behavioral health*. Washington, DC: National Academy Press.

Institute of Medicine (S. Lamb, M. R. Greenlick, & D. McCarty, Eds.). (1998). *Bridging the gap between practice and research: Forging partnerships with community-based drug and alcohol treatment*. Washington, DC: National Academy Press.

Kaminer, K., & Frances, R. J. (1991). Inpatient treatment of adolescents with psychiatric and substance abuse disorders. *Hospital & Community Psychiatry*, 42, 894-896.

Mohadjer, L., Yansaneh, I., Krenzke, T., & Dohrmann, S. (2000). *Sample design, selection and estimation for Phase I of ADSS: Final report* (available as a PDF file at http://www.samhsa.gov/oas/adss.htm). Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies.

Schmidt, L., & Weisner, C. (1993). Developments in alcoholism treatment. In M. Galanter (Ed.), *Recent developments in alcoholism, Volume II: Ten years of progress* (pp. 369-396). New York: Plenum Press.

Sorensen, J. L., & Miller, M. S. (1996). Impact of HIV risk and infection on delivery of psychosocial treatment services in outpatient programs. *Journal of Substance Abuse Treatment*, 13, 387-395; discussion 439.

Substance Abuse and Mental Health Services Administration. (1994). *Practical approaches in the treatment of women who abuse alcohol and other drugs*. Rockville, MD: Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment.

Substance Abuse and Mental Health Services Administration (Gerstein, D. R., Foote, M. L., & Ghadialy, R.). (1997a). *The prevalence and correlates of treatment for drug problems* (DHHS Publication No. SMA 97-3135, NHSDA Series H-2). Rockville, MD: Author.

Substance Abuse and Mental Health Services Administration. (1997b). *Uniform Facility Data Set (UFDS): Data for 1996 and 1980-1996*. Rockville, MD: Author.

Substance Abuse and Mental Health Services Administration. (1997c). *Year-end preliminary estimates from the 1996 Drug Abuse Warning Network* (DHHS Publication No. SMA 98-3175, DAWN Series D-3). Rockville, MD: Author.

Substance Abuse and Mental Health Services Administration. (1998). *National admissions to substance abuse treatment services: The Treatment Episode Data Set (TEDS) 1992-1996* (DHHS Publication No. SMA 98-3244, Drug and Alcohol Services Information System Series S-5). Rockville, MD: Author.

Wallen, J. (1992). A comparison of male and female clients in substance abuse treatment. *Journal of Substance Abuse Treatment*, *9*, 243-248.

Weisner, C., Greenfield, T., & Room, R. (1995). Trends in treatment of alcohol problems in the US general population, 1979 through 1990. *American Journal of Public Health*, 85, 55-60.



Table 2.1 Number of Substance Abuse Treatment Clients, by Selected Facility Characteristics, Point-Prevalence Count, Annual Admissions, and Annual Discharges: National Estimates, October 1, 1996

1996	Point Pre	evalence	Annual Data				
	Clients in Tr October		Admissions		Discharges		
[Q-B1]	N	%	N	%	N	%	
Total Number of Clients	1,091,328	100.0	4,295,815	100.0	3,680,566	100.0	
Client's Type of Care							
Hospital Inpatient	14,649	1.3	603,311	14.0	614,005	16.7	
Non-Hospital Residential	100,290	9.2	1,079,858	25.1	990,282	26.9	
Outpatient Methadone	151,882	13.9	136,310	3.2	105,382	2.9	
Outpatient Non-Methadone	824,507	75.6	2,476,336	57.7	1,970,897	53.5	
Facility Setting ^a					62		
Hospital (inpatient and outpatient)	140,371	12.9	1,156,078	27.0	1,044,061	28.5	
Non-Hospital Residential, Therapeutic Community or Halfway House	162,468	14.9	1,233,077	28.8	1,116,067	30.5	
Community Mental Health Center	199,700	18.3	599,439	14.0	475,353	13.0	
Other Outpatient	654,245	60.0	1,857,466	43.4	1,534,928	42.0	
Other	123,690	11.3	433,492	10.1	363,022	9.9	
Ownership		4	- 24	-			
Private For-Profit	210,722	19.3	979,505	22.9	884,877	24.2	
Private Non-Profit	652,593	59.8	2,562,028	59.8	2,172,782	59.4	
Public	228,013	20.9	742,119	17.3	600,598	16.4	
Percent Public Revenue							
0%	151,727	13.9	381,687	8.9	307,102	8.4	
1-50%	185,139	17.0	939,492	21.9	848,435	23.2	
51-90%	403,473	37.0	1,576,796	36.8	1,357,101	37.1	
91-99%	223,370	20.5	753,544	17.6	627,349	17.2	
100%	108,641	10.0	473,915	11.1	366,382	10.0	
Unknown %	18,978	1.7	158,217*	3.7*	151,886*	4.2*	
Urbanicity ^b							
Metro: Small Metro	124,238	11.4	511,544	11.9	458,086	12.5	
Medium Metro	266,819	24.5	1,145,254	26.7	989,453	27.0	
Large Metro	537,867	49.3	1,949,053	45.5	1,657,662	45.3	
Non-metro: Rural	12,448	1.1	42,503*	1.0*	37,695*	1.0*	
Small Urban	89,613	8.2	333,042	7.8	258,946	7.1	
Urban	60,343	5.5	302,255	7.1	256,414	7.0	
Level of Affiliation ^c							
Parent Facility	278,323	25.5	1,086,081	25.4	925,674	25.3	
Affiliate	475,899	43.6	1,895,799	44.3	1,649,997	45.1	
Non-Affiliate	337,090	30.9	1,301,583	30.4	1,082,492	29.6	

^a Not mutually exclusive.

^b Based on Beale code (Butler & Beale, 1994).

^c At least 99 percent of facilities responded to affiliation.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table 2.2 Percentage Distribution of Substance Abuse Treatment Clients, by Selected Facility Characteristics and by Client Type of Care: National Estimates, October 1, 1996

		Estimates, October 1, 1996 Client Type of Care					
	Totala	Hospital Inpatient	Non-Hospital Residential	Outpatient Methadone	Outpatient Non-Methadone		
Total Number of Clients	1,091,328	14,649	100,290	151,882	824,507		
Percent of Clients	100.0	100.0	100.0	100.0	100.0		
Gender [Q-B2a]							
Male	67.2	69.8	63.7	60.5	68.1		
Female	31.8	28.9	36.2	38.1	30.5		
Unknown	1.1	1.3*	0.2*	1.5*	1.4		
Race/Ethnicity [Q-B2b]		- 1					
White, non-Hispanic	61.0	61.4	53.2	54.4	64.3		
Black, non-Hispanic	23.1	23.9	30.4	23.1	20.9		
Hispanic	9.8	8.5	9.7	18.2	8.8		
Asian or Pacific Islander	0.9	0.1	0.5*	0.8	1.0		
American Indian or Alaskan Native	2.5	1.1*	4.1	0.4	2.2		
Unknown	2.8	5.1*	2.2*	3.1*	2.9		
Age [Q-B2c]							
Under 18	11.4	3.6	13.0	0.2*	12.1		
18-24	14.1	14.1	15.3	5.0	14.2		
25-34	32.1	31.7	37.2	24.3	31.3		
35-44	26.4	28.5	25.2	42.0	25.6		
45 and older	11.7	17.6	8.1	23.6	11.8		
Unknown	4.3	4.5*	1.2	4.9	5.1		
Primary Source of Payment [Q-B2d]							
No payment	7.4	5.2	9.9	4.1	7.4		
Client self-payment	23.1	6.0	15.3	38.6	24.6		
Private health insurance (fee-for-service)	9.3	10.8	4.0	2.1*	11.6		
Private health insurance (HMO, PPO, managed care)	10.1	25.3	5.7	4.1	11.9		
Medicaid	15.0	22.3	11.1	29.1	13.7		
Medicare	3.7	15.3	1.2*	2.6	4.2		
Other public payment	28.6	10.9	51.6	17.5	23.3		
Unknown	3.0	4.3*	1.3	1.9*	3.4		
Referral Source ^b [Q-B6]							
Other treatment facility	11.6	10.8	22.6	8.2	7.8		
Criminal justice system	33.8	9.6	26.5	10.0	38.4		
Self-referred/voluntary	20.6	27.9	19.6	64.9	18.4		
Family	5.2	8.4	5.1	2.7	5.5		
Friend	2.3	3.0	1.9	5.4	2.2		
Employer	4.6	8.9	2.8	0.7	5.5		
Health care or mental health providers	9.3	20.5	8.8	3.5	9.4		
Welfare offices or other social service agencies	7.4	4.5	9.7	3.3	7.2		
Other	5.2	6.4	3.0	1.4	5.6		

Table 2.2 (continued)

		Client Type of Care					
	Totala	Hospital Inpatient	Non-Hospital Residential	Outpatient Methadone	Outpatient Non-Methadone		
Principal Drug of Abuse [Q-B2e]							
Heroin/other opiates	10.1	9.7	8.5	98.2	4.4		
Cocaine (including crack)	19.1	20.1	30.9	0.4	17.2		
Benzodiazepines	1.0	3.0	0.6	0.1*	1.3		
Barbiturates	0.5	0.3	0.4	0.0*	0.5		
Amphetamines	3.7	1.7	5.3	0.0	3.6		
Marijuana/hashish/THC	11.6	3.3	10.4	0.0*	13.3		
PCP/LSD	0.8	0.0	0.6	0.0*	0.9		
Alcohol	46.8	55.1	38.0	0.0*	51.7		
Other drugs (not alcohol)	2.6	2.1	2.7	0.1*	2.9		
Unknown	3.7	4.8	2.6	1.2*	4.3		

^a Total is not the sum of the four types of care because it is based on the overall client count variables instead of the sum of individual care variables.

b At least 99 percent of facilities responded to referral source. For the 15 percent of facilities with multiple types of care, the referral source information for all clients combined was applied to clients in each specific type of care.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table 2.3 Percentage Distribution of Substance Abuse Treatment Clients, by Selected Facility Characteristics and by Treatment Settings: National Estimates, October 1, 1996

and by Treatment Settings	: National	al Estimates, October 1, 1996						
		Clients in Treatment Settings ^a						
	Total	Inpatient or Outpatient Hospital Setting	Non-Hospital Residential, Therapeutic Community or Halfway House	Community Mental Health Center	Other Outpatient	Other		
Total Number of Clients	1,091,328	140,371	162,468	199,700	654,245	123,690		
Percent of Clients	100.0	100.0	100.0	100.0	100.0	100.0		
Gender [Q-B2a]								
Male	67.2	69.0	62.6	67.4	68.9	66.7		
Female	31.8	29.6	37.0	31.4	30.0	32.3		
Unknown	1.1	1.4*	0.3*	1.3*	1.2*	1.0*		
Race/Ethnicity [Q-B2b]		150						
White, non-Hispanic	61.0	65.0	53.4	70.0	59.1	65.3		
Black, non-Hispanic	23.1	22.1	30.3	18.4	22.7	17.8		
Hispanic	9.8	7.0	10.1	5.1	12.2	9.4		
Asian or Pacific Islander	0.9	0.6*	0.5*	1.5*	1.3	1.7*		
American Indian or Alaskan Native	2.5	1.3*	3.8	1.9	2.5	3.6*		
Unknown	2.8	4.0	1.9	3.2	2.3	2.2		
Age [Q-B2c]								
Under 18	11.4	7.9*	12.9	12.9	11.7	16.2		
18-24	14.1	10.7	16.1	14.8	14.3	14.0		
25-34	32.1	31.0	37.0	31.1	31.1	30.6		
35-44	26.4	30.7	24.1	25.2	25.5	25.4		
45 and older	11.7	15.2	8.1	11.1	12.5	10.1		
Unknown	4.3	4.6	1.9	4.9*	4.9	3.8		
Primary Source of Payment [Q-B2d]								
No payment	7.4	5.2	10.1	7.9	6.5	8.6		
Client self-payment	23.1	8.2	17.2	25.6	29.4	26.6		
Private health insurance (fee-for-service)	9.3	18.1	4.1	7.4	8.8	13.4		
Private health insurance (HMO, PPO, managed care)	10.1	23.3	4.1	6.0	9.4	13.6		
Medicaid	15.0	16.9	11.5	16.9	15.3	14.1		
Medicare	3.7	12.2	1.5*	2.7	2.5	2.0*		
Other public payment	28.6	13.6	50.0	30.2	24.5	18.0		
Unknown	3.0	2.5	1.6	3.3	3.6	3.7*		
Referral Source ^b [Q-B6]	1							
Other treatment facility	11.6	11.8	23.5	7.4	6.8	6.9		
Criminal justice system	33.8	13.7	27.1	42.3	41.2	34.2		
Self-referred/voluntary	20.6	24.6	18.7	18.2	21.0	22.8		
Family	5.2	9.0	4.5	6.8	4.2	5.5		
Friend	2.3	2.8	2.2	1.9	2.3	2.8		
Employer	4.6	8.9	2.4	2.7	4.6	5.6*		
Health care or mental health providers	9.3	17.2	7.7	8.4	7.4	11.1		
Welfare offices or other social service agencies	7.4	6.4	10.1	7.4	7.1	6.4		
Other	5.2	5.6	3.8	4.9	5.4	4.7		

Table 2.3 (continued)

		Clients in Treatment Settings ^a						
	Total	Inpatient or Outpatient Hospital Setting	Non-Hospital Residential, Therapeutic Community or Halfway House	Community Mental Health Center	Other Outpatient	Other		
Principal Drug of Abuse [Q-B2e]								
Heroin/other opiates	10.1	12.0	8.9	3.2	12.7	5.9		
Cocaine (including crack)	19.1	20.6	29.5	14.4	16.3	16.2		
Benzodiazepines	1.0	2.1	0.7	1.4	0.7	1.2		
Barbiturates	0.5	0.2	0.5*	0.4	0.5	0.5		
Amphetamines	3.7	2.6	5.5	2.3	3.6	6.0		
Marijuana/hashish/THC	11.6	6.7	10.5	13.6	13.3	13.6		
PCP/LSD	0.8	0.3	0.6	0.9*	1.0*	0.8*		
Alcohol	46.8	47.9	38.7	55.4	46.2	51.1		
Other drugs (not alcohol)	2.6	2.6	2.6	3.0	2.6	1.4		
Unknown	3.7	5.1	2.5	5.4	3.0	3.2*		

^a Not mutually exclusive.

^b At least 99 percent of facilities responded to referral source. For the 15 percent of facilities with multiple types of care, the referral source information for all clients combined was applied to clients in each specific type of care.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table 2.4 Percentage Distribution of Substance Abuse Treatment Clients, by Selected Facility Characteristics and by Facility Ownership: National Estimates, October 1, 1996

Characteristics and by Facility Ow.	nership: National Estimates, October 1, 1996					
		Clients in Ownership Types				
	Totala	Private For- Profit	Private Non- Profit	Public		
Total Number of Clients	1,091,328	210,722	652,593	228,013		
Percent of Clients	100.0	100.0	100.0	100.0		
Gender [Q-B2a]						
Male	67.2	70.7	65.8	67.7		
Female	31.8	27.5	33.3	31.6		
Unknown	1.1	1.7*	0.9	0.8*		
Race/Ethnicity [Q-B2b]						
White, non-Hispanic	61.0	69.9	58.3	58.2		
Black, non-Hispanic	23.1	16.0	25.6	23.8		
Hispanic	9.8	8.5	10.8	6.8		
Asian or Pacific Islander	0.9	0.6	0.9*	1.1		
American Indian or Alaskan Native	2.5	0.9	2.0	7.7		
Unknown	2.8	4.2	2.4	2.3		
Age [Q-B2c]						
Under 18	11.4	7.2	13.6	8.5		
18-24	14.1	12.4	14.6	14.7		
25-34	32.1	32.7	32.4	29.5		
35-44	26.4	30.4	25.0	26.3		
45 and older	11.7	12.0	10.7	15.9		
Unknown	4.3	5.4	3.7	5.0		
Primary Source of Payment [Q-B2d]	- 4					
No payment	7.4	1.5	8.0	15.0		
Client self-payment	23.1	32.4	19.4	23.7		
Private health insurance (fee-for-service)	9.3	18.3	7.2	4.2		
Private health insurance (HMO, PPO, managed care)	10.1	22.9	6.7	4.3		
Medicaid	15.0	8.7	16.9	16.2		
Medicare	3.7	7.1	2.7	2.6		
Other public payment	28.6	6.1	36.5	29.9		
Unknown	3.0	3.1	2.7	4.1		
Referral Source ^b [Q-B6]						
Other treatment facility	11.6	8.5	13.0	10.0		
Criminal justice system	33.8	31.4	35.0	32.7		
Self-referred/voluntary	20.6	21.0	19.4	25.2		
Family	5.2	6.4	4.8	5.0		
Friend	2.3	3.7	1.9	1.5		
Employer	4.6	10.2	3.0	2.6		
Health care or mental health providers	9.3	10.8	8.6	10.1		
Welfare offices or other social service agencies	7.4	3.8	8.6	8.1		
Other	5.2	4.1	5.7	4.8		

Table 2.4 (continued)

		Clients in Ownership Types			
	Totala	Private For- Profit	Private Non- Profit	Public	
Principal Drug of Abuse [Q-B2e]					
Heroin/other opiates	10.1	13.4	9.3	8.0	
Cocaine (including crack)	19.1	16.0	20.6	17.4	
Benzodiazepines	1.0	2.0	0.8	0.6	
Barbiturates	0.5	0.5	0.5	0.4*	
Amphetamines	3.7	2.9	3.9	4.2	
Marijuana/hashish/THC	11.6	8.7	13.2	9.6	
PCP/LSD	0.8	0.8*	0.8	0.6*	
Alcohol	46.8	51.7	43.8	52.0	
Other drugs (not alcohol)	2.6	1.5	3.0	2.9	
Unknown	3.7	2.6	4.2	4.3	

^a Total is not the sum of the four types of care because it is based on the overall client count variables instead of the sum of individual care variables.

^b At least 99 percent of facilities responded to referral source. For the 15 percent of facilities with multiple types of care, the referral source information for all clients combined was applied to clients in each specific type of care.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table 2.5 Percentage of Clients Receiving Treatment for Alcohol Abuse Only, Drug Abuse Only, or Both, by Selected Facility Characteristics: National Estimates, October 1, 1996

of Both, by Sciected 1 a	cinty Cir	aracteristics.	aracteristics: National Estimates, October 1, 1996 Percent of Clients					
[Q-B7]	Total	Alcohol Abuse Only	Drug Abuse Only	Both Alcohol and Drug Abuse	Unknown			
Total	100.0	29.0	19.0	51.3	0.7			
Type of Care								
Hospital Inpatient Only	100.0	30.9	15.7	46.4	6.9			
Non-Hospital Residential Only	100.0	14.7	14.7	69.8	0.8*			
Outpatient Methadone Only	100.0	0.3*	85.5	14.2	0.0			
Outpatient Non-Methadone Only	100.0	35.7	16.3	47.4	0.6*			
Combination Facilities	100.0	24.6	19.2	56.1	0.1*			
Facility Setting ^a								
Hospital (inpatient and outpatient)	100.0	30.3	16.9	51.5	1.4			
Non-Hospital Residential, Therapeutic Community or Halfway House	100.0	16.1	15.3	67.7	0.9*			
Community Mental Health Center	100.0	38.6	16.3	44.6	0.5*			
Other Outpatient	100.0	29.6	23.0	47.0	0.5*			
Other	100.0	32.2	16.7	50.4	0.7*			
Ownership								
Private For-Profit	100.0	35.1	18.6	46.3	-			
Private Non-Profit	100.0	26.2	19.2	53.6	1.1			
Public	100.0	31.7	19.2	48.8	0.4*			
Percent Public Revenue		P						
None	100.0	36.9	17.6	44.5	1.0*			
1-50%	100.0	36.1	15.2	47.8	0.9*			
51-90%	100.0	28.0	18.2	53.0	0.8*			
91-99%	100.0	20.8	22.9	56.2	0.2*			
100%	100.0	24.1	23.7	51.3	0.9*			
Unknown %	100.0	29.5	15.3	55.2	-			
Urbanicity ^b								
Metro: Small Metro	100.0	30.3	13.0	55.7	1.1*			
Medium Metro	100.0	29.5	17.6	52.4	0.5*			
Large Metro	100.0	22.4	23.5	53.8	0.4*			
Non-metro: Rural	100.0	51.4	15.0	28.1	5.5*			
Small Urban	100.0	43.3	16.1	39.1	1.4*			
Urban	100.0	34.1	12.5	52.8	0.6*			
Level of Affiliation ^c								
Parent	100.0	29.1	19.2	51.7	0.0*			
Affiliate	100.0	28.0	20.0	50.9	1.1*			
Non-Affiliate	100.0	30.4	17.3	51.6	0.7*			

^a Not mutually exclusive.

Exclusions: ADSS Phase I excludes intake/referral-only facilities, halfway houses without paid counseling staff, solo practices, correctional facilities, and Department of Defense and Indian Health Service facilities.

^b Based on Beale code (Butler & Beale, 1994).

^c At least 99 percent of facilities provided affiliation.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table 2.6 Facilities Offering Programs for Special Populations and Number of Special Population Clients Admitted in 12-Month Period: National Estimates, October 1, 1996

Population Chefts Aun				•
	Faci	lities	Clie	ents
	N	%	Number of Clients Admitted in 12- Month Period	Percent of Clients Admitted in 12- Month Period
All Facilities	12,387	100.0	4,295,815	100.0
Admitted Specific Clients [Q-C4]				
Pregnant women	6,528	52.7	51,557	1.2
SSI/SSDI	7,897	63.8	391,861	9.1
Active tuberculosis	1,716	14.6	9,350	0.2
HIV-positive	6,267	53.9	91,534	2.1
AIDS-diagnosed	3,795	32.8	42,606*	1.0*
Had Special Programs [Q-B10]				
Women	4,631	37.4		
Pregnant women	2,393	19.3		
Adolescents	3,932	31.8		
DWI/DUI	4,253	34.4		
AIDS/HIV	2,697	21.8		
Dual Diagnosis	4,988	40.4		

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Exclusions: ADSS Phase I excludes intake/referral-only facilities, halfway houses without paid counseling staff, solo practices, correctional facilities, and Department of Defense and Indian Health Service facilities.

Table 2.7 Percentage of Facilities That Admitted Special Client Types: National Estimates, October 1, 1996

Table 2.7 Fercentage of Facilities 1		Percentages of Facilities That Admitted Three Types of Clients ^a					tages of Facilit Treatment Po	ies with
	Pregnant Women [Q-C4]	SSI/SSDI [Q-C4]	Active TB [Q-C4]	HIV Positive [Q-C4]	AIDS Diagnosed [Q-C4]	Women [Q-B2-pt prev]	Adolescents [Q-B2-pt prev]	Dual Diagnosis [Q-B9-pt prev]
Total	52.7	63.8	14.6	53.9	32.8	90.1	39.5	79.9
Facility Type of Care								
Hospital Inpatient Only	60.0	72.1	32.9	74.6	59.4	75.0	8.2	73.1
Non-Hospital Residential Only	41.7	61.6	18.3	58.4	26.1	71.4	17.1	69.1
Outpatient Methadone Only	59.8	75.8	42.1	84.3	64.8	99.8	2.4*	87.9
Outpatient Non-Methadone Only	52.0	62.0	8.8	45.2	26.4	94.3	51.4	80.5
Combination Facilities	64.8	68.7	22.7	72.3	53.0	95.2	32.9	89.3
Facility Setting ^c					7 70	- 1		
Hospital (inpatient and outpatient)	52.7	68.0	19.6	69.4	51.3	90.2	21.1	87.6
Non-Hospital Residential, Therapeutic Community or Halfway House	47.7	62.5	18.0	58.2	30.4	78.2	25.5	73.5
Community Mental Health Center	57.9	78.4	11.4	44.4	27.0	93.9	61.2	93.3
Other Outpatient	54.0	59.1	13.3	51.8	32.0	95.6	45.5	76.5
Other	48.4	52.7	8.9	39.3	24.4	90.8	45.0	73.5
Ownership	AV					/A 7		
Private For-Profit	45.7	50.0	10.2	50.4	31.8	92.4	32.5	78.4
Private Non-Profit	52.9	66.4	14.5	53.1	31.6	88.6	39.9	78.0
Public	63.4	74.3	22.5	63.8	40.1	93.5	49.1	91.4
Percent Public Revenue	1.00							
0%	33.7	30.7	5.7	33.5	24.0	86.9	28.0	66.5
1-50%	53.5	61.5	12.7	53.3	33.4	93.1	38.7	83.2
51-90%	57.7	72.3	16.2	59.4	33.3	91.3	46.2	83.4
91-99%	62.3	71.6	19.8	59.1	38.7	90.1	40.6	83.2
100%	50.4	66.9	16.1	53.3	29.7	86.9	37.1	72.9
Unknown %	26.2*	70.4	11.7*	63.5	39.6*	86.7	23.5*	87.0
Urbanicity ^d								
Metro: Small Metro	55.1	59.6	11.5	43.6	23.2	87.2	45.0	78.1
Medium Metro	55.5	64.1	11.0	52.0	34.4	90.0	38.2	80.6
Large Metro	51.2	61.1	18.2	65.6	40.6	89.9	30.8	78.6
Non-metro: Rural	56.6	78.6	13.5*	32.8*	8.4*	87.6	65.8	84.5
Small Urban	51.6	71.7	11.0	33.6	20.6	92.8	61.3	85.1
Urban	49.2	67.5	14.9	46.6	22.6	93.0	43.8	78.1

See notes at end of table. (continued)

Table 2.7 (continued)

	Percentag	es of Facilit	ies That Ao of Clients ^a	Percentages of Facilities with Clients in Treatment Population ^b				
	8					Women [Q-B2-pt prev]	Adolescents [Q-B2-pt prev]	Dual Diagnosis [Q-B9-pt prev]
Level of Affiliation ^e								
Parent Facility	61.2	64.6	17.9	58.4	34.5	92.6	46.6	80.9
Affiliate	51.3	67.0	13.2	55.0	32.1	90.0	37.4	81.4
Non-Affiliate	48.9	57.8	14.5	49.1	32.7	88.5	38.0	76.6

^a 95 percent of facilities responded to active TB question; 94 percent responded to HIV-positive question; and 93 percent responded to AIDS question.

