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Services Research Monograph

Financing Drug Treatment Through State Programs

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Services Research Monograph No. 1

Financing Drug Treatment Through State Programs

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NIDA SERVICES RESEARCH MONOGRAPHS

The *Services Research Monographs* are issued by the National Institute on Drug Abuse's Division of Clinical Research. The National Institute on Drug Abuse is the Federal agency with primary responsibility for research on drug abuse. Such research includes the biological, pharmacological, psychological, and sociocultural aspects of drug abuse; the quality, cost, access to and outcomes of services addressing drug abuse; and the organization, financing, and management of those systems of services.

The *Services Research Monographs* disseminate the latest studies on a range of health services topics related to drug abuse. The research they report addresses the impact of organization, financing, and management of drug abuse services on the quality, cost, access to, and outcomes of care.

Opinions expressed in this volume are those of the authors and do not necessarily reflect the opinions or official policy of the National Institute on Drug Abuse or any other part of the U.S. Department of Health and Human Services.

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FOREWORD

Health services research studies the impact of the organization, financing, and management of health services on the quality, cost, access to, and outcomes of care. Such research has always been an essential part of the research program at the National Institute on Drug Abuse (NIDA), and the Institute is continuing its efforts to develop a balanced program of health services research. This program builds on a substantial knowledge base about drug abuse services.

Health services research has taken on a new role at NIDA, in large part because the entire context for drug abuse services is evolving and shifting around us. The National system of health care delivery, for acute as well as chronic care, is under unprecedented scrutiny. There is a new focus on cost-effective care, appropriate care, access to care, and control of overutilization. We must have these data for drug abuse and addiction, or our clients and patients will be left out of any new health care system.

Health care reform, when it occurs, will involve major and system-wide changes in private benefit packages, and in Federal and State programs and laws. It would affect the organization and financing, as well as the services delivered and the population served, of the whole health care delivery system. This cannot help but have massive implications for drug abuse services responsibilities, financing and delivery.

In recognition of these forces, NIDA is increasing its emphasis on research on the organization, financing, and management of drug abuse services. Studies will address the factors that influence the availability, accessibility, and utilization of health services, and the efficiency and effectiveness of these services within established service delivery settings and at a system-wide level. Research will cover a range of services including drug abuse treatment and prevention, prevention of HIV transmission and other adverse medical consequences associated with drug abuse, and primary care service delivery intended to impact drug abusers' concomitant medical disorders. This will include studies of service needs and resources required to meet service demands; utilization of services and barriers to utilization; the impact of financing and insurance strategies, including managed care, on access, quality, and outcomes of care; entry, compliance, and retention of clientele; the effectiveness and efficiency of alternative organizational and manpower configurations; patient and provider characteristics that impact outcome; the cost-effectiveness of service delivery approaches; assessment, matching and referral to improve services and outcomes; and the impact of specific policies on service delivery and effectiveness.

To expand the usefulness and impact of services research, NIDA is also increasing its efforts to disseminate services research results quickly and efficiently. An important part of that effort is a new series of *Services Research Monographs* intended to be relevant and informative to a broad range of audiences including States, drug abuse treatment providers, health services researchers, and policymakers. It is our hope that the *Services Research Monographs* will serve as a forum and a resource for the research community, and a source of research-based information on drug services for practitioners and policymakers.

Alan I. Leshner, Ph.D.
Director
National Institute on Drug Abuse

PREFACE

This is the first volume of the National Institute on Drug Abuse's (NIDA) *Services Research Monograph* series. The papers presented here address specific knowledge gaps and make significant contributions to the field in understanding public substance abuse financing, reimbursement and regulation, specifically, in the area of funding drug abuse treatment through State programs.

These studies were conducted at the Center for Drug Abuse Services Research. The Center was established in 1989 through a 5-year contract for $3.4 million from the National Institute on Drug Abuse. This action was prompted by the growing impact of drug abuse and the increasing demand for research on the organization, financing, and delivery of drug abuse treatment services. Research is based at Brandeis University and three partner institutions, the Department of Economics at Boston University, the Kennedy School of Government at Harvard University and Health Economics Research, Inc.

The Center was initiated by Dr. James Kaple and began under the direction of the former Financing and Services Research Branch at NIDA. In 1992 the ADAMHA Reorganization Act shifted the Center to the new Substance Abuse and Mental Health Services Administration (SAMHSA). This volume represents a cooperative effort between NIDA and SAMHSA.

The drug abuse treatment system is special among health services in its reliance upon government financing. The research presented here assesses the status of the treatment delivery system and expands our understanding of how the system functions through secondary analyses of information about governmental funding for substance abuse treatment.

The first paper, by Horgan, Larson, and Simon, provides an overview of the national Medicaid program and how it is used to fund drug abuse treatment. Using data from the 1990 Drug Abuse Services Research Survey, the report discusses what services Medicaid pays for in drug abuse treatment facilities, what kinds of facilities receive Medicaid payment, and for what groups of clients Medicaid is paying. The paper focuses on providing an overview of Medicaid coverage of substance abuse services.

Second, Larson and Horgan also present a complementary report on State Medicaid program expenditures for substance abuse units and facilities from the National Drug and Alcohol Treatment Unit Survey. The report examines the role of State Medicaid financing based on revenue data. The authors' analyses demonstrate tremendous variation among all States in Medicaid expenditures, the benefits adopted, and the types of facilities reimbursed.

The third report in this volume, by Rosenbach and Huber, is a case study of Washington State. Using Medicaid's Statistical Information System, the report describes the substance abuse treatment system in Washington State and quantifies the extent of Medicaid spending for drug treatment services. The authors discuss several reasons why spending is limited for substance abuse services.

Fourth, Commons, Hodgkin, McGuire and Riordan discuss the reimbursement policies of six New England States. The analysis uses information on regulations and contracting practices from State agencies to describe relationships between providers of drug treatment services and States. Market structure analysis identifies some interstate differences in the way the market areas are defined; the extent to which States channel funds to preferred providers; and the degree to which drug treatment facilities specialize or diversify. This summary of the sources from which States derive their funding for treatment, and institutional constraints in the allocation of funds, identifies a variety of special features of the market for public substance abuse treatment.

The last paper, also by Commons, Hodgkin, McGuire, and Riordan, contains the results of case studies for each New England State. Each case study contains an overview of the State and describes the agency that coordinates substance

abuse treatment services. Furthermore, the authors define market areas and outline licensing and contracting procedures for each of the six States.

These papers were presented at the Annual Meeting of the Advisory Committee Members of the NIDA-sponsored Center for Drug Abuse Services Research.

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MEDICAID FUNDING FOR DRUG ABUSE TREATMENT: A NATIONAL PERSPECTIVE

Constance Horgan, Sc.D., Mary Jo Larson, Ph.D., and Lorna Simon, M.A.

INTRODUCTION

Knowledge about the current role of Medicaid in funding drug abuse treatment is sparse. This lack of knowledge covers two major areas: First, the providers, administrators, and policymakers dealing with substance abuse have limited understanding of the complexities of the Medicaid program. Second, there is little national baseline information available on what substance abuse treatment, and for whom, Medicaid pays (Fountain et al. 1991; GAO 1991; IOM 1990; Wright and Buck 1991). Medicaid will have an important role in the current debate around national health reform and improved information as how this public insurance program functions as a payer in the substance abuse treatment system can only lighten such discussions.

Complexities of the Medicaid Program

The complexities of the Medicaid program have always been immense. Several conditions must be met before Medicaid will pay for any services. The client must be eligible, the service must be approved and part of the State Plan for Medicaid, and the provider must be certified. Beyond these conditions, the intricacies of the benefit design are complex and idiosyncratic to particular States. The lack of understanding about the Medicaid program is coupled with State fears of uncontrollable expenditures because of the program's entitlement nature.

Lack of Data

It is exceedingly difficult to track Medicaid dollars for substance abuse treatment. It is not a covered service per se, and is not reported by States in federally mandated information on Medicaid. Two basic approaches have been used to examine the role of Medicaid: (1) Medicaid claims data (Wright and Buck 1991; Rosenbach and Huber 1993), and (2) surveys of specialty providers, e.g., the National Drug and Alcoholism Treatment Unit Survey (NDATUS) (IOM 1990; Larson and Horgan 1992). The Treatment Outcome Prospective Study (Fountain et al. 1991) has also been used; however, this data source is over a decade old and does not reflect recent changes in the Medicaid program, particularly with respect to client eligibility. There are major data problems associated with each approach.

Utilization and expenditure information on substance abuse services paid for by Medicaid is not available in any nationwide Medicaid service data. However, at the State level, Medicaid claims can be put together to provide an in-depth picture of substance abuse treatment for the individual States which have data of sufficient quality. According to the recent Intergovernmental Health Policy Project (IHPP) study, only six State Medicaid Management Information Systems (MMIS) have separate coding for substance abuse services (Solloway 1992). Thus, in order to estimate substance abuse utilization and expenditures from Medicaid claims in other states, it is necessary to rely on a complex methodology based primarily on diagnosis (Rosenbach and Huber 1993). This technique has the potential bias of overstating the provision of substance abuse treatment services since a substance abuse diagnosis may be coded when no substance abuse treatment is actually provided, e.g., complications of pregnancy due to substance abuse. Medicaid claims do, however, provide the opportunity to capture substance abuse treatment which occurs in settings which are not included in specialty provider surveys, e.g., detoxification services which are provided in hospital scatter beds and substance abuse treatment provided by private, office-based physicians.

NDATUS has provided the best opportunity to examine the role of Medicaid from a national perspective because it is a national, periodic survey of specialized treatment programs. As discussed elsewhere, it omits services provided in settings which do not report to NDATUS and facilities which are nonresponders to the survey. Data are collected at the unit or facility level and, in the past, have not included a great deal of modality-specific

information. It should be pointed out that some States have sophisticated reporting systems administered through the State substance abuse agency, which capture data from specialty providers in their State; however, this data is State-specific and not common to all States.

Purpose

This paper provides information to expand our knowledge of Medicaid's role in financing substance abuse services. It uses a new data source with several advantages over other specialty provider surveys. This data source includes both facility-level and client-level data, much richer on a modality-specific basis, and provides more details on sources of revenue. However, this next source is limited to services in drug abuse treatment facilities, and thus does not provide information on substance abuse services in other settings. This paper:

- Provides an overview of Federal Medicaid coverage of substance abuse services, in terms of mandatory, optional and excluded benefits and describes client eligibility and provider qualification requirements;
- Describes the characteristics of drug treatment facilities which are Medicaid certified and receive Medicaid funding and examines variations in the proportion of funding which is provided by Medicaid in relation to other revenue sources; and
- Compares the demographic and other characteristics of clients in drug abuse treatment facilities for whom Medicaid is the expected source of payment with clients whose expected source of payment is insurance or some other mechanism.

OVERVIEW OF MEDICAID COVERAGE OF SUBSTANCE ABUSE SERVICES

A former administrator of the Health Care Financing Administration (HCFA), the Federal agency which administers Medicaid, has written about Medicaid and substance abuse services: "Each State designs its own program, building on the basic Federal requirements. States establish their own regulations and instructions and construct eligibility, coverage, and payment rules with which they operate their programs. Thus, general statements about Medicaid must be quite general to be applicable across the board" (Wilensky 1990). With this in mind, this section is intended to provide a brief overview of an extremely complex subject. Several excellent reports have recently become available which describe the complexities of the Medicaid program in far greater depth and provide extensive State-level detail (Fountain et al. 1991; Fox et al. 1991; Gates 1991; GAO 1991; Solloway 1992).

Medicaid is a publicly funded health insurance program designed principally to cover the poor. It is jointly financed and administered by Federal and State governments. The Federal share of State Medicaid program costs ranges from 50 to 80 percent, depending on the per capita income of the state. In order to access Federal Medicaid funds, the State must provide the required level of matching funds from non-Federal sources. Federal law mandates certain client eligibility criteria, provider participation requirements, and a core set of services; however, States are allowed considerable latitude in specifying eligibility, reimbursement level, setting, type, scope and duration of services to be covered. Each State administers its Medicaid program based on a State Medicaid plan which must be approved by HCFA. State Medicaid programs may include additional State-only services and eligibility groups which are not federally reimbursed.

Client Eligibility

Eligibility for Medicaid is extremely complex and varies tremendously from State to State. Fox et al. (1991) provide an excellent review of the nuances of

Medicaid eligibility criteria. There are four broad types of client eligibility: (1) cash assistance recipients; (2) noncash assistance, categorically needy; (3) medically needy; and (4) children and pregnant women not categorically needy. All four categories involve means (income and asset) tests. The first three -- most of Medicaid -- involve two broad family categories. The first of these, Aid to Families with Dependent Children (AFDC) and AFDC-related are single-parent families and unemployed families with children. The second are aged, blind and disabled. Employed two-parent families, nonaged single persons, or childless couples are by and large ineligible for the first three categories unless they are disabled.

Cash Assistance Recipients

This form of eligibility includes individuals receiving AFDC or Supplemental Security Income (SSI).

- AFDC: A Federal/State cash assistance program for poor children in single-parent families or with a disabled or unemployed parent. The State AFDC payment level is usually much lower than Federal poverty guidelines, e.g., 34 States have AFDC payment levels at or below 50 percent of the Federal poverty level (Fox et al. 1991); thus many poor, single-parent families are not eligible for Medicaid through AFDC.

- SSI: A uniform Federal cash assistance program for the aged, blind, and disabled. Alcohol- and drug-dependent individuals can be determined to be disabled under SSI criteria; however, this process is extremely complex.

Noncash Assistance Categorically Needy

This group does not receive AFDC or SSI, but must fall within the two broad family categories indicated above. Within the categorically needy groups, there are subgroups that are mandated for coverage by the Federal government, and those that are covered at the discretion of the State. They may be older children, have earned their way off welfare, or have higher incomes than allowed under cash assistance.

Medically Needy

States have the option of covering individuals who are medically needy. These individuals must also belong to one of the two categorical groups; however, they can have incomes that are greater than the maximum level for categorical assistance. Also eligible are individuals whose incomes are below a State-determined standard after medical expenses are deducted.

Children and Pregnant Women Not Categorically Needy

Children and pregnant women may now be eligible for Medicaid, solely on the basis of income with no link to qualification for the above-discussed cash assistance programs. Children may only be covered up to age five; of particular importance to substance abuse treatment, however, is the increased eligibility of pregnant women.

Provider Participation and Reimbursement

Although States have considerable flexibility with respect to the rates and methods of Medicaid reimbursement to providers, certain basic requirements must be met under Federal law. Providers must be appropriately licensed and determined to be qualified to participate in the Medicaid program. Providers must accept Medicaid payment as payment in full; thus, there is no balance billing of Medicaid clients. The Medicaid statute requires that payment rates be adequate to ensure that access to services is equivalent to the general population, although Medicaid reimbursement rates are generally viewed as lower than those of both Medicare and the private sector.

Benefits Covered

Federal law provides for a wide range of both mandatory and optional benefits, many of which may be used to fund substance abuse services. Medicaid does <u>not</u> have a discrete substance abuse benefit, but rather provides generic coverage for services which are not linked to specific diagnoses or conditions.

Under Federal guidelines, mandatory services must be provided by States, and optional services may be covered if the State chooses. States have considerable flexibility with respect to the scope, duration, and reimbursement level of both mandatory and optional services.

Mandatory Services

The following services, which have the most importance for substance abuse treatment, are mandatory under Federal law:

- Inpatient Hospital Services - The inpatient hospital benefit is probably among the most misunderstood benefit as it relates to substance abuse treatment. The former HCFA administrator has stated that: "For mandatory Medicaid benefits, such as inpatient hospital services, our regulations explicitly prohibit States from using a recipient's diagnosis, type of illness, or condition as the basis for arbitrary limiting or denying coverage" (Wilensky 1990). Thus, Federal Medicaid policy will pay for inpatient drug abuse treatment in facilities other than institutions for mental diseases. However, States may determine that the hospital setting is not the appropriate setting for the treatment of certain conditions. In fact, in 1989, about one-half of the States had limited inpatient hospital services for substance abuse to detoxification services only (Fox et al. 1991).

- Outpatient Hospital Services - Services must be provided in a facility that also meets Medicaid requirements as an inpatient facility. As discussed above, it is within the discretion of the State to limit the outpatient services offered; however, in 1989, substance abuse treatment was provided without limits in about one-half of the States (Fox et al. 1991).

- Physician Services - The services not only of physicians but of other health care practitioners working under the supervision of the physician can be reimbursed. As for other services, limitations may be set, usually related to the type of provider. For example, in 1959, psychiatrists could use psychiatric billing codes in 29 States only (Fox et al. 1991).

- Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) - This EPSDT benefit applies to all children under 21 years and is intended to provide screening and diagnostic services to detect conditions and to provide followup treatment to correct or ameliorate the condition. This benefit is not widely used, although it could be used to fund substance abuse treatment that may actually be excluded under other State guidelines.

Optional Services

The following services which have the most relevance for substance abuse treatment are optional under Federal law:

- Clinic Services - Clinic services are outpatient services provided under the direction of a physician in a facility that is not a hospital. Satellite clinics and mobile vans qualify as clinics. Only 11 States which opted for coverage under the clinic option specified that they allow substance abuse services under the clinic option (Fox et al. 1991).

- Rehabilitative Services - Rehabilitative services are medical or remedial services recommended by a physician for the reduction of medical or physical disability. Services do not need to be furnished under a physician's direction. In 1989, 10 States covered substance abuse services under this option and one-half of these States used the rehabilitative benefit to cover day treatment (Fox et al. 1991).

- Other Licensed Practitioner Services - This benefit can be used to reimburse the services of other practitioners, such as psychologists and clinical social workers. Psychologists were reimbursed in about one-half of the States (Fox et al. 1991).

- Inpatient Psychiatric Hospital Services for under 21 - In 1989, about three-quarters of the States provided this benefit; although most of these

States will cover substance abuse treatment if it is a secondary diagnosis, only one-third will cover it as a primary diagnosis (Fox et al. 1991).

Excluded Services

The one Federal statutory restriction of the Medicaid program relevant to substance abuse treatment is the so-called institution for mental diseases (IMD) exclusion which precludes payment for services provided in IMDs for clients 22 to 65 years of age (Sullivan 1992). Under the International Classification of Diseases, alcohol and substance abuse are classified as mental disorders. Facilities that exclusively treat psychiatric or substance abuse disorders are considered IMDs by Medicaid. Facilities with 16 beds or fewer are exempt from this restriction, as is the treatment of those under 21 as discussed above. Under a recent waiver, it is possible for some residential programs for pregnant women to be funded for a HCFA demonstration.

METHODS

Data

The data presented in this paper are from phase I and phase II of the NIDA-funded 1990 Drug Services Research Survey (DSRS) conducted by Brandeis University and Westat, Inc. DSRS collected data from a nationally representative sample of drug treatment facilities for the point prevalence date of March 30, 1990, and for the most recent 12-month reporting period of the facility.

Phase I of DSRS provides facility-level data on the organization, financing, and nature of drug treatment, collected through a mail/telephone survey of a stratified random sample of over 1,000 drug treatment facilities. Phase II of DSRS provides data on client characteristics collected through the abstraction of clinical records for a sample of approximately 2,100 clients discharged from treatment between September 1, 1989 and August 31, 1990 from a stratified random subsample of 120 facilities. The response rate for DSRS was 82 percent. The sampling design and statistical weighting procedures, which corrected for nonresponse, yield results which are nationally representative. Further details on data collection and descriptive results for phases I and II are provided in Batten et al. (1991, 1992).

Caveats

DSRS can provide only a partial, albeit important, picture of the role of Medicaid in funding substance abuse treatment. It is limited to treatment providers who treat drug abuse treatment clients. Substance abuse treatment facilities that exclusively treat alcohol clients are therefore not included in the survey. Also, substance abuse treatment which is provided outside of the specialty treatment sector is not included, such as that provided in scatter beds of general hospitals.

The data presented in this report are uni- and bivariate descriptive statistics. In future research, it is important to perform multivariate analyses in order to control for the peculiarities of State Medicaid policy.

CHARACTERISTICS OF FACILITIES WITH MEDICAID INVOLVEMENT

Tables 1-6 are discussed in this section. All data reported are facility-level (weighted) and were collected in phase I of DSRS.

Medicaid Certification

Medicaid payments can only be made to providers that States have determined to be qualified for participation in Medicaid. Table 1 indicates that a large minority of drug abuse treatment facilities have Medicaid involvement. Almost 32 percent of all drug treatment facilities reported that they were certified by Medicaid to provide treatment, and another 10 percent reported not knowing whether they had certification. However, almost all facilities were able to estimate the percent of their revenue coming from Medicaid. Twenty-eight percent of all facilities reported receiving some revenue from

Medicaid. For facilities which were Medicaid certified, only 12 percent reported not receiving any Medicaid funding during the most recent 12-month financial reporting period.

Whether a facility was Medicaid certified varied significantly by type of facility ownership (table 2). Only 15 percent of private for-profit facilities reported being Medicaid certified; whereas, over 38 percent of public facilities were Medicaid certified. One-third of private nonprofit facilities were certified, representing over two-thirds of all Medicaid certified facilities.

As might be expected given the benefit structure of Medicaid described above, whether a facility is Medicaid certified varies with the type of treatment modalities offered by the facility (table 3). One-half of facilities which were single modality hospital inpatient, and over one-half of facilities which offered single modality outpatient methadone were Medicaid certified. Facilities which included a residential modality were the least likely to be Medicaid certified.

Sources of Revenue

Table 4 describes the sources of revenue for all facilities, as well as for facilities with and without Medicaid certification. Overall it is estimated that drug abuse treatment facilities received about 8 percent of their revenues from Medicaid. On average, Medicaid certified facilities received 18 percent of their funding from Medicaid. In table 1, it was shown that about 10 percent of facilities did not know whether or not they were Medicaid certified. Since Medicaid accounted for about 3 percent of total revenue for these facilities, it can be assumed that some of these facilities must be Medicaid certified because of the Medicaid program requirement regarding certification in order to receive reimbursement.

The distribution of Medicaid revenue for Medicaid certified facilities (data not shown) is skewed, with the median facility receiving 10 percent of funding from Medicaid, although the mean is about 18 percent. One-quarter of facilities reported receiving 4 percent or less of revenue from Medicaid, and one-quarter received 23 percent or more.

Facilities both with and without certification had the majority of funding from public sources, with 53 percent of revenues coming from public sources for both types of facilities. The most striking difference was within the public source of revenues. Facilities that were not Medicaid certified received almost all of their public revenue from public subsidy programs, including the Alcohol Drug Abuse Mental Health Administration (ADAMHA) block grant, other State alcohol/drug agency funds, other State non-Medicaid funds, and local funds. For facilities that were Medicaid certified, however, public subsidy revenue is still the single largest revenue source, accounting for over one-third of revenues, almost double the contribution made by Medicaid. Given the State matching requirements, a large role by the non-Medicaid public sector is to be expected.

Private revenue sources were estimated to make a substantial contribution to both types of facilities, accounting for about 27 percent of the revenue. Client fees contributed about 10 percent to total revenue for both types of facilities.

Table 5 presents data on the relative importance of Medicaid funding for facilities that have any Medicaid funding, according to selected facility characteristics. Recalling from tables 1-3 that only about one-third of facilities are Medicaid certified, certification varies significantly by ownership and by modality, and over 10 percent of certified facilities receive no funding, this table focuses on the smaller set of facilities that actually received Medicaid funding. Although private for-profit facilities were the least likely to be Medicaid certified (table 2), given that they did receive Medicaid funding, they were the most likely to rely on it as a source of revenue, with over 20 percent of total revenues coming from Medicaid.

Single modality hospital inpatient facilities and methadone facilities were not only the most likely to be Medicaid certified (table 3), but also, given that they were receiving Medicaid funds, relied more heavily on Medicaid as a revenue source. For single

modality inpatient hospital facilities, almost one-quarter of total revenues were from Medicaid. For facilities with single modality methadone programs, about one-third of total revenues were from Medicaid. For other types of modalities Medicaid was less important, accounting for 11 to 15 percent of total revenue. Of particular interest is that even though the residential benefit under Medicaid is circumscribed because of the IMD exclusion, a small number of residential facilities are able to tap into Medicaid as a revenue source for at least some of their clients. This can occur if clients are under 21 years of age or if treatment is provided in a facility with 16 beds or fewer. Other creative approaches may include the provision of treatment off-site from the residential setting.

Capacity and Utilization

Table 6 provides summary capacity and utilization data on facilities with and without Medicaid certification. As noted previously, only 31 percent of facilities were Medicaid certified; however, 43 percent (307,081 persons out of 719,084) of all clients in drug treatment facilities on the point prevalence date of March 30, 1991, were receiving services in these Medicaid certified facilities. About 95 percent (307,081 slots out of 323,853) of the capacity of Medicaid certified facilities was utilized on March 30, 1990, whereas 82 percent (346,315 slots out of 422,915) of the capacity of facilities without Medicaid certification was utilized. It appears that Medicaid certified facilities are playing an important role in the treatment system because 43 percent of all clients are treated in these facilities. These facilities also appear to be operating at a significantly higher level of utilization than non-certified facilities.

It is estimated that Medicaid certified facilities received funding from Medicaid for over 125,000 clients during their most recent 12-month reporting period. For these facilities, Medicaid clients represent 14 percent of admissions and 15 percent of discharges.

CHARACTERISTICS OF MEDICAID CLIENTS IN TREATMENT

Tables 7-10 are discussed in this section. All data reported are client-level and were collected in Phase II of DSRS. All client-level data were obtained from abstraction of the client treatment record.

Demographic and Other Characteristics

Table 7 indicates that, at the time of admission, Medicaid was the expected primary source of payment for 13 percent of clients. Other public and private insurance mechanisms accounted for just over double the number of clients for whom Medicaid was the expected primary source of payment. It should be emphasized that using the expected primary source of payment may overestimate the number of Medicaid clients to the extent that Medicaid ends up not being the actual payer, either because reimbursement was disallowed or because a claim may not have been submitted for reimbursement.

Table 8 provides an overview of demographic characteristics of clients in treatment categorized by their expected source of payment. Only 16 percent of Medicaid clients were less than 25 years old, a smaller percentage than for all other payment groupings. About 77 percent were between 25 and 44 years of age, and 7 percent were over 45 years of age. Insurance was much more likely to cover the older client in treatment, with 21 percent of insurance clients over 45 years of age.

For all payment sources, males represented a substantially larger proportion of clients than did females, although this was much less pronounced for Medicaid clients. One-third of Medicaid clients were female. This was smaller than expected given the strong link to Medicaid eligibility for families with dependent children. This finding suggests that other links to Medicaid eligibility are being used by substance abuse clients, including the SSI eligibility criteria and the State-only clients. The overwhelming majority of clients in treatment for all payment

categories except for Medicaid are white. For Medicaid clients, 48 percent are black, and less than 40 percent are white.