^b 96 percent of facilities responded to dual-diagnosis question.

^c Not mutually exclusive.

^d Based on Beale code (Butler & Beale, 1994).

^e At least 99 percent of facilities responded to affiliation question.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table 2.8 Percentage of Facilities That Admitted Special Population Clients and Have Special

Programs for Them: National Estimates, October 1, 1996

Programs for Them; Nation		5, October 1	1, 1//0		1
[Q-B10]	Womena	Pregnant Women ^a	Adolescentsa	AIDS or HIV- Positive Clients ^a	Dual Diagnosis ^b [Q-B9]
Total	40.2	32.0	65.8	32.5	49.8
Facility Type of Care					
Hospital Inpatient Only	22.8	20.9	84.6	25.7	50.3
Non-Hospital Residential Only	58.3	46.9	66.1	44.6	47.2
Outpatient Methadone Only	42.9	50.5	0.0	61.4	41.2
Outpatient Non-Methadone Only	37.0	27.4	64.3	26.2	49.4
Combination Facilities	39.6	33.9	75.2	30.0	55.6
Facility Setting ^c					
Hospital (inpatient and outpatient)	29.4	20.8	74.5	29.4	57.5
Non-Hospital Residential, Therapeutic Community or Halfway House	56.2	44.6	70.6	41.9	50.5
Community Mental Health Center	35.5	34.1	61.6	26.0	65.9
Other Outpatient	40.1	30.9	66.3	32.2	41.0
Other	34.9	36.5	57.0	26.0	46.6
Ownership	4				
Private For-Profit	30.7	10.9	59.2	21.2	46.8
Private Non-Profit	42.9	35.5	69.0	36.0	49.6
Public	43.9	43.5	61.1	34.8	55.1
Percent Public Revenue					
0%	26.6	15.6	56.9	11.2	41.7
1-50%	30.0	13.7	66.8	19.6	44.6
51-90%	45.6	34.0	66.8	34.8	51.8
91-99%	49.4	41.0	64.3	44.0	56.5
100%	44.6	53.6	75.7	43.8	53.5
Unknown %	29.2*	12.0*	31.6*	27.9*	35.2*
Urbanicity ^d					
Metro: Small Metro	42.6	45.9	70.6	30.9	52.4
Medium Metro	40.5	28.9	67.9	28.9	48.4
Large Metro	43.4	32.3	69.3	38.1	51.5
Non-metro: Rural	27.9*	41.1	57.5	27.6*	38.6
Small Urban	31.6	27.9	57.7	23.6	48.9
Urban	34.8	21.5	59.5	13.0	46.1
Level of Affiliation ^e					
Parent Facility	48.1	33.5	67.9	37.7	50.1
Affiliate	37.0	34.4	63.9	31.1	49.9
Non-Affiliate	39.6	26.5	67.0	30.9	49.5

^a 99 percent of facilities responded to special programs question.

Exclusions: ADSS Phase I excludes intake/referral-only facilities, halfway houses without paid counseling staff, solo practices, correctional facilities, and Department of Defense and Indian Health Service facilities.

^b 96 percent of facilities responded to dual-diagnosis question.

^c Not mutually exclusive.

^d Based on Beale code (Butler & Beale, 1994).

^e 99 percent of facilities responded to affiliation question.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Chapter 3. Treatment Services and Staffing

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3.1 Introduction

This chapter documents what services are offered to clients and what type of staff treat clients in the national substance abuse treatment system. It examines the relationship between facility characteristics and service patterns and staffing. Data reported here are drawn from Phase I of the Alcohol and Drug Services Study (ADSS). ADSS is a nationally representative sample of substance abuse facilities across the Nation, excluding halfway houses without paid counselors, solo practitioners, correctional facilities, Department of Defense (DoD) facilities, Indian Health Service facilities, and facilities that are intake and referral only. This study builds upon the work of the 1990 Drug Services Research Survey (DSRS) (Batten et al., 1993) with a more complete sampling frame, an enhanced sampling design, and improved measures of financing and organization.

3.1.1 Background

The quality of care provided in the treatment system depends on the array of services offered to clients and the quality of staff at treatment facilities. A third factor that affects the quality of care is how well the services offered at the facility match the client's needs (Schottenfeld, Pascale, & Sokolowski, 1992). This chapter looks at services offered in the current treatment system and the staffing patterns. However, this chapter does not have data to shed light on the issue of matching client needs to services. Chronic substance abusers suffer from a variety of serious health problems, such as disease of the heart and blood vessels, cirrhosis, HIV infection, and hepatitis (Harwood, Fountain, & Livermore, 1998; Institute for Health Policy, 1993). In addition, they suffer from social problems, including unemployment, poor family relations, mental health problems, and legal problems. Consequently, various services provided by qualified substance abuse treatment staff are needed, in addition to drug and alcohol education and counseling, to foster recovery and rehabilitation.

There is accumulating evidence that the range and quality of services provided to clients while they are in substance abuse treatment is related to treatment outcomes (Hoffman et al., 1996; McLellan et al., 1993). Furthermore, the number of services received in the areas of medical, employment, family, and psychiatric care is significantly and positively related to better post-treatment social adjustment (McLellan et al., 1994). Despite the importance of the number and intensity of services for positive treatment outcomes, substance abuse services declined from the mid-1980s to the mid-1990s (D'Aunno & Vaughn, 1995; Etheridge, Craddock, Dunteman, & Hubbard, 1995). Generally, wraparound services or support services, such as employment and legal services, were not offered as often as such services as individual therapy, group therapy, and alcohol and drug services (Burke & Rafferty, 1994; McLellan et al., 1993; Price et al., 1991).

Factors other than clinical need may determine the amount of services provided by programs. Facility-level characteristics, such as type of care, ownership, and level of affiliation, have implications for service delivery. Level of affiliation, or whether a facility is an independent entity or an integral part of a larger organization, has been shown to have an impact on service delivery (Friedmann, Alexander, & D'Aunno, 1999; James, 1998). Facility ownership also has been shown to have an impact on services offered. Private for-profit outpatient units have been reported to be more likely than other ownership types to provide physical exams and medical tests to their clients during the assessment process; however, they are less likely to provide mental health assessment (Burke & Rafferty, 1994; Friedmann et al., 1999). In addition, private for-profit units provide less tuberculosis treatment and HIV/AIDS treatment than public units (Friedmann et al., 1999). Different client bases at private and public facilities also may be a factor in determining services offered. Private facilities tend to treat clients who are more affluent and less impaired than clients in public facilities (Price & D'Aunno, 1992; Wheeler, Fadel, & D'Aunno, 1992). Differences in clients' economic resources have been associated with differences in substance abuse severity and, therefore, differences in service needs. Historically, the purpose of the publicly funded health care system has been to serve those clients who have more problems and fewer resources (Humphreys, Hamilton, Moos, & Suchinsky, 1997). Public facility clients may have more need for such services as HIV/AIDS counseling, tuberculosis treatment, employment counseling, academic classes, and transportation; therefore, that is why they offer these services more in public facilities than in private facilities.

In addition, staffing plays a key role in the quality of services and the type of services delivered. Variations also occur in staffing by facility characteristics, such as type of care, ownership, and setting. For example, staff at methadone facilities tend to have more medical training than at other outpatient facilities (Calsyn, Saxon, Blaes, & Lee-Myer, 1990; Price & D'Aunno, 1992). This reflects the fact that methadone facilities have more requirements or regulations regarding medical staff than other types of care. Private for-profit units tend to employ higher proportions of part-time staff and independent contractors or consultants than private non-profit and public units (Burke & Rafferty, 1994). In the outpatient treatment system, mental health centers tend to have the most highly educated staff with the most training. Nonhospital residential treatment units (i.e., those that are not part of a hospital or mental health center) tend to have staff with lower levels of education, and they tend to have more part-time staff (Price & D'Aunno, 1992). A study of alcoholism and drug abuse treatment programs in Massachusetts found that community mental health centers tended to have staff with higher education levels, were least likely to have recovering counselors, and tended to stress education and licensing more than substance abuse certification (Mulligan, McCarty, Potter, & Krakow, 1989).

Client-to-staff ratios also are important determinants of service quality. When treatment staff have higher caseloads, this affects service delivery. A higher client-to-staff ratio has been associated with fewer routine medical care services, less HIV/AIDS treatment, and less tuberculosis screening (Friedman et al., 1999). Number of staff and ratio of client to treatment staff also are related to percent of clients who continue to abuse alcohol or drugs after treatment (McCaughrin & Price, 1992).

3.1.2 Methodology Overview

Phase I of ADSS consisted of a telephone interview with facility directors at a stratified random sample of 2,395 alcohol and drug treatment facilities across the Nation (representing 12,387 facilities nationwide). The questionnaire was mailed out in advance so that directors had a chance to gather information to fill out the questionnaire. The responses then were collected by telephone. Sample strata were selected to reflect the different types of care within the substance abuse treatment system. The sample frame was SAMHSA's 1995 National Master Facility Inventory (NMFI) augmented to yield the universe of treatment facilities known to SAMHSA. The Phase I ADSS Facility Survey was conducted from December 1996 to June 1997, with data collected for a point-prevalence date of October 1, 1996, and for the most recent 12-month reporting period of the facility. The point-prevalence date was chosen to be the same as the 1996 Uniform Facility Data Set (UFDS) (SAMHSA, 1997) in order to allow comparison with UFDS. The Phase I response rate was 91.4 percent of 2,621 facilities eligible for ADSS. Because the Phase I sampling design incorporated a stratified random probability sample, weights were developed to produce national estimates of facilities. The sampling weights adjusted for facility non-response and for differential response rates within strata. The data in this chapter were imputed to account for missing values. Overall, item non-response was generally well below 10 percent. Further information about the data collection methodology for the study is presented in the Appendix A. A description of variable definitions appears in Appendix B, and standard error tables are presented in Appendix C.

3.1.3 Organization of the Chapter

First, ADSS findings are presented on the percentage of facilities in the overall treatment system offering each of the selected services. Second, types of treatment and support services offered at facilities are examined by facility characteristics. This chapter explores such questions as whether facility ownership is related to different services and staffing patterns or whether variation also is related to the facility funding stream. ADSS examines ownership and degree of dependence on public revenue as separate variables and explores the effect of each. This chapter also looks at the degree of affiliation as it relates to services offered by examining whether a facility that is affiliated with another organization offers more services than non-affiliated facilities. Third, the characteristics of facilities that offer high, medium, and low numbers of services are examined. Fourth, staffing percentages at facilities and mean number of staff per facility based on several measures are examined. Fifth, national estimates of the number of staff in the treatment system are presented. Sixth, variations in client-to-staff ratios by facility characteristics are investigated. The last part of the findings for this chapter examine the percentage of staff who are certified in substance abuse treatment and how the ratio of clients to certified staff vary by facility variables. The chapter ends by drawing some conclusions about the services and staffing in the treatment system. In the tables appearing at the end of this chapter, the Phase I questionnaire numbers from which the data were drawn are noted as Q-x.

3.2 Findings on Service Patterns in the Treatment System

The selected services examined in this chapter are divided into two categories: treatment services and support services (see Table 3.1). Treatment services include those that are directly

oriented toward treating alcohol and drug abuse (e.g., comprehensive assessment, individual therapy, group therapy, family counseling and aftercare¹), while support services include those directed toward related problems or toward keeping the client in treatment (e.g., employment counseling, academic education, transportation, and child care). Among the expectations for positive treatment outcome are improvement in employment, psychological functioning, medical health, and family and social relationships, as well as a decrease in substance use and criminal activity. Various treatment and support services are offered during treatment to rehabilitate the client in these areas.

Generally, facilities offered more treatment services than support services. Table 3.1 shows that all treatment services, except for detoxification and acupuncture, were offered at 67 percent or more of the facilities. More than 90 percent of facilities offered individual therapy, comprehensive assessment/diagnosis, and group therapy. In contrast, support services were offered at less than 50 percent of facilities with the exception of HIV/AIDS education/counseling/support, which was offered at 77 percent of all facilities. Thus, services directly treating alcohol and drug abuse appear to have a priority over support services. This lends support to the findings of the Drug Abuse Treatment System Survey (DATSS), a national study of the outpatient substance abuse system. Support services, such as employment, financial, and legal counseling, were offered at less than 40 percent of DATSS facilities, while treatment services, such as individual therapy, group therapy, and alcohol/drug education, were offered at 90 percent or more of the facilities (Price et al., 1991).

3.2.1 Treatment Services

Facilities varied in the type of services offered to clients. Tables 3.2a and 3.2b show service variations by key facility characteristics (see Appendix B for a description of variable definitions). Of all the various services offered by substance abuse treatment facilities, individual therapy was offered the most frequently. It was offered by 95 percent or more of facilities regardless of the type of care, except for hospital inpatient facilities where it was offered at 87 percent of the facilities. Significantly fewer hospital inpatient facilities offered individual therapy as compared with each of the other types of care.²

Although group therapy was one of the treatment services more routinely offered, it was offered less often than individual therapy. Group therapy was offered in fewer outpatient methadone facilities than in any other type of care—in fewer small facilities than other size facilities, in fewer private-for-profit facilities than other ownership facilities, and in fewer non-affiliate facilities than affiliate or parent facilities (see Appendix B for a definition of facility level of affiliation).

Non-hospital residential facilities, in particular therapeutic communities, have as their goal rehabilitation and recovery through self-help/mutual support (De Leon, 1994; De Leon &

¹ Services offered to clients after discharge.

² All comparisons reported in this section are significant, except where noted otherwise, using the Bonferroni correction to p = .05 based on the number of comparisons.

Ziegenfuss, 1986, pp. 9-10; Institute of Medicine [IOM], 1990, p. 171). Therefore, one would expect more self-help services to be offered in non-hospital residential facilities than other types of care. Table 3.2a partially supports this by indicating that self-help or mutual-help groups were offered in more non-hospital residential facilities than outpatient methadone and outpatient non-methadone facilities. However, there was no significant difference in self-help or mutual-help groups offered in non-hospital residential, hospital inpatient, and combination facilities. Another service important to rehabilitation is relapse prevention. Relapse prevention was offered in 88 percent of non-hospital residential facilities, which was more than all other types of care with the exception of combination facilities. This is consistent with the rehabilitative nature of non-hospital residential facilities. It also should be noted that more facilities that were in non-hospital residential settings compared with those that were not in residential settings offered self-help/mutual support and relapse prevention services.

Aftercare treatment services provided after the client leaves treatment were offered at fewer facilities than any of the counseling services. Aftercare and outcome follow-up were offered more in combination facilities (94 and 85 percent, respectively) than other types of care. Combination facilities are facilities that consist of more than one type of care and, therefore, are more likely to offer a wider range of services in order to meet the needs of all their clients. Generally, aftercare and outcome follow-up were offered least often in methadone facilities (64 and 44 percent, respectively). Comparisons of these two services in outpatient methadone facilities with other types of care were significant with the exception of outpatient methadone compared with hospital inpatient facilities for aftercare services. Information on aftercare services reported in ADSS concur with past findings that aftercare is not routinely offered (IOM, 1990, p. 171). It is of importance to note the findings on aftercare because aftercare group therapy has been found to decrease readmission significantly (Lash & Blosser, 1999).

Detoxification was offered mostly in hospital inpatient facilities followed by outpatient methadone facilities and combination facilities. More hospital inpatient facilities offered detoxification than any other type of care. There was no significant difference between methadone and combination facilities; both offered detoxification more than residential and outpatient non-methadone types of care.

3.2.2 Support Services

Generally, support services were offered by fewer facilities than treatment services (see Table 3.2b). Among the support services, HIV/AIDS education/counseling/support was offered at 77 percent of facilities, which was more than any other support service.

Transportation, employment counseling/training, and academic education/GED classes were not routinely offered in the substance abuse treatment system. However, these support services were offered in non-hospital residential type of care more than any other type of care (Table 3.2b). This is in line with the rehabilitation treatment philosophy of residential facilities. The principal goal of the therapeutic community is a "global change in lifestyle" that includes abstinence from illicit substances, elimination of antisocial behavior, and positive changes in lifestyle that include employability (De Leon & Ziegenfuss, 1986, p. 5). In addition, Table 3.2b shows that HIV/AIDS education/counseling/support was offered at more residential than

outpatient non-methadone and hospital inpatient types of care. A similar percentage of residential, methadone, and combination types of care offered this service. At the time of the study, residential programs had begun to address the problems of treating HIV/AIDS clients and to provide support and care to these clients (Tims, Jainchill, & De Leon, 1994). More facilities in residential settings offered transportation, employment, academic, and HIV/AIDS services than facilities not in residential settings.

3.2.3 Other Notable Service Variations by Facility Characteristics

Compared with the other types of care, a lower percentage of methadone facilities offered the selected treatment and support services. Group therapy, family counseling, and outcome follow-up were offered at a lower percentage of methadone facilities than any other type of care. In addition, fewer methadone facilities offered relapse prevention than any other type of care except outpatient non-methadone facilities. Relapse prevention was equally offered in outpatient methadone and outpatient non-methadone types of care. Of the support services, smoking cessation was offered at fewer methadone facilities than any other type of care. Transportation was offered in fewer methadone facilities than all other types of care except for outpatient non-methadone facilities. It should be noted, however, that HIV/AIDS education/counseling/support and tuberculosis screening were support services offered at a high percentage of methadone facilities (94 and 93 percent, respectively). Tuberculosis screening was offered in methadone facilities more than other types of care. HIV/AIDS education/counseling/support was offered more in methadone facilities than in hospital inpatient and outpatient non-methadone facilities. In view of injection drug use and health problems among methadone clients, these are much needed services for this population.

A high percentage of combination facilities offered comprehensive assessment/diagnosis, individual therapy, group therapy, family counseling, relapse prevention, aftercare, and outcome follow-up (Table 3.2a). Combination facilities, which provide more than one type of care, offer a broader scope of services.

There was some tendency for fewer private-for-profit facilities to offer the selected services than private non-profit and public (publicly owned) facilities. For support services in Table 3.2b, fewer private for-profit facilities offered each of the services compared with public facilities. The only exception was that there was no significant difference in the percentage of private for-profit and public facilities that offered smoking cessation services. However, among treatment services, only group therapy was offered at significantly fewer private for-profit facilities than public facilities. Thus, it appears that public facilities offered a range of services to include more support services compared with private for-profit facilities. This is not surprising considering that the mission of many public facilities is to serve clients with a range of problems and who have fewer resources available to them (Humphreys et al., 1997; Price & D'Aunno, 1992; Wheeler et al., 1992). DATSS data indicate that private-for-profit outpatient facilities serve a different clientele than private non-profit and public facilities. A smaller percentage of for-profit clients are under 20, unemployed, unable to pay for treatment, or have multiple drug problems (Price & D'Aunno, 1992). Services in public facilities are driven by the client base and because they have mandates to treat a different client base compared with private for-profit

facilities. Many public facilities receive public funding to serve special populations, such as HIV/AIDS clients, tuberculosis clients, injection drug users, and pregnant women.

It is noted that private non-profit facilities were similar to publicly owned facilities in terms of support services offered. More private non-profit facilities also offered each of the support services in Table 3.2b than private for-profit facilities, with the exception of smoking cessation. Thus, the for-profit status was the key distinguishing variable that differentiated facilities along ownership lines. Burke and Rafferty (1994) also found that ownership differences were between private for-profit versus private non-profit and public facilities. Private for-profit facilities were more likely to receive private funds, such as client self-pay fees and private insurance. At the same time, these facilities were less likely to receive clients through criminal justice referrals and social service agency referrals; therefore, a different client base was in treatment at private-for-profit facilities compared with other facilities.

As mentioned above, HIV education/counseling/support and tuberculosis screening were offered in more publicly owned facilities and private non-profit facilities than private for-profit facilities. In addition, HIV education/counseling/support was offered at fewer facilities that received no public funds than any other percent public revenue category. Furthermore, fewer facilities that received 50 percent or less public revenue offered HIV/AIDS services compared with facilities that received public funds for more than 50 percent of their revenue. Tuberculosis screening was offered in fewer facilities with no public revenue than facilities with some public revenue. This concurs with other research findings (Friedmann et al., 1999), which attributed these findings to facility ownership. ADSS data suggest that it is not simply ownership that is important, but that facility sources of funding need to be considered. Facilities receiving greater public revenue offered more support services than facilities receiving less public revenue.

ADSS estimates indicate that there was some support that being a parent or affiliate facility was associated with more treatment services being offered than facilities that were not affiliated with any other organization. Group therapy and self-help groups were offered at fewer non-affiliate facilities than facilities that were parents or affiliates. In addition, relapse prevention groups, aftercare, and outcome follow-up were offered at more parent facilities than affiliates and non-affiliates. There did not seem to be much significant difference in the offering of support services between parent, affiliate, and non-affiliate facilities. The only notable exception was that child care and prenatal care were offered in more parent facilities than non-affiliate facilities, and HIV/AIDS education/counseling/support was offered at more parent and affiliate facilities than at non-affiliates. This supports research by Alexander, Anderson, and Lewis (1985) who found that units owned or affiliated with another entity offered more services.

3.2.4 Facilities That Offer Varying Numbers of Services

Table 3.3 examines the question of whether facilities differed in the number of the selected treatment and support services they offered. That is, which facilities offered low (5 or fewer), medium (6 to 8), or high (9 to 11) different treatment services? Which facilities offered no support services, low (1 or 2), medium (3 or 4), or high (5 to 8) different support services?

The majority of facilities with combination type of care (74 percent) offered a high number of treatment services. In fact, more combination facilities offered a high number of treatment services than the other types of care. As mentioned earlier, combination facilities offered more than one type of care and, generally, offered more types of services in order to serve their various clients' needs. After combination facilities, hospital inpatient facilities were next in offering a high number of treatment services. Equal proportions of residential, outpatient non-methadone, and methadone type of care offered a high number of treatment services. As noted earlier, methadone type of care offered a low number of treatment services compared with other types of care.

Few facilities offered a high number of support services. Across the treatment system, only 17 percent of facilities offered a high number of support services. More non-hospital residential type of care (38 percent) offered support services than other types of care, although the difference between non-hospital residential and combination facilities was not significant. Combination facilities, similar to residential facilities, offered more support services than outpatient types of care (methadone and non-methadone).

The percentage of facilities that offered a high number of treatment services did not vary significantly by ownership. Roughly a little over a third of all facilities regardless of ownership offered a high number (9-11) of treatment services. However, more private for-profit facilities offered no support services or a low number of support services compared with private non-profit and public facilities. These findings support reports from a national outpatient study that private for-profit programs delivered fewer support services than public programs (Friedmann et al., 1999).

More facilities with no public revenue offered a low number of treatment and low or no support services compared with facilities receiving some public funding. The only pairwise comparison that was not significant was zero percent public funding versus 1 to 50 percent public funding for low support services. Facilities that received 50 percent or less public funding offered low support services compared with facilities that received public funding for more than 50 percent of their funding. This again may be related to the purpose of public facilities to serve the wide range of clients who depend on the public sector for health care.

Forty (40) percent of parent facilities offered a high number of treatment services compared with 32 percent of non-affiliates. A similar trend was indicated for support services (22 vs. 12 percent). Therefore, more parent facilities offered a high number of treatment and support services compared with non-affiliates. Integration of units allows for more resources to be made available to the client as the resources that each of the units provides is shared throughout (James, 1998). There is some evidence that hospitals owned by another organization tend to offer more inpatient and outpatient services (Alexander et al., 1985). There are few findings specific to the substance abuse field as to whether services differ in non-hospital residential substance abuse treatment facilities compared with facilities that are affiliated with other organizations. However, Friedmann et al. (1999) did find that substance abuse facilities affiliated with mental health centers provided on-site mental health services to a greater degree than those not affiliated with a mental health center.

3.3 Findings on Staffing of the Substance Abuse Treatment System

The ratio of clients to staff is important to study because it is one of the factors that affects the delivery of services. Table 3.3 examines the relationship between client-to-staff ratio and number of services offered. The ratio of clients to staff can be viewed as caseload level.

Table 3.3 shows that 51 percent of facilities with a low client-to-staff ratio offered a high number of treatment services. More facilities with a low client-to-staff ratio offered a high number of treatment services than facilities with a medium client-to-staff ratio, and more facilities with a medium client-to-staff ratio offered a high number of treatment services than facilities with a high client-to-staff ratio. Thus, it appeared that the lighter the caseload for direct-care staff, the more likely the facility offered a variety of treatment services. This pattern was also true of support services. The lower the client-to-staff ratio, the more kinds of support services the facility offered. These results are in line with the findings of a national outpatient survey where higher client-to-staff ratios were associated with fewer services (D'Aunno & Vaughn, 1995; Friedmann et al., 1999; Price et al., 1991).

Table 3.4 shows staffing percentages and means among facilities. The first column of the table shows the percentage of facilities that have each of the staffing categories. More than three fourths of facilities had graduate-degreed counseling staff, B.A. or non-degreed counseling staff, and staff other than medical and counseling staff. The "all other staff" category in Table 3.4 refers to non-medical and non-counseling staff and includes administrators, administrative assistants, clerical staff, and any other staff who did not provide medical or counseling services. Most facilities (86 percent) had "all other staff." Seventy-seven (77) percent of facilities had master's level counselors, and 68 percent had B.A.-level counselors. Therefore, in terms of direct-care staff, the substance abuse treatment system had facilities primarily staffed by counselors with M.A. and B.A. degrees. This finding supports the staffing patterns found in the DATSS where master's and bachelor's level educational backgrounds dominated outpatient treatment, in particular in outpatient non-methadone programs (Price et al., 1991; Price & D'Aunno, 1992).

Columns 2-4 of Table 3.4 indicate that master's level counselors were on staff full time at significantly more facilities (62 percent) than any other direct-care staff category, except for bachelor's level counselors. Only 12 percent of facilities reported having a full-time doctoral level counselor on staff, while a slightly higher but significant percentage (16 percent) reported having one on contract. Although only 13 percent of facilities had at least one full-time physician on staff, 21 percent of facilities reported having a part-time physician and 37 percent of facilities reported having a contract physician on staff. Therefore, more highly educated and costly staff may more likely be part time or contract.

Table 3.4 looks at the mean number of staff per facility based on several measures. Means for "all facilities" included all facilities in the denominator regardless of whether they had the staff category. Means for "facilities with staff category" were calculated by including in the denominator only those facilities that had a member of the staff category for the row. "Mean staff" counted full-time, part-time, and contract staff each as one. "Mean FTE staff" counted full-time equivalent staff (see FTE calculation in Appendix B definition for client-to-staff ratio).

In general, the mean number of staff in any one category was low, ranging from one to six across all facilities.

3.3.1 <u>Distribution of Staffing Categories Among Full-Time, Part-Time, and Contract Staff</u>

Tables 3.5a and 3.5b are based on data from an estimated 11,782 facilities (about 95 percent of the universe) that could report their staff numbers by full-time, part-time, and contract staff. Table 3.5a shows the percentage distribution of full-time, part-time, and contract staff by staff category and provides national estimates of staff in these categories. Note that in this table the columns total to 100 percent. In 1996-1997, there were an estimated 134,184 full-time staff in the treatment system compared with an estimated 44,956 part-time staff and an estimated 22,283 contract staff. Medical staff and graduate-degreed counselors each accounted for about 17 percent of full-time staff. B.A. and non-degreed counselors made up 29 percent of the full-time work force, while staff other than medical and counseling staff made up 37 percent of the full-time staff. Among direct-care staff, more B.A. and non-degreed counselors were full time than graduate-level counselors or medical staff. In contrast, medical staff made up 47 percent of the system's contract staff while graduate-degreed counselors made up 32 percent, and B.A. and non-degreed counselors made up only 11 percent. Therefore, direct-care staff who were more highly trained, educated, and paid were more likely to be hired on contract. "All other staff" made up only 10 percent of the contract staff, which was not significantly different from the percentage of B.A. and non-degreed counselors on contract.

Table 3.5b shows the percentage distribution of staff type by "time" category. The information is based on the same data as Table 3.5a but with the rows adding to 100 percent. The findings reported in Table 3.5b parallel the findings in Table 3.4. That is to say, the more educated and more costly staff members, such as physicians, were more often on contract (56 percent) than part-time (26 percent) and full-time (18 percent) staff. Doctoral-level counselors, however, were mostly either full time or contract. Master's level, bachelor's level, and non-degreed counselors were most often full time and least often on contract. The same was true of "all other staff" (i.e., staff other than medical and counseling staff).

3.3.2 FTE Staff

Data for Table 3.5c is based on the same data as Tables 3.5a and 3.5b but also includes data for an estimated 605 facilities that could only report their staff by numbers of FTEs. Table 3.5c shows the estimated number and percentage distribution of FTE staff in the treatment system by staff category. The largest group of FTE staff were the "all other staff' (32 percent) followed by master's level counselors (17 percent). The four subtotal rows (in bold) indicate that there were more "all other staff" followed by "BA and non-degreed counselors," then "total medical staff" and "total graduate degreed counseling staff." The difference between the estimated number of "total medical staff" and "total graduate degreed counseling staff"was not significant.

3.3.3 Mean Ratios of Clients to Staff

Because of the relationship between staff caseload and service delivery, Table 3.6 examines a number of different mean ratios of clients to FTE staff. They all tended to have a similar pattern with the lowest client-to-staff ratio in hospital inpatient and non-hospital residential types of care, and the highest ratio in outpatient types of care. This is to be expected given that residential facilities must be staffed 24 hours a day. In hospital inpatient facilities, there was on average one client to a direct-care staff; in non-hospital residential facilities, there were on average five clients per direct-care staff. This ratio was highest in methadone care. On average, there were 24 methadone clients per direct-care staff. The next highest ratio was in outpatient non-methadone facilities, with 19 clients per staff. Therefore, direct-care staff in the outpatient treatment system had to spread their time among many more clients than staff in the inpatient treatment system.

Facilities with no public revenue had the highest client to direct-care staff ratio. These facilities also tended to have the highest client to all staff ratios (includes direct-care and all other staff). The difference between the 0 and 1 to 50 percent public revenue groups was not significantly different for the client to all staff ratio, but the 0 percent group was significantly different from all other percentage public revenue groups. Therefore, facilities that received no public revenue tended to have higher client-to-staff ratios than facilities that received some public funding.

Generally, the lower the ratio of clients to staff, the more treatment services offered at a facility. The difference between high, medium, and low treatment service facilities were all significant for the client to all staff and client to direct-care staff categories. For the client to all other staff ratio, the comparison for high and low treatment services facilities was significant, whereas the ratio for the medium treatment services facilities was not significantly different from the high or low. A similar trend was found for support services as for treatment services for the client to all staff and client to direct-care staff ratios. Lower ratios of clients to staff were found in facilities that offered medium or high numbers of support services (three or more). Higher ratios of clients to staff were found in facilities that offered low or no support services.

3.3.4 Percentage of Direct-Care Staff Certified in Substance Abuse Treatment

In addition to client-to-staff ratios, the percentage of direct-care staff certified in substance abuse treatment and the ratio of clients to certified staff are two other staffing factors that may be related to service delivery. Quality of services depends on adequate numbers of staff who are certified and trained in substance abuse treatment.

Certification of addiction counselors began in the early 1970s in response to two concerns. One was the lack of special training for counselors in the field of addiction medicine. The other was the need to provide credentialing for non-degreed staff working in substance abuse treatment. Organizations such as the National Association of Alcoholism and Drug Abuse Counselors (NAADAC) have established requirements for certification that specify level of education, years or hours of experience as an alcoholism and/or drug abuse counselor, and passing score on a national certification exam (Beck, 1998).

The debate surrounding certification versus licensing of counselors has continued over the years. Certification specifies counselor experience in the field of substance abuse. Although counselors with certification may have more experience with substance abuse treatment, some managed care plans require counselors to have graduate training and master's degrees in order to treat clients. Organizations such as NAADAC advocate certification requirements for degreed and non-degreed counselors. The argument is that counselors should not only be academically trained, but also be skilled and experienced in the treatment of substance abusers (IOM, 1997, pp. 58-59).

Table 3.7 shows the percentage of direct-care staff certified in substance abuse treatment. Across all facilities, less than half of all direct-care staff were certified (45 percent). Similar findings were reported in a national study of the outpatient system. Across all outpatient facilities, about 40 percent of all staff were certified in substance abuse (Burke & Rafferty, 1994).

Outpatient non-methadone facilities had the highest percentage of certified direct-care staff, although the difference between non-hospital residential and outpatient non-methadone facilities was not significant. The percentage of certified direct-care staff was higher in non-hospital residential type of care than in methadone and hospital inpatient types of care. The percentage of direct-care staff certified in substance abuse treatment was lower in methadone facilities than in all other types of care except for hospital inpatient care. This finding of fewer certified staff in methadone facilities compared with outpatient non-methadone facilities was consistent with past findings (Price et al., 1991; Price & D'Aunno, 1992). The treatment orientation at facilities may influence the number of staff certified in substance abuse treatment. Methadone facilities tend to have more of a medical orientation than a counseling orientation (Friedmann et al., 1999; Price & D'Aunno, 1992). Therefore, they may emphasize credentials other than certification in substance abuse treatment. In addition, Federal methadone regulations required that a licensed physician be on staff to assume responsibility for setting methadone dosages to be dispensed, and methadone could be dispensed only by a practitioner licensed under the appropriate State and Federal regulations to order narcotic drugs for clients. By requirement, the staff dispensing methadone was a pharmacist, registered nurse, a licensed practical nurse, or another health care professional authorized by State or Federal law to dispense narcotic drugs.

Facilities with no public revenue compared with facilities with greater than 90 percent public revenue had a higher percentage of direct-care staff certified in substance abuse treatment. Similarly, private for-profit and private non-profit facilities had a higher percentage of certified direct-care staff than publicly owned facilities. Therefore, private facilities and facilities with no public funding had more certified direct-care staff. Public facilities use a network of service agencies that specialize in providing services to the complex needs of the uninsured or publicly insured. Counselors in the public sector can run the gamut from licensed to certified to non-certified (IOM, 1997, p. 59).

Two other findings are noted in Table 3.7, column 1. Facilities that provide no support services, compared with those that offer a medium or high number of support services, tended to have a higher percentage of staff certified in substance abuse treatment. Therefore, facilities that offered more support services did not necessarily have these services delivered by a staff member

who was certified in substance abuse treatment. Setting variations for the percentage of direct-care staff certified in substance abuse treatment indicate that community mental health centers had fewer certified staff than facilities that were not in community mental health centers. This lends support to past findings that community mental health centers tend to stress credentials other than certification in substance abuse treatment (Mulligan et al., 1989).

3.3.5 Mean Ratio of Clients to Staff Certified in Substance Abuse Treatment

The second column in Table 3.7 looks at the mean ratio of clients to staff certified in substance abuse treatment. The ratio was highest in outpatient methadone care. On average, in hospital inpatient facilities, there were five clients per staff certified in substance abuse treatment. In contrast, methadone facilities had, on average, 106 clients per staff certified in substance abuse treatment. The ratio of clients to certified staff was a function of size. The larger the facility, the higher the ratio, and the client caseload for treatment staff became heavier. Over 80 percent of methadone facilities were very large, as defined by client count, and therefore tended to have a higher ratio of clients to certified staff. In addition, as mentioned above, the number of certified staff tended to be low in methadone type of care. Setting variations, once again, showed a similarity to type of care variations. Facilities in inpatient settings had lower ratios of clients to certified staff than facilities not in inpatient settings.

In terms of facility ownership, private facilities (for-profit and non-profit) had lower ratios of clients to staff certified in substance abuse treatment than public facilities. The pattern was less clear regarding the percentage of public revenue. Facilities that had 50 percent or less public revenue had a lower ratio of clients to certified staff than facilities with more than 50 percent public revenue.

3.4 Conclusions

3.4.1 Service Variations

There were variations in service patterns by facility level characteristics; overall, however, most facilities in the treatment system offered treatment services, such as individual therapy, comprehensive assessment and diagnosis, and group therapy. Services provided after the client leaves treatment, such as aftercare and outcome follow-up, were not offered as often as the various types of counseling. Furthermore, support services were not offered as often as treatment services in the substance abuse treatment system.

Variations in services by facility characteristics included the following patterns. Self-help/mutual support and relapse prevention services tended to be offered in non-hospital residential type of care. Support services such as transportation, employment counseling/training, and academic education/GED classes were not routinely offered in the substance abuse treatment system, but among the various types of care they were offered more often in non-hospital residential facilities. This was likely due to the rehabilitative nature of non-hospital residential type of care. In terms of ownership, fewer private-for-profit facilities offered services compared with public facilities. Group therapy and most support services were offered at fewer private for-profit facilities. Facilities receiving no public revenue tended to offer fewer services, such as

HIV/AIDS and tuberculosis services. Thus, the funding stream is important to consider in addition to facility ownership. Furthermore, facilities that were parent or affiliate facilities tended to offer more services than non-affiliates. Combination facilities, those that offered more than one type of care, offered a broader range of services.

Facilities varied in the number of services they offered clients. Combination facilities offered a high number of treatment services while methadone facilities offered a low number of treatment services. In contrast, high numbers of support services were offered in more non-hospital residential and combination facilities and in fewer outpatient non-methadone facilities. Public and private facilities did not differ in the number of treatment services offered, but more public facilities offered support services to clients. Therefore, the difference between services offered by ownership was in support services. In addition, findings on funding stream also support that facilities with no public revenue offered low treatment and low or no support services compared with facilities that received at least some public funding. Facilities with low client-to-staff ratios offered more treatment and support services.

3.4.2 Staffing Variations

In terms of direct-care staff, the substance abuse treatment system was staffed primarily with M.A.- and B.A.-level counselors. This result agrees with findings of a national outpatient study of drug treatment facilities (Price et al., 1991; Price & D'Aunno, 1992). However, non-medical and non-counseling staff, such as administrators and administrative support, were most frequently on the payrolls of facilities. There were fewer Ph.D.-level professional staff at substance abuse treatment facilities, and these and other costly staff, such as physicians, tended to be on staff as part-time or contract staff.

The ratio of the number of clients to direct-care staff may affect the delivery of services. The ratio of clients to direct-care staff in the treatment system varied by a number of facility characteristics. Low client-to-staff ratio was associated with facilities that offered high numbers of treatment and support services, facilities with inpatient types of care, and facilities that received some public revenue.

The percentage of direct-care staff certified in substance abuse tended to be low. In general, the percentage of certified staff was less than 50 percent of the treatment staff. The percentage of certified staff tended to be lower in methadone and hospital inpatient types of care (where other credentials are important), publicly owned facilities, and those facilities that received public funding for 90 percent or more of their revenue.

The mean ratio of clients to certified staff was highest in facilities that were methadone type of care, larger facilities, public facilities, and facilities that offered a low number of treatment services.

The findings presented in this chapter illustrate variations in service patterns and staffing in the substance abuse treatment system. Facility characteristics are important in determining these variations. The substance abuse treatment system offers a range of services and has a range of staff in order to serve the clients treated in the national treatment system.

3.5 References for Chapter 3

Alexander, J. A., Anderson, J. G., & Lewis, B. L. (1985). Toward an empirical classification of hospitals in multihospital systems. *Medical Care*, 23, 913-932.

Batten, H. L., Horgan, C. M., Prottas, J. M., Simon, L. J., Larson, M. J., Elliott, E. A., Bowden, M. L., & Lee, M. T. (1993). *Drug Services Research Study, Phase I final report:*Non-correctional facilities (revised; submitted to the National Institute on Drug Abuse; available at http://www.samhsa.gov/oas/dsrs.htm). Waltham, MA: Institute for Health Policy, Brandeis University.

Beck, D. (1998). Certified addiction counselors (CAC): Real world issues in managed care settings. *SAMHSA Managed Care Tracking Report*, 1(2), 9-10.

Burke, A. C., & Rafferty, J. A. (1994). Ownership differences in the provision of outpatient substance abuse services. *Administration in Social Work, 18*(3), 59-91.

Calsyn, D. A., Saxon, A. J., Blaes, P., & Lee-Myer, S. (1990). Staffing patterns of American methadone maintenance programs. *Journal of Substance Abuse Treatment*, 7, 255-259.

D'Aunno, T. & Vaughn, T. E. (1995). An organizational analysis of service patterns in outpatient drug abuse treatment units. *Journal of Substance Abuse*, 7, 27-42.

De Leon, G. (1994). The therapeutic community: Toward a general theory and model. In F.M. Tims, G. De Leon, & N. Jainchill (Eds.), *Therapeutic community: Advances in research and application* (DHHS Publication No. 94-3633, NIDA Research Monograph 144, pp. 16-53). Rockville, MD: National Institute on Drug Abuse.

De Leon, G., & Ziegenfuss, J. T. (Eds.). (1986). *Therapeutic communities for addictions: Readings in theory, research and practice*. Springfield, IL: Charles C Thomas Publisher.

Etheridge, R. M., Craddock, S. G., Dunteman, G. H., & Hubbard, R. L. (1995). Treatment services in two national studies of community-based drug abuse treatment programs. *Journal of Substance Abuse*, 7, 9-26.

Friedmann, P. D., Alexander, J. A., & D'Aunno, T. A. (1999). Organizational correlates of access to primary care and mental health services in drug abuse treatment units. *Journal of Substance Abuse Treatment*, 16, 71-80.

Harwood, H., Fountain, D., & Livermore, G. (1998). *The economic costs of alcohol and drug abuse in the United States, 1992* (NIH Publication No. 98-4327; available at http://www.nida.nih.gov:80/EconomicCosts/Intro.html). Rockville, MD: National Institute on Drug Abuse.

Hoffman, J. A., Caudill, B. D., Koman, J. J., 3rd, Luckey, J. W., Flynn, P. M., & Mayo, D. W. (1996). Psychosocial treatments for cocaine abuse: 12-month treatment outcomes. *Journal of Substance Abuse Treatment*, 13, 3-11.

Humphreys, K., Hamilton, E. G., Moos, R. H., & Suchinsky, R. T. (1997). Policy-relevant program evaluation in a national substance abuse treatment system. *Journal of Mental Health Administration*, 24, 373-385.

Institute for Health Policy, Brandeis University. (1993). *Substance abuse: The nation's number one health problem* (report prepared for the Robert Wood Johnson Foundation, Princeton, NJ). Waltham, MA: Author.

Institute of Medicine (M. Edmunds, R. Frank, M. Hogan, D. McCarty, R. Robinson-Beale, & C. Weisner, Eds.). (1997). *Managing managed care: Quality improvement in behavioral health*. Washington, DC: National Academy Press.

Institute of Medicine (D. Gerstein & H. Harwood, Eds.). (1990). *Treating drug problems: Volume 1*. Washington, DC: National Academy Press.

James, D. M. (1998). An integrated model for inner-city health-care delivery: The Deaconess Center. *Journal of the National Medical Association*, *90*, 35-39.

Lash, S. J., & Blosser, S. L. (1999). Increasing adherence to substance abuse aftercare group therapy. *Journal of Substance Abuse Treatment*, 16, 55-60.

McCaughrin, W. C., & Price, R. H. (1992). Effective outpatient drug treatment organizations: Program features and selection effects. *International Journal of the Addiction*, 27, 1335-1358.

McLellan, A. T., Alterman, A. I., Metzger, D. S., Grissom, G. R., Woody, G. E., Luborsky, L. & O'Brien, C. P. (1994). Similarity of outcome predictors across opiate, cocaine, and alcohol treatments: Role of treatment services. *Journal of Consulting and Clinical Psychology*, 62, 1141-1158.

McLellan, A. T., Grissom, G. R., Brill, P., Durell, J., Metzger, D. S., & O'Brien, C. P. (1993). Private substance abuse treatments: Are some programs more effective than others? *Journal of Substance Abuse Treatment*, 10, 243-254.

Mulligan, D. H., McCarty, D., Potter, D., & Krakow, M. (1989). Counselors in public and private alcoholism and drug abuse treatment programs. *Alcoholism Treatment Quarterly*, 6(3/4), 75-89.

Price, R. H., Burke, A. C., D'Aunno, T. A., Klingel, D. M., McCaughrin, W. C., Rafferty, J. A., & Vaughn, T. E. (1991). Outpatient drug abuse treatment services, 1988: Results of a national survey. In R. W. Pickens, C. G. Leukefeld, & C. R. Schuster (Eds.), *Improving drug abuse treatment* (DHHS Publication No. ADM 91-1754, NIDA Research Monograph 106, pp. 63-92). Rockville, MD: National Institute on Drug Abuse.

Price, R. H., & D'Aunno, T. A. (1992). The organization and impact of outpatient drug abuse treatment services. In R. R. Watson (Ed.), *Drug and alcohol abuse reviews, Volume 3: Treatment of drug and alcohol abuse* (pp. 1-22). Totowa, NJ: Humana Press, Inc.

Substance Abuse and Mental Health Services Administration. (1997). *Uniform Facility Data Set* (*UFDS*): *Data for 1996 and 1980-1996*. Rockville, MD: Office of Applied Studies.

Schottenfeld, R. S., Pascale, R., & Sokolowski, S. (1992). Matching services to needs: Vocational services for substance abusers. *Journal of Substance Abuse Treatment*, 9, 3-8.

Tims, F. M., Jainchill, N., & De Leon, G. (1994). Therapeutic communities and treatment research. In F. M. Tims, G. De Leon, & N. Jainchill (Eds.), *Therapeutic community: Advances in research and application* (NIH Publication No. 94-3633, NIDA Research Monograph 144, pp. 1-15). Rockville, MD: National Institute on Drug Abuse.

Wheeler, J. R., Fadel, H., & D'Aunno, T. A. (1992). Ownership and performance of outpatient substance abuse treatment centers. *American Journal of Public Health*, 82, 711-718.



Table 3.1 Percentage of Facilities in the Treatment System Offering Treatment and Support Services: National Estimates

Services	Percent of Responding Facilities Offering Service ^a [Q-C9]
Treatment Services	
Individual therapy	96.9
Comprehensive assessment/diagnosis	93.8
Group therapy, not including relapse prevention	92.6
Family counseling	85.6
Aftercare	82.6
Relapse prevention groups	78.8
Self-help or mutual-help groups	71.4
Outcome follow-up	66.7
Combined substance abuse and mental health treatment	66.7
Detoxification	26.5
Acupuncture	4.8
Support Services	
HIV/AIDS education/counseling/support	76.5
Transportation	49.6
TB screening	43.2
Employment counseling/training	40.2
Smoking cessation	24.2
Academic education/GED classes	17.1
Child care	13.3
Prenatal care	12.0

^a More than 99 percent of facilities responded to each service question.

Table 3.2a Percentage of Facilities Offering Treatment Services, by Selected Facility Characteristics: National Estimates

Treatment Services [All services from Q-C9]	Comprehensive Assessment/Diagnosis	Individual Therapy	Group Therapy, Not Incl. Relapse Prevention	Family Counseling	Relapse Prevention Groups	Self-Help or Mutual- Help Groups	Aftercare	Outcome Follow-Up	Combined Substance Abuse & Mental Health Tx	Detoxification	Acupuncture
All Facilities ^a	93.8	96.9	92.6	85.6	78.8	71.4	82.6	66.7	66.7	26.5	4.8
Facility Type of Care											
Hospital Inpatient Only	96.1	87.0	86.9	80.4	77.6	85.9	68.0	60.3	74.9	88.5	4.4
Non-hospital Residential Only	84.7	95.5	95.0	78.6	88.0	92.3	76.4	74.4	53.9	24.6	7.2
Outpatient Methadone Only	87.2	96.3	76.5	66.6	66.0	62.7	64.4	43.8	55.9	74.7	14.9
Outpatient Non-methadone Only	95.8	97.2	91.4	86.9	72.6	61.0	83.1	61.4	67.8	9.3	3.7
Combination Facilities	97.1	98.9	99.1	94.0	95.9	87.9	94.4	85.0	77.4	71.7	4.0
Facility Size		4					9				
Small (<17 clients)	91.8	94.5	85.8	81.1	72.9	73.9	78.9	70.2	61.9	24.3	2.3
Medium (17-40)	94.0	97.5	92.6	91.5	75.6	71.7	83.0	67.9	69.5	25.6	5.4
Large (41-100)	95.9	98.8	95.9	87.6	82.4	72.4	86.2	69.5	69.9	24.1	4.8
Very Large (>100)	93.2	96.3	95.8	82.0	84.2	66.9	81.6	58.1	65.3	31.7	7.0
Ownership							3				
Private For-profit	93.2	94.4	86.9	84.1	73.8	62.9	79.6	59.4	70.1	29.0	5.9
Private Non-profit	93.9	97.7	94.1	86.7	79.6	75.0	84.0	69.5	63.5	24.2	4.3
Public	94.2	96.9	94.3	83.0	82.7	68.1	80.5	64.6	75.5	31.6	5.5
Percent Public Revenue											
0%	91.2	91.4	85.4	77.0	68.5	59.7	75.9	54.2	56.9	13.4	2.8
1-50%	96.0	97.4	92.5	89.9	79.2	68.3	86.1	72.3	74.5	35.6	4.0
51-90%	92.5	97.5	94.4	86.1	78.4	72.9	88.1	69.3	65.0	27.9	5.4
91-99%	95.0	97.0	95.5	85.8	84.2	73.4	80.5	63.9	68.5	23.5	4.6
100%	93.7	99.3	91.9	84.0	82.6	81.6	73.0	68.5	62.2	19.9	8.0
Unknown %	97.2	98.0	86.2	97.4	74.8	69.0	77.8	65.5	88.6	53.9	0.9*
Urbanicity ^b											
Metro: Small Metro	88.7	98.3	88.9	80.9	77.1	63.9	82.9	61.0	66.2	24.5	0.4*
Medium Metro	95.9	98.3	93.6	85.2	76.2	72.1	83.6	70.9	62.9	27.6	5.2
Large Metro	93.2	95.2	93.2	84.2	82.6	75.1	81.4	63.7	67.5	27.0	7.7
Non-metro: Rural	98.8	98.4	88.0	98.0	70.9	52.7	82.5	65.0	76.3	13.9*	0.0*
Small Urban	95.8	98.4	91.2	92.9	72.3	64.5	86.2	69.8	70.7	22.6	0.5*
Urban	92.9	95.9	93.1	87.0	79.3	74.4	78.3	73.1	65.4	30.6	1.5*
Level of Affiliation ^c											
Parent Facility	94.8	97.5	94.6	86.5	84.6	74.7	87.5	73.8	67.0	23.2	6.4
Affiliate	94.5	97.2	93.9	85.0	78.6	73.4	81.6	63.9	69.4	28.8	4.5
Non-Affiliate	91.7	95.7	88.7	85.9	74.6	65.4	80.2	65.7	61.8	24.6	4.2

See notes at end of table. (continued)

Table 3.2a (continued)

Treatment Services [All services from Q-C9]	Comprehensive Assessment/Diagnosis	Individual Therapy	Group Therapy, Not Incl. Relapse Prevention	Family Counseling	Relapse Prevention Groups	Self-Help or Mutual- Help Groups	Aftercare	Outcome Follow-Up	Combined Substance Abuse & Mental Health Tx	Detoxification	Acupuncture
Facility Setting ^d					_9						
Hospital (inpatient and outpatient)	97.7	96.2	95.2	93.7	88.0	88.4	90.7	82.0	89.4	72.8	4.6
Non-Hospital Residential, Therapeutic Community or Halfway House	88.1	97.3	96.9	82.4	91.5	90.3	81.7	77.8	56.6	29.5	5.9
Community Mental Health Center	97.9	98.1	87.1	95.4	67.3	53.6	82.1	60.3	88.4	13.0	1.2*
Other Outpatient	94.3	96.8	91.9	82.7	75.3	64.8	82.0	60.8	55.1	17.1	5.5
Other	90.2	95.2	84.4	83.2	67.2	62.9	78.4	63.7	71.0	13.6	6.1

^a At least 99 percent of facilities responded to the service questions.

^b Based on Beale code (Butler & Beale, 1994).

^c At least 99 percent of facilties responded to affiliation.