Table 9 presents an overview of the criminal justice history of clients in treatment by their expected source of payment. Only 20 percent of Medicaid clients had a history of DWI/DUI arrests, compared to 37 percent for both insurance and self/no payment clients. This lower percent may reflect a lack of access to an automobile. However, compared to insurance and self/no payment clients, Medicaid clients were more likely to have had other arrests prior to treatment and to have had a prison/jail record. About 55 percent of Medicaid clients had a history of other arrests and 31 percent had a prison/jail record. Only 15 percent of Medicaid clients were receiving treatment as a condition of probation, a lower percent than for other payment categories, particularly the self/no payment group which had 37 percent of clients in probation related treatment.

Facility Characteristics

Table 10 provides an overview of the facility characteristics in which Medicaid and other clients receive treatment. Over 55 percent of Medicaid clients were in single modality facilities which offered methadone outpatient drug-free modalities. This was significantly higher than for all other payment sources. About 16 percent were treated in single modality hospital inpatient facilities and 5 percent in single modality residential facilities. These findings suggest that Medicaid clients are predominantly treated in outpatient settings and not in inpatient settings. They also suggest that, for some clients, it is possible to get substance abuse treatment in a residential setting despite the IMD exclusion.

Medicaid clients differed significantly from insurance and self/no payment clients in terms of the ownership of the facilities in which they received treatment. About 65 percent of Medicaid clients received treatment in private nonprofit facilities. About 30 percent were treated in public facilities, and only 5 percent were treated in for-profit facilities.

CONCLUSION

An overview of the role played by Medicaid in the financing of drug abuse treatment facilities has been provided with data from the 1990 Drug Services Research Survey (DSRS). The descriptive results presented suggest several implications about the potential for increased utilization of Medicaid as a funding source under current Federal law.

(1) The Medicaid program requires that the State determine whether providers are qualified to participate and agree to accept the Medicaid reimbursement as payment in full. Currently less than one-third of facilities are certified, and even though certified, a substantial number receive no Medicaid funding. Increased use of Medicaid funding would need to determine why so few facilities are certified, when many are currently offering modalities of care that are reimbursable under the mandatory benefit coverage of the Federal Medicaid program. In particular, further research is needed on the degree to which State limitations on the scope of covered services, including the level and process of reimbursement, discourage facilities from seeking certification and/or reimbursement.

(2) While almost two-fifths of public facilities are Medicaid certified, a higher proportion than for private facilities, it must be asked why more public facilities are not certified. Since Medicaid is a program designed primarily for the poor, it can be presumed that clients who are treated in a public setting are more likely to meet the income eligibility requirements of Medicaid. Data presented in this paper show the number of clients for whom Medicaid is the expected source of payment. However, the number of Medicaid clients treated in drug abuse facilities for whom Medicaid reimbursement is not sought or obtained is not known. Future research should focus on how many drug abuse clients are covered by Medicaid and how many could be covered given current Medicaid eligibility requirements. Medicaid allows higher income thresholds for pregnant women who are, thus, a

group which could easily be targeted for reimbursement from Medicaid. There should also be particular focus on how clients qualify for Medicaid through disability status.

(3) Although private for-profit facilities are much less likely to be Medicaid certified than facilities with other ownership status, for-profit facilities that are certified appear to rely more heavily on Medicaid as a revenue source. Future research should focus on why this is so. Are for-profit facilities better able to navigate the complexities of the Medicaid reimbursement process or are they more likely to tailor their services to meet reimbursement requirements?

(4) Overall, Medicaid is not currently an important funding source for drug abuse treatment facilities, accounting for only 8 percent of total revenues. However, Medicaid represents a relatively more important funding source, for a subset of Medicaid certified facilities that offer treatment in a manner consistent with whatever optional benefits and limitations are imposed by the individual State in which the facility is located. Since about one-half of funding comes from public sources for facilities with and without Medicaid certification, it is reasonable to assume that for facilities without certification, there is some potential for shifting some portion of funding to Medicaid if certification was obtained. Future research needs to focus on documenting the importance of specific barriers to maximizing the potential of Medicaid funding. To what extent are barriers provider-specific with respect to lack of Medicaid program knowledge or lack of expertise in mastering the complexities of accessing the program as a funding source? To what extent are the barriers to Medicaid reimbursement linked to either benefit limitations or reimbursement levels at the State Medicaid level?

(5) It is clear that the benefit design of Medicaid affects what services are most likely to be paid for by Medicaid. Facilities which offer methadone as a modality of care appear to have tapped into Medicaid as a funding source better than other modalities of treatment in terms of both likelihood of certification and level of Medicaid funding. Particular attention should be paid to the potential for better use of Federal mandatory benefits. Surprisingly, Medicaid appears to pay for little treatment of adolescents. The potential of accessing drug treatment for adolescents through the EPSDT benefit needs to be more fully explored.

(6) Facilities which are Medicaid certified are playing an important role in the substance abuse delivery system. Over two-fifths of clients in treatment in drug abuse facilities are in Medicaid certified facilities. These facilities are closer to operating at total capacity than are facilities that are not Medicaid certified. Given that these facilities are already at least minimally involved with the Medicaid program, future research might focus on whether and how these facilities can maximize the full potential of Medicaid funding. This might focus on two aspects: getting eligible clients enrolled in Medicaid and identifying and defining services so that they can be reimbursed under State Medicaid guidelines.

In summary, although Medicaid can be used, in theory, to cover a broad array of drug abuse treatment services, Medicaid currently is not a major payer for substance abuse treatment. This paper has provided a national overview of the role that Medicaid plays in the treatment system and suggests opportunities for increasing Medicaid funding within the system as it is currently configured. This paper suggests that Medicaid is an underutilized funding resource for substance abuse treatment.

There are several factors that contribute to this underutilization of Medicaid. First, since there is not a discrete benefit for substance abuse treatment, services must fit into a benefit design which is oriented toward a medical model which does not precisely fit substance abuse. Second, the Medicaid program is very complex because of the dual Federal/State role. In a very real sense, the program can be viewed as 50 separate and unique programs, each offering a different kind of opportunity for maximizing funding. Although changes could be made at the Federal level to make reimbursement for

substance abuse services easier, there does appear to be opportunity at the State level to more creatively access Medicaid funding within the current confines of the Medicaid program.

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Table 1. Facility Medicaid Certification and Receipt of Medicaid Funds During Past Twelve Months

	All Facilities	
	n	%
Medicaid Certification		
Certified	2,243	31.3
Not Certified	4,217	58.9
Don't Know/Refused	702	[illegible]
Total	7,163	100.0%
Estimated Medicaid Percentage		
Medicaid Funding	1,976	27.6
No Medicaid Funding	5,179	72.3
Don't Know/Refused	8	0.1
Total	7,163	100.0%
Specified Medicaid Dollars	Medicaid Certified Facilities	
Medicaid Funding	1,517	67.7
No Medicaid Funding	258	11.5
Don't Know/Refused	467	20.9
Total	2,243	100.0%

Source: Phase I, 1990 Drug Services Research Survey, Brandeis University

Table 2. Facility Ownership and Medicaid Certification

Ownership	Certification			
	Yes	No	DK	Total
	Row Percentage Distribution			n
Private For-Profit	14.3	60.8	19.9	1,233
Private Non-Profit	40.6	60.1	6.3	4,555
Public	38.4	49.1	38.4	1,362
	Column Percentage Distribution			
Private For-Profit	7.9	19.2	35.0	
Private Non-Profit	68.2	64.9	40.6	
Public	23.3	15.8	24.4	
Total n	2,243	4,218	702	7,163

Source: Phase I, 1990 Drug Services Research Survey, Brandeis University

Table 3. Facility Modalities and Medicaid Certification

	Certification			
Modality	Yes	No	DK	Total
	Row Percentage Distribution			n
Hospital Inpatient[a]	50.2	32.2	17.5	500
Residential[a]	7.7	36.6	2.5	1,246
Outpatient Non-Methadone[a]	31.8	58.6	9.6	3,455
Methadone[a]	52.6	36.6	17.5	546
Residential and Outpatient[b]	26.9	66.2	6.9	482
Hospital Inpatient and Outpatient[b]	49.0	49.0	21.0	482
Other[c]	36.6	27.9	23.2	172
	Column Percentage Distribution			
Hospital Inpatient[a]	11.2	4.7	12.5	
Residential[a]	4.3	26.5	4.4	
Outpatient Non-Methadone[a]	49.0	48.0	47.1	
Methadone[a]	12.8	4.7	8.4	
Residential and Outpatient[b]	58.6	12.0	7.5	
Hospital Inpatient and Outpatient[b]	9.8	3.8	14.4	
Other[c]	3.8	1.1	5.7	
Total n	2,243	4,218	702	7,163

[a] single modality

[b] outpatient refers to both methadone and non-methadone outpatient facilities

[c] includes all other multiple modality facilities

Source: Phase I, 1990 Drug Services Research Survey, Brandeis University

Table 4. Sources and Estimated Revenue for Facilities With and Without Medicaid Certification

Source of Revenue	Certification			
	Yes	No	DK	Total
	Column Percentage Distribution			n
Public	(58.7)	(39.9)	(6.1)	(53.0)
Subsidy[a]	35.8	46.0	0.9	41.2
Medicaid	18.0	0.7	2.0	8.1
Other 3rd Party[b]	4.8	2.8	2.0	3.6
Private	(36.5)	(39.9)	(92.3)	(39.0)
Client Fees	9.3	12.7	5.4	11.2
Private Insurance	27.3	27.2	86.9	27.8
Other	(4.8)	(10.7)	(1.6)	(8.1)
Philanthropy	0.7	2.3	0.9	1.6
Others	4.8	2.3	5.4	6.5
Total	(100%) 100%	(100%) 100%	(100%) 100%	(100%) 100%
Medicaid Revenue ($)				
Mean	141,152			
Standard Error	78,120			
First Quartile	5,000			
Median	16,796			
Third Quartile	98,979			
Total Revenue ($)				
Mean	695,434	465,657	722,539	544,776
Standard Error	178,735	90,956	1,022,714	85,600
Median	305,685	196,165	40,650	221,253

[a] Includes ADAMHA Block Grants, Other State Alcohol-Drug Agency, Other State Funds (non-Medicaid), and Local Funds.

[b] Includes Medicare and CHAMPUS

Source: Phase I, 1990 Drug Services Research Survey, Brandeis University

Table 5. Percent of Revenues from Medicaid for Facilities Receiving Medicaid Funding by Modality and Ownership

	Percent Revenues from Medicaid		
	Mean (%)	Standard Error	Median (%)
Modality			
Hospital Inpatient[a]	24.5	8.1	15.0
Residential[a]	13.9	12.8	5.0
Outpatient Non-methadone[a]	12.7	6.9	5.5
Methadone[a]	30.0	9.8	23.0
Residential and Outpatient[b]	11.2	6.9	5.5
Hospital Inpatient and Outpatient	15.2	5.3	10.0
Other	13.6	12.0	5.0
Ownership			
Private For-Profit	20.3	8.7	11.5
Private Non-Profit	16.6	3.1	9.0
Public	15.6	6.8	7.5
All Reporting Facilities	16.8	2.8	9.0

[a] single modality

[b] outpatient refers to methadone and non-methadone outpatient facilities

[c] includes all other multiple modality facilities

Source: Phase I, 1990 Drug Services Research Survey, Brandeis University

Table 6. Capacity and Utilization of Facilities With and Without Medicaid Certification

	Certification			
	Yes	No	DK	Total
Census (3/30/90)	307,081	346,315	65,689	719,084
Capacity (3/30/90)	323,853	422,915	73,013	819,781
Medicaid Clients (12 month)	125,467	---	---	125,467
Annual Admissions	918,382	1,400,865	269,628	2,588,875
Annual Discharges	819,671	1,077,671	226,351	2,123,693
Proportion Medicaid Admissions	0.14	---	---	0.05
Proportion Medicaid Discharges	0.15	---	---	0.06

Source: Phase I, 1990 Drug Services Research Survey, Brandeis University

Table 7. Percentage Distribution of Clients in Treatment by Expected Source of Payment

Expected Source of Payment		
	n	%
Medicaid	273	12.6
Insurance[a]	593	27.4
Self/No Pay[b]	510	23.6
All Other[c]	787	36.4
Total	2,163	100.0%

[a] Includes public and private insurance mechanisms (HMO, other prepaid plan, private insurance, Medicare, DOD and CHAMPUS) exclusive of Medicaid.

[b] Includes self-payment and no expected source of payment because of public subsidy, philanthropy, and unspecified.

[c] Includes social services, public housing/home relief, other, and unknown.