^d Not mutually exclusive

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table 3.2b Percentage of Facilities Offering Support Services, by Selected Facility Characteristics: National Estimates

Support Services [All services from Q-C9]	HIV/AIDS Education/ Counseling/Support	Transportation	TB Screening	Employment Counseling/Training	Smoking Cessation	Academic Education/ GED Classes	Child Care	Prenatal Care
All Facilities ^a	76.5	49.6	43.2	40.2	24.2	17.0	13.3	12.0
Facility Type of Care			10					
Hospital Inpatient Only	75.8	54.3	85.1	23.3	40.8	13.7	0.9*	32.6
Non-Hospital Residential Only	90.2	86.2	62.4	65.5	30.5	41.4	15.4	19.1
Outpatient Methadone Only	93.8	28.9	92.9	57.5	12.8	19.8	7.8	19.0
Outpatient Non-Methadone Only	68.7	34.9	21.8	30.3	19.3	7.4	12.7	5.6
Combination Facilities	87.4	69.1	84.1	48.7	35.2	27.5	17.0	22.8
Facility Size			2		- 10			
Small (<17 clients)	73.5	57.1	40.7	41.5	21.4	17.8	13.2	13.0
Medium (17-40)	73.5	49.9	42.5	41.0	28.1	16.7	7.6	11.0
Large (41-100)	79.2	43.1	39.0	39.5	23.9	17.3	12.3	11.4
Very Large (>100)	79.4	47.2	50.0	37.9	23.0	15.9	20.3	12.2
Ownership					5.49	9		
Private For-Profit	67.3	29.3	32.2	26.0	21.8	6.6	4.2	6.9
Private Non-Profit	78.5	55.2	43.4	45.1	23.4	20.5	15.1	12.0
Public	81.8	55.4	58.1	39.6	30.8	17.6	19.5	19.5
Percent Public Revenue		- A						
0%	58.4	18.3	19.5	20.6	21.5	6.9*	5.5*	5.0
1-50%	70.6	32.4	41.9	30.7	23.2	9.4	7.1	10.4
51-90%	80.2	54.7	41.7	40.6	22.1	16.8	18.6	12.8
91-99%	83.3	68.9	58.3	54.1	26.6	28.6	15.9	16.6
100%	85.2	67.1	46.5	58.0	30.9	24.7	15.3	14.0
Unknown %	72.4	39.0*	58.7	15.9*	19.7*	6.2*	1.4*	4.1*
Urbanicity ^b		7						
Metro: Small Metro	71.4	52.9	37.2	34.7	26.8	23.3	16.4	12.4
Medium Metro	79.6	43.9	43.9	40.4	24.2	14.4	11.3	10.8
Large Metro	81.7	52.2	48.5	44.7	24.4	20.0	13.5	14.2
Non-metro: Rural	70.7	47.0	27.9*	18.5*	10.7*	21.4*	4.2*	4.6*
Small Urban	57.9	42.8	28.8	31.7	24.9	8.4	13.4	8.1
Urban	73.9	56.0	42.9	38.8	20.0	9.8	15.8	9.8
Level of Affiliation ^c								
Parent Facility	80.8	52.4	41.8	43.2	24.3	18.0	16.8	14.2
Affiliate	79.0	50.8	44.6	41.3	24.8	17.7	12.9	12.8
Non-Affiliate	68.9	44.6	40.8	35.5	22.6	15.0	11.2	8.8

See notes at end of table. (continued)

Table 3.2b (continued)

Support Services [All services from Q-C9]	HIV/AIDS Education/ Counseling/Support	Transportation	TB Screening	Employment Counseling/Training	Smoking Cessation	Academic Education/ GED Classes	Child Care	Prenatal Care
Facility Setting ^d				0				
Hospital (inpatient and outpatient)	80.0	52.1	74.7	32.0	36.3	14.3	7.1	19.8
Non-Hospital Residential, Therapeutic Community or Halfway House	90.4	83.9	64.2	64.1	32.0	40.4	16.7	19.5
Community Mental Health Center	70.0	47.3	22.4	29.0	16.9	7.2	13.9	5.0
Other Outpatient	75.5	37.2	33.6	37.0	18.4	11.6	13.9	9.4
Other	66.9	36.3	30.1	35.0	26.9	17.3	12.6	10.1

^a At least 99 percent of facilities responded to the service questions.

^b Based on Beale code (Butler & Beale, 1994).

^c At least 99 percent of facilties responded to affiliation.

^d Not mutually exclusive.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table 3.3 Percentage Distribution of Facilities Offering Varying Number of Services, by Facility Characteristics: National Estimates

	Number o	of Treatmen	t Services	Nui	mber of S	upport Servi	ces
	Low	Medium	High	None	Low	Medium	High
All Facilities ^a	11.7	51.8	36.4	10.7	36.9	35.4	17.1
Facility Type of Care							
Hospital Inpatient Only	9.9	34.1	55.9	7.9	21.9	47.1	23.2
Non-Hospital Residential Only	11.3	53.5	35.3	0.7*	11.7	49.7	37.9
Outpatient Methadone Only	23.2	46.0	30.9	0.2*	28.0	52.0	19.8
Outpatient Non-Methadone Only	13.7	59.6	26.7	16.8	50.3	26.0	6.9
Combination Facilities	2.0*	23.9	74.1	1.0*	17.0	49.9	32.1
Facility Size							
Small (<17 clients)	14.6	52.9	32.5	11.9	35.2	36.2	16.7
Medium (17-40)	11.1	52.1	36.8	12.3	32.3	38.8	16.6
Large (41-100)	8.8	52.6	38.6	9.7	41.1	33.8	15.4
Very Large (>100)	12.5	49.6	37.9	8.9	38.7	32.6	19.9
Ownership	. <						
Private For-Profit	20.0	38.1	41.9	21.2	45.8	26.2	6.8
Private Non-Profit	8.8	57.1	34.1	8.2	34.9	37.1	19.8
Public	11.4	50.2	38.4	5.0	31.0	42.6	21.4
Percent Public Revenue							
0%	26.4	47.3	26.3	26.8	49.5	20.3	3.4*
1-50%	9.6	43.9	46.6	13.6	45.3	31.7	9.4
51-90%	9.1	54.7	36.2	9.9	34.0	37.3	18.9
91-99%	8.2	58.8	33.0	2.8*	31.1	37.4	28.8
100%	10.8	55.1	34.1	4.0*	24.5	47.5	24.0
Unknown %	13.9*	31.9	54.2	5.6*	46.9	42.5	5.0
Urbanicity ^b		1					
Metro: Small Metro	13.4	56.9	29.8	12.0	39.8	27.7	20.5
Medium Metro	11.4	49.1	39.5	8.7	40.8	33.9	16.7
Large Metro	12.6	49.1	38.4	7.7	33.6	39.7	19.0
Non-metro: Rural	14.7*	57.3	28.0*	17.1*	54.4	23.8*	4.6*
Small Urban	6.7*	61.8	31.4	22.7	38.2	28.1	11.0
Urban	12.4	51.4	36.2	12.0*	31.5	41.8	14.8
Level of Affiliation ^c							
Parent Facility	8.8	51.3	40.0	10.3	35.8	32.1	21.8
Affiliate	10.6	51.7	37.7	9.4	36.1	36.7	17.8
Non-Affiliate	15.7	52.5	31.8	13.2	38.9	35.6	12.4
Client/Staff Ratio ^c							
Low (0-4)	8.8	40.1	51.2	4.9	30.2	40.5	24.5
Medium (>4-14)	11.8	54.9	33.3	12.0	33.3	37.6	17.2
High (>14)	14.2	60.1	25.8	14.2	47.8	28.1	9.9

See notes at end of table. (continued)

Table 3.3 (continued)

	Number	of Treatmen	t Services	Number of Support Services					
	Low	Medium	High	None	Low	Medium	High		
Facility Setting ^d									
Hospital (inpatient and outpatient)	2.6	20.7	76.8	4.9	29.9	44.4	20.9		
Non-Hospital Residential, Therapeutic Community or Halfway House	8.4	50.3	41.3	1.1*	11.6	50.8	36.5		
Community Mental Health Center	9.8	62.4	27.8	13.9	53.9	23.3	9.0		
Other Outpatient	15.8	58.0	26.2	12.9	43.3	33.4	10.3		
Other	21.9	41.6	36.6	20.5	39.4	21.6	18.6		

^a At least 99 percent of facilities responded to the service questions.

Note: Each row adds to 100 percent within each section (treatment services or support services).

Exclusions: ADSS Phase I excludes intake/referral-only facilities, halfway houses without paid counseling staff, solo practices, correctional facilities, Department of Defense facilities, and Indian Health Service facilities.

^b Based on Beale code (Butler & Beale, 1994).

^c At least 99 percent of facilties responded to affiliation and client/staff questions.

^d Not mutually exclusive.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

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Table 3.4 Percentage of Facilities, by Staffing Category and Mean Staff per Facility: National Estimates

			'acilities wi me'' Categ facilities)			Mean Staff P	er Facility	
	Percent of Facilities with Staff Category	Full-Time	Part- Time	Contract	Mean Staff ^a per Facility (for facilities with staff category)	Mean FTE Staff ^b per Facility (for facilities with staff category)	Mean Staff ^a per Facility (all facilities)	Mean FTE Staff ^b per Facility (all facilities)
Total Staff	99.8°	93.1	72.3	54.9	18.4	17.2	18.3	17.2
Physicians	61.4	12.8	21.0	36.7	2.0	1.3	1.2	0.8
Registered Nurses	36.5	25.8	17.4	5.9	4.9	4.9	1.8	1.8
Other Medical Personnel	24.2	17.5	12.1	3.5	4.4	4.0	1.1	1.0
Any Medical Staff	65.8	34.0	32.8	39.1	6.2	5.4	4.1	3.5
Doctoral Level Counselors	32.7	12.0	8.8	16.1	1.6	1.5	0.5	0.5
Master's Level Counselors	76.5	61.9	24.7	15.4	3.5	3.7	2.7	2.8
Any Graduate-Degreed Counseling Staff	80.3	64.0	28.1	26.9	4.0	4.1	3.2	3.3
Other Degreed Counselors	68.1	58.5	19.2	6.4	3.2	3.4	2.2	2.3
Non-Degreed Counselors	57.7	50.3	17.4	4.7	3.6	3.8	2.1	2.2
Any BA or Non-Degreed Counseling Staff	85.0	75.3	30.0	9.7	5.0	5.3	4.3	4.5
All Other Staff	86.4	72.8	38.1	6.5	6.4	6.2	5.5	5.3

^a The mean was calculated by adding all full-time, part-time, and contract staff, and dividing by the total number of facilities to obtain a facility mean for each staffing category.

^b Part-time and contract staff were counted as .41 FTE, based on ADSS Phase II data.

^c Does not add to 100 percent because 0.2 percent of facilities reported no paid staff on October 1, 1996.

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Table 3.5a Number and Percentage Distribution of Full-Time, Part-Time, and Contract Staff, by Staff Type: National Estimates^a

	Full-Time		Part-Time		Contract	
	N	Percent	N	Percent	N	Percent
Total Staff	134,184	100%	44,956	100%	22,283	100%
Physicians	2,653	2.0	3,700	8.2	8,053	36.1
Registered Nurses	13,474	10.0	6,139	13.7	1,334	6.0
Other Medical Personnel	7,390	5.5	4,106	9.1	1,118*	5.0
Total Medical Staff	23,517	17.5	13,945	31.0	10,504	47.1
Doctoral Level Counselors	2,170	1.6	1,331	3.0	2,524	11.3
Master's Level Counselors	20,631	15.4	6,172	13.7	4,537	20.4
Total Graduate-Degreed Counseling Staff	22,801	17.0	7,504	16.7	7,061	31.7
Other Degreed Counselors	19,767	14.7	4,613	10.3	1,462	6.6
Non-Degreed Counselors	18,918	14.1	5,095	11.3	1,012	4.5
Total BA and Non-Degreed Counseling Staff	38,685	28.8	9,708	21.6	2,474	11.1
All Other Staff	49,181	36.7	13,800	30.7	2,244	10.1

^a This table is based on data from the estimated 11,782 facilities (about 95 percent of the universe) that reported their staff by full-time, part-time, and contract.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

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Table 3.5b Number and Percentage Distribution of Staff Type, by "Time" Category in the Treatment System: National Estimates^a

	To	Total		-Time	Part-Time		Contract	
	N	Percent	N	Percent	N	Percent	N	Percent
Physicians	14,406	100.0	2,653	18.4	3,700	25.7	8,053	55.9
Registered Nurses	20,946	100.0	13,474	64.3	6,139	29.3	1,334	6.4
Other Medical Personnel	12,614	100.0	7,390	58.6	4,106	32.6	1,118*	8.9
Total Medical Staff	47,965	100.0	23,517	49.0	13,944	29.1	10,504	21.9
Doctoral Level Counselors	6,025	100.0	2,170	36.0	1,331	22.1	2,524	41.9
Master's Level Counselors	31,341	100.0	20,631	65.8	6,172	19.7	4,537	14.5
Total Graduate-Degreed Counseling Staff	37,366	100.0	22,801	61.0	7,504	20.1	7,061	18.9
Other Degreed Counselors	25,841	100.0	19,767	76.5	4,613	17.9	1,462	5.7
Non-Degreed Counselors	25,025	100.0	18,918	75.6	5,095	20.4	1,012	4.0
Total BA and Non-Degreed Counseling Staff	50,866	100.0	38,685	76.1	9,708	19.1	2,474	4.9
All Other Staff	65,225	100.0	49,181	75.4	13,800	21.2	2,244	3.4

^a This table is based on data from the estimated 11,782 facilities that reported their staff by full-time, part-time, and contract.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table 3.5c Number and Percentage Distribution of FTE Staff, by Staffing Categories: National Estimates^a

	F	TE Staff ^b
	N	Percent
Total	206,852	100.0
Physicians	9,862	4.8
Registered Nurses	21,950	10.6
Other Medical Personnel	12,081	5.8
Total Medical Staff	43,894	21.2
Doctoral Level Counselors	5,977	2.9
Master's Level Counselors	35,086	17.0
Total Graduate-Degreed Counseling Staff	41,063	19.9
Other Degreed Counselors	29,028	14.0
Non-Degreed Counselors	26,847	13.0
Total BA and Non-Degreed Counseling Staff	55,875	27.0
All Other Staff	66,019	31.9

^a This table is based on data from an estimated 12,387 facilities, including 605 facilities that could not report their staff by full-time, part-time, and contract. These 605 facilities could only report staff numbers in terms of full-time equivalents.

^b Part-time and contract staff were counted as .41 FTE, based on Phase II data.

Table 3.6 Mean Ratio of Clients to FTE Staff, by Facility Characteristics: National Estimates

		Mean Ratios			
	Clients to All Staff ^b [Q-A9a-h]	Clients to Direct- Care Staff ^b [Q- A9a-g]	Clients to All Other Staff ^c [Q- A9h]		
All Facilities	9.9	14.1	39.0		
Facility Type of Care					
Hospital Inpatient Only	0.8	1.0	6.1		
Non-Hospital Residential Only	2.3	4.6	7.6		
Outpatient Methadone Only	18.1	23.6	95.8		
Outpatient Non-Methadone Only	13.3	18.5	50.0		
Combination Facilities	4.8	7.3	26.6		
Facility Size			£.		
Small (<17 clients)	2.6	3.8	6.4		
Medium (17-40)	6.0	8.1	16.7		
Large (41-100)	10.2	14.8	40.0		
Very Large (>100)	21.5	30.3	89.4		
Ownership		-			
Private For-Profit	10.7	14.8	43.7		
Private Non-Profit	9.2	13.4	35.8		
Public	12.0	15.9	46.3		
Percent Public Revenue			/		
0%	13.2	19.1	51.1		
1-50%	10.2	13.5	37.0		
51-90%	10.2	14.5	40.7		
91-99%	8.7	12.5	35.9		
100%	8.1	11.7	31.7		
Unknown %	5.7	9.4	27.6		
Urbanicity ^d					
Metro: Small Metro	8.7	12.8	32.0		
Medium Metro	10.6	14.7	40.5		
Large Metro	9.7	13.9	42.8		
Non-metro: Rural	12.9*	17.5	27.4		
Small Urban	11.3	15.4	39.1		
Urban	7.9	11.9	26.1		
Level of Affiliation ^e					
Parent Facility	10.2	14.5	40.2		
Affiliate	9.6	13.0	39.6		
Non-Affiliate	10.3	15.6	37.1		
Number of Treatment Services					
Low (0-5)	13.6	19.0	50.6		
Medium (6-8)	10.7	15.5	39.1		
High (9-11)	7.6	10.5	35.4		

See notes at end of table. (continued)

Table 3.6 (continued)

	Mean Ratios			
	Clients to All Staff ^b [Q-A9a-h]	Clients to Direct- Care Staff ^b [Q- A9a-g]	Clients to All Other Staff ^c [Q- A9h]	
Number of Support Services				
None	13.4	18.8	44.3	
Low (1-2)	12.4	17.5	48.7	
Medium (3-4)	8.0	11.4	32.1	
High (5-8)	6.4	9.4	29.9	
Facility Setting ^f	4			
Hospital (inpatient and outpatient)	4.5	5.7	27.1	
Non-Hospital Residential, Therapeutic Community or Halfway House	3.2	6.0	11.4	
Community Mental Health Center	12.1	16.5	43.1	
Other Outpatient	13.7	19.4	53.7	
Other	10.5	15.0	38.1	

^a Part-time and contract staff were counted as .41 FTE, based on Phase II data.

^b At least 99 percent of facilities responded to staffing questions.

^c At least 89 percent of facilities reported having "other staff."

^d Based on Beale code (Butler & Beale, 1994).

^e At least 99 percent of facilities responded to affiliation.

^f Not mutually exclusive.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table 3.7 Percentage of Staff Certified in Substance Abuse Treatment and Mean Ratio of Clients to Staff Certified in Substance Abuse Treatment, by Facility Characteristics: National Estimates

[Q-A10]	Percent of Direct-Care Staff Certified in Substance Abuse Treatment ^a	Mean Ratio of Clients to Staff Certified in Substance Abuse Treatment ^b
All Facilities	44.7	30.3
Facility Type of Care		
Hospital Inpatient Only	23.8	4.9
Non-Hospital Residential Only	41.9	10.3
Outpatient Methadone Only	26.0	105.6
Outpatient Non-Methadone Only	49.4	35.2
Combination Facilities	38.6	21.8
Facility Size		
Small (<17 clients)	42.5	5.4
Medium (17-40)	40.8	12.8
Large (41-100)	47.7	27.1
Very Large (>100)	47.8	73.9
Ownership		
Private For-Profit	47.8	25.5
Private Non-Profit	45.1	29.2
Public	37.8	45.1
Percent Public Revenue		
0%	51.7	35.6
1-50%	47.0	22.3
51-90%	47.7	30.5
91-99%	38.2	35.0
100%	36.3	32.8
Unknown %	37.3	18.8
Urbanicity ^c		
Metro: Small Metro	50.3	23.9
Medium Metro	46.4	33.5
Large Metro	42.9	31.8
Non-metro: Rural	32.4	28.6
Small Urban	45.8	26.6
Urban	43.3	26.7
Level of Affiliation ^d		
Parent Facility	46.8	30.0
Affiliate	41.7	29.4
Non-Affiliate	48.0	32.0
Number of Treatment Services		
Low (0-5)	43.7	38.6
Medium (6-8)	48.2	30.3
High (9-11)	40.3	28.1

See notes at end of table. (continued)

Table 3.7 (continued)

[Q-A10]	Percent of Direct-Care Staff Certified in Substance Abuse Treatment ^a	Mean Ratio of Clients to Staff Certified in Substance Abuse Treatment ^b
Number of Support Services		
None	56.5	27.6
Low (1-2)	46.9	32.5
Medium (3-4)	40.7	29.5
High (5-8)	41.4	29.4
Facility Setting ^e		
Hospital (inpatient and outpatient)	35.3	18.2
Non-Hospital Residential, Therapeutic Community or Halfway House	42.9	13.8
Community Mental Health Center	36.5	40.9
Other Outpatient	51.3	39.2
Other	49.9	24.4

^a At least 88 percent of facilities provided number of direct-care staff (not FTEs).

^b At least 99 percent of facilities reported having staff certified in substance abuse treatment.

^c Based on Beale code (Butler & Beale, 1994).

^d At least 99 percent of facilities provided affiliation.

^e Not mutually exclusive.

Appendix A

ADSS Phase I Methodology



Appendix A: ADSS Phase I Methodology

Phase I of the Alcohol and Drug Services Study (ADSS) consisted of a national mail/telephone survey of substance abuse treatment facilities. Data collected were based on reports of facility directors. The survey, conducted in 1996-1997, was based on a nationally representative, stratified random sample of 2,395 alcohol and drug treatment facilities, sampled from the Substance Abuse and Mental Health Services Administration's (SAMHSA's) national inventory of substance abuse treatment facilities. This appendix provides a summary of the methodology for Phase I of the ADSS. For more detailed information, see the ADSS methodology report.¹

Facility Sample Frame. The sample frame for ADSS Phase I was the enhanced 1996 National Master Facility Inventory (NMFI) created by SAMHSA. The ADSS sampling frame of 18,368 consisted of 13,787 substance abuse treatment facilities previously known to SAMHSA and listed on the National Facility Register (NFR) and an additional 4,581 facilities identified from other sources, such as hospital listings, provider associations, and business directories. Types of facilities excluded from the ADSS sampling frame were intake/referral-only facilities, halfway houses without paid counseling staff, solo practices, correctional facilities, Department of Defense facilities, and Indian Health Service facilities.

Facility Stratification. The strata used to select the ADSS facility sample reflect the types of care offered within the Nation's substance abuse treatment system: hospital inpatient, non-hospital residential, outpatient-predominantly methadone, outpatient-non-methadone, and combined. For the outpatient, non-methadone type of care, the sample was further stratified to reflect whether or not facility clients were almost exclusively alcohol abusers. A seventh stratum was included for facilities whose type of care could not be determined based on existing information at the time of sampling.

Facility Sample Size. A total sample size of about 2,400 facilities was planned. Approximately 300 facilities per stratum were considered minimal to provide estimates with the necessary precision and stability. Stratified proportional samples are known to produce optimal design effects. Based on needed minimums and design effect considerations, target strata sizes for the ADSS Phase I sample were determined: 316 facilities each for the hospital inpatient, non-hospital residential, outpatient-predominantly methadone, outpatient-almost exclusively alcohol, and combined strata, and 560 facilities for the outpatient-other strata. The target for the unknown stratum was set to zero as facilities would be reclassified based on their Phase I responses.

Facility Sampling. Facility selection into the ADSS sample was based on a probability proportional to size (PPS), with size calculated as the 0.7th power of the facility's most recent

¹ Ritter, G.A., Levine, H.J., Mohadjer, L., Krenzke, T., Lee, M.T., Reif, S., & Horgan, C.M. (2003). Phase I methodology—ADSS Facility Survey. In Office of Applied Studies (Ed.), *Alcohol and Drug Services Study (ADSS): Methodology report: Phases I, II, and III* (Chapter 1; available at http://www.samhsa.gov/oas/adss.htm). Rockville, MD: Substance Abuse and Mental Health Services Administration.

point-prevalence client count from their response to SAMHSA's annual Uniform Facility Data Set (UFDS) census of facilities. Facilities with no prior UFDS point-prevalence count were given an estimated size based on other existing information from the NFR or UFDS. Factors used for such estimates included the facility's stratum, location, capacity, annual admissions, annual revenues, and whether the facility treated drug abusers only, alcohol abusers only, or both.

The ADSS Phase I sample was released in two waves to ensure the target number of facilities per strata and in recognition of some incompleteness and misclassification of initial strata groups. Information on response rate, reclassification of stratum designation, and the distribution of facilities in the unknown stratum for the first wave of 2,447 facilities was used to determine the distribution of facilities released in the second wave. In all, an oversample of 3,643 facilities was released as the ADSS Phase I sample, allowing for closed or otherwise ineligible or out-of-scope facilities.

Comparison of the ADSS and UFDS Facility Universes. Because the ADSS facility universe is an expansion of the original frame previously used for the annual UFDS survey, comparison of national estimates from the two survey frames was undertaken to determine whether the addition of facilities from the business listings and other sources in ADSS made any important changes to the survey universe.

Looking at the facility organizational characteristics for the 12,387 facilities estimated in ADSS Phase I versus the characteristics for only the original NFR portion of the ADSS estimate (10,035 facilities or 81 percent of the ADSS estimate of facilities,) a few small differences are noted.

For the full ADSS frame, there was a slightly lower proportion of non-hospital residential facilities (17 percent residential) compared with the NFR portion of the frame (19 percent residential). Conversely, for the full ADSS frame, there was a slightly higher proportion of outpatient non-methadone facilities (61 percent outpatient non-methadone) compared with the NFR portion of the frame (59 percent outpatient non-methadone).

There were other small differences of 2 to 3 percentage points between the full ADSS frame and original NFR frame. In the full ADSS universe, there was a slightly larger representation of private for-profit facilities (23 percent in the full ADSS universe vs. 20 percent in the NFR universe) and correspondingly fewer non-profit facilities. There was a slightly higher percentage of medium-sized facilities in the full universe (24 percent) compared with the NFR universe (22 percent) and correspondingly fewer very large facilities in the complete ADSS sample (23.5 percent) than the NFR (25.5 percent). There were no differences in percent public revenue, urbanicity, or level of affiliation with other organizations. The small differences that might exist between sample estimates are largely due to somewhat greater representation of private for-profit, medium-sized, outpatient non-methadone facilities among the newly identified facilities.

Instrument Development and Data Collection. The ADSS Phase I data collection consisted of three steps: a telephone screener to confirm eligibility status and to update the mailing address; a mailing of the ADSS Phase I facility questionnaire; and a telephone call to

collect the responses prepared by the facility's administrator. The last step often took a number of follow-up telephone calls to complete, sometimes to more than one person at the facility.

Instrument development was the result of an extensive process of planning, development, and review. The ADSS advisory group, formed to help in the development process, was comprised of members of the research community, including representatives from SAMHSA and members of other U.S. Department of Health and Human Services (DHHS) agencies, representatives of the National Association of State Alcohol and Drug Abuse Directors (NASADAD), provider organizations, and private treatment providers. Final instruments used in ADSS were subject to both internal institutional review board (IRB) review and governmental Office of Management and Budget (OMB) approval. Both the screener and the facility questionnaire were revised based on pilot results. The revised screener was estimated to take about 10 minutes to complete. The revised facility questionnaire was estimated to require about 3 hours of preparation and an additional 50 minutes of telephone time to provide the responses.

ADSS Screener. The screener was a telephone call to sampled ADSS facilities to verify name and mailing address and to gather additional information regarding the facility's ADSS eligibility, stratum classification, and size. Questions included the facility's types of care, setting, ownership, managed care arrangements, and whether the facility provided treatment or only performed intake and referral. This information was necessary to confirm that facilities still were in business and to refine stratification assignment.

Of the 3,643 Phase I facilities for which screening was attempted, 221 were out of business,18 refused, and 3,404 facilities responded to the screener. Ultimately, 2,771 of the 3,404 responding facilities were determined by the screener to be eligible to receive the ADSS Phase I questionnaire. Screened facilities were designated ineligible for the ADSS survey because of duplicate listings (n = 55), out-of-scope setting (n = 186), out-of-scope ownership (n = 14), or lack of substance abuse treatment (n = 378). Further breakdown of the ineligible categories follows. Facilities ineligible for ADSS based on out-of-scope setting included correctional facilities (n = 103), halfway houses without paid counselors (n = 14), and solo practitioners (n = 69). Facilities ineligible for ADSS based on ownership included Department of Defense facilities (n = 8) and Indian Health Service facilities (n = 6). Facilities ineligible for ADSS because of lack of treatment included administrative-only units (n = 35), facilities with prevention services only (n = 319), and facilities providing only intake and referral (n = 24). Overall, 2,771 eligible facilities responded to the screener out of 2,789 eligible facilities (2,771 respondents and 18 refusals), for a screener response rate of 99.4 percent.

ADSS Facility Questionnaire. The ADSS Phase I Facility Survey was conducted from December 1996 to June 1997, using the ADSS Facility Questionnaire. It was mailed to facilities that met ADSS eligibility criteria on the basis of screener responses. The questionnaire collected point-prevalence information for October 1, 1996, concerning the facility's organizational structure, the number of clients served, and client characteristics. It also asked for the facility's most recent 12-month data on admissions and discharges; special treatment programs; special populations served; treatment services offered; managed care participation; and annual costs and revenues. The questionnaire was organized in four sections: Section A involved facility organization and staffing, Section B concerned point-prevalence client counts, Section C

concerned 12-month client counts and treatment services, and Section D involved financial data. Questionnaires were mailed to facility directors to allow them time to assemble the detailed information necessary for responses. Data were collected by telephone interviews beginning approximately 2 weeks after the questionnaire was mailed.

ADSS Phase I Response Rate. Table A.1 shows each survey step and the resulting response rate for the ADSS Phase I survey. Of the 2,771 facilities originally mailed Phase I questionnaires, 168 were designated ineligible because they were out of business or did not provide substance abuse treatment as of October 1, 1996. Of the remaining 2,603 eligible facilities, 2,395 completed the interview and 208 refused, for a questionnaire response rate of 92 percent.

Table A.1 Number of Facilities in the ADSS Phase I Survey Results

Table A.1 Number of Facilities in the ADSS Phas	e I Survey Results
Mailed Questionnaire	2,771
Out of Business/Closed/No Treatment	168
Eligible	2,603
Refusals/No Contact	208
Eligible Completers	2,395
Phase I Questionnaire Response Rate	92.0% (2,395 out of 2,603)

Phase I Cumulative Response Rate. The cumulative response rate for ADSS Phase I is calculated as the product of the Phase I screener response rate (.994) and the Phase I questionnaire response rate (.920) for a cumulative response rate of .914 or 91.4 percent.

Weighting. The Phase I sampling design incorporated a stratified random probability sample. Weights were developed for the Phase I sample to facilitate overall and by-stratum estimates of facility-level and client-level characteristics of the Nation's substance abuse treatment system. Final Phase I weights were constructed in a multi-step process involving calculation of initial base weights, trimming to guard against excessive influence by a few highly weighted facilities, adjustment for facility non-response, and poststratification adjustment of the facility estimates to initial frame counts.

Because the Phase I sample was selected using a complex multi-stage design, resampling is the appropriate method of calculating the stability of computed statistics. Replicate weights based on the stratified jackknife procedure (JKn) are included in the ADSS Phase I dataset for the purpose of standard error (SE) calculation.

Imputation. In the Phase I data file, imputation was used to fill in missing values for key responses concerning staffing, point-prevalence counts, characteristics of clients, admissions, revenues, and costs. Variables for which missing responses were imputed generally had item non-response of well under 10 percent, except for total revenue and total cost, which had 10 to 11 percent missing values across the full sample; missing values within hospital inpatient facilities were higher. Phase I imputation involved a number of methods designed to approximate the true missing value and at the same time maintain variability and preserve joint relationships among responses. Listed in order of preference these methods include logical imputation, substitution from an external source, and imputation by statistical method. The statistical imputation methods used in ADSS Phase I were non-deterministic, based on random regression² and random within class hot-decking.³

Imputation was performed to blocks of items at a time—staffing, point-prevalence counts, admissions, revenues, and costs. Within each block, missing totals were imputed first, followed by imputation of missing components in a manner to produce internally consistent responses. Upon completion of a block, pre-imputation to post-imputation comparisons were done to ensure that key statistics of the data remained invariant. Imputation error variances, measuring the amount of error introduced, also were calculated to provide added assurance that the imputation process did not compromise the quality of ADSS data. More detailed information about frame construction, sample design, sampling method, the data collection process, weighting, and imputation can be found in the ADSS methodology report.⁴

² Montaquila, J., & Ponickowski, C. (1995). An evaluation of alternative imputation methods. In *Proceedings of the Section on Survey Research Methods*. Alexandria, VA: American Statistical Association.

³ Kalton, G., & Kish, L. (1984). Some efficient random imputation methods. *Communication in Statistics*, *13*, 1919-1939.

⁴ See footnote 1.



Appendix B

Variable Definitions



Appendix B: Variable Definitions

The variables used in this report were constructed from the Alcohol and Drug Services Study (ADSS) Phase I Facility Questionnaire. See the ADSS methodology report for a copy of the questionnaire. Data items included organization and staffing, point-prevalence client data, 12-month client data, and financial data. Constructed variables include type of care, facility size, ownership, percent public revenue, urbanicity, level of affiliation, number of treatment services, number of support services, setting, and client-to-staff ratio. Categories for each variable are listed with a description of how they were constructed.

Facility Type of Care (ADSS Phase I Question B1). Facilities were asked whether they offered specific types of substance abuse treatment on the point-prevalence date of October 1, 1996. The majority of facilities offered a single type of care and were categorized as such. Although many combinations of the four types of care are represented in the combination category, they were grouped together to create cell sizes large enough for analysis and so indicate facilities offering multiple types of care. Facilities were classified as follows:

- *hospital inpatient only*—offered hospital inpatient (including hospital inpatient detoxification or rehabilitation) and no other types of care.
- *non-hospital residential only*—offered residential care (including residential detoxification or rehabilitation) and no other types of care.
- *outpatient methadone only*—offered outpatient methadone and no other types of care.
- *outpatient non-methadone only*—offered outpatient non-methadone care and no other types of care.
- *combination facilities*—offered more than one of the types of care listed above. Any combination is included in this category.

Facility Size (ADSS Phase I Question B1). Facilities were categorized by the total number of clients in all types of care reported as in treatment on the point-prevalence date of October 1, 1996. The categories represent quartiles of the weighted data, and they are used to facilitate comparisons among facilities of similar size:

- *small*—16 or fewer clients.
- *medium*—17 to 40 clients.
- *large*—41 to 100 clients.
- *very large*—more than 100 clients

Ownership (ADSS Phase I Question A6). Facilities were asked to describe their ownership on October 1, 1996:

private for-profit.

¹ Office of Applied Studies. (2003). *Alcohol and Drug Services Study (ADSS): Methodology report: Phases I, II, and III* (available at http://www.samhsa.gov/oas/adss.htm). Rockville, MD: Substance Abuse and Mental Health Services Administration.

- private non-profit.
- *public*—collapses categories for city or county government agency, State government agency, Federal Government agency, or tribal government.

Mean Percent Public Revenue (ADSS Phase I Questions D7 and D8). Facilities were asked to break down their annual revenue by 10 different sources. Of these 10 categories, 5 were "public revenue" categories: Medicaid (not specified), Medicaid (managed care), Medicare, other Federal Government funds (VA, CHAMPUS, etc.), and other public funds (block grants, contracts, grants, etc.). The percentage of revenue from each of these five sources was summed and calculated as a percentage of total revenue for each sample facility, creating a public revenue variable. This public revenue percentage was categorized based, in part, on frequency distributions. The frequency distribution of the public revenue variable was divided into thirds: 0 to 50 percent, 51 to 90 percent, and 91 to 99 percent. Based on further analyses, these thirds were then modified to separate facilities with no public revenue and facilities with 100 percent public revenue, as these were deemed to be inherently different types of facilities. Therefore, the public revenue categories are as follows:

- *none*—facility reported no revenue from any of the five public revenue categories.
- 1 to 50 percent—public revenue was more than 0 percent, and up to and including 50 percent of the facilities' total revenue.
- 51 to 90 percent—more than 50 percent, and up to and including 90 percent of total revenue.
- 91 to 99 percent—more than 90 percent, but less than 100 percent.
- 100 percent—all revenue reported came from the public revenue categories.

Urbanicity. Based on facility ZIP code, facilities were coded according to the Beale Rural-Urban Continuum Codes developed by the U.S. Department of Agriculture to categorize facilities by level of urbanicity.² The Beale classification uses 10 county-based categories. For the ADSS analysis, the 10 Beale categories were collapsed into 6 categories, combining several categories as follows:

- *large metro*—central or fringe counties in metropolitan statistical areas (MSAs) with a population of 1 million or more. Beale Code equals 0 (central counties) or 1 (fringe counties).
- *medium metro*—counties in MSAs with population of 250,000 to 1 million. Beale Code equals 2.
- *small metro*—counties in MSAs with population <250,000. Beale Code equals 3.
- *non-metro, urban*—urban population of 20,000 or more, in non-metropolitan counties. Beale Code equals 4 (adjacent to a metro area) or 5 (not adjacent to a metro area).
- *non-metro*, *small urban*—urban population of 2,500 to 19,999, in non-metropolitan counties. Beale Code equals 6 (adjacent to a metro area) or 7 (not adjacent to a metro area).

² Butler, M.A., & Beale, C.L. (1994). *Rural-urban continuum codes for metropolitan and nonmetropolitan counties*, 1993 (Staff Report No. AGES 9425; http://www.ers.usda.gov:80/briefing/rural/data/code93.txt). Washington, DC: U.S. Department of Agriculture, Economic Research Service.

• *non-metro*, *rural*—completely rural with <2,500 population, in non-metropolitan counties. Beale Code equals 8 (adjacent to a metro area) or 9 (not adjacent to a metro area).

Level of Affiliation (ADSS Phase I Questions A11 and A16). Level of affiliation refers to whether a facility is an independent entity or an integral part of a larger organization. This variable was created to capture organizational configurations in the substance abuse treatment system. Facilities were asked if they were a parent organization to other substance abuse facilities on October 1, 1996 (A16), and whether they were legally part of another organization on October 1, 1996 (A11). Using these questions, facilities were classified for this report as follows:

- *parent*—If the facility answered "yes" to being a parent, whether or not they were legally part of another organization.
- *affiliate*—If the facility was not a parent to other substance abuse facilities, but was legally part of another organization.
- *non-affiliate*—If the facility was not a parent to other substance abuse facilities and was not legally part of another organization.

Number of Treatment Services (ADSS Phase I Question C9). Facilities were asked whether they offered each of 19 selected services. For this report, the 19 services were classified into two groups—treatment services and support services. The following 11 were classified as treatment services: comprehensive assessment/diagnosis, self-help or mutual-help groups, detoxification, individual therapy, group therapy (not including relapse prevention), relapse prevention groups, family counseling, combined substance abuse and mental health treatment, acupuncture, aftercare, and outcome follow-up. Facilities were categorized by the number of these 11 treatment services they offered:

- *low*—offered 5 or fewer types of treatment services.
- *medium*—offered 6 to 8 types of treatment services.
- *high*—offered 9 to 11 types of treatment services.

Number of Support Services (ADSS Phase I Question C9). Facilities were asked whether they offered each of 19 services. For this report, eight (8) of the services were classified as support services: child care, transportation, employment counseling/training, academic education/GED classes, HIV/AIDS education/counseling/ support, TB screening, prenatal care, and smoking cessation. Facilities were categorized by the number of these eight support services they offered:

- *none*—offered no support services.
- *low*—offered one or two types of support services.
- *medium*—offered three or four types of support services.
- *high*—offered five to eight types of support services.

Setting (ADSS Phase I Question A5). Facilities were asked to identify the settings or locations (14 settings listed plus "other" category) that best applied as of October 1, 1996. Because facilities checked all that applied, a facility may be represented in more than one of the

categories below. The settings were collapsed into the major types of settings represented as follows:

- *hospital (inpatient and outpatient)*—general hospital, Veterans Affairs (VA) hospital, or psychiatric/other specialized hospital. Inpatient and/or outpatient treatment at this setting.
- *non-hospital residential*—non-hospital residential facility, therapeutic community, or halfway house.
- *community mental health center*—community mental health center.
- *other outpatient*—outpatient, other than above (i.e., excluding outpatient set at a hospital, community mental health center, or group practice).
- **other**—reported settings other than hospital, residential, community mental health center, or other outpatient. These include group practice, school, or other.

Client-to-Staff Ratio (ADSS Phase I Questions A9 and B1). A client-to-staff ratio variable was created to examine the distribution of caseloads in the substance abuse treatment system. The point-prevalence client count was divided by the point-prevalence direct-care full-time equivalent (FTE) staff count to calculate a ratio at each facility. The direct-care staff category was created to include physicians, nurses, other medical personnel, doctoral-level counselors, master's level counselors, other degreed counselors (B.A., B.S.), and non-degreed counselors. FTE estimates for part-time and contract staff were derived from Phase II data because Phase I did not collect FTE data for those categories.³ The weighted frequency distribution of facilities by this ratio was divided by thirds, and facilities were categorized as follows:

- *low*—0 to 4 clients per staff.
- *medium*—more than 4 to 14 clients per staff.
- *high*—more than 14 clients per staff.

³ The average number of hours worked by a part-time and contract staff was 14.34 hours per week. Full-time was defined in ADSS as 35 hours per week. Therefore, part-time and contract staff were counted as .41 FTE.

Appendix C

Standard Error Tables



Appendix C: Standard Error Tables

The Alcohol and Drug Services Study (ADSS) was designed to produce statistically unbiased national estimates that are representative of substance abuse treatment facilities and clients in treatment. Because ADSS is based on sample data, the statistics presented in this report may differ from the figures that would have been obtained if the whole universe were surveyed. The potential difference between sample statistics and statistics from a complete census is the standard error (SE) of the estimate. The SEs are calculated using WesVar v.3.0, a software program that employs replication to calculate statistics based on data from complex surveys. WesVar v.3.0 was developed by Westat, Inc. This appendix presents SEs for tables appearing earlier in this report.



Table C.1.1 Standard Errors - Number of Substance Abuse Treatment Facilities, Average Number of Direct-Care Staff per Facility, and Average Facility Percentage of Public Revenue, by Facility Type of Care: National Estimates

	Unweighted Number of Facilities	National Estimates of Facilities on October 1, 1996			Direct-Care per F	Number of e Staff (FTE) facility per 1, 1996	Average Percentage of Facility Revenue from Public Sources ^b		
Facility Type of Care ^a	Sample n	Weighted N	(± SE)	Percent	Mean	Median	Mean	Median	
Total, All Facilities		267.4	Ċ	•	0.45	0.2	1.16	1.35	
Type of Care			4						
Hospital Inpatient Only		25.0		0.20	2.35	1.2	2.43	4.62	
Non-Hospital Residential Only	A	107.7	1.1	0.84	0.87	0.4	1.43	0.81	
Outpatient Methadone Only		24.8		0.21	0.39	0.5	2.10	1.88	
Outpatient Non-Methadone Only		236.3	. 3	1.05	0.41	0.2	1.78	2.13	
Combination Facilities		113.7		0.89	2.05	1.4	2.05	3.80	

^a Because Table 1.1 presents data on facility staffing and revenue available only at the overall facility level, rather than within each type of care, the facilities are categorized by their overall type of care (i.e., facilities with only one type of care are counted by that type of care and facilities with more than one type of care are classified as "combination" facilities, except methadone facilities, which are included in the outpatient methadone category if 70 percent or more of their clients are in methadone treatment). Therefore, the counts of facilities offering a specific type of care in Table 1.1 generally include only the single-modality facilities and do not represent all facilities with that type of care; those with a type of care in combination with another modality are counted in the "combination" category. For a count of all facilities providing a particular type of care, whether alone or in combination with another type of care, see Table 1.2.

Exclusions: ADSS Phase I excludes intake/referral-only facilities, halfway houses without paid counseling staff, solo practices, correctional facilities, Department of Defense facilities, and Indian Health Service facilities.

^b At least 97 percent of facilities provided source of revenue data for their most recent 12-month reporting period.

Table C.1.2 Standard Errors - Number of Facilities and Number of Clients, and the Average Number of Clients per Facility, by Client Type of Care: National Estimates

	Unweighted Facility Sample	Hach Type of (National Estimates of Clients in Treatment, by Facility Type, on October 1, 1996			f Clients per cility
Client Type of Care ^a	(n) ^b	N	Percent	N	Percent	Mean	Median
Total		267.4		42,787.2		2.98	1.8
Type of Care							
Hospital Inpatient		92.6	0.96	1,079.4	0.15	0.63	0.6
Non-Hospital Residential	·	121.3	1.53	13,867.0	1.63	4.30	0.8
Outpatient Methadone		36.9	0.42	9,453.5	1.41	9.24	12.8
Outpatient Non-Methadone		254.3	3.69	38,487.7	6.49	3.44	3.0

^a Because clients in combination facilities can be counted by their specific treatment modality within the facility, there is no "combination" type of care category, as there is for facility type of care in Table 1.1.

Exclusions: ADSS Phase I excludes intake/referral-only facilities, halfway houses without paid counseling staff, solo practices, correctional facilities, Department of Defense facilities, and Indian Health Service facilities.

b This table presents estimates of the number of facilities providing each type of care, whether provided alone or in combination with other types of care (i.e., facilities providing more than one type of care are counted in more than one category). Therefore, the unweighted and weighted numbers of facilities providing each type of care add to more than the total, and the percentages offering each type of care add to more than 100 percent.

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Table C.1.3 Standard Errors - Percentage Distribution of Substance Abuse Treatment Facilities, by Selected Facility Characteristics and by Facility Type of Care: National Estimates, October 1, 1996

		Facility Type of Care							
	Total	Hospital Inpatient Only	Non-Hospital Residential Only	Outpatient Methadone Only	Outpatient Non- Methadone Only	Combination Facilities			
Number of Facilities (weighted estimate)	267.40	25.03	107.66	24.76	236.26	113.65			
Percent of Facilities		0.20	0.84	0.21	1.05	0.89			
Facility Size (on October 1, 1996)									
Small (<17 clients)	1.32	2.18	2.79	0.22	1.85	3.45			
Medium (17-40)	1.17	1.58	2.33	0.32	1.62	4.14			
Large (41-100)	1.12	1.17	1.33	2.23	1.69	3.92			
Very Large (>100)	1.00	0.11	0.63	2.21	1.46	2.70			
Ownership ^a									
Private For-Profit	1.44	2.89	1.42	2.58	2.06	3.26			
Private Non-Profit	1.45	3.27	1.92	2.26	2.07	3.49			
Public	0.80	1.83	1.54	1.51	1.25	1.91			
Percent Public Revenue ^a	A 4		~						
0%	1.07	1.41	1.16	2.56	1.73	0.54*			
1-50%	1.17	3.80	1.35	2.40	1.56	3.51			
51-90%	1.39	3.11	2.95	2.21	1.81	3.99			
91-99%	1.17	2.93	2.17	2.22	1.67	2.79			
100%	0.87	1.08	1.79	0.26	1.30	1.68			
Unknown %	0.57	2.49	0.56*	0.36	0.87	1.26*			
Urbanicity ^a	/	3							
Metro: Large Metro (1 million+ pop)	1.21	3.14	2.55	3.04	1.65	3.53			
Medium Metro (250,000 - 1 million pop)	1.07	3.56	1.95	2.99	1.49	3.29			
Small Metro (< 250,000 pop)	1.04	1.38	2.26	1.22	1.56	2.40			
Non-metro: Urban (20,000+ pop)	0.65	2.88	1.29	0.18	0.88	1.83			
Small Urban (2,500 - 19,999 pop)	1.01	1.50	1.57		1.54	1.38			
Rural (< 2,500 pop)	0.43	1.35*	0.49*	•	0.64	1.08*			
Level of Affiliation ^a									
Parent Facility	1.10	1.53	2.08	1.59	1.51	2.97			
Affiliate	1.24	3.05	2.57	2.65	1.81	3.08			
Non-Affiliate	1.19	2.91	2.45	2.86	1.71	2.82			
Number of Treatment Services ^a									
Low (0-5)	0.92	1.80	1.79	2.36	1.40	0.65*			
Medium (6-8)	1.56	3.38	2.73	2.57	2.31	2.81			
High (9-11)	1.46	3.21	2.81	2.40	2.13	2.87			

Table C.1.3 (continued)

		Facility Type of Care							
	Total	Hospital Inpatient Only	Non-Hospital Residential Only	Outpatient Methadone Only	Outpatient Non- Methadone Only	Combination Facilities			
Number of Support Services ^a									
None	0.90	1.81	0.52*	0.14*	1.45	0.80*			
Low (1-2)	1.42	3.22	1.53	2.63	2.09	2.79			
Medium (3-4)	1.32	3.24	2.47	2.72	1.53	4.23			
High (5-8)	0.89	2.75	2.67	2.46	0.83	3.46			
Client-to-Staff Ratio (Direct-Care FTEs) ^a									
Low (4 or less)	1.38	0.83	2.63	0.45	1.94	3.90			
Medium (>4 to 14)	1.39	0.82*	2.68	1.42	2.13	3.33			
High (more than 14)	1.31	0.08	0.40	1.44	1.94	1.90			
Facility Setting ^{a,b}									
Hospital (inpatient or outpatient)	0.98	0.90	0.78	2.15	1.32	2.71			
Non-Hospital Residential, Therapeutic Community or Halfway House	0.92	0.78	0.98	0.17	0.44	2.57			
Community Mental Health Center	1.19	0.98*	0.70*	1.13	1.83	1.46			
Other Outpatient	1.43	0.68*	0.64*	2.35	1.87	3.81			
Other	1.02	0.60	1.70	0.86	1.58	1.18			
Certification Type ^{a,b}									
State Alcohol or Drug Agency	1.22	3.29	1.75	0.83	1.62	3.61			
State Dept. of Mental Health	1.47	3.48	2.30	1.27	2.10	3.88			
State Dept. of Public Health	1.44	3.33	2.43	2.57	1.84	4.62			
Hospital Licensing Authority	0.84	2.83	0.61*	0.58	0.98	3.41			
JCAHO	1.32	2.53	2.03	2.43	1.91	2.74			
Other	1.21	2.34	2.18	2.90	1.69	3.32			
Mean Number of Licenses or Accreditation	0.08	0.05	0.04	0.04	0.13	0.03			

^a See Appendix B for definition of variables.

^b Categories are not mutually exclusive and may add to greater than 100.0 percent.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table C.1.4 Standard Errors - Percentage Distribution of Substance Abuse Treatment Facilities, by Selected Facility Characteristics and by Facility Ownership: National Estimates, October 1, 1996

October 1, 1996		Fac	ility Ownersh	ip
	Total	Private For-Profit	Private Non-Profit	Public
Number of Facilities (weighted estimate)	267.44	183.13	255.28	106.50
Percent of Facilities		1.44	1.45	0.80
Facility Type of Care ^a				
Hospital Inpatient Only	0.20	0.40	0.30	0.48
Non-Hospital Residential Only	0.84	1.07	1.24	1.89
Outpatient Methadone Only	0.21	0.76	0.20	0.45
Outpatient Non-Methadone Only	1.05	2.46	1.54	3.04
Combination Facilities	0.89	2.12	1.12	2.53
Facility Size ^a (on October 1, 1996)				
Small (<17 clients)	1.32	3.60	1.57	3.09
Medium (17-40)	1.17	3.09	1.44	3.26
Large (41-100)	1.12	2.73	1.52	2.87
Very Large (>100)	1.00	2.03	1.33	3.19
Percent Public Revenue ^a				
0%	1.07	3.49	0.90	0.78*
1-50%	1.17	3.54	1.11	2.31
51-90%	1.39	2.25	1.68	3.30
91-99%	1.17	0.58	1.61	3.16
100%	0.87	0.49*	1.28	2.88
Unknown %	0.57	2.05	0.48	0.12
Urbanicity ^a		>		
Metro: Large Metro (1 million+ pop)	1.21	3.93	1.54	3.35
Medium Metro (250,000 - 1 million pop)	1.07	3.18	1.47	2.26
Small Metro (< 250,000 pop)	1.04	2.50	1.26	2.92
Non-metro: Urban (20,000+ pop)	0.65	1.25*	0.91	1.59
Small Urban (2,500 - 19,999 pop)	1.01	1.17	1.28	3.76
Rural (< 2,500 pop)	0.43	0.26*	0.55	1.60*
Level of Affiliation ^a				
Parent Facility	1.10	2.05	1.50	2.63
Affiliate	1.24	3.39	1.53	3.31
Non-Affiliate	1.19	3.25	1.52	2.47
Number of Treatment Services ^a				
Low (0-5)	0.92	2.88	0.81	2.26
Medium (6-8)	1.56	3.90	1.85	3.49
High (9-11)	1.46	4.00	1.80	3.20

Table C.1.4 (continued)

		Fac	ility Ownershi	ip
	Total	Private For-Profit	Private Non-Profit	Public
Number of Support Services ^a				
None	0.90	2.84	0.97	1.40
Low (1-2)	1.42	3.59	1.70	2.91
Medium (3-4)	1.32	3.15	1.50	3.60
High (5-8)	0.89	1.44	1.21	2.65
Client-to-Staff Ratio (Direct-Care FTEs) ^a				
Low (4 or less)	1.38	3.78	1.70	3.24
Medium (>4 to 14)	1.39	3.98	1.70	3.12
High (more than 14)	1.31	2.75	1.71	3.07
Facility Setting ^{a,b}				
Hospital (inpatient or outpatient)	0.98	3.53	1.15	2.49
Non-Hospital Residential, Therapeutic Community or Halfway House	0.92	1.51	1.35	2.66
Community Mental Health Center	1.19	1.38	1.43	3.60
Other Outpatient	1.43	3.35	1.94	3.16
Other	1.02	3.50	1.01	1.33

^a See Appendix B for definition of variables.