Source: Phase II, 1990 Drug Services Research Survey, Brandeis University

Table 8. Percentage Distribution of Medicaid Clients in Treatment by Demographic Characteristics

	Expected Source of Payment			
	Medicaid (%)	Insurance (%)	Self/No (%)	Other (%)
Age				
< 18	[illegible]	8.7	2.0	0.3
18 - 24	10.9	10.6	18.5	24.0
25 - 34	41.8	37.1	52.1	43.1
35 - 44	34.8	23.1	19.2	20.0
45 - 64	6.9	16.5	6.3	6.0
65 +	0.0	4.1	1.7	0.3
	100.0%	100.0%	100.0%	100.0%
Gender				
Male	67.1	78.8	77.9	73.8
Female	32.9	21.1	22.1	26.0
	100.0%	100.0%	100.0%	100.0%
Race/Ethnicity				
White	39.3	62.8	69.5	58.4
Black	47.7	22.4	23.7	30.0
Hispanic	6.9	7.3	2.[illegible]	6.0
Other/Unknown	6.8	7.6	4.6	3.2
	100.0%	100.0%	100.0%	100.0%

Source: Phase II, 1990 Drug Services Research Survey, Brandeis University

Table 9. Percentage Distribution of Medicaid and Other Clients in Treatment by Criminal Justice History

	Expected Source of Payment			
	Medicaid (%)	Insurance (%)	Self/No (%)	Other (%)
DWI/DUI Arrests				
No	49.5	33.3	36.3	31.9
Yes	19.9	36.7	37.4	29.4
Unknown	30.6	28.9	26.3	38.9
	100.0%	100.0%	100.0%	100.0%
Other Arrests				
No	21.8	32.0	36.3	25.8
Yes	54.9	38.3	47.3	58.8
Unknown	28.9	29.6	14.9	21.2
	100.0%	100.0%	100.0%	100.0%
Prison/Jail Record				
No	30.6	39.7	41.5	27.6
Yes	41.5	19.4	29.2	39.4
Unknown	41.5	40.8	29.3	33.0
	100.0%	100.0%	100.0%	100.0%
Treatment/Probation				
No	63.3	56.8	48.7	44.5
Yes	14.9	16.1	37.4	25.8
Unknown	21.8	27.1	19.9	33.0
	100.0%	100.0%	100.0%	100.0%

Source: Phase II, 1990 Drug Services Research Survey, Brandeis University

Table 10. Percent of Distribution of Medicaid and Other Clients in Treatment by Facility Characteristics

	Expected Source of Payment			
	Medicaid (%)	Insurance (%)	Self/No (%)	Other (%)
Modality				
Hospital Inpatient[a]	16.0	30.0	2.7	10.5
Residential[a]	4.3	4.3	0.3	27.2
Outpatient Non-Methadone[a]	44.2	25.2	29.6	27.9
Methadone[a]	10.2	4.3	9.2	5.4
Residential and Outpatient[b]	12.9	14.3	48.0	26.1
Hospital Inpatient and Outpatient[b]	10.2	15.2	0.3	2.8
Other[c]	0.6	0.8	1.2	0.1
	100.0%	100.0%	100.0%	100.0%
Ownership				
Private For-Profit	5.3	31.8	0.3	3.3
Private Non-Profit	64.8	56.4	48.0	71.5
Public	30.0	11.8	52.0	25.3
	100.0%	100.0%	100.0%	100.0%

[a] single modality

[b] outpatient refers to methadone and non-methadone outpatient facilities

[c] includes all other multiple modality facilities

Source: Phase II, 1990 Drug Services Research Survey, Brandeis University

VARIATIONS IN STATE MEDICAID PROGRAM EXPENDITURES FOR SUBSTANCE ABUSE UNITS AND FACILITIES

Mary Jo Larson, Ph.D. and Constance M. Horgan, Sc.D.

INTRODUCTION

The Medicaid program has complex requirements and options and provides a great deal of latitude to States in determining which substance abuse[1] services to fund. Consequently, there is tremendous variation in the way States make use of Medicaid benefits to finance substance abuse treatment services (Fox, Wicks, McManus, and Kelly 1991; GAO 1990; Fountain, Rachal, and Cavanaugh 1991; Gates 1992; Solloway 1992). There is similar diversity in the utilization limits and the types of provider reimbursement methods used for substance abuse services. The complexity of this State-Federal cooperative program cannot be overstated. Only recently have reports been issued which describe State policies for Medicaid funding of substance abuse programs (Fox et al. 1991; Solloway 1992; Solloway 1992b).

Unlike the national Medicare program, the Medicaid program is a collaborative State and Federal program which does not have a uniform national data system permitting analysis of expenditures by type of disorder (e.g., drug abuse, alcohol abuse) or type of service (e.g., detoxification). Since States are not required to report claims-level data, many do not have systems for this type of expenditure reporting. This limitation is changing, however, now that the Health Care Financing Administration (HCFA) has in place a mechanism to receive data allowing research of Medicaid claims data from a limited number of participating States.

To date, only three States have had any analyses published regarding substance abuse expenditures based upon these claims data (Wright and Buck 1991; Rosenbach and Huber 1994). Wright and Buck (1991), studying California and Michigan claims data from 1984, estimated that alcohol, drug abuse, and mental health expenditures (ADM) net of long-term care were a significant component of Medicaid spending. They also concluded, however, that expenditures related to alcohol and drug abuse diagnoses were only a fraction of all ADM expenditures, and reported substantial differences in expenditures between the two States. Of all ADM care, the percentage associated with alcohol and drug diagnoses was nearly four times greater in Michigan than California (6.4 percent and 1.7 percent, respectively). Similarly, expenditures for alcohol and drug diagnoses per recipient were nearly four times greater in Michigan than California ($1,463 and $378, respectively). These differences went beyond those anticipated based on the demographic makeup of the Medicaid ADM population in the two States (Wright and Buck 1991).

Previous analyses have pointed out the difficulties of research relying on State descriptions of Medicaid policies and practices or claims. Each State uses its own taxonomy of services; there is no uniformity in the way substance abuse services are linked to benefit categories; there are inconsistencies in what is reported by different knowledgeable sources within the State; usually State officials have no expenditure data by which to analyze actual State practices; and there are problems in using the existing diagnostic and procedure codes on claims to identify substance abusers and substance abuse treatment (Solloway 1992). Linkages between the service categories and reimbursement categories are difficult to establish, particularly since most States lack mechanisms to track Medicaid clients at all, much less track Medicaid substance abuse clients separately. Only six States have separate codes or specific procedures for identifying those Medicaid clients who receive substance abuse services. These States are: *Illinois, Maryland, Massachusetts, New York, Ohio, and Oregon* (Solloway 1992). A final problem for substance research is that States frequently change their use of Medicaid benefits as they adopt new strategies, target new problems, and learn about options eligible for Federal match (Solloway 1992).

This paper uses revenue data reported by substance abuse specialty facilities and units to address four research questions:

(1) What is the level of support received from Medicaid by substance abuse treatment units and facilities in each State, in terms of expenditures per recipient, percent of total substance abuse revenues received from Medicaid, and percent of substance abuse facilities accepting Medicaid funds?

(2) Does the type of Medicaid benefit coverage used by States distinguish States with the highest and lowest expenditure patterns?

(3) What are the characteristics of States with high and low Medicaid expenditures for substance abuse treatment units and facilities?

(4) What innovations in use of benefits, enrollment of populations, or linkages between agencies might lead to an enhanced role for Medicaid funding of substance abuse treatment units and facilities?

The advantage of using specialty facility-reported data is that the role of Medicaid can be described within the context of the State's entire treatment system. Analyses of claims data generally cannot describe the type of substance abuse treatment supported by Medicaid revenue. Indeed, when relying upon claims, it is difficult to distinguish rehabilitation and other treatment services from other services used as consequence of a disorder, but not necessarily to treat the disorder.

This analysis focuses only on those services offered by specialty treatment units and facilities. Outside the scope of this paper are drug treatment services not delivered by these specialty facilities such as from individual physicians or social workers, or in scatterbeds of general hospitals without specialty units. Also outside the scope is drug abuse-related care which is not generally considered drug abuse treatment, such as emergency room episodes or treatment of medical complications associated with a drug abuse disorder or diagnosis (e.g., overdose, pregnancy complications associated with drug use).

This paper on State variations in Medicaid is a companion paper to the one which provides the first description of national Medicaid expenditures for substance abuse services using financial data reported from a nationally representative sample of substance abuse treatment facilities (Horgan, Larson, and Simon 1994). The national paper also provides an overview of coverage of substance abuse services in terms of mandatory, optional, and excluded benefits. These papers together describe how current Medicaid policies and other forces have combined to affect the distribution of Medicaid substance abuse expenditures nationally, and have created immense variation in the practices of individual States.

The sections which follow describe the variation in Medicaid expenditures across States in terms of average substance abuse expenditures per Medicaid recipient, percent of total substance abuse revenues received from Medicaid, and percent of substance abuse facilities accepting Medicaid funds. After this description, the paper compares Medicaid spending for substance abuse (e.g., expenditures per recipient, percent of revenues and percent of participating facilities) to various other State Medicaid program characteristics. For a limited number of States, more in-depth analysis is presented to explore hypotheses about what leads to a more extensive role for Medicaid. Finally, the paper describes some innovative State practices and presents conclusions about Medicaid.

METHODS

This paper analyzes data from the 1989 National Drug and Alcoholism Treatment Unit Survey (NDATUS). The survey was jointly sponsored by the National Institute on Drug Abuse (NIDA) and the National Institute on Alcohol Abuse and Alcoholism (NIAAA). NDATUS covers most known substance abuse treatment and prevention units or facilities; however, response rates vary from State to State and type of unit. NIDA relies upon the States to ensure proper identification of all existing active units, including the identification of new and closed units, and to assist in distributing

and collecting the NDATUS forms (NIDA and NIAAA 1991).

First, we estimated the level of Medicaid revenues from the 1989 survey by calculating the amount of public third-party funds received for substance treatment services only for those facilities which indicated they accepted Medicaid. This estimate over-represents Medicaid funding to the extent that Medicare, CHAMPUS, and other public third party sources are received by these facilities. While for some States and facilities this amount may be significant, we doubt it is a substantial bias since very little substance abuse funding is received from other types of public third-party funding (NIDA 1990). Beginning in 1990, NDATUS requested separate reporting of Medicaid revenues, eliminating the need to estimate these funds using the above method.

Second, we combined alcohol and drug abuse funds because a substantial proportion of public third-party funds (over 16 percent) could not be reported separately for alcohol and drug abuse services.[3]

Third, we compared the expenditure data to what was known about Medicaid benefits in each State. Two recent reports were used as the sources of information about how State Medicaid programs are organized, what benefits are covered, and what restrictions apply. These two studies were based upon detailed mailed surveys and telephone interviews with State substance abuse directors and Medicaid staff.

In the first study, the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA) requested that Fox Health Policy Consultants and McManus Health Policy, Inc. conduct a 50-State survey of State Medicaid coverage policies and practices as of June 30, 1989 for mental health and substance abuse services, focusing on the child and adolescent population. Their detailed set of tables on benefits and coverage policies was reviewed for baseline information (Fox et al. 1991).

The second study which provided baseline data was conducted by the Intergovernmental Health Policy Program (IHHP) at George Washington University. The project mailed survey instruments to State Medicaid offices, following up on the surveys with a phone call. Project staff then compiled a narrative summary or a "profile" for each State. This profile was reviewed and corrected by State officials. During this lengthy process the project staff noted that Medicaid benefits and policies affecting substance abuse services often changed, making the original survey response outdated (Solloway 1992). The reader interested in detailed descriptions of the State benefit programs is referred to these two sources.

The analysis presented in this paper offers some valuable insights and the first estimates of Medicaid expenditures for the 50 States. However, there are important limitations associated with the data available.

As noted earlier, *the scope of this study is limited to funding in specialty units and facilities*. As such, no comments can be made about Medicaid expenditures for other substance abuse-related services in other settings, such as inpatient stays in scatterbeds of hospitals. Also excluded are substance abuse-related services that are not direct treatment services, such as emergency room episodes, care for complications of pregnancies, etc. In other words, the expenditures presented here are estimates of direct treatment expenditures in specialty units.

The IHPP survey discovered that very few Medicaid programs are able to identify expenditures separately for substance abuse facilities. *New York* and *Michigan* are two such States. Our analysis of 1989 New York data, where 94 percent of facilities responded to NDATUS, captured about 57 percent of the all Medicaid expenditures for treatment reported by the New York Medicaid system. The differential may represent some under-reporting at NDATUS facilities, but presumably represents the degree to which substance abuse treatment occurs in settings or facilities outside of NDATUS. At Michigan State, our analysis accounted for about 76 percent of Medicaid expenditures reported in 1990 by the State system, even though only 70 percent of NDATUS facilities responded to the 1989 survey. Thus, the magnitude of services

outside NDATUS must be smaller in Michigan than New York.

The NDATUS is the only data source with funding information on known specialty substance abuse units.[4] There are important limitations associated with this data source. First, the sample response rate varies from year to year, with about 78 percent of active (listed) units/facilities returning completed surveys in 1989. NIDA did not provide sampling weights or otherwise adjust the responses in 1989 to account for the sample attrition associated with nonresponse, and we made no adjustments in our estimates for missing surveys.[5] Thus the estimated Medicaid expenditures reported here are conservative or underestimates of the true magnitude of Medicaid funding. Also, it is commonly believed that for-profit providers are less likely to respond to NDATUS than other providers, which may introduce some bias in these estimates.

A second related problem is that the response rates across States vary tremendously (NIDA and NIAAA 1991). Also, since States are responsible for identifying new treatment units, closed units, and ensuring active participation of existing units, this introduces another source of variation and potential bias. Since this variation may affect the ranking of States on our measures, we have indicated on each listing which States have response rates below 70 percent. .

A third limitation is that NDATUS is a facility-based survey, so we cannot answer questions about the types of clients who receive Medicaid-reimbursed treatment. The issue of client eligibility as a source of State expenditure variation would be a useful investigation. Using national data, the issue of Medicaid client characteristics is addressed in the companion paper by Horgan, Larson, and Simon (1993).

RESULTS

Characteristics of State Medicaid Expenditures for Substance Abuse Treatment Units

Tables 1-3 list each State ranked by three characteristics of Medicaid program expenditures:

- expenditures per recipient,
- the Medicaid proportion or "share" of total funding,
- the Medicaid proportion or "scope" of facilities covered.[6]

The tables present a wide range for each of the three spending characteristics.

First, the substance abuse expenditures per Medicaid recipient vary tremendously across States (table 1). Medicaid expenditures for substance abuse care as reported by specialty treatment facilities range from a low of under one dollar per recipient in six States (Virginia, Alaska, Hawaii, Delaware, Alabama, and Nevada) to over $77 per recipient in New York State. While the average expenditure per recipient (weighted by population) was about $15 in 1989, the distribution is highly skewed with only 10 States spending more than this level (New York, North Dakota, Vermont, Indiana, Wisconsin, Iowa, Pennsylvania, New Hampshire, Kansas, Colorado). In table 1, Medicaid expenditures are calculated from 1989 financial reports of substance abuse treatment facilities and the number of Medicaid recipients are calculated as the total number of recipients excluding those age 65 and older.

The broad range in spending per recipient may exist for several reasons, though the existing data does not allow us to understand the role of each of these factors. There may be State variations in the proportion of the Medicaid-enrolled population that are substance abusers. States have differing eligibility practices, but the degree to which these practices results in the differential enrollment of various populations at high-risk for substance abuse disorders is unknown. For example, the income threshold for children, the income threshold for

pregnant women, the adoption of benefits for optional groups, particularly the disabled, may all be associated with the proportion of Medicaid population with a substance abuse disorder. Thus, these per capita expenditure estimates may reflect the overall level of need in the Medicaid population or Medicaid targeting/outreach to substance abusers.

There are also variations in reimbursable services under Medicaid in each State, as documented in recent studies (Fox et al. 1991; Solloway 1992). The per capita expenditures may reflect the different mix of services covered, with some States covering a more expensive mix than others. Utilization rates of these services may vary because of differences in the availability or accessibility of care or State policies to manage care access. In particular, utilization limits on substance abuse care are common, but vary considerably across State Medicaid programs (Fox et al. 1991; Solloway 1992). Furthermore, Medicaid payment rates and methods vary from State to State, with some States reimbursing providers' costs, while others operate with fee schedules reimbursing significantly below full charges. Finally, since some States have incomplete reporting from NDATUS facilities, some variation may be associated with the bias introduced from survey nonresponse.

Second, the "Medicaid share" of total substance abuse funding in a State varies considerably as well, but the range is not as broad as it was for the first spending pattern dimension (table 2). In the highest ranked States, Medicaid represents about one-quarter of all substance abuse funding, with other public sources, client fees, and private insurance payments accounting for the remainder. On average, less than 8 percent of all substance abuse funds at treatment facilities are estimated to be from Medicaid, while the percentage ranges from a fraction of 1 percent in six States (Alaska, Alabama, Arizona, Hawaii, Nebraska, and Nevada) to about 25 percent in Vermont and New York. A State's ranking on this dimension reflects the Medicaid expenditures per client (and indirectly, the factors described previously affecting the level of these expenditures) and the financing strategy of a State. For example, States with a high level of cooperation between the State substance abuse agency and the Medicaid agency might have a higher share of funding received from Medicaid.

Additionally, some States lack significant involvement of private payers for treatment, which might result in greater reliance on Medicaid, since the system would be dominated by public programs. Within the public systems, some States have created a consolidated assessment and referral program which deemphasizes the client's Medicaid status (e.g., Minnesota and Washington), which might result in fewer Medicaid dollars recovered than in some other States, since clients may be referred more frequently to nonreimbursable treatment settings. Some States heavily support facilities excluded from the Federal Medicaid program (e.g., Michigan, Washington, New York), which may result in recovering a smaller share of funding from Medicaid than States using other strategies. Finally, States where a wider scope of facilities are eligible for Medicaid reimbursement (described below) are more likely to have a higher share of funding received from Medicaid. Again, some bias may be introduced by the uneven reporting to NDATUS. For example, if facilities receiving Medicaid funds responded more frequently than other facilities, then the Medicaid share of funding might be overestimated in States with low NDATUS response rates.

Third, the percentage of substance abuse facilities accepting any Medicaid funding, or the "scope" of facility coverage in the State shows considerable variation, with a broader range than the Medicaid share of funding (table 3). On average, about one-third of all facilities reported that they accept Medicaid reimbursements. The scope varied in individual States from less than 10 percent in six States (Arizona, California, Delaware, Idaho, Nevada, South Dakota) to over 50 percent in eight States (Georgia, Indiana, Maine, North Carolina, New York, South Carolina, Vermont, and Wyoming). The scope of facility coverage is determined by the State choice of Medicaid benefits (e.g., whether or not optional benefits such as rehabilitation or clinic services are included) and State licensing and Medicaid certification practices. The State reimbursement levels and practices might

also encourage or discourage substance abuse provider participation in Medicaid. Again, some bias may be introduced in States with a low NDATUS response level.

As noted previously, while the three dimensions reflect unique aspects of the State Medicaid programs, they are not independent measures. Seventeen States rank in the same third, e.g., bottom, middle, or top, on all three spending patterns.

States With the "Lowest" or "Highest" Medicaid Spending Patterns

The Medicaid benefit structure in each State for substance abuse services is often difficult for State officials to describe and document (Solloway 1992), and the degree to which substance abusers are eligible for Medicaid has not been studied directly. To develop some hypotheses about why expenditure patterns vary so widely among States, we identified those States which had the lowest expenditures and the highest expenditures on all three spending dimensions. Eight States ranked in the bottom third on all dimensions and six States ranked in the top third on all dimensions (see exhibit 1). Examples of these States are briefly discussed next, with attention to common characteristics which might explain the observed expenditure patterns.

The three spending dimensions describe the magnitude of the Medicaid role in each State. If the only policy goal were to have the highest possible funding come from Medicaid sources, these measures would correlate positively with the success of each State, with the highest ranking always the preferred status. However, several policy goals may be important in a State's choice of financing strategy. High spending States might be achieving some of these goals but not achieving others. For example, high spending States might have a more expensive mix of services covered under their benefit programs than other States. This difference would result in greater Medicaid expenditures, but might also result in fewer recipients getting care. States with unlimited access to care would have greater expenditures than States with limits on days or visits. Some utilization, however, might reflect inappropriate or unnecessary care. And finally, States with reduced fees might pay less per unit of care than States paying facility costs. Thus, lower expenditures might reflect smart-buying strategies by the State. Undoubtedly, a combination of desirable and undesirable factors influence each State's spending rates as shown in these measures.

The distinction between the lowest and highest spending pattern States on each dimension is illustrated in exhibit 2. The only States illustrated here are those 14 which are either in the top third on all dimensions or the bottom third on all dimensions. On the first measure, expenditures per recipient, all the "top third" States have very low expenditures. Interestingly, among the "most generous" States, North Dakota and New York, per capita expenditure are outliers, but Michigan and other States have much more moderate per capita expenditures. On the second and third measures, the distinction between the "low" and "high" expenditure States is more clear. Vermont and New York are outliers on the "share" of funding from Medicaid. Vermont is an outlier on the "scope" of facility coverage. It is clear from this illustration that high spending pattern States differ from low, especially in the scope of their coverage.

States with the "Lowest" Medicaid Expenditure Patterns

Among the States in the bottom third on all dimensions are: California, Delaware, District of Columbia, Hawaii, South Dakota, Texas, Virginia, and Washington. The practices of two large States, **California and Texas**, have been studied previously using tape-to-tape data and in a recent General Accounting Office (GAO) study. We supplemented these sources with our own analysis from NDATUS.

California can be characterized as a State with a well-developed substance abuse treatment system. Social rehabilitation, an approach which moves away from the medically oriented, chemical dependency programs funded more typically by Medicaid, is predominant in California. The single

largest payer for substance abuse services was private third party payments in 1989: over $278 million was received from this source, or 40 percent of all substance abuse funding. Client fees are the second largest source (NIDA and NIAAA 1990). California has been successful in receiving three NIDA grants and 25 Office of Substance Abuse Prevention (OSAP) grants for drug treatment services for pregnant/postpartum women, demonstrating treatment innovativeness (GAO 1991a). California Medicaid, or Medi-Cal, enrolls a higher ratio of the poor in Medicaid than the U.S. average (1.28 compared to 0.82 in 1984), (Wright and Buck 1991). But the tradeoff appears to be greater constraints on benefits, fees, or other dimensions which result in lower expenditures per recipient than the U.S. average ($1,023 vs. $1,594 in 1984). As previously noted, only 1.7 percent of all ADM expenditures under Medicaid were for alcohol and drug abuse diagnosis; only 4.6 percent of ADM recipients had an alcohol or drug abuse diagnosis (Wright and Buck 1991).

Under the State plan in 1990, Medi-Cal paid for a variety of services when medically indicated. Of particular note, using the optional Medicaid Clinic benefit, Medi-Cal reimburses for detoxification and methadone maintenance by physicians, and psychotherapy or counseling by psychiatrists and psychologists (Solloway 1992b). Through contracts with County substance abuse programs, Medi-Cal reimbursed for the methadone maintenance treatment program, the drug free treatment program, the naltrexone treatment program, and the day habilitative program (Solloway 1992b). Inpatient general hospital services appear to be limited to detoxification only; and inpatient [substance abuse] services in psychiatric facilities for persons under 21 were reimbursed when substance abuse was a secondary disorder only (Fox et al. 1991).

Table 4 presents our analysis of Medi-Cal revenues from the 1989 NDATUS.[7] With overall funding to substance abuse facilities exceeding $697 million, only $10.4 million was received from Medicaid, less than 2 percent. The Medicaid funding level is low primarily because so few substance abuse facilities accept Medicaid (only 81 out of 1184 treatment facilities, or less than 7 percent). Reflecting the Medi-Cal benefit structure, a relatively high rate of facility participation and the greatest share of Medicaid funding is reported by outpatient facilities. $5.3 million of the $10.4 million of expenditures were for outpatient services. Psychiatric hospitals received a greater level of Medi-Cal funding ($3.0 million) than general hospitals ($1.4 million).

This low level of funding for substance abuse services may reflect several things. As Wright and Buck (1991) noted, Medi-Cal serves a larger than average share of low-income persons. Wright and Buck also noted that a significant proportion of ADM recipients had substance abuse diagnoses. Thus, California may sacrifice benefit coverage in order to cover a broader group of low-income individuals. Given the greater enrollment, it is also likely that Medicaid recipients would be a more substantial proportion of clients seen at California facilities than is reflected in NDATUS. It appears as though California has kept the role of Medicaid small by focusing its benefits on outpatient services, constraining the number of reimbursed outpatient facilities through using County contracts, and limiting inpatient care in general hospitals to detoxication only. It is unknown from existing data what proportion of the clients paying for treatment with their own fees, or receiving treatment subsidized by State and local government, are eligible for Medicaid-reimbursed care.

Texas placed severe limits on the role of Medicaid in 1990 by limiting most services to two population groups, children and adolescents. Texas seems to be improving upon what could be characterized in 1990 as a relatively undeveloped substance abuse treatment system. For example, Texas did not provide specially designed treatment services for pregnant women at the time of the GAO study and had no slots specifically set aside for pregnant abusers or mothers of small children (GAO 1991a, ADMS). The State received three drug treatment OSAP grants (GAO 1991a). However, at the time of a second report, Texas had seven licensed residential treatment facilities with 181 beds for women and their children (Gates 1992).

Another recent innovation is that Texas has been attempting to get a waiver of the institutions for mental diseases (IMD) exclusion for residential treatment for pregnant women, but has been unsuccessful in getting HCFA approval (GAO 1991a). The single largest source of substance abuse funding in Texas was private third party payments, as in California. This source provides 37 percent of total funding. Another large source was State government funds (excluding the ADMS block grant) (NIDA and NIAAA 1990).

While all Medicaid recipients were eligible for detoxification services and diagnostic assessments in Texas in 1990, only those under age 21 were eligible for counseling services or other care related to a chronic drug or alcohol problem. Other services were reimbursable if the substance abuse problems were complications, that is, not the primary diagnosis. Hospital inpatient stays were limited to the first 5 days for detoxification. Outpatient counseling for persons under 21 years was limited to 26 hours per calendar year for individual counseling and 135 hours per calendar year for group counseling (Solloway 1992b; Marstiller 1990).

Of $142 million total funding for substance abuse facilities in 1989, only $1.8 million (less than 2 percent) was received from Medicaid (see Table 5).[8] Despite the severe limitations on general hospital services, our analysis found that nearly all the estimated Medicaid expenditures were reported at these facilities. Other types of facilities with Medicaid funding included other unspecified facilities, residential facilities, and psychiatric hospitals. While a greater scope of facilities accepted Medicaid than in California, the overall share of funding was not greater, reflecting the severe restrictions on the recipient groups that were eligible for reimbursement.

In summary, there are lessons from these two States with more limited roles for Medicaid. Restricting access to hospital care through the benefit structure, not surprisingly, appears to result in fewer Medicaid expenditures. These States also appear to limit outpatient services as well. There may be other reasons for the low expenditures. For example, substance abuse facilities may have little knowledge about successful recovery of Medicaid funding which may result from lack of communication between the State substance abuse authority and the Medicaid office, or because the State may not understand the full utility of using Medicaid funding for substance abuse care, given the Federal match. Those Medicaid systems in the bottom third for these three dimensions may be models of efficiency, or examples of States where benefits are too constrained; such a distinction cannot be made without further analysis.

States with the "Highest" Medicaid Expenditure Patterns

Among the States with the highest expenditure patterns are Michigan, New York, North Dakota, Pennsylvania, Vermont, and Wisconsin. Within this group, Michigan and New York have received special study using either tape-to-tape data, or as a result of the GAO study. The programs in these two States are described next in some detail.