^b Categories are not mutually exclusive and may add to greater than 100.0 percent.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table C.1.5 Standard Errors - Percentage Distribution of Substance Abuse Treatment Facilities, by Selected Facility Characteristics and by Urbanicity: National Estimates, October 1, 1996

Facility Characteristics			utional Est	Urbanic		<u> </u>	
			Metropolitar	1	Non	-Metropolit	an
	Total	Large Metro (1 million+)	Medium Metro (250,000 - 1 million)	Small Metro (< 250,000)	Urban (20,000+)	Small Urban (2,500 - 19,999)	Rural (<2,500)
Number of Facilities (weighted estimate)	267.40	171.83	148.37	133.74	84.90	130.22	53.70
Percent of Facilities		0.43	1.01	0.65	1.04	1.07	1.21
Facility Type of Care ^a			9				
Hospital Inpatient Only	0.20	0.28	0.52	0.42	1.29	0.46	2.02*
Non-Hospital Residential Only	0.84	1.18	1.55	3.83	3.11	2.41	4.10*
Outpatient Methadone Only	0.21	0.41	0.56	0.42	0.11	·	
Outpatient Non-Methadone Only	1.05	1.64	2.46	4.91	4.35	2.77	8.40
Combination Facilities	0.89	1.34	2.09	3.42	3.64	1.80	7.66*
Facility Size ^a (on October 1, 1996)					100		
Small (<17 clients)	1.32	1.75	3.29	5.48	4.84	3.82	9.65
Medium (17-40)	1.17	1.73	2.97	2.90	5.14	4.12	9.49*
Large (41-100)	1.12	1.37	2.56	4.80	4.15	3.84	8.32*
Very Large (>100)	1.00	1.48	2.20	3.23	3.60	2.65	6.05*
Ownership ^a		P					
Private For-Profit	1.44	2.41	3.07	4.57	3.81*	2.15	2.81*
Private Non-Profit	1.45	2.08	3.16	4.92	4.45	4.69	9.84
Public	0.80	1.15	1.37	3.43	2.96	4.55	9.50
Percent Public Revenue ^a		-					
0%	1.07	2.00	2.86	2.91	3.21*	2.35	0.99*
1-50%	1.17	1.70	2.71	4.40	3.77	3.00	6.83*
51-90%	1.39	1.73	3.02	4.26	5.39	4.06	10.61
91-99%	1.17	1.70	2.46	4.46	2.89	3.00	8.08*
100%	0.87	1.47	1.70	4.45*	4.41*	1.72	7.65*
Unknown %	0.57	1.16	0.55	0.96*	1.05*	1.37*	4.24*
Level of Affiliation ^a							
Parent Facility	1.10	1.26	2.87	3.21	3.21	3.73	9.35*
Affiliate	1.24	1.84	3.18	4.80	4.83	4.11	11.34
Non-Affiliate	1.19	1.74	2.44	4.98	3.66	3.49	10.55
Number of Treatment Services ^a							
Low (0-5)	0.92	1.57	1.81	2.96	2.62	2.05*	9.44*
Medium (6-8)	1.56	2.42	2.83	5.27	4.85	3.45	10.60
High (9-11)	1.46	2.28	2.95	4.70	4.79	3.43	8.87*

Table C.1.5 (continued)

				Urbanic	ity ^a		
			Metropolitai	n	Non	an	
	Total	Large Metro (1 million+)	Medium Metro (250,000 - 1 million)	Small Metro (< 250,000)	Urban (20,000+)	Small Urban (2,500 - 19,999)	Rural (<2,500)
Number of Support Services ^a							
None	0.90	1.22	1.75	2.77	4.62*	3.66	9.50*
Low (1-2)	1.42	1.94	3.16	5.16	4.56	4.14	11.11
Medium (3-4)	1.32	1.96	2.88	4.14	4.60	3.77	8.80*
High (5-8)	0.89	1.28	1.87	3.62	3.37	2.07	3.10*
Client-to-Staff Ratio (Direct-Care FTEs) ^a		- 1	1. 1. 1.	47 YB	- 1		
Low (4 or less)	1.38	1.90	3.19	5.21	4.94	3.84	9.38*
Medium (>4 to 14)	1.39	2.07	3.29	4.95	4.83	4.09	9.45
High (more than 14)	1.31	1.64	3.26	3.58	5.14	4.67	9.98
Facility Setting ^{a,b}	4		V		AL 7		
Hospital (inpatient or outpatient)	0.98	1.68	2.73	3.14	4.04	2.99	3.57*
Non-Hospital Residential, Therapeutic Community or Halfway House	0.92	1.49	2.11	4.31	3.48	2.30	8.33*
Community Mental Health Center	1.19	1.27	2.32	5.19	4.95	4.13	11.11
Other Outpatient	1.43	2.13	3.32	4.23	4.36	3.91	11.04*
Other	1.10	1.52	1.95	4.57	1.38	2.57	4.36*

^a See Appendix B for definition of variables.

^b Categories are not mutually exclusive and may add to greater than 100.0 percent.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table C.1.6 Standard Errors - Percentage Distribution of Substance Abuse Treatment Facilities, by Selected Facility Characteristics and by Facility Certification: National Estimates, October 1, 1996

racinty Characterist	ics and D	y raciiity 	ty Certification: National Estimates, October 1, 1990 Type of Certification ^a [Q-A7]					
				• • •			ſ	1
	Total	Facilities with Any Certifica- tion	State Alcohol or Drug Abuse Agency	State Mental Health Agency	State Public Health Facility	Hospital Certifica- tion Authority	ЈСАНО	Other
Number of Facilities (weighted								
estimates)	267.40	274.93	263.92	195.60	184.95	107.90	177.58	156.33
Percent of All Facilities		0.73	1.22	1.47	1.44	0.84	1.32	1.21
Percent of Facilities with Certification Type				4				
Facility Type of Care ^a			1					
Hospital Inpatient Only	0.20	0.22	0.20	0.46	0.50	2.08	0.83	0.36
Non-Hospital Residential Only	0.84	0.87	0.91	1.42	1.83	1.02*	1.31	1.63
Outpatient Methadone Only	0.21	0.23	0.27	0.17	0.54	0.24	0.43	0.61
Outpatient Non-Methadone Only	1.05	1.13	1.09	2.52	2.82	4.97	2.73	2.89
Combination Facilities	0.89	0.95	0.96	2.26	2.52	4.67	2.37	2.36
Facility Size ^a (on October 1, 1996)	- 6				4			
Small (<17 clients)	1.32	1.35	1.49	2.61	2.43	4.89	3.25	2.92
Medium (17-40)	1.17	1.21	1.29	2.75	2.49	5.55	2.86	2.71
Large (41-100)	1.12	1.17	1.30	2.08	2.12	3.94	2.00	2.31
Very Large (>100)	1.00	1.05	1.20	1.95	1.78	1.88	1.87	2.10
Ownership ^a								
Private For-Profit	1.44	1.33	1.36	2.83	2.66	5.44	3.34	3.12
Private Non-Profit	1.45	1.40	1.54	2.82	2.54	5.04	3.05	3.25
Public	0.80	0.80	0.92	1.97	1.44	2.13	1.40	1.67
Percent Public Revenue ^a								
0%	1.07	1.04	1.03	1.62	2.05	3.20*	2.23	2.41
1-50%	1.17	1.29	1.38	2.56	2.41	4.87	2.82	2.38
51-90%	1.39	1.41	1.45	3.00	2.59	4.13	2.56	2.69
91-99%	1.17	1.23	1.28	2.77	2.91	1.13	1.60	1.99
100%	0.87	0.93	1.02	1.23	1.33	1.02	1.83	2.09
Unknown %	0.57	0.54	0.60	1.48	0.68*	4.44*	1.66*	1.82*
Urbanicity ^a								
Metro: Large Metro (1 million+	1.21	1.25	1.46	2.70	2.12	5.00	2.87	3.35
Medium Metro (250,000 - 1 million pop)	1.07	1.14	1.25	2.52	2.33	4.70	2.71	2.36
Small Metro (< 250,000 pop)	1.04	1.04	1.13	2.27	1.87	1.69	1.87	1.77
Non-metro: Urban (20,000+ pop)	0.65	0.69	0.77	1.37	1.02	2.97	1.36	1.28
Small Urban (2,500 - 19,999 pop)	1.01	1.07	1.14	2.22	1.73	2.95*	1.75	1.65
Rural (< 2,500 pop)	0.43	0.45	0.47	1.09*	0.64*	0.72*	0.59*	0.36*

Table C.1.6 (continued)

				Тур	e of Certific	ation ^a [Q-A7]		
	Total	Facilities with Any Certifica- tion	State Alcohol or Drug Abuse Agency	State Mental Health Agency	State Public Health Facility	Hospital Certifica- tion Authority	ЈСАНО	Other
Level of Affiliation ^a								
Parent Facility	1.10	1.15	1.27	1.85	2.48	3.83	2.21	2.17
Affiliate	1.24	1.26	1.43	2.73	2.73	5.17	2.88	2.92
Non-Affiliate	1.19	1.15	1.36	2.49	2.50	4.44	1.90	2.65
Number of Treatment Services ^a								
Low (0-5)	0.92	0.83	0.90	1.43	1.27	0.77*	1.32	0.97
Medium (6-8)	1.56	1.57	1.56	3.09	3.00	2.98	2.85	2.93
High (9-11)	1.46	1.50	1.48	2.84	2.90	3.08	3.14	2.90
Number of Support Services ^a								
None	0.90	0.93	0.99	1.88	2.03	0.96*	1.73	1.12
Low (1-2)	1.42	1.46	1.57	2.59	3.27	4.57	2.84	3.42
Medium (3-4)	1.32	1.32	1.35	2.66	2.47	4.80	2.84	3.69
High (5-8)	0.89	0.93	1.06	1.79	2.07	3.10	1.70	2.42
Client-to-Staff Ratio (Direct-Care FTEs) ^a								
Low (4 or less)	1.38	1.38	1.57	2.89	2.39	4.66	2.59	3.24
Medium (>4 to 14)	1.39	1.36	1.51	2.70	2.42	4.41	2.51	2.83
High (more than 14)	1.31	1.35	1.46	2.54	1.88	2.53	2.18	2.42
Facility Setting ^{a,b}				100				
Hospital (inpatient or outpatient)	0.98	1.02	1.08	2.35	2.51	2.40	2.87	2.98
Non-Hospital Residential, Therapeutic Community or Halfway House	0.92	0.93	1.04	1.20	2.34	1.13	1.59	2.24
Community Mental Health Center	1.19	1.27	1.21	3.33	2.57	1.27*	2.19	2.06
Other Outpatient	1.43	1.50	1.54	2.49	2.78	2.77	2.44	3.41
Other	1.02	0.88	0.96	2.09	1.79	1.30*	1.01	1.54

^a See Appendix B for definition of variables.

^b Categories are not mutually exclusive and may add to greater than 100.0 percent.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table C.1.7 Standard Errors - Percentage Distribution of Substance Abuse Treatment Facilities, by Selected Facility Characteristics and by Level of Affiliation with Other Facilities: National Estimates, October 1, 1996

National Estimates, October 1, 1990		Level of Affiliation ^a			
	Total	Parent	Affiliate	None	
Number of Facilities (weighted estimate)	267.40	148.0	208.0	161.8	
Percent of All Facilities		1.1	1.2	1.2	
Percent of Facilities with Affiliation Type		1.10	1.24	1.19	
Facility Type of Care ^a					
Hospital Inpatient Only	0.20	0.2	0.4	0.4	
Non-Hospital Residential Only	0.84	1.8	1.2	1.6	
Outpatient Methadone Only	0.21	0.3	0.3	0.5	
Outpatient Non-Methadone Only	1.05	2.5	1.8	2.0	
Combination Facilities	0.89	2.1	1.3	1.5	
Facility Size ^a (on October 1, 1996)			~		
Small (<17 clients)	1.32	2.9	2.2	2.2	
Medium (17-40)	1.17	2.1	2.0	2.7	
Large (41-100)	1.12	3.3	1.8	2.0	
Very Large (>100)	1.00	2.2	1.5	2.0	
Ownership ^a					
Private For-Profit	1.44	2.0	1.8	3.1	
Private Non-Profit	1.45	2.6	1.9	2.9	
Public	0.80	1.8	1.4	1.2	
Percent Public Revenue ^a		10			
0%	1.07	2.1	1.4	2.1	
1-50%	1.17	2.1	1.8	2.4	
51-90%	1.39	2.9	1.9	2.5	
91-99%	1.17	2.6	2.0	2.1	
100%	0.87	1.6	1.5	1.3	
Unknown %	0.57	0.6*	0.7	1.6*	
Urbanicity ^a	(
Metro: Large Metro (1 million+ pop)	1.21	2.4	1.8	2.6	
Medium Metro (250,000 - 1 million pop)	1.07	3.0	1.8	2.0	
Small Metro (< 250,000 pop)	1.04	1.6	1.6	2.1	
Non-metro: Urban (20,000+ pop)	0.65	1.1	1.1	1.0	
Small Urban (2,500 - 19,999 pop)	1.01	2.3	1.4	1.6	
Rural (< 2,500 pop)	0.43	1.0*	0.6*	0.8	
Number of Treatment Services ^a					
Low (0-5)	0.92	1.7	1.1	2.3	
Medium (6-8)	1.56	3.2	1.9	3.0	
High (9-11)	1.46	2.8	2.0	2.5	

Table C.1.7 (continued)

		Level of Affiliation ^a			
	Total	Parent	Affiliate	None	
Number of Support Services ^a					
None	0.90	1.8	1.3	1.8	
Low (1-2)	1.42	3.0	2.2	2.7	
Medium (3-4)	1.32	2.7	1.8	2.7	
High (5-8)	0.89	2.3	1.4	1.6	
Client-to-Staff Ratio (Direct-Care FTEs) ^a		A			
Low (4 or less)	1.38	2.5	2.1	2.7	
Medium (>4 to 14)	1.39	2.7	2.0	3.0	
High (more than 14)	1.31	2.8	2.1	2.3	
Facility Setting ^{a,b}				-	
Hospital (inpatient or outpatient)	0.98	1.9	1.6	1.9	
Non-Hospital Residential, Therapeutic Community or Halfway House	0.92	2.3	1.3	2.2	
Community Mental Health Center	1.19	2.4	1.8	1.7	
Other Outpatient	1.43	2.7	2.0	2.7	
Other	1.02	1.8	1.0	2.9	

^a See Appendix B for definition of variables.

^b Categories are not mutually exclusive and may add to greater than 100.0 percent.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table C.1.8 Standard Errors - Number and Percentage of Substance Abuse Treatment Facilities with Affiliation with Other Organizations, and Service Provided by Affiliated Organizations, by Facility Type of Care: National Estimates, October 1, 1996

		Facility Type of Care					
Affiliations	All Facilities	Hospital Inpatient Only	Non-Hospital Residential Only	Methadone Only	Outpatient Non- Methadone Only	Combination Facilities	
Total Number of Facilities (national estimates)	267.4	25.0	107.7	24.8	236.3	113.7	
Number of Facilities with Affiliations ^a	246.7	22.0	91.4	18.1	224.1	98.5	
Percent with Affiliations	1.27	2.82	2.68	2.73	1.91	3.12	
Types of Organizations Affiliated with Percent of Affiliated Facilities ^{a,b}	/						
Hospital	1.69	4.12	1.63	3.00	2.49	5.25	
Substance abuse treatment facility	1.71	1.99	3.25	3.05	2.46	3.94	
Administrative office	1.85	3.92	2.94	3.18	2.73	5.86	
Government agency	0.96	1.53	1.42	1.29	1.50	2.14	
Other	1.89	2.66	2.90	1.22	2.70	3.45	
Types of Services Provided by Other Organization ^{a,b}			- A				
Financial	1.26	3.39	1.92	2.65	1.79	4.09	
Personnel	1.43	2.31	2.71	0.97	2.00	4.56	
Pricing	1.87	2.71	2.90	3.34	2.85	3.47	
Treatment protocols	1.83	4.11	3.49	3.02	2.59	4.19	
Client intake/assessment	1.84	4.39	3.32	2.97	2.56	4.24	

^a Facilities with affiliations are those that indicated in ADSS Phase I question A11 that they were legally part of another organization.

^b Not mutually exclusive categories.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table C.2.1 Standard Errors - Number of Substance Abuse Treatment Clients, by Selected Facility Characteristics, Point-Prevalence Count, Annual Admissions, and Annual Discharges: National Estimates, October 1, 1996

Estimates, Octob	· · · · · · · · · · · · · · · · · · ·	evalence	Annual Data				
		reatment on r 1, 1996	Admissions		Discharges		
[Q-B1]	N	Percent	N	Percent	N	Percent	
Total Number of Clients	42,787.2		198,089.9		182,788.9		
Client's Type of Care							
Hospital Inpatient	1,079.4	0.15	64,526.3	2.16	66,851.8	2.67	
Non-Hospital Residential	13,867.0	1.63	103,794.6	3.59	97,217.4	4.01	
Outpatient Methadone	9,453.5	1.41	8,188.6	0.34	6,096.3	0.31	
Outpatient Non-Methadone	38,487.7	6.49	136,520.5	5.86	119,751.2	5.97	
Facility Setting ^a			100				
Hospital (inpatient and outpatient)	12,245.6	1.03	118,884.1	2.20	112,199.8	2.39	
Non-Hospital Residential, Therapeutic Community or Halfway House	18,539.5	1.53	113,717.8	2.20	108,163.8	2.40	
Community Mental Health Center	14,511.5	1.18	63,723.1	1.43	58,257.8	1.53	
Other Outpatient	30,724.0	1.69	124,274.0	2.18	113,628.6	2.33	
Other	18,042.9	1.51	56,774.5	1.39	54,472.5	1.50	
Ownership			9				
Private For-Profit	12,527.0	1.10	121,508.4	2.37	115,991.3	2.56	
Private Non-Profit	28,943.6	1.69	132,505.4	2.23	119,882.8	2.36	
Public	23,119.7	1.70	63,920.5	1.35	49,935.1	1.31	
Percent Public Revenue							
0%	11,615.0	0.96	29,129.4	0.75	25,927.0	0.81	
1-50%	14,154.5	1.22	78,728.3	1.97	79,170.1	2.17	
51-90%	28,039.8	1.78	131,258.3	2.25	123,138.1	2.50	
91-100%	15,983.5	1.36	71,193.7	1.55	54,658.0	1.48	
100%	10,893.6	0.91	73,339.5	1.60	66,775.3	1.73	
Unknown	3,306.6	0.31	75,597.9*	1.73*	75,497.5*	2.02*	
Urbanicity ^b							
Metro: Small Metro	20,098.5	1.68	60,241.2	1.32	55,480.3	1.43	
Medium Metro	18,262.7	1.55	89,364.5	2.02	83,884.6	2.22	
Large Metro	26,521.1	1.81	136,519.3	2.08	126,180.5	2.29	
Non-Metro: Rural	3,176.9	0.30	16,509.3*	0.38*	15,969.7*	0.43*	
Small Urban	11,071.1	0.95	41,571.8	0.94	33,508.1	0.90	
Urban	8,068.0	0.69	69,221.5	1.54	67,726.5	1.77	
Level of Affiliation ^c							
Parent Facility	20,592.0	1.58	91,251.5	1.64	86,047.7	1.88	
Affiliate	25,906.6	1.86	94,193.6	2.03	85,328.8	2.31	
Non-Affiliate	24,073.1	1.74	124,564.0	2.19	119,774.9	2.44	

^a Not mutually exclusive.

^b Based on Beale code (Butler & Beale, 1994).

^c At least 99 percent of facilities responded to affiliation.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table C.2.2 Standard Errors - Percentage Distribution of Substance Abuse Treatment Clients, by Selected Facility Characteristics and by Client Type of Care: National Estimates, October 1, 1996

		Sype of Care: National Estimates, October 1, 1996 Client Type of Care					
	Total ^a	Hospital Inpatient	Non-Hospital Residential	Outpatient Methadone	Outpatient Non- Methadone		
Total Number of Clients	42,787.2	1,079.4	13,867.0	9,453.5	38,487.7		
Percent of Clients							
Gender [Q-B2a]							
Male	0.60	1.46	1.96	0.91	0.66		
Female	0.57	1.33	1.96	0.92	0.61		
Unknown	0.26	0.83*	0.11*	0.72*	0.34		
Race/Ethnicity [Q-B2b]		(11)					
White, non-Hispanic	0.98	2.51	1.56	1.42	1.19		
Black, non-Hispanic	0.83	1.74	1.35	1.02	1.03		
Hispanic	0.47	1.92	0.94	0.80	0.53		
Asian or Pacific Islander	0.20	0.02	0.25*	0.21	0.26		
American Indian or Alaskan Native	0.35	0.42*	0.97	0.05	0.35		
Unknown	0.45	1.62*	0.67*	1.06*	0.48		
Age [Q-B2c]							
Under 18	1.12	0.94	1.55	0.11*	1.42		
18-24	0.39	2.03	1.08	0.36	0.45		
25-34	0.77	1.95	1.21	1.14	0.90		
35-44	0.66	1.74	0.80	1.05	0.81		
45 and older	0.37	1.68	0.47	1.06	0.47		
Unknown	0.58	1.54*	0.32	1.10	0.76		
Primary Source of Payment [Q-B2d]							
No payment	0.54	0.90	1.48	0.95	0.65		
Client self-payment	0.98	0.75	1.39	1.82	1.23		
Private health insurance (fee-for-service)	0.63	1.52	0.63	0.69*	0.86		
Private health insurance (HMO, PPO, managed care)	0.70	2.85	0.92	0.59	0.91		
Medicaid	0.81	2.26	1.40	1.52	0.92		
Medicare	0.39	2.00	0.41*	0.69	0.66		
Other public payment	1.05	1.83	2.17	1.87	1.20		
Unknown	0.41	1.40*	0.38	0.84*	0.52		
Referral Source ^b [Q-B6]							
Other treatment facility	0.55	1.32	1.64	0.78	0.48		
Criminal justice system	1.04	0.97	1.36	1.49	1.35		
Self-referred/voluntary	0.72	1.99	1.07	1.85	0.81		
Family	0.31	0.91	0.45	0.24	0.39		
Friend	0.17	0.40	0.17	0.66	0.22		
Employer	0.39	1.82	0.35	0.09	0.46		
Health care or mental health providers	0.43	1.79	0.83	0.34	0.53		
Welfare offices or other social service agencies	0.45	0.73	1.26	0.45	0.49		
Other	0.43	0.73	0.41	0.43	0.49		
Onici	0.43	0.09	0.41	0.41	0.50		

Table C.2.2 (continued)

			Client Type	e of Care	
	Total ^a	Hospital Inpatient	Non-Hospital Residential	Outpatient Methadone	Outpatient Non- Methadone
Principal Drug of Abuse [Q-B2e]					
Heroin/other opiates	0.44	1.15	0.56	0.80	0.42
Cocaine (including crack)	0.65	1.98	1.38	0.08	0.78
Benzodiazepines	0.15	0.77	0.15	0.05*	0.24
Barbiturates	0.08	0.08	0.13	0.01*	0.10
Amphetamines	0.29	0.44	0.63	0.00	0.35
Marijuana/hashish/THC	0.67	0.60	1.11	0.03*	0.82
PCP/LSD	0.21	0.01	0.17	0.01*	0.28
Alcohol	0.80	2.31	1.49	0.01*	1.03
Other drugs (not alcohol)	0.25	0.55	0.51	0.04*	0.30
Unknown	0.41	1.06	0.58	0.79*	0.55

^a Total is not the sum of the four types of care because it is based on the overall client count variables instead of the sum of individual care variables.

^b At least 99 percent of facilities responded to referral source. For the 15 percent of facilities with multiple types of care, the referral source information for all clients combined was applied to clients in each specific type of care.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution. Exclusions: ADSS Phase I excludes intake/referral-only facilities, halfway houses without paid counseling staff, solo practices, correctional facilities, Department of Defense facilities, and Indian Health Service facilities.