New York's program appears generous in its coverage for substance abuse care, primarily because it includes persons disabled with substance abuse addictions who do not meet Federal eligibility criteria. As in most States, but unlike Texas, all Medicaid recipients are eligible for substance abuse services. New York's State-only program offers Medicaid eligibility to persons not meeting Federal guidelines, particularly single adults without dependent children. A majority of persons on Medicaid in treatment reportedly do not meet the Federal eligibility criteria. One estimate is that the State receives a Federal match for only 40 percent of Medicaid recipients in treatment (Gates, 1992). New York also used a broad range of Medicaid benefits to pay for such care in 1990. Unlike Texas and California, the two largest sources of funds for substance abuse care were State government and public third-party, 32 and 27 percent, respectively. Private third-party and client fees together represented only 21 percent of all funding (NIDA and NIAAA 1990).

A George Washington University survey provided a detailed description of the broad range of services

that were covered in 1990 (Solloway 1992). Covered alcoholism services included: inpatient hospitalization, outpatient hospital care, clinic or day rehabilitation treatment, family and group therapy, and certain nonphysician services. Freestanding inpatient alcoholism rehabilitation services were also covered, but HCFA had advised the State that these settings were not covered with Federal financial participation because they were classified as IMDs. Coverage for drug abuse services differed from alcohol services. To date, only methadone maintenance treatment in clinics or by physicians was covered; no other outpatient drug abuse services were covered. Hospital inpatient detoxification services for drug abuse were covered with Federal financial participation. The payment rates for inpatient and outpatient facilities were determined by a prospective system. Psychiatric hospitals and free-standing residential alcoholism facilities were reimbursed with a cost-based system with rates determined by different State agencies and methodologies. Physicians and nonphysician individual providers were reimbursed according to a fee schedule. New York also provided services to Medicaid recipients under 39 full capitation plans and five partial capitation plans, where alcoholism services were typically limited to 30 inpatient days per year and 60 outpatient visits, with fee-for-service rates kicking in when these limits were exceeded.

It should be remembered that New York offers a broader range of services than those for which it currently receives a Federal match and that the majority of Medicaid recipients receiving substance abuse care may not have met Federal eligibility criteria.[9] Solloway (1992b) obtained reports from New York's expenditure reporting system. Data tabulated from these reports showed that Medicaid spent $73.2 million on methadone maintenance in 1989; $92.5 million on inpatient drug services; $76.2 million for inpatient alcohol services; and $26.4 million for outpatient alcohol services for a total of $268.3 million for all Medicaid substance abuse expenditures (Solloway 1992b).

Our analysis of NDATUS estimated about $154.1 million from Medicaid, or about 57 percent of the expenditures captured in their reporting program. Table 6 provides estimates based on the 1989 NDATUS of the number of facilities accepting Medicaid and the amount of Medicaid funding in New York.[10] The greatest proportion of expenditures are for general hospital services, with nearly one-half of revenues at these facilities received from Medicaid. However, general hospital services are only one-third of all expenditures. The majority of the remaining expenditures are at outpatient facilities and other facilities.

Among other innovations, New York clearly had a set of policies and procedures that promoted participation in Medicaid, as the majority of facilities in most locations accepted Medicaid payments. The State engaged in a number of activities to strengthen coordination among Medicaid and other agencies.

As previously described, not all of these settings are eligible for Federal financial participation. The State also was studying how to get more substance abusers who are receiving State-only Medicaid onto Supplemental Security Income (SSI) on the basis of disability (Gates 1992), and thus eligible for Federal reimbursement.

Another area where New York was innovative was its case management of pregnant women in certain New York City neighborhoods. A special program coordinates services from over 16 agencies for these clients. One collaboration is provision of a continuum of care to substance-abusing pregnant women and to women with children, to ensure appropriate standards and reimbursement from Medicaid (Solloway 1992b). New York State has received three NIDA grants and six OSAP grants for drug treatment of women, most of which focus on pregnant or postpartum women (GAO 1991).

Michigan is a State that has been studied using tape-to-tape data and is able to report its own expenditure and utilization data (Wright and Buck 1991; Solloway 1992). Michigan is another example of a State substance abuse system which relies heavily on private insurance and client fees; nearly 53 percent of funding was from these two sources in 1989. State funding and public third-

party fees made up rather small shares of total funding, only 14 percent and 8 percent respectively (NIDA and NIAAA 1990).

Michigan enrolled a higher proportion of the poor in Medicaid than the U.S. average (0.95 compared to 0.82 in 1984). A greater proportion of enrollees were on Aid to Families with Dependent Children (AFDC) than the U.S. average (88 percent compared to 71 percent, in 1984, Wright and Buck 1991). According to its FY 1990 data, over 6,000 recipients received substance abuse services; the majority received hospital-based services (3,500) or freestanding counseling (2,400), with about 700 recipients receiving freestanding residential services (Solloway 1992b). There were $17 million in expenditures for hospital-based services ($15 million) and 100% State-funded residential and counseling services ($2 million).

Michigan developed its approach to Medicaid coverage of alcoholism and drug abuse services in part through an early HCFA/NIAAA demonstration project. At the completion of the project, the State continued some of the services with State-only funds. The State operated two Medicaid components for substance abuse services: *a State-only component funded jointly through the State Department of Social Services and the Office of Substance Abuse Services, and a hospital subacute component which receives federal financial participation* (Solloway 1992b). An unusually broad range of services was reimbursable, including: counseling, methadone, intensive outpatient, short-term intensive residential and long-term "intermediate care" residential, and halfway houses (Gates, 1992; Solloway, 1992b). Prior authorization was required for intensive outpatient and residential treatment, and a fee schedule was used for reimbursement. Michigan may be in a period of benefits retrenchment due to budget problems (Gates 1992).

Our analysis of 1989 NDATUS information for Michigan identified about $13 million of expenditures on substance abuse treatment (table 7).[11] Nearly one-half of Michigan's facilities accept Medicaid, with very high participation rates among community mental health centers (CMHCs) and general hospitals. General hospitals and specialty hospitals report both the highest share of funding from Medicaid and the most Medicaid expenditures. While residential and outpatient facilities are eligible for reimbursement, less than 3 percent of their revenues are from Medicaid.

Michigan was one of 10 States which used the Medicaid rehabilitation benefit to cover substance abuse services. Subject to prior authorization, 40 days of partial hospital/day treatment care and 45 counseling visits per 12 month period were allowed (Solloway 1992b). In general, Michigan used a broader than average range of Medicaid benefits to finance substance abuse services. Thus, while Michigan's Medicaid program may be characterized as generous in coverage scope, the role of Medicaid is still relatively limited compared to other funding sources.

Benefit Structure

Medicaid programs entitle recipients to medically necessary care for acute and chronic medical conditions. As an entitlement, Medicaid expenditures are frequently cited for exceeding financial projections, or for growing at rates faster than other State programs. The *three major levers* States can use to constrain expenditures are *eligibility thresholds, types of benefits offered, and reimbursement methods or payment rates.* Exhibit 3 illustrates how those States classified as the top and bottom third on these spending dimensions make use of the Medicaid benefit structures to pay for substance abuse services. The mandatory general hospital benefit and three optional benefit categories, which were frequently used to provide substance abuse services, were reviewed for the two groups of States. The greatest distinction between the two groups appears to be whether the State opens the mandatory hospital benefit to cover rehabilitation and detoxification care. The first dimension illustrates that full coverage of care beyond detoxification is infrequent and occurs only in four States with high spending patterns. These States are Wisconsin, North Dakota, New York, and Vermont. The other two States with high spending patterns (Massachusetts and Pennsylvania) and all States with lower

spending do not cover rehabilitation in a general hospital setting. The second dimension shows that all States with high spending patterns and two States with low spending patterns offer full coverage of detoxification services in general hospitals. The other States with low spending patterns offer coverage with limitations or no coverage at all.

The third dimension in exhibit 3 demonstrates that even among States with high spending patterns, use of the rehabilitation benefit is rare, with only Wisconsin and Michigan using this benefit. Both the optional clinic benefit and the optional outpatient general hospital benefit are used by both high spending and low spending States. However, not all high spending States include these optional benefits. Thus, use of the optional benefit categories does not seem to explain the expenditure differences seen between these two groups of States. Some types of benefits in particular may be underutilized by most States or have potential for greater use.

FACTORS LEADING TO VARIATION IN STATE MEDICAID EXPENDITURES FOR SUBSTANCE ABUSE TREATMENT FACILITIES

Eligible Populations

States indirectly determine the size of the population eligible for Medicaid services in several ways:

- by determining the income thresholds for their welfare programs (AFDC or SSI State supplements),
- by determining which of the optional groups of categorically eligible will be eligible and with what income guidelines,
- by determining whether medically needy will be eligible and with what income guidelines,
- and by determining whether other non-categorical groups will be eligible and with what income guidelines.

While States may cover noncategorical groups, the States receive Federal participation for service expenditures only on behalf of children and pregnant women. Coverage is mandated both for children age 6 in 1990 (phasing up to age 19 in 2001) and for pregnant women and their infants, up to 133 percent of poverty. States may cover pregnant women up to 185 percent of poverty. Over 30 States have at least some coverage above the mandated levels (Fountain, Rachal, and Cavanaugh 1991). We examined the income thresholds for children age 8-19 and pregnant women and infants for the "top" and "bottom" third States. There appears to be little direct correlation between these guidelines and substance abuse expenditures.

A higher rate of substance abuse probably exists among the AFDC, SSI, or medically needy population groups than in the population in general. In particular, substance abuse disorders may be one reason for disability, making an individual eligible for SSI (Fountain, Rachal, and Cavanaugh 1991). Nevertheless, the predominant group with substance abuse problems is young, single males, a group which generally does not meet requirements for the above categorically eligible groups.

States may adopt eligibility thresholds which promote greater enrollment in Medicaid of substance abusers. However, this solution may seem an inefficient way for most States to finance substance abuse services, since the State also becomes obligated to finance a wide range of non-substance abuse benefits as well for these individuals. There is tremendous variation in the size of these categorical groups across States, which reflects both the level of poverty in each State and the policy choices made by each State in setting income-eligibility thresholds for AFDC, SSI, and the medically needy. New York, a State with a large State-only-funded Medicaid program, is piloting a special effort to determine SSI eligibility by reason of disability. Through this strategy, the State would then gain Federal financial participation for a greater portion of the substance abusers enrolled in the State-only Medicaid program (Gates 1992). In most States, an individual, once on SSI, would automatically be eligible for Medicaid.

Even with creative attempts such as New York State's, the current Medicaid eligibility categories remain a barrier to most States enhancing Medicaid's role in providing substance abuse services. One important population group already eligible for Medicaid, however, is the categorically needy group of low-income pregnant women and infants. The drug use rates among this group have been estimated to be as high as 11 to 25 percent. While State income thresholds vary, pregnant women and infants below 133 percent of poverty are eligible in all States, with half of States offering coverage to those women with incomes up to 185 percent of poverty (including all of the largest states). Medicaid in some States covers a substantial proportion of all births (as high as 40 percent in some States), and in most States could be a significant source of payment for substance abuse treatment for this critical population. With a new demonstration under way, the Health Care Financing Administration is exploring cost-effective strategies for providing and financing treatment for pregnant substance abusers, including payments for residential care in IMD facilities. NIDA and OSAP demonstration projects are also promoting expansion of services to this important group of substance abusers (GAO 1991a). For pregnant women needing substance abuse treatment, Medicaid could well become the most important source of payment in many States.

Variations in Type, Scope, and Duration of Services Covered

States have tremendous latitude in setting the type, scope, and duration of substance abuse services to be covered under the Medicaid State plan. Because there is not a distinct "substance abuse" benefit within the Medicaid program, States have not been consistent in the way they classify services commonly used to treat substance abusers and have usually not adopted the optional benefits which allow the greatest range of providers to be funded (i.e., rehabilitation services and clinic services).

States vary also in the types of reimbursement limits they adopt for different types of providers and, in general, adopt more restrictive limits for substance abuse services than other services (Fox et al. 1991; Solloway 1992b). In particular, hospitalization is often limited to detoxification services of 4, 5, or 6 days in duration. Clinic services may be restricted to methadone treatment only. More States are now adopting an "intensive outpatient program" (IOP) benefit for substance abuse services to individuals needing more than the traditional outpatient treatment and less than inpatient treatment. The range of benefits adopted and the types of services allowed under the Medicaid State plan, particularly the type of reimbursement for inpatient hospital services, undoubtedly are major reasons for the variation in State expenditure patterns. The degree of association has not been empirically studied and would be difficult to study given the limitations of existing data.

In general, little is known about reimbursement levels and methods of payment for substance abuse services under Medicaid. While the IHPP survey asked for information on the type and level of payments, it was difficult to summarize because States use different classifications for the same services and providers, and States could not always report the necessary detail (Solloway 1992b). Some States reported they use payment methods linked to provider costs, which would imply their rates are similar to those of other payment sources. But many States have adopted Statewide fee schedules where payments might be much lower than provider costs. This issue deserves additional attention to see to what extent these fees and payment methods are barriers to attracting additional provider participation and increasing the willingness of providers to serve Medicaid recipients. In one State, the Medicaid rates are reportedly only 38 percent of costs for outpatient care and 48 percent of costs for inpatient care (Fountain, Rachal, and Cavanaugh 1991). Another important study in New York City of 78 drug treatment programs found that 54 percent of programs would not treat pregnant women and 67 percent would not treat pregnant women on Medicaid (Zeitel, Bauer, and Brooks 1991). Thus, low Medicaid payment rates could be a significant barrier to enhancing the role of Medicaid in providing substance abuse treatment services.