Table C.2.3 Standard Errors - Percentage Distribution of Substance Abuse Treatment Clients, by Selected Facility Characteristics and by Treatment Setting: National Estimates, October 1, 1996

Facility Characteristics an	Facility Characteristics and by Treatment Setting: National Estimates, October 1, 1996									
		Clients in Treatment Settings ^a								
	Total	Inpatient or Outpatient Hospital Setting	Non-Hospital Residential, Therapeutic Community, or Halfway House	Community Mental Health Center	Other Outpatient	Other				
Total Number of Clients	42,787.2	12,245.6	18,539.5	14,511.5	30,724.0	18,042.9				
Percent of Clients	•	•	•	•		•				
Gender [Q-B2a]										
Male	0.6	1.2	1.9	1.0	0.8	1.8				
Female	0.6	1.2	1.9	0.9	0.7	1.7				
Unknown	0.3	0.6*	0.2*	0.6*	0.5*	0.3*				
Race/Ethnicity [Q-B2b]										
White, non-Hispanic	1.0	2.7	1.5	2.4	1.5	3.0				
Black, non-Hispanic	0.8	2.3	1.3	2.4	1.1	2.0				
Hispanic	0.5	1.1	1.0	0.9	0.8	1.2				
Asian or Pacific Islander	0.2	0.4*	0.3*	0.9*	0.4	1.2*				
American Indian or Alaskan Native	0.3	0.5*	1.0	0.4	0.6	1.1*				
Unknown	0.4	1.1	0.5	1.1	0.5	0.5				
Age [Q-B2c]										
Under 18	1.1	3.1*	1.6	2.6	1.4	2.7				
18-24	0.4	0.9	1.2	1.2	0.6	1.3				
25-34	0.8	2.0	1.2	1.7	0.9	2.0				
35-44	0.7	1.9	0.9	1.6	0.7	1.9				
45 and older	0.4	1.1	0.5	0.9	0.6	1.1				
Unknown	0.6	1.1	0.4	1.5*	0.9	1.1				
Primary Source of Payment [Q-B2d]										
No payment	0.5	0.9	1.3	1.2	0.8	2.1				
Client self-payment	1.0	0.9	1.4	2.4	1.5	3.5				
Private health insurance (fee-for-service)	0.6	3.1	0.6	0.8	0.9	2.4				
Private health insurance (HMO, PPO, managed care)	0.7	2.9	0.6	1.0	1.0	2.6				
Medicaid	0.8	1.6	1.5	2.1	1.2	2.6				
Medicare	0.4	2.0	0.5*	0.6	0.5	0.8*				
Other public payment	1.0	2.0	2.2	3.2	1.7	2.7				
Unknown	0.4	0.7	0.4	0.7	0.8	2.1*				
Referral Source ^b [Q-B6]										
Other treatment facility	0.5	1.2	1.7	1.1	0.5	1.2				
Criminal justice system	1.0	1.2	1.4	2.5	1.7	4.0				
Self-referred/voluntary	0.7	1.8	1.1	1.6	1.1	2.7				
Family	0.3	1.3	0.5	0.8	0.4	1.0				
Friend	0.2	0.4	0.4	0.4	0.2	0.8				
Employer	0.4	1.3	0.3	0.3	0.6	1.9*				
Health care or mental health providers	0.4	1.6	0.8	0.9	0.6	1.8				
Welfare offices or other social service agencies	0.4	1.4	1.3	0.8	0.6	1.6				
Other	0.4	0.7	0.6	1.0	0.9	0.9				

Table C.2.3 (continued)

			Clients in T	reatment Sett	ings ^a	
	Total	Inpatient or Outpatient Hospital Setting	Non-Hospital Residential, Therapeutic Community, or Halfway House	Community Mental Health Center	Other Outpatient	Other
Principal Drug of Abuse [Q-B2e]						
Heroin/other opiates	0.4	1.3	0.6	0.5	0.6	0.7
Cocaine (including crack)	0.6	1.8	1.3	1.4	0.9	1.8
Benzodiazepines	0.1	0.6	0.2	0.3	0.1	0.3
Barbiturates	0.1	0.1	0.1*	0.1	0.1	0.2
Amphetamines	0.3	0.7	0.7	0.3	0.5	1.5
Marijuana/hashish/THC	0.7	1.2	1.1	1.6	1.0	1.7
PCP/LSD	0.2	0.1	0.1	0.3*	0.4*	0.4*
Alcohol	0.8	2.0	1.3	1.9	1.3	2.7
Other drugs (not alcohol)	0.2	0.7	0.5	0.5	0.4	0.4
Unknown	0.4	1.2	0.5	1.1	0.5	1.0*

^a Not mutually exclusive.

^b At least 99 percent of facilities responded to referral source. For the 15 percent of facilities with multiple types of care, the referral source information for all clients combined was applied to clients in each specific type of care.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table C.2.4 Standard Errors - Percentage Distribution of Substance Abuse Treatment Clients, by Selected Facility Characteristics and by Facility Ownership: National Estimates, October 1, 1996

October 1, 1996		Clients in Ownership Types				
	Totala	Private For- Profit	Private Non- Profit	Public		
Total Number of Clients	42,787.2	12,527.0	28,943.6	23,119.7		
Percent of Clients	•					
Gender [Q-B2a]						
Male	0.60	1.20	0.86	2.10		
Female	0.57	1.02	0.87	2.10		
Unknown	0.26	0.92*	0.24	0.34*		
Race/Ethnicity [Q-B2b]	0					
White, non-Hispanic	0.98	2.17	1.14	2.43		
Black, non-Hispanic	0.83	1.92	0.92	1.70		
Hispanic	0.47	0.80	0.69	0.75		
Asian or Pacific Islander	0.20	0.11	0.29*	0.61		
American Indian or Alaskan Native	0.35	0.26	0.36	1.91		
Unknown	0.45	1.22	0.43	0.76		
Age [Q-B2c]	1			40		
Under 18	1.12	2.02	1.33	1.18		
18-24	0.39	0.71	0.53	1.61		
25-34	0.77	1.65	0.86	1.12		
35-44	0.66	1.62	0.78	1.16		
45 and older	0.37	0.81	0.46	0.95		
Unknown	0.58	1.22	0.64	1.10		
Primary Source of Payment [Q-B2d]	A 7					
No payment	0.54	0.25	0.77	1.75		
Client self-payment	0.98	2.65	1.04	2.13		
Private health insurance (fee-for-service)	0.63	2.33	0.61	0.59		
Private health insurance (HMO, PPO, managed care)	0.70	2.41	0.60	0.83		
Medicaid	0.81	0.93	1.08	2.09		
Medicare	0.39	1.50	0.34	0.75		
Other public payment	1.05	0.95	1.53	2.79		
Unknown	0.41	1.36	0.40	0.92		
Referral Source ^b [Q-B6]						
Other treatment facility	0.55	1.10	0.75	1.00		
Criminal justice system	1.04	2.43	1.30	2.08		
Self-referred/voluntary	0.72	1.76	0.85	1.79		
Family	0.31	1.04	0.34	0.64		
Friend	0.17	0.54	0.14	0.22		
Employer	0.39	1.63	0.22	0.30		
Health care or mental health providers	0.43	1.13	0.58	0.92		
Welfare offices or other social service agencies	0.45	0.94	0.57	0.79		
Other	0.43	0.92	0.59	0.83		

Table C.2.4 (continued)

		Clients in Ownership Types					
	Totala	Private For- Profit	Private Non- Profit	Public			
Principal Drug of Abuse [Q-B2e]							
Heroin/other opiates	0.44	1.09	0.44	0.79			
Cocaine (including crack)	0.65	1.45	0.76	1.44			
Benzodiazepines	0.15	0.52	0.10	0.12			
Barbiturates	0.08	0.12	0.11	0.13*			
Amphetamines	0.29	0.56	0.37	0.68			
Marijuana/hashish/THC	0.67	0.85	0.94	0.89			
PCP/LSD	0.21	0.36*	0.23	0.20*			
Alcohol	0.80	1.70	0.96	1.91			
Other drugs (not alcohol)	0.25	0.26	0.37	0.58			
Unknown	0.41	0.54	0.54	0.97			

^a Total is not the sum of the four types of care because it is based on the overall client count variables instead of the sum of individual care variables.

^b At least 99 percent of facilities responded to referral source. For the 15 percent of facilities with multiple types of care, the referral source information for all clients combined was applied to clients in each specific type of care.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table C.2.5 Standard Errors - Percentage of Clients Receiving Treatment for Alcohol Abuse Only, Drug Abuse Only, or Both, by Selected Facility Characteristics: National

Estimates, October 1, 1996

Estimates, October 1, 1		Percent of Clients							
[Q-B7]	Total	Alcohol Abuse Only	Drug Abuse Only	Both Alcohol and Drug Abuse	Unknown				
Total		0.72	0.68	1.00	0.19				
Facility Type of Care									
Hospital Inpatient Only		2.65	1.40	2.77	1.68				
Non-Hospital Residential Only		1.12	1.17	1.54	0.58*				
Outpatient Methadone Only	•	0.19*	0.96	0.94	0.01				
Outpatient Non-Methadone Only		1.06	0.98	1.40	0.25*				
Combination Facilities		1.47	1.42	2.29	0.04*				
Facility Setting ^a					N.A.				
Hospital (inpatient and outpatient)		2.04	1.42	3.10	0.35				
Non-Hospital Residential, Therapeutic Community or Halfway House	•	1.11	0.97	1.46	0.50*				
Community Mental Health Center	N	2.02	1.07	2.38	0.48*				
Other Outpatient		1.17	1.09	1.41	0.23*				
Other	N	2.63	1.78	3.06	0.62*				
Ownership		9		$\gamma_{\ell_{\lambda}} \vee \gamma_{\ell_{\lambda}} \vee \gamma_{\ell_{\lambda}}$					
Private For-Profit	1. 11	1.74	1.32	2.27					
Private Non-Profit		0.94	0.81	1.18	0.29				
Public		1.75	1.25	2.06	0.21*				
Percent Public Revenue				h					
0%		2.30	2.08	3.06	0.65*				
1-50%		1.97	1.04	2.33	0.52*				
51-90%		1.31	1.00	1.75	0.35*				
91-99%	•	1.76	1.61	2.40	0.12*				
100%	•	2.14	2.87	2.94	0.60*				
Unknown %		7.51	3.31	9.30					
Urbanicity ^b		4							
Metro: Small Metro	(0.0)	2.74	1.81	3.89	0.78*				
Medium Metro		1.73	1.22	2.14	0.41*				
Large Metro		1.08	1.09	1.44	0.19*				
Non-metro: Rural		5.30	2.21	5.59	4.21*				
Small Urban	47	2.02	1.38	1.94	0.61*				
Urban		2.92	1.29	2.85	0.34*				
Level of Affiliation ^c									
Parent		1.34	1.13	1.58	0.02*				
Affiliate		1.18	0.99	1.64	0.35*				
Non-Affiliate		1.56	0.91	1.75	0.28*				

^a Not mutually exclusive.

Exclusions: ADSS Phase I excludes intake/referral-only facilities, halfway houses without paid counseling staff, solo practices, correctional facilities, Department of Defense facilities, and Indian Health Service facilities.

^b Based on Beale code (Butler & Beale, 1994).

^c At least 99 percent of facilities provided affiliation.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table C.2.6 Standard Errors - Facilities Offering Programs for Special Populations and Number of Special Population Clients Admitted in 12-Month Period: National Estimates, October 1, 1996

October 1, 1990	Fa	cilities	Clie	ents
	N	Percent	Number of Clients Admitted in 12- Month Period	Percent of Clients Admitted in 12-Month Period
All Facilities	267.4		198,089.9	•
Admitted Specific Clients [Q-C4]				
Pregnant women	205.6	1.51	3,157.6	0.13
SSI/SSDI	231.9	1.46	39,906.3	1.35
Active-TB	92.9	0.79	1,325.6	0.04
HIV-positive	190.5	1.29	13,226.3	0.41
AIDS-diagnosed	148.7	1.19	14,836.0*	0.39
Had Special Programs [Q-B10]				
Women	189.2	1.31		
Pregnant women	143.9	1.08		
Adolescents	223.2	1.47		
DWI/DUI	205.9	1.50		
AIDS/HIV	168.1	1.29		
Dual Diagnosis	206.8	1.40		

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table C.2.7 Standard Errors - Percentage of Facilities That Admitted Special Client Types: National Estimates, October 1, 1996

Estimates, Oct		tages of Faciliti	es That Adn	nitted Three	Types	Percenta	ges of Facili	ities with
			f Clients ^a			Clients in	Treatment F	opulation ^b
	Pregnant Women [Q-C4]	SSI/SSDI [Q-C4]	Active TB [Q-C4]	HIV Positive [Q-C4]	AIDS Diagnosed [Q-C4]	Women [Q-B2-pt prev]	Ado- lescents [Q-B2-pt prev]	Dual Diagnosis [Q-B9-pt prev]
Total	1.51	1.46	0.79	1.29	1.19	0.88	1.53	1.13
Facility Type of Care								
Hospital Inpatient Only	3.56	3.75	2.94	3.41	3.28	3.18	1.64	3.27
Non-Hospital Residential Only	2.59	2.62	1.92	2.87	2.54	2.63	2.15	2.63
Outpatient Methadone Only	2.83	2.59	3.43	1.20	3.17	0.14	0.91*	0.96
Outpatient Non-Methadone Only	2.06	1.93	0.94	1.90	1.61	1.16	2.27	1.61
Combination Facilities	3.90	4.18	2.73	2.90	3.35	1.22	3.13	2.01
Facility Setting ^c					7 10			
Hospital (inpatient and outpatient)	4.01	4.39	2.51	4.05	4.40	2.52	3.20	2.85
Non-Hospital Residential, Therapeutic Community or Halfway House	3.64	3.19	1.99	3.88	2.97	2.30	3.18	2.04
Community Mental Health Center	2.83	2.26	1.63	2.88	2.25	2.19	2.10	2.22
Other Outpatient	2.19	1.93	0.98	2.27	1.54	0.92	2.22	1.91
Other	4.63	4.35	1.69	4.43	3.92	2.60	5.14	4.35
Ownership								
Private For-Profit	3.44	3.19	1.60	3.17	3.35	2.14	3.61	2.86
Private Non-Profit	1.70	1.60	1.03	1.75	1.56	1.08	1.78	1.68
Public	3.64	3.32	2.34	3.84	3.31	1.32	3.35	1.69
Percent Public Revenue								
0%	3.82	3.52	1.26	3.30	3.45	3.55	4.19	3.58
1-50%	3.60	3.42	1.65	3.13	2.96	1.51	3.06	2.73
51-90%	2.65	2.56	1.57	2.69	2.22	1.53	2.29	2.02
91-99%	4.07	3.57	1.96	3.95	3.40	2.39	3.40	2.87
100%	4.11	4.04	2.74	4.06	3.57	2.19	4.05	4.44
Unknown %	8.68*	9.21	6.48*	10.35	13.07*	5.22	9.98*	4.71
Urbanicity ^d								
Metro: Small Metro	5.40	5.37	2.26	4.96	3.69	4.07	5.30	3.85
Medium Metro	3.24	3.31	1.33	3.50	3.07	2.16	3.47	2.93
Large Metro	2.52	1.94	1.46	2.08	2.05	1.11	1.90	1.63
Non-metro: Rural	11.68	6.84	6.76*	10.21*	5.81*	8.43	9.67	8.36
Small Urban	3.94	3.73	2.32	3.44	3.45	1.70	4.37	3.17
Urban	5.06	5.07	2.75	5.11	3.63	1.89	4.92	4.76

Table C.2.7 (continued)

	Percen	tages of Faciliti	Percentages of Facilities with Clients in Treatment Population ^b					
	Pregnant Women SSI/SSDI TB Positive Diagnosed [Q-B2-pt prev]							Dual Diagnosis [Q-B9-pt prev]
Level of Affiliation ^e								
Parent Facility	2.86	2.92	1.89	3.22	2.71	1.45	3.15	2.79
Affiliate	2.27	2.14	1.19	1.96	1.82	1.40	2.14	1.67
Non-Affiliate	2.74	2.67	1.47	2.64	2.49	1.87	2.89	2.41

^a 95 percent of facilities responded to active TB question; 94 percent responded to HIV-positive question; and 93 percent responded to AIDS question.

^b 96 percent of facilities responded to dual-diagnosis question.

^c Not mutually exclusive.

^d Based on Beale code (Butler & Beale, 1994).

^e At least 99 percent of facilities responded to affiliation question.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table C.2.8 Standard Errors - Percentage of Facilities That Admitted Special Population Clients and Have Special Programs for Them: National Estimates, October 1, 1996

and Have Special Programs for Them: National Estimates, October 1, 1996										
[Q-B10]	Women ^a	Pregnant Women ^a	Adolescentsa	AIDS or HIV- Positive Clients ^a	Dual Diagnosis ^b [Q-B9]					
Total	1.33	1.84	2.06	1.75	1.59					
Facility Type of Care										
Hospital Inpatient Only	2.59	3.57	3.74	3.07	3.58					
Non-Hospital Residential Only	3.11	4.29	7.78	3.34	3.15					
Outpatient Methadone Only	2.61	2.62		3.35	2.81					
Outpatient Non-Methadone Only	1.75	2.53	2.42	2.63	2.14					
Combination Facilities	3.52	2.96	5.00	3.48	4.86					
Facility Setting ^c										
Hospital (inpatient and outpatient)	3.97	3.27	7.32	4.44	4.41					
Non-Hospital Residential, Therapeutic Community or Halfway House	3.79	4.74	5.16	5.09	3.08					
Community Mental Health Center	2.85	3.60	5.21	3.01	2.64					
Other Outpatient	2.13	2.52	3.26	2.29	2.21					
Other	4.33	5.88	6.13	5.37	5.58					
Ownership				1						
Private For-Profit	3.61	2.05	5.09	4.68	4.41					
Private Non-Profit	1.79	2.39	2.50	2.26	2.06					
Public	3.28	4.06	5.91	4.22	3.67					
Percent Public Revenue	9			3/						
0%	3.71	3.79	8.68	2.85	6.08					
1-50%	3.29	2.37	5.04	4.31	4.50					
51-90%	2.38	2.42	3.83	3.24	2.50					
91-99%	3.61	4.06	5.71	3.87	4.20					
100%	5.03	5.75	6.89	5.12	5.43					
Unknown %	15.34*	6.23*	23.94*	21.40*	14.71*					
Urbanicity ^d		7								
Metro: Small Metro	5.57	7.12	7.39	5.10	6.19					
Medium Metro	3.10	3.37	4.92	3.14	3.58					
Large Metro	2.14	2.73	3.61	2.28	2.61					
Non-metro: Rural	9.07*	12.06	14.79	17.21*	11.17					
Small Urban	3.84	4.41	5.43	6.62	5.03					
Urban	5.07	4.07	7.61	3.56	5.52					
Level of Affiliation ^e										
Parent Facility	2.92	4.09	3.55	3.44	3.17					
Affiliate	2.03	2.70	3.76	2.50	2.53					
Non-Affiliate	2.78	2.85	3.80	3.26	3.07					

^a 99 percent of facilities responded to special programs question.

Exclusions: ADSS Phase I excludes intake/referral-only facilities, halfway houses without paid counseling staff, solo practices, correctional facilities, Department of Defense facilities, and Indian Health Service facilities.

^b 96 percent of facilities responded to dual-diagnosis question.

^c Not mutually exclusive.

^d Based on Beale code (Butler & Beale, 1994).

^e 99 percent of facilities responded to affiliation question.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table C.3.1 Standard Errors - Percentage of Facilities in the Treatment System Offering Treatment and Support Services: National Estimates

mates
Percent of Responding Facilities Offering Service ^a [Q-C9]
0.41
0.60
1.27
0.95
1.04
1.26
1.63
1.67
1.40
1.03
0.43
1.27
1.33
1.31
1.45
1.12
0.97
0.90
0.79

^a More than 99 percent of facilities responded to each service question.

Exclusions: ADSS Phase I excludes intake/referral-only facilities, halfway houses without paid counseling staff, solo practices, correctional facilities, Department of Defense facilities, and Indian Health Service facilities.

Table C.3.2a Standard Errors - Percentage of Facilities Offering Treatment Services, by Selected Facility Characteristics: National Estimates

Treatment Services [All services from Q-C9] Color Colo	Characteristics:	Nation	<u>al Estir</u>	nates								
Facility Type of Care Hospital Inpatient Only 1.25 2.89 2.73 2.41 2.73 3.04 2.68 3.55 3.39 1.33 0.79		Comprehensive Assessment/Diagnosis	Individual Therapy	Group Therapy, Not Incl. Relapse Prevention	Family Counseling	Relapse Prevention Groups	Self-Help or Mutual- Help Groups	Aftercare	Outcome Follow-Up	Combined Substance Abuse & Mental Health Tx	Detoxification	Acupuncture
Hospital Inpatient Only	All Facilities ^a	0.61	0.42	1.27	0.96	1.25	1.62	1.03	1.67	1.41	1.01	0.42
Non-Hospital Residential Only 2.04 1.24 1.42 2.36 1.80 1.41 2.44 1.81 2.77 2.19 1.17	Facility Type of Care					100						
Outpatient Methadone Only 1.86 0.70 2.30 2.67 2.65 3.19 2.51 3.07 3.06 2.96 2.20		1.25	2.89	2.73	2.41	2.73	3.04	2.68	3.55	3.39	1.33	0.79
Outpatient Non-Methadone Only 0.70 0.53 2.00 1.30 2.01 2.49 1.41 2.45 1.95 1.15 0.55	Non-Hospital Residential Only	2.04	1.24	1.42	2.36	1.80	1.41	2.44	1.81	2.77	2.19	1.17
Combination Facilities 0.88 0.51 0.09 1.88 1.08 2.34 1.34 2.39 2.71 3.48 1.07	Outpatient Methadone Only	1.86	0.70	2.30	2.67	2.65	3.19	2.51	3.07	3.06	2.96	2.20
Combination Facilities 0.88 0.51 0.09 1.88 1.08 2.34 1.34 2.39 2.71 3.48 1.07	·	0.70		2.00	1.30	2.01	2.49	1.41	2.45	1.95	1.15	0.55
Small (<17 clients)	Combination Facilities	0.88	0.51	0.09	1.88	1.08	2.34	1.34	2.39	2.71	3.48	1.07
Medium (17-40)	Facility Size									11.11		
Large (41-100)	Small (<17 clients)	1.60	1.22	3.43	2.30	3.08	3.04	2.17	3.48	2.89	2.47	0.65
Very Large (>100)	Medium (17-40)	1.21	0.83	1.89	1.19	2.60	3.22	2.39	3.02	2.82	2.93	0.90
Very Large (>100)	Large (41-100)	0.87	0.28	0.88	1.69	2.46	2.83	1.74	2.51	2.53	2.20	0.94
Private For-Profit 1.48 1.22 3.07 2.44 3.69 3.47 2.63 3.34 2.98 2.73 1.29	Very Large (>100)	1.12	0.73	0.59	1.66	1.75	2.19	1.58	2.24	2.37	1.82	0.93
Private Non-Profit 0.68 0.43 1.05 1.04 1.64 1.81 1.12 1.89 2.04 1.37 0.50	Ownership	- //										
Public 1.59 0.96 1.59 2.94 2.53 3.72 2.61 2.90 3.00 2.95 1.23	Private For-Profit	1.48	1.22	3.07	2.44	3.69	3.47	2.63	3.34	2.98	2.73	1.29
Percent Public Revenue	Private Non-Profit	0.68	0.43	1.05	1.04	1.64	1.81	1.12	1.89	2.04	1.37	0.50
1.49 1.74 2.91 2.88 3.96 4.10 3.19 4.17 3.40 2.29 0.81 -50% 1.19 0.90 1.80 2.12 2.82 3.00 2.28 3.30 2.91 2.92 0.95 -51-90% 1.40 0.65 1.10 1.57 2.16 2.54 1.37 2.20 2.70 2.05 0.87 -91-99% 0.95 0.99 1.19 2.23 3.31 3.65 2.26 3.68 3.32 2.09 0.84	Public	1.59	0.96	1.59	2.94	2.53	3.72	2.61	2.90	3.00	2.95	1.23
1.49 1.74 2.91 2.88 3.96 4.10 3.19 4.17 3.40 2.29 0.81 -50% 1.19 0.90 1.80 2.12 2.82 3.00 2.28 3.30 2.91 2.92 0.95 -51-90% 1.40 0.65 1.10 1.57 2.16 2.54 1.37 2.20 2.70 2.05 0.87 -91-99% 0.95 0.99 1.19 2.23 3.31 3.65 2.26 3.68 3.32 2.09 0.84	Percent Public Revenue	_49			- 1							
S1-90% 1.40 0.65 1.10 1.57 2.16 2.54 1.37 2.20 2.70 2.05 0.87		1.49	1.74	2.91	2.88	3.96	4.10	3.19	4.17	3.40	2.29	0.81
91-99% 0.95 0.99 1.19 2.23 3.31 3.65 2.26 3.68 3.32 2.09 0.84	1-50%	1.19	0.90	1.80	2.12	2.82	3.00	2.28	3.30	2.91	2.92	0.95
1.69	51-90%	1.40	0.65	1.10	1.57	2.16	2.54	1.37	2.20	2.70	2.05	0.87
Unknown % 1.11 0.96 10.00 0.98 10.26 10.57 10.40 10.65 4.04 11.37 0.79* Urbanicityb Metro: Small Metro 3.04 0.76 4.32 4.29 5.18 5.28 2.59 5.74 4.83 3.52 0.26* Medium Metro 1.08 0.51 1.71 2.07 2.77 3.10 2.17 2.69 3.36 2.36 0.90 Large Metro 0.70 0.80 1.62 1.32 1.82 2.16 1.61 2.21 1.79 1.61 0.84 Non-metro: Rural 0.99 1.08 6.22 1.24 9.19 10.47 8.71 10.26 11.10 7.66* . Small Urban 1.82 0.76 2.48 1.64 3.64 3.97 2.59 3.87 4.02 3.46 0.36* Urban 2.11 1.88 2.04 2.69 3.52 5.11 4.83 3.79	91-99%	0.95	0.99	1.19	2.23	3.31	3.65	2.26	3.68	3.32	2.09	0.84
Urbanicityb 3.04 0.76 4.32 4.29 5.18 5.28 2.59 5.74 4.83 3.52 0.26* Medium Metro 1.08 0.51 1.71 2.07 2.77 3.10 2.17 2.69 3.36 2.36 0.90 Large Metro 0.70 0.80 1.62 1.32 1.82 2.16 1.61 2.21 1.79 1.61 0.84 Non-metro: Rural 0.99 1.08 6.22 1.24 9.19 10.47 8.71 10.26 11.10 7.66* . Small Urban 1.82 0.76 2.48 1.64 3.64 3.97 2.59 3.87 4.02 3.46 0.36* Urban 2.11 1.88 2.04 2.69 3.52 5.11 4.83 3.79 5.01 4.09 0.99* Level of Affiliationc 1.16 0.72 1.47 1.90 2.07 2.62 1.74 2.37 2.72 2.37 1.11	100%	1.69	0.26	3.86	3.34	2.73	3.90	3.74	4.31	4.40	2.61	1.78
Metro: Small Metro 3.04 0.76 4.32 4.29 5.18 5.28 2.59 5.74 4.83 3.52 0.26* Medium Metro 1.08 0.51 1.71 2.07 2.77 3.10 2.17 2.69 3.36 2.36 0.90 Large Metro 0.70 0.80 1.62 1.32 1.82 2.16 1.61 2.21 1.79 1.61 0.84 Non-metro: Rural 0.99 1.08 6.22 1.24 9.19 10.47 8.71 10.26 11.10 7.66* . Small Urban 1.82 0.76 2.48 1.64 3.64 3.97 2.59 3.87 4.02 3.46 0.36* Urban 2.11 1.88 2.04 2.69 3.52 5.11 4.83 3.79 5.01 4.09 0.99* Level of Affiliation ^c 1.4 2.37 2.72 2.37 1.11<	Unknown %	1.11	0.96	10.00	0.98	10.26	10.57	10.40	10.65	4.04	11.37	0.79*
Medium Metro 1.08 0.51 1.71 2.07 2.77 3.10 2.17 2.69 3.36 2.36 0.90 Large Metro 0.70 0.80 1.62 1.32 1.82 2.16 1.61 2.21 1.79 1.61 0.84 Non-metro: Rural 0.99 1.08 6.22 1.24 9.19 10.47 8.71 10.26 11.10 7.66* . Small Urban 1.82 0.76 2.48 1.64 3.64 3.97 2.59 3.87 4.02 3.46 0.36* Urban 2.11 1.88 2.04 2.69 3.52 5.11 4.83 3.79 5.01 4.09 0.99* Level of Affiliation ^c Parent Facility 1.16 0.72 1.47 1.90 2.07 2.62 1.74 2.37 2.72 2.37 1.11 Affiliate 0.73 0.54 1.21 1.23 1.75 2.10 1.33 2.57 1.99 <t< td=""><td>Urbanicity^b</td><td></td><td></td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Urbanicity ^b			1								
Large Metro 0.70 0.80 1.62 1.32 1.82 2.16 1.61 2.21 1.79 1.61 0.84 Non-metro: Rural 0.99 1.08 6.22 1.24 9.19 10.47 8.71 10.26 11.10 7.66* . Small Urban 1.82 0.76 2.48 1.64 3.64 3.97 2.59 3.87 4.02 3.46 0.36* Urban 2.11 1.88 2.04 2.69 3.52 5.11 4.83 3.79 5.01 4.09 0.99* Level of Affiliation ^c 1.16 0.72 1.47 1.90 2.07 2.62 1.74 2.37 2.72 2.37 1.11 Affiliate 0.73 0.54 1.21 1.23 1.75 2.10 1.33 2.57 1.99 1.62 0.58	Metro: Small Metro	3.04	0.76	4.32	4.29	5.18	5.28	2.59	5.74	4.83	3.52	0.26*
Non-metro: Rural 0.99 1.08 6.22 1.24 9.19 10.47 8.71 10.26 11.10 7.66* . Small Urban 1.82 0.76 2.48 1.64 3.64 3.97 2.59 3.87 4.02 3.46 0.36* Urban 2.11 1.88 2.04 2.69 3.52 5.11 4.83 3.79 5.01 4.09 0.99* Level of Affiliation ^c Parent Facility 1.16 0.72 1.47 1.90 2.07 2.62 1.74 2.37 2.72 2.37 1.11 Affiliate 0.73 0.54 1.21 1.23 1.75 2.10 1.33 2.57 1.99 1.62 0.58	Medium Metro	1.08	0.51	1.71	2.07	2.77	3.10	2.17	2.69	3.36	2.36	0.90
Non-metro: Rural 0.99 1.08 6.22 1.24 9.19 10.47 8.71 10.26 11.10 7.66* . Small Urban 1.82 0.76 2.48 1.64 3.64 3.97 2.59 3.87 4.02 3.46 0.36* Urban 2.11 1.88 2.04 2.69 3.52 5.11 4.83 3.79 5.01 4.09 0.99* Level of Affiliation ^c Parent Facility 1.16 0.72 1.47 1.90 2.07 2.62 1.74 2.37 2.72 2.37 1.11 Affiliate 0.73 0.54 1.21 1.23 1.75 2.10 1.33 2.57 1.99 1.62 0.58	Large Metro					1.82			2.21		1.61	0.84
Urban 2.11 1.88 2.04 2.69 3.52 5.11 4.83 3.79 5.01 4.09 0.99* Level of Affiliation ^c Parent Facility 1.16 0.72 1.47 1.90 2.07 2.62 1.74 2.37 2.72 2.37 1.11 Affiliate 0.73 0.54 1.21 1.23 1.75 2.10 1.33 2.57 1.99 1.62 0.58		0.99				9.19					7.66*	
Level of Affiliation ^c Image: Control of Affiliation of Parent Facility Incomplete the control of Incomplete the Con	Small Urban	1.82	0.76	2.48	1.64	3.64	3.97	2.59	3.87	4.02	3.46	0.36*
Parent Facility 1.16 0.72 1.47 1.90 2.07 2.62 1.74 2.37 2.72 2.37 1.11 Affiliate 0.73 0.54 1.21 1.23 1.75 2.10 1.33 2.57 1.99 1.62 0.58	Urban	2.11	1.88	2.04	2.69	3.52	5.11	4.83	3.79	5.01	4.09	0.99*
Affiliate 0.73 0.54 1.21 1.23 1.75 2.10 1.33 2.57 1.99 1.62 0.58	Level of Affiliation ^c	/										
	Parent Facility	1.16	0.72	1.47	1.90	2.07	2.62	1.74	2.37	2.72	2.37	1.11
Non-Affiliate 1.58 0.94 2.07 1.87 2.29 2.92 2.39 2.61 2.72 2.19 0.79	Affiliate	0.73	0.54	1.21	1.23	1.75	2.10	1.33	2.57	1.99	1.62	0.58
	Non-Affiliate	1.58	0.94	2.07	1.87	2.29	2.92	2.39	2.61	2.72	2.19	0.79