Residential Treatment Services

States have expressed interest in legislative or procedural changes that would allow them to receive financial participation for services to clients in residential treatment settings. A handful of States fund residential services through Medicaid, even though these reimbursements are not eligible for Federal participation. A substantial share of the remaining States have indicated that the Federal IMD exclusion is the most significant Medicaid barrier to providing the appropriate continuum of services to Medicaid clients. One reason this barrier is so profound is because a Medicaid recipient residing in a facility determined to be an IMD will be ineligible for Medicaid reimbursement for all services that they require, including other non-substance abuse services such as prenatal care.

An important method by which States can fund such services within the current guidelines is to develop small facilities of 16 or less beds. An IMD is defined, in part, as a "hospital, nursing facility, or other institution of more than 16 beds... ." A second approach is to separate all treatment services from the residential living setting. The argument then made is that the facility is not an IMD, since no treatment is provided at the facility (Gates 1992). The extent to which States are actually using these options is undocumented.

Michigan is an example of a State using State-only funds to provide treatment services in residential settings for Medicaid recipients. The Michigan freestanding provider program has a $2 million cap on expenditures, with $1 million going for residential services and $1 million for counseling services. Prior authorization is required for intensive residential rehabilitation and intensive outpatient counseling services, as well as hospital rehabilitation (which does receive Federal participation). A uniform set of criteria is used to determine the intensity of services that are required. Examples of assessment instruments include the Addiction Severity Index (ASI) for the adult population and the Personal Experience Inventory (PEI) for adolescents, and other guidelines established by the State (Solloway 1992b).

Rehabilitation Benefit for Special Populations

While only a limited number of States use the optional rehabilitation benefit to fund substance abuse services, this category offers the most flexibility in terms of the types of providers that can be reimbursed. Michigan, again, is an example of a State making extensive use of this benefit. The State funds a range of services under this benefit, including inpatient hospital care, partial hospitalization/day treatment, crisis intervention, diagnosis and intervention, referral, methadone maintenance, and outpatient counseling (Solloway 1992b). Massachusetts uses the rehabilitation benefit to fund methadone counseling, methadone dosing, and acupuncture detoxification (Solloway 1992).

Early and Periodic Screening, Diagnosis, and Treatment (EPSDT)

The Omnibus Budget Reconciliation Act of 1989 requires that, for all Medicaid-eligible children, any service required as a result of an EPSDT screen must be provided by the State Medicaid program, regardless of whether that service is covered under the State's plan (Solloway 1992). There is no example of a State program that widely uses this benefit for coverage of substance abuse services. Several observers have noted the potential usefulness of the early and periodic screening, diagnosis, and treatment (EPSDT) benefit for children aged 21 and under for expanding the range of service options available to children and adolescent substance abusers (Solloway 1992; Fox et al., 1991).

Variations in Treatment Need and Public Expenditures

It is unknown to what degree State Medicaid spending reflects variations in treatment need. It is well documented, however, that patterns of substance use and abuse vary by geographic areas (NIDA 1990; Schlesinger and Dorwart 1992; Pope 1994). Pope examined a range of available data when he studied State public expenditures for substance abuse treatment. He found substantial variation in many measures which approximate

need: estimates of the number of cocaine addicts, number of IV drug abusers, and drug arrests. Other indicators showed less variation: alcohol arrests, liver cirrhosis deaths, alcohol sales, and motor vehicle fatalities. Through correlation and multivariate analysis, Pope concluded that State and local spending was not strongly correlated to indicators of need for services (Pope 1994). Pope's per capita public expenditures on substance abuse services for the top and bottom third of spending States are shown in Table 8. Medicaid and other public expenditures in these States do not appear to be correlated.

Schlesinger and Dorwart (1992) also found evidence of substantial geographic variations in both treatment need and treatment capacity when studying the 50 largest cities in the United States. They concluded that there is as much as a fivefold difference between highest and lowest need for treatment, there was a tenfold difference between highest and lowest in treatment capacity per capita, and differences between treatment capacity were only partially related to differences in treatment need.

The characteristics of the Medicaid population vary across States. Thus, differences in the number of adolescents, single males, disabled, and other high risk individuals enrolled on Medicaid may explain some of the expenditure variations. However, when Wright and Buck (1991) compared expenditures in California and Michigan, they concluded that the size of the expenditure difference could not be explained by the different demographics of the two States.

Examples of Innovative Medicaid Practices

Linkages Between State Medicaid and Substance Abuse Offices

The case management benefit and Medicaid "waivers" offer mechanisms to coordinate a broad range of services (Gates 1992). Coordination is most effective when it goes beyond Medicaid services to incorporate the State alcohol and drug abuse agency as well as other appropriate agencies. While States have varying degrees of interagency coordination that may be formal or informal, Solloway (1992) identified specific collaborative efforts between the substance abuse agency and the Medicaid office in the following States: California, Illinois, Maryland, New Jersey, New York, North Carolina, Ohio, Oregon, Pennsylvania, and Wisconsin.

As an example, in California, treatment services are provided to Medi-Cal recipients through an interagency agreement between the Department of Health Services and the Department of Alcohol and Drug Programs. Policies governing treatment in either agency are reviewed by the other agency as well. Maryland Medicaid has a designated staff individual who works collaboratively with the Alcohol and Drug Abuse agency to develop Medicaid reimbursement policies. New Jersey is developing a Statewide master plan for substance abuse services through a collaborative effort. The two alcohol and drug divisions and the Medicaid office in New York have developed a continuum of care to substance-abusing pregnant women and to women with children to ensure access to appropriate services under Medicaid. The two agencies in Wisconsin jointly developed a benefit for day treatment and explored developing a benefit for residential treatment (Solloway 1992b).

Blending of Interagency Budgets

Minnesota operates a unique system where a Consolidated Chemical Dependency Treatment Fund has been established to provide treatment to low income, chemically dependent persons. The fund, which operates somewhat like an insurance policy for low income individuals, is financed from Federal, State, and local revenues and uses standard assessment criteria to place clients with licensed treatment providers. The fund has apparently resulted in improved access, rapid assessment and expanded treatment options which, in turn, have resulted in a 20 percent annual growth in the number of clients served and in costs. The recommended level of care depends upon a client's assessment, not a client's eligibility for Medicaid or other programs. Prices are negotiated between the county or Indian reservation and the provider, with

prices averaging about 20 to 30 percent less than other third-party fees (Solloway 1992b). The consolidated fund idea deserves additional study regarding the access, quality, and cost outcomes of this innovation.

Other States sometimes combine Medicaid and other funding into a single stream of programming and resources for certain population groups only. For example, Washington State operates a special continuum of services for pregnant women, and Michigan operates one combined program funded through State-only dollars for both Medicaid and non-Medicaid clients.

SUMMARY AND CONCLUSION

This paper describes how Medicaid programs function in certain States which have expenditure patterns which might be characterized as "most extensive" or "least extensive" for substance abuse care. The paper demonstrates that there is tremendous variation among all States in Medicaid expenditures, the benefits adopted, and the types of facilities reimbursed. While some of this variation probably reflects intentional State financing choices, some of the variation is undoubtedly associated with the complexity of the program itself: the confusion about what services and locations are eligible for reimbursement; the degree to which States use waivers for special population groups; the coordination between the substance abuse and Medicaid State officials; the ease of matching Medicaid benefits in the State plan to the current drug abuse treatment system. High expenditure patterns are desirable characteristics if a State wants to maximize the Federal reimbursement for substance abuse care or wants to enhance the role of Medicaid in providing substance abuse services for other reasons. High expenditure patterns might also be indicative of undesirable characteristics, such as overreliance upon an expensive mix of service settings or overutilization of services if there are no reimbursement limits or control mechanisms. Overall, however, Medicaid is currently playing a small and sometimes insignificant role in the financing of substance abuse care. Thus, the major motivation of this paper has been to identify States where the Medicaid role is augmented.

Future research on national and State Medicaid issues would be enhanced by more complete and reliable data sources. Future analysis might compare the estimates generated from NDATUS to expenditure reports from States in places where Medicaid systems allow separate tracking of reimbursements to substance abuse providers. From these State systems, one could estimate expenditures for these specialty providers and all other types of treatment providers as well. One would expect that the use of specialty versus general sector providers would be influenced by the benefits covered under Medicaid.

A series of conclusions can be reached from this analysis of State-level expenditures.

First, there is considerable variation in State Medicaid program expenditures for substance abuse units and facilities. While the average expenditure per recipient is about $15, the median is about $6. Only 10 States have expenditures that exceed this average and only a small number of States have exceptionally high expenditures. There is considerable variation in the scope of facility coverage, with over 40 percent of facilities accepting Medicaid among the top third of States and less than 10 percent of facilities accepting Medicaid among the bottom third of States. The share of total funding to substance abuse facilities received from Medicaid never exceeds 25 percent and averages less than 8 percent, with a median value below 4 percent.

Second, given this considerable variation, the Medicaid program may be currently underutilized in most States as a financing source for substance abuse. While Medicaid payments do not exceed 25 percent of funding in any State, the States which fall below the average appear to have more restrictions on benefits or restrictions on eligibility than other States. For certain groups in particular, such as pregnant women and adolescents, current guidelines would allow most States to expand the role of Medicaid. States should carefully assess

their current strategy. Because of the Federal matching dollars, States might be able to enhance the role of Medicaid while reducing State fund expenditures. States with the poorest populations have the most to gain, since the Federal matching rate is linked to the per capita income of the State. Additionally, States with generous Medicaid enrollment criteria and high enrollment levels may find that providers are more willing to accept reduced prices for services. States should consider not only the cost of offering substance abuse treatment but the costs they might avoid by adopting more generous benefits. In particular, offering substance abuse treatment to low-income women, in particular pregnant substance abusers already on Medicaid, might save tremendous costs even in the short run, by reducing complications at birth, low-birthweight newborns and other drug-related complications among newborns (Larson and Horgan 1992).

Third, the goal of operating a comprehensive cost-effective substance abuse system with a continuum of services is not necessarily compatible with maximizing Medicaid reimbursement. Since Medicaid Federal financial participation cannot be received for some integral and cost-effective services, States must either forfeit Federal reimbursement in order to place people in the appropriate level of care, place people in acute care facilities to gain Federal participation even when clients only need subacute care, or treat people with a lower intensity of care than is sometimes needed. The financial penalty for placing people in IMDs is so strong (e.g., none of their care is Medicaid reimbursable), that few States choose this option. Minnesota, Michigan, and New York are three exceptions.

Fourth, with the exception of pregnant addicts, the populations with the greatest substance abuse problems (i.e., single men and women without children) are generally not eligible for Medicaid. The poor fit between eligibility for Medicaid and the populations most in need of substance abuse treatment services is probably the most serious limitation to enhancing the role of Medicaid in financing these services, where that is the goal. Whether the existing disability category could be better used is being tested by New York in a pilot study to get more substance abusers certified as disabled. States with low reliance on Medicaid for substance abuse care may not be willing to entitle greater numbers of people to Medicaid services. Similarly, the income guidelines for most States are so restrictive that most low-income adolescents will not be eligible for Medicaid until their age groups are phased in in five or more years time. The population that could be most easily targeted for more services under Medicaid is pregnant women. States are required to have higher income thresholds and use other measures to outreach to pregnant women. Through NIDA, OSAP, and HCFA demonstration grants, many States are either enhancing substance abuse services or creating more comprehensive prenatal care programs to better address the problems of pregnant addicts.

NOTES

[1] Substance abuse refers to both alcohol and drug abuse treatment. The nature of the expenditure data available for this research requires the study of drug and alcohol services combined. While some NDATUS funding is reported separately, much of it is combined.

[2] About 56 percent of all funds identified as either drug or alcohol funding was for drug abuse services.

[3] A second survey of facilities, the State Alcohol and Drug Abuse Profile, is limited to those facilities receiving at least some state funds.

[4] The Substance Abuse and Mental Health Services Administration is now administering the NDATUS Survey. This issue of sampling weight for future surveys is being explored by them.

[5] Appendix A lists each state alphabetically with the values for each expenditure characteristic.

[6] The NDATUS response rate for California facilities in 1989 was particularly high, nearly 98 percent.

[7] This analysis of 1989 NDATUS should be interpreted cautiously since only 57 percent of Texas facilities responded.

[8] This might have come about as a result of New York's participation in a joint Health Care Financing Administration-National Institute on Alcohol Abuse and Alcoholism Alcoholism Treatment Demonstration in the 1980's.

[9] Over 95 percent of drug and alcohol units returned completed NDATUS surveys in 1989.

[10] Which is 76 percent of 1990 expenditures reported by their system. About 70 percent of facilities responded to the 1989 NDATUS.

[11] The states in the bottom third on all dimensions are: California, Delaware, District of Columbia, Hawaii, South Dakota, Texas, Virginia, and Washington. The States with the expenditure patterns in the top third are: Michigan, New York, North Dakota, Pennsylvania, Vermont, and Wisconsin.