Table C.3.2a (continued)

Treatment Services [All services from Q-C9]	Comprehensive Assessment/Diagnosis	Individual Therapy	Group Therapy, Not Incl. Relapse Prevention	Family Counseling	Relapse Prevention Groups	Self-Help or Mutual- Help Groups	Aftercare	Outcome Follow-Up	Combined Substance Abuse & Mental Health Tx	Detoxification	Acupuncture
Facility Setting ^d											
Hospital (inpatient and outpatient)	0.89	0.88	1.28	0.87	2.24	2.46	1.42	2.29	1.65	3.98	1.00
Non-Hospital Residential, Therapeutic Community or Halfway House	1.46	0.66	0.81	1.98	1.25	1.72	1.75	1.57	2.43	2.36	0.89
Community Mental Health Center	1.26	0.95	3.80	1.23	3.64	3.94	2.59	3.89	3.28	2.29	0.48
Other Outpatient	0.76	0.63	1.45	1.49	2.04	2.39	1.73	2.30	2.24	1.30	0.72
Other	2.36	1.32	4.59	3.55	5.09	4.88	4.63	5.02	4.16	2.59	1.70

^a At least 99 percent of facilities responded to the service questions.

^b Based on Beale code (Butler & Beale, 1994).

^c At least 99 percent of facilities responded to affiliation.

^d Not mutually exclusive.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table C.3.2b Standard Errors - Percentage of Facilities Offering Support Services, by Selected Facility Characteristics: National Estimates

es							
HIV/AIDS Education/ Counseling/Support	Transportation	TB Screening	Employment Counseling/Training	Smoking Cessation	Academic Education/ GED Classes	Child Care	Prenatal Care
1.26	1.32	1.33	1.43	1.10	0.96	0.90	0.78
3.83	3.26	2.41	2.96	3.78	1.83	0.46*	3.15
1.70	1.91	2.99	2.37	2.44	2.54	1.96	1.87
1.93	2.60	0.67	2.72	1.35	2.32	0.76	2.18
1.89	1.83	1.69	1.93	1.57	1.03	1.22	0.71
2.51	3.59	2.45	4.16	3.29	2.68	2.40	3.48
		4					
3.16	3.30	3.42	3.25	2.42	2.11	2.07	1.70
3.07	3.10	2.76	3.58	2.74	2.10	1.54	1.94
2.70	2.51	2.87	2.99	2.14	1.98	2.04	1.52
1.96	2.12	2.43	1.99	1.79	1.38	1.68	1.26
				/ 1			
3.12	3.57	2.99	2.30	2.64	1.32	1.21	1.56
1.51	1.86	1.69	1.86	1.56	1.30	1.23	0.81
2.67	3.49	3.47	3.45	3.35	2.87	3.26	2.83
	- 4						
3.78	3.88	3.17	3.32	4.46	2.12*	1.96*	1.43
3.22	3.28	2.72	3.15	2.50	1.72	1.49	2.21
2.04	2.26	2.26	2.35	2.17	1.71	1.71	1.35
3.19	3.22	4.14	3.18	2.84	3.13	2.17	2.41
3.08	3.88	4.42	4.36	3.43	3.33	2.64	2.50
9.05	12.59*	11.93	5.31*	6.00*	2.16*	0.93*	1.56*
4.89	5.69	5.15	4.97	4.34	4.19	3.55	2.75
2.76	3.03	2.84	3.09	2.79	1.70	1.41	1.53
1.73	2.23	2.14	2.28	1.83	1.63	1.33	1.30
10.21	10.91	8.96*	8.54*	6.16*	6.71*	3.06*	3.13*
4.34	4.10	3.59	4.12	3.62	2.23	3.26	1.68
4.72	5.41	4.87	4.49	4.44	2.37	3.49	2.12
2.54	2.73	2.70	3.44	2.56	2.23	2.00	2.11
1.81	2.04	1.94	2.31	1.67	1.51	1.29	1.41
2.48	2.85	2.90	2.41	2.31	1.74	1.47	1.11
	3.83 1.70 1.93 1.89 2.51 3.16 3.07 2.70 1.96 3.12 1.51 2.67 3.78 3.22 2.04 3.19 3.08 9.05 4.89 2.76 1.73 10.21 4.34 4.72	Note	Light Ligh	Light Ligh	The standard of the standard	Note Part Part	1.26 1.32 1.33 1.43 1.10 0.96 0.90

Table C.3.2b (continued)

Support Services [All services from Q-C9]	HIV/AIDS Education/ Counseling/Support	Transportation	TB Screening	Employment Counseling/Training	Smoking Cessation	Academic Education/ GED Classes	Child Care	Prenatal Care
Facility Setting ^d								
Hospital (inpatient and outpatient)	2.95	4.09	3.88	3.58	3.34	2.17	1.89	2.73
Non-Hospital Residential, Therapeutic Community or Halfway House	1.44	1.71	2.48	2.43	2.32	2.39	1.85	1.76
Community Mental Health Center	3.26	3.66	2.88	3.37	2.83	1.48	2.33	1.12
Other Outpatient	1.68	1.81	1.82	2.32	1.68	1.40	1.19	1.00
Other	4.22	4.66	4.22	4.15	4.33	3.21	2.76	2.25

^a At least 99 percent of facilities responded to the service questions.

^b Based on Beale code (Butler & Beale, 1994).

^c At least 99 percent of facilities responded to affiliation.

^d Not mutually exclusive.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table C.3.3 Standard Errors - Percentage Distribution of Facilities Offering Varying Number of Services, by Facility Characteristics: National Estimates

Facility Characteristics		of Treatment	t Services	Nun	ıber of Su	ıpport Servi	ces
	Low	Medium	High	None	Low	Medium	High
All Facilities ^a	0.92	1.56	1.46	0.90	1.42	1.32	0.89
Facility Type of Care							
Hospital Inpatient Only	1.80	3.38	3.21	1.81	3.22	3.24	2.75
Non-Hospital Residential Only	1.79	2.73	2.81	0.52*	1.53	2.47	2.67
Outpatient Methadone Only	2.36	2.57	2.40	0.14*	2.63	2.72	2.46
Outpatient Non-Methadone Only	1.40	2.31	2.13	1.45	2.09	1.53	0.83
Combination Facilities	0.65*	2.81	2.87	0.80*	2.79	4.23	3.46
Facility Size			1				
Small (<17 clients)	2.10	3.22	3.01	1.93	3.13	3.01	2.01
Medium (17-40)	2.06	3.36	2.92	2.32	3.35	3.53	1.91
Large (41-100)	1.41	2.94	3.09	1.61	3.01	2.58	1.65
Very Large (>100)	1.36	2.32	2.23	1.32	2.35	1.94	1.93
Ownership	-) .		
Private For-Profit	2.88	3.90	4.00	2.84	3.59	3.15	1.44
Private Non-Profit	0.81	1.85	1.80	0.97	1.70	1.50	1.21
Public	2.26	3.49	3.20	1.40	2.91	3.60	2.65
Percent Public Revenue	10				10	C.	
0%	3.42	4.64	4.60	3.45	4.09	3.40	1.05*
1-50%	2.03	3.41	3.53	2.64	3.68	3.29	1.88
51-90%	1.43	2.16	2.16	1.52	2.50	2.26	1.65
91-99%	1.70	3.31	2.94	0.94*	3.17	2.69	2.65
100%	2.24	4.13	4.37	2.40*	4.24	4.30	3.06
Unknown %	10.00*	8.39	11.28	3.83*	11.51	12.29	1.84
Urbanicity ^b	7	A 7					
Metro: Small Metro	2.96	5.27	4.70	2.77	5.16	4.14	3.62
Medium Metro	1.81	2.83	2.95	1.75	3.16	2.88	1.87
Large Metro	1.57	2.42	2.28	1.22	1.94	1.96	1.28
Non-metro: Rural	9.44*	10.60	8.87*	9.50*	11.11	8.80*	3.10*
Small Urban	2.05*	3.45	3.43	3.66	4.14	3.77	2.07
Urban	2.62	4.85	4.79	4.62*	4.56	4.60	3.37
Level of Affiliation ^c							
Parent Facility	1.66	3.21	2.78	1.81	2.99	2.68	2.26
Affiliate	1.09	1.94	1.99	1.29	2.17	1.81	1.35
Non-Affiliate	2.28	3.04	2.53	1.79	2.69	2.72	1.59
Client/Staff Ratio ^c							
Low (0-4)	1.39	2.49	2.47	0.95	3.15	2.72	2.03
Medium (>4-14)	1.70	2.74	2.61	1.81	2.77	2.33	1.41
High (>14)	1.41	2.29	1.72	1.70	2.31	1.74	1.25

Table C.3.3 (continued)

	Number o	of Treatment	Services	Number of Support Services				
	Low	Medium	High	None	Low	Medium	High	
Facility Setting ^d								
Hospital (inpatient and outpatient)	0.56	2.88	2.95	1.41	4.17	3.78	2.29	
Non-Hospital Residential, Therapeutic Community or Halfway House	1.15	2.63	2.68	0.63*	1.41	2.42	2.39	
Community Mental Health Center	1.85	3.76	3.44	2.62	3.26	2.98	1.79	
Other Outpatient	1.78	2.36	1.84	1.49	2.11	1.80	1.09	
Other	4.82	5.45	4.44	3.99	5.63	3.80	3.09	

^a At least 99 percent of facilities responded to the service questions.

Note: Each row adds to 100 percent within each section (treatment services or support services).

Exclusions: ADSS Phase I excludes intake/referral-only facilities, halfway houses without paid counseling staff, solo practices, correctional facilities, Department of Defense facilities, and Indian Health Service facilities.

^b Based on Beale code (Butler & Beale, 1994).

^c At least 99 percent of facilities responded to affiliation and client/staff questions.

^d Not mutually exclusive.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

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Table C.3.4	Standard Errors -	Percentage of F	facilities, b	y Staffing (Category and Mean	Staff per Facility	y: National Estimates

			Facilities wi Time'' Categ facilities)		Mean Staff Per Facility				
	Percent of Facilities with Staff Category	Full-Time	Part-Time	Contract	Mean Staff ^a per Facility (for facilities with staff category)	Mean FTE Staff ^b per Facility (for facilities with staff category)	Mean Staff ^a per Facility (all facilities)	Mean FTE Staff ^b per Facility (all facilities)	
Total Staff	0.09	0.84	1.43	1.70	1.33	0.84	1.33	0.84	
Physicians	1.52	0.93	1.34	1.49	0.08	0.06	0.05	0.04	
Registered Nurses	1.28	1.08	1.19	0.68	0.51	0.49	0.20	0.19	
Other Medical Personnel	1.08	0.80	1.00	0.60	0.38	0.30	0.10	0.08	
Any Medical Staff	1.50	1.05	1.60	1.45	0.48	0.42	0.31	0.27	
Doctoral Level Counselors	1.30	0.86	0.82	1.12	0.06	0.12	0.03	0.04	
Master's Level Counselors	1.29	1.31	1.30	1.36	0.11	0.15	0.10	0.13	
Any Graduate-Degreed Counseling Staff	1.20	1.31	1.36	1.53	0.13	0.17	0.12	0.15	
Other Degreed Counselors	1.60	1.53	1.24	0.77	0.10	0.19	0.08	0.14	
Non-Degreed Counselors	1.54	1.39	1.11	0.73	0.14	0.17	0.09	0.12	
Any BA or Non-Degreed Counseling Staff	1.27	1.23	1.45	0.96	0.17	0.24	0.15	0.22	
All Other Staff	0.94	1.40	1.34	0.69	0.37	0.38	0.33	0.34	

^a The mean was calculated by adding all full-time, part-time, and contract staff, and dividing by the total number of facilities to obtain a facility mean for each staffing category.

^b Part-time and contract staff were counted as .41 FTE, based on ADSS Phase II data.

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Table C.3.5a Standard Errors - Percentage Distribution of Full-Time, Part-Time, and Contract Staff, by Staff Type: National Estimates^a

	Full	Full-Time		Гіте	Contract	
	N	Percent	N	Percent	N	Percent
Total Staff	6,580.9		2,354.8	•	1,895.2	
Physicians	289.4	0.3	265.3	1.0	576.1	5.7
Registered Nurses	2,022.2	2.0	627.4	2.1	310.8	1.9
Other Medical Personnel	793.0	0.9	426.8	1.4	460.5*	2.5
Total Medical Staff	2,507.9	2.7	1,140.3	4.2	1,059.3	8.8
Doctoral Level Counselors	177.9	0.2	137.7	0.5	212.8	1.9
Master's Level Counselors	850.7	1.4	475.3	1.8	525.4	4.1
Total Graduate-Degreed Counseling Staff	899.8	1.5	543.2	2.1	637.7	5.6
Other Degreed Counselors	822.2	1.3	416.7	1.5	232.6	1.6
Non-Degreed Counselors	884.9	1.4	514.5	1.7	161.7	1.1
Total BA and Non-Degreed Counseling Staff	1,447.9	2.5	751.0	2.8	286.8	2.2
All Other Staff	3,463.6	4.4	885.7	3.6	537.7	3.3

^a This table is based on data from the estimated 11,782 facilities (about 95 percent of the universe) that reported their staff by full-time, part-time and contract.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

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Table C.3.5b Standard Errors - Number and Percentage Distribution of Staff Type, by "Time" Category in the Treatment System:
National Estimates^a

	Tot	Total		Гіте	Part-Time		Contract	
	N	Percent	N	Percent	N	Percent	N	Percent
Physicians	686.1		289.4	2.9	265.3	4.6	576.1	8.0
Registered Nurses	2,394.2		2,022.2	17.0	627.4	7.4	310.8	2.1
Other Medical Personnel	1,261.5		793.0	12.1	426.8	6.9	460.5*	4.6
Total Medical Staff	3,786.9	2	2,507.9	9.1	1,140.3	5.5	1,059.3	4.0
Doctoral Level Counselors	351.0		177.9	5.0	137.7	4.1	212.8	7.9
Master's Level Counselors	1,325.5	(850.7	5.5	475.3	2.3	525.4	2.8
Total Graduate-Degreed Counseling Staff	1,534.5	/	899.8	4.9	543.2	2.2	637.7	3.1
Other Degreed Counselors	1,124.6	- 1	822.2	6.5	416.7	2.4	232.6	1.4
Non-Degreed Counselors	1,236.2	.(0)	884.9	7.3	514.5	3.0	161.7	1.0
Total BA and Non-Degreed Counseling Staff	2,066.0	. 157	1,447.9	5.9	751.0	2.2	286.8	0.9
All Other Staff	4,033.5	•	3,463.6	10.0	885.7	2.9	537.7	1.0

^a This table is based on data from the estimated 11,782 facilities that reported their staff by full-time, part-time and contract.

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table C.3.5c Standard Errors - Number and Percentage Distribution of FTE Staff, by Staffing

Categories: National Estimates^a

	FTE S	taff ^b
	N	Percent
Total	9,835.5	
Physicians	497.1	0.5
Registered Nurses	2,402.3	1.7
Other Medical Personnel	1,027.0	0.8
Total Medical Staff	3,447.1	2.7
Doctoral Level Counselors	451.9	0.4
Master's Level Counselors	1,548.9	1.6
Total Graduate-Degreed Counseling Staff	1,802.1	1.8
Other Degreed Counselors	1,922.8	1.6
Non-Degreed Counselors	1,599.4	1.4
Total BA and Non-Degreed Counseling Staff	3,124.0	2.8
All Other Staff	4,389.1	3.6

^a This table is based on data from an estimated 12,387 facilities, including 605 facilities that could not report their staff by full-time, part-time, and contract. These 605 facilities could only report staff numbers in terms of full-time equivalents.

Exclusions: ADSS Phase I excludes intake/referral-only facilities, halfway houses without paid counseling staff, solo practices, correctional facilities, Department of Defense facilities, and Indian Health Service facilities.

^b Part-time and contract staff were counted as .41 FTE, based on Phase II data.

Table C.3.6 Standard Errors - Mean Ratio of Clients to FTE Staff, by Facility Characteristics: National Estimates

National Estimates									
		Mean Ratios							
	Clients to All Staff ^b [Q-A9a-h]	Clients to Direct- Care Staff ^b [Q-A9a-g]	Clients to All Other Staff ^c [Q-A9h]						
All Facilities	0.39	0.52	1.63						
Facility Type of Care									
Hospital Inpatient Only	0.07	0.08	0.54						
Non-Hospital Residential Only	0.09	0.23	0.54						
Outpatient Methadone Only	0.47	0.53	3.85						
Outpatient Non-Methadone Only	0.62	0.83	2.60						
Combination Facilities	0.43	0.67	2.65						
Facility Size									
Small (<17 clients)	0.29	0.36	0.44						
Medium (17-40)	0.76	0.75	1.42						
Large (41-100)	0.52	0.96	2.80						
Very Large (>100)	0.75	1.00	4.27						
Ownership									
Private For-Profit	0.75	1.01	4.35						
Private Non-Profit	0.47	0.66	1.83						
Public	0.98	1.16	4.15						
Percent Public Revenue)						
0%	1.16	1.60	6.84						
1-50%	0.78	0.93	3.32						
51-90%	0.75	0.97	3.18						
91-99%	0.65	0.90	2.89						
100%	0.72	1.31	3.10						
Unknown %	0.83	2.21	5.69						
Urbanicity ^d		~							
Metro: Small Metro	0.87	1.24	4.73						
Medium Metro	1.16	1.43	3.67						
Large Metro	0.38	0.56	2.55						
Non-metro: Rural	4.36*	5.06	5.39						
Small Urban	1.01	1.31	4.26						
Urban	1.21	1.75	3.76						
Level of Affiliation ^e									
Parent Facility	0.59	0.79	3.12						
Affiliate	0.59	0.75	2.32						
Non-Affiliate	0.63	0.96	3.15						
Number of Treatment Services									
Low (0-5)	0.98	1.27	5.74						
Medium (6-8)	0.54	0.77	1.91						
High (9-11)	0.53	0.69	2.55						

Table C.3.6 (continued)

	Mean Ratios		
	Clients to All Staff ^b [Q-A9a-h]	Clients to Direct- Care Staff ^b [Q-A9a-g]	Clients to All Other Staff ^c [Q-A9h]
Number of Support Services			
None	1.13	1.48	6.18
Low (1-2)	0.74	1.08	3.42
Medium (3-4)	0.57	0.69	2.11
High (5-8)	0.54	0.81	2.67
Facility Setting ^f			
Hospital (inpatient and outpatient)	0.40	0.51	2.56
Non-Hospital Residential, Therapeutic Community or Halfway House	0.23	0.39	1.31
Community Mental Health Center	1.15	1.68	4.12
Other Outpatient	0.62	0.76	2.97
Other	0.88	1.28	4.17

^a Part-time and contract staff were counted as .41 FTE, based on Phase II data.

^b At least 99 percent of facilities responded to staffing questions.

^c At least 89 percent of facilities reported having "other staff."

^d Based on Beale code (Butler & Beale, 1994).

^e At least 99 percent of facilities responded to affiliation.

f Not mutually exclusive

^{*} The Coefficient of Variation (CV) for this estimate is greater than or equal to 0.3, indicating this number should be interpreted with caution.

Table C.3.7 Standard Errors - Percentage of Staff Certified in Substance Abuse Treatment and Mean Ratio of Clients to Staff Certified in Substance Abuse Treatment, by Facility Characteristics: National Estimates

[Q-A10]	Percent of Direct-Care Staff Certified in Substance Abuse Treatment ^a	Mean Ratio of Clients to Staff Certified in Substance Abuse Treatment ^b
_		1.30
All Facilities	1.12	1.50
Facility Type of Care	1.60	0.20
Hospital Inpatient Only	1.68	0.38
Non-Hospital Residential Only	2.88	0.49
Outpatient Methadone Only	1.06	8.85
Outpatient Non-Methadone Only	1.55	1.85
Combination Facilities	2.44	2.07
Facility Size	2.55	0.25
Small (<17 clients)	3.66	0.35
Medium (17-40)	2.13	0.69
Large (41-100)	1.96	1.30
Very Large (>100)	1.38	4.08
Ownership		
Private For-Profit	2.47	2.63
Private Non-Profit	1.47	1.48
Public	2.82	3.65
Percent Public Revenue		
0%	2.63	5.77
1-50%	2.67	1.76
51-90%	2.34	2.27
91-99%	2.52	2.38
100%	2.67	3.59
Unknown %	4.53	3.04
Urbanicity ^c		
Metro: Small Metro	4.83	2.21
Medium Metro	2.96	3.35
Large Metro	1.26	1.89
Non-Metro: Rural	9.61	7.20
Small Urban	3.28	2.34
Urban	3.33	4.19
Level of Affiliation ^d		
Parent Facility	2.00	2.55
Affiliate	1.96	1.47
Non-Affiliate	2.12	3.42
Number of Treatment Services		
Low (0-5)	2.58	3.20
Medium (6-8)	1.87	1.40
High (9-11)	1.68	2.72

Table C.3.7 (continued)

[Q-A10]	Percent of Direct-Care Staff Certified in Substance Abuse Treatment ^a	Mean Ratio of Clients to Staff Certified in Substance Abuse Treatment ^b
Number of Support Services		
None	4.19	2.34
Low (1-2)	1.95	2.42
Medium (3-4)	1.79	2.29
High (5-8)	1.98	2.96
Facility Setting ^e		
Hospital (inpatient or outpatient)	2.34	1.87
Non-Hospital Residential, Therapeutic Community or Halfway House	2.44	0.84
Community Mental Health Center	3.10	3.66
Other Outpatient	1.75	2.15
Other	3.19	2.12

^a At least 88 percent of facilities provided number of direct-care staff (not FTEs).

^b At least 99 percent of facilities reported having staff certified in substance abuse treatment.

^c Based on Beale code (Butler & Beale, 1994).

^d At least 99 percent of facilities provided affiliation.

^e Not mutually exclusive.