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Table 1: Estimated Medicaid Substance Abuse Expenditures per Recipient, by State, Ranked by Level, 1989

Rank	State	Estimated Expenditures (in thousands)[1]	Medicaid Recipients Under Age 65 (in thousands)[2]	Expenditures Per Recipient[3]
	TOTAL	$304,177	$20,763	$14.65
1	New York	$154,144	$ 1,993	$77.33
2	North Dakota	2,653	39	67.94
3	Vermont	1,852	50	36.75
4	Indiana	9,457	301	31.39
5	* Wisconsin	9,814	328	29.96
6	Iowa	4,055	205	19.82
7	* Pennsylvania	19,962	1,046	19.09
8	* New Hampshire	615	35	17.72
9	Kansas	2,720	170	16.00
10	Colorado	2,477	157	15.77
11	New Jersey	7,040	495	14.24
12	* Maryland	4,079	287	14.21
13	* Massachusetts	6,605	495	13.33
14	Michigan	12,879	963	13.37
15	Connecticut	2,609	203	12.86
16	Oklahoma	2,245	221	10.18
17	Missouri	3,719	383	9.71
18	* North Carolina	4,450	460	9.68
19	* Maine	1,077	112	9.61
20	Kentucky	3,620	413	8.77
21	Ohio	8,720	1,112	7.84
22	Louisiana	3,796	495	7.66
23	Minnesota	2,497	328	7.62
24	* Idaho	301	48	6.32
25	* Tennessee	3,099	528	5.87
26	* Utah	572	100	5.71
27	Montana	295	54	5.46
28	Arkansas	1,173	219	5.35
29	Rhode Island	484	96	5.06
30	Illinois	4,770	980	4.87
31	Florida	4,163	876	4.75
32	Nebraska	480	101	4.73
33	Oregon	840	203	4.13
34	Wyoming	102	26	3.93
35	* Georgia	1,901	567	3.35
36	California	10,417	3,186	3.27
37	* South Dakota	118	41	2.90
38	South Carolina	683	266	2.56
39	* West Virginia	387	222	1.74
40	* Texas	1,836	1,208	1.52
41	Mississippi	508	370	1.37
42	* New Mexico	151	116	1.29
43	* Washington	488	402	1.22
44	District of Columbia	86	82	1.05
45	* Virginia	202	312	0.65
46	* Nevada	19	39	0.48
47	Alaska	8	36	0.21
48	Delaware	3	37	0.08
49	Hawaii	2	73	0.02
50	* Alabama	6	284	0.02

Source: Authors' analysis of 1989 NDATUS and the HCFA 2082 reports.

Notes: * NDATUS response rate was less than 70% of surveyed facilities for this state (NIDA, NIAAA, 1990). Arizona did not report recipient data on HCFA 2082.
[1] Calculated as the sum of public third party revenues at facilities which indicated they accept Medicaid payments.
[2] Calculated as the total recipients less recipients who are age 65 and over.
[3] Expenditures per recipient is weighted by the number of recipients in each state.

Table 2: Estimated Percent of Total Revenue to Substance Abuse Facilities Received from Medicaid by State, Ranked by Level, 1989

Rank	State	Estimated Medicaid Revenues (in thousands)	Total Revenues (in Thousands)	Percent from Medicaid
	TOTAL	$304,178	$3,982,055	7.6%
1	New York	$154,144	$606,967	25.4%
2	Vermont	1,852	7,657	24.2
3	North Dakota	2,653	17,831	14.9
4	Kentucky	3,620	24,663	14.7
5	* Wisconsin	9,814	69,321	14.2
6	* Pennsylvania	19,962	164,190	12.2
7	Indiana	9,458	94,235	10.0
8	* West Virginia	387	3,903	9.9
9	Kansas	2,720	28,132	9.7
10	Louisiana	3,796	39,672	9.6
11	* Maine	1,077	11,324	9.5
12	Arkansas	1,173	13,656	8.6
13	* Massachusetts	6,605	79,026	8.4
14	Iowa	4,055	49,652	8.2
15	* Tennessee	3,099	37,949	8.2
16	Michigan	12,879	163,728	7.9
17	Missouri	3,719	56,668	6.6
18	* North Carolina	4,450	69,429	6.4
19	New Jersey	7,040	114,381	6.2
20	Oklahoma	2,245	38,309	5.9
21	* Idaho	301	5,150	5.8
22	Mississippi	508	8,725	5.8
23	Maryland	4,079	77,691	5.3
24	Ohio	8,720	180,814	4.8
25	Colorado	2,477	64,480	3.8
26	Connecticut	2,609	68,730	3.8
27	Illinois	4,770	135,679	3.5
28	Georgia	1,901	57,847	3.3
29	* New Hampshire	615	19,188	3.2
30	Minnesota	2,497	84,186	3.0
31	* Utah	572	21,650	2.6
32	Florida	4,163	172,349	2.4
33	Oregon	840	49,135	1.7
34	Montana	295	19,736	1.5
35	California	10,417	697,499	1.5
36	South Carolina	683	46,156	1.5
37	Wyoming	102	7,163	1.4
38	* South Dakota	118	8,792	1.3
39	* Texas	1,836	142,272	1.3
40	Rhode Island	484	39,617	1.2
41	District of Columbia	86	9,107	0.9
42	* Washington	488	67,084	0.7
43	* New Mexico	151	22,962	0.7
44	Nebraska	480	117,097	0.4
45	* Virginia	202	50,738	0.4
46	* Nevada	19	16,068	0.1
47	Alaska	8	19,647	< 0.1
48	Delaware	3	8,830	< 0.1
49	* Alabama	6	19,025	< 0.1
50	Hawaii	2	11,764	< 0.1
51	Arizona	1	42,183	< 0.1

Source: Authors' analysis of 1989 NDATUS and the HCFA 2082 reports.

Note: * NDATUS response rate was less than 70% of surveyed facilities for this state (NIDA, NIAAA, 1990).

Table 3: Percent of Substance Abuse Facilities Reporting That They Accept Medicaid Payments, by State, Ranked by Level, 1989

Rank	State	Facilities Accepting Medicaid	Total Reporting Facilities	Percent Accepting Medicaid
	TOTAL	2530	7617	33.2%
1	Vermont	18	21	85.7%
2	* Maine	31	41	75.6
3	* West Virginia	13	21	61.9
4	New York	428	735	58.2
5	* North Carolina	61	105	58.1
6	* Georgia	27	50	54.0
7	Indiana	109	205	53.2
8	South Carolina	27	53	50.9
9	* Wisconsin	97	199	48.7
10	Ohio	160	332	48.2
11	Rhode Island	34	71	47.9
12	Michigan	158	333	47.4
13	North Dakota	14	30	46.7
14	* Pennsylvania	140	304	46.1
15	* Tennessee	27	60	45.0
16	New Jersey	113	269	42.0
17	Kentucky	58	142	40.8
18	* Massachusetts	81	204	39.7
19	* Utah	16	41	39.0
20	Wyoming	15	39	38.5
21	Illinois	120	319	37.6
22	Connecticut	51	139	36.7
23	Iowa	22	60	36.7
24	Louisiana	33	90	36.7
25	Mississippi	23	65	35.4
26	* New Hampshire	12	34	35.3
27	Oregon	50	143	35.0
28	Kansas	44	128	34.4
29	Florida	84	255	32.9
30	* Maryland	58	182	31.9
31	Arkansas	12	38	31.6
32	* Alabama	11	35	31.4
33	* New Mexico	16	52	30.8
34	Nebraska	35	125	28.0
35	Oklahoma	20	72	27.8
36	Missouri	25	11	22.5
37	* Virginia	21	97	21.6
38	Minnesota	33	166	19.9
39	* Texas	49	261	18.8
40	District of Columbia	7	42	16.7
41	* Washington	22	135	16.3
42	Colorado	39	264	14.8
43	Montana	5	35	14.3
44	Alaska	6	47	12.8
45	Hawaii	3	26	11.5
46	Arizona	14	148	9.5
47	* Nevada	3	32	9.4
48	* South Dakota	2	26	7.7
49	California	81	1184	6.8
50	* Idaho	1	25	4.0
51	Delaware	1	26	3.8

Source: Authors' analysis of 1989 NDATUS and the HCFA 2082 reports.

Note: * NDATUS response rate was less than 70% of surveyed facilities for this state (NIDA, NIAAA, 1990).

Table 4: Number of Alcohol and Drug Treatment Facilities Accepting Medicaid and Estimated Medicaid Revenue, 1989: California

Facility Type	Number of Facilities Accepting Medicaid	Total Number of Facilities Reporting to NDATUS	Percent of Facilities Accepting Medicaid	Estimated Funding from Medicaid	Total Funding for Facilities	Percent of Facility Funding from Medicaid
All Facilities	81	1184	6.8%	$10,416,952	$697,498,565	1.5%
CMHC	3	38	7.9	300,650	10,824,279	0.6
Gen-VA Hospital	6	127	4.7	1,457,866	243,857,164	0.6
Alc-Hospital	3	6	0.0	0	17,334,421	0.0
Mental-Psych Hospital	4	26	15.4	3,049,792	76,511,846	4.0
Other Spec Hospital	3	10	0.0	0	29,120,795	0.6
Correctional Facility	3	11	0.0	0	45,259,634	0.6
Halfway House	1	219	0.5	5,765	47,538,731	0.0
Other Residential Facility	4	170	2.4	340,730	87,767,333	0.4
Outpatient Facility	63	523	12.0	5,262,149	118,019,843	4.5
Other Facility	0	54	0.0	0	21,264,519	0.0

Source: Authors' analysis of 1989 NDATUS.

Notes: Funding from Medicaid estimated as the sum of public third party funding at facilities which accept Medicaid fees.

The response rate among facilities to NDATUS was estimated at 57.9 percent (NIDA and NIAAA, 1990).

Table 5: Number of Alcohol and Drug Treatment Facilities Accepting Medicaid and Estimated Medicaid Revenue, 1989: Texas

Facility Type	Number of Facilities Accepting Medicaid	Total Number of Facilities Reporting to NDATUS	Percent of Facilities Accepting Medicaid	Estimated Funding from Medicaid	Total Funding for Facilities	Percent of Facility Funding from Medicaid
All Facilities	41	261	15.7%	$1,836,421	$142,272,310	1.3%
CMHC	1[illegible]	40	47.5	13,768	12,957,609	0.1
Gen-VA Hospital	16	49	32.7	1,493,938	25,718,166	5.8
Alc-Hospital	0	4[illegible]	0.0	0	28,694,976	[illegible]
Mental-Psych Hospital	5	23	21.7	48,675	28,170,138	0.2
Other Spec Hospital	[illegible]	4	50.0	0	1,460,000	[illegible]
Correctional Facility	0	2	0.0	0	0	n.a.
Halfway House	0	40	0.0	0	8,104,335	0.0
Other Residential Facility	4	35	11.4	85,000	24,599,635	0.3
Outpatient Facility	2	63	3.2	5,040	11,179,134	0.0
Other Facility	1	4	25.0	190,000	1,388,317	13.7

Source: Authors' analysis of 1989 NDATUS.

Notes: Funding from Medicaid estimated as the sum of public third party funding at facilities which accept Medicaid fees.

The response rate among facilities to NDATUS was estimated at 57.9 percent (NIDA and NIAAA, 1990).

Table 6: Number of Alcohol and Drug Treatment Facilities Accepting Medicaid and Estimated Medicaid Revenue, 1989: New York

Facility Type	Number of Facilities Accepting Medicaid	Total Number of Facilities Reporting to NDATUS	Percent of Facilities Accepting Medicaid	Estimated Funding from Medicaid	Total Funding for Facilities	Percent of Facility Funding from Medicaid
All Facilities	428	735	58.2%	$154,143,568	$606,966,853	25.4%
CMHC	44	53	83.0	4,286,544	17,825,511	24.0
Gen-VA Hospital	99	111	89.2	57,401,488	120,060,436	47.8
Alc-Hospital	2	9	22.2	0	29,625,264	0.0
Mental-Psych Hospital	17	23	73.9	3,302,649	32,508,346	10.2
Other Spec Hospital	[illegible]	3	66.7	1,271,222	5,872,712	21.6
Correctional Facility	0	5	0.0	0	1,718,144	0.0
Halfway House	7	39	17.9	0	9,983,577	0.0
Other Residential Facility	22	52	42.3	8,929,108	77,453,637	11.5
Outpatient Facility	217	327	66.4	52,661,858	196,329,102	26.8
Other Facility	18	113	15.9	26,290,699	115,590,124	22.7

Source: Authors' analysis of 1989 NDATUS.

Note: Funding from Medicaid estimated as the sum of public third party funding at facilities which accept Medicaid fees.

The response rate among New York state facilities to the 1985 NDATUS was estimated as 94.5 percent (NIDA and NIAAA, 1990).

Table 7: Number of Alcohol and Drug Treatment Facilities Accepting Medicaid and Estimated Medicaid Revenue, 1989: Michigan

Facility Type	Number of Facilities Accepting Medicaid	Total Number of Facilities Reporting to NDATUS	Percent of Facilities Accepting Medicaid	Estimated Funding from Medicaid	Total Funding for Facilities	Percent of Facility Funding from Medicaid
All Facilities	158	333	47.4%	$12,879,244	$163,727,655	7.9%
CMHC	12	13	92.3	55,780	2,806,750	[illegible].0
Gen-VA Hospital	30	43	69.8	8,133,762	42,240,615	19.3
Alc-Hospital	1	5	20.0	242,542	13,018,449	1.9
Mental-Psych Hospital	0	33	0.0	0	3,450,499	[illegible]
Other Spec Hospital	2	[illegible]	50.0	2,388,400	7,806,600	30.6
Correctional Facility	0	2	0.0	0	451,672	0.0
Halfway House	2	15	13.3	0	2,319,452	0.0
Other Residential Facility	14	33	42.4	399,367	30,492,543	1.3
Outpatient Facility	81	181	44.8	864,536	39,047,278	2.2
Other Facility	16	33	48.5	794,857	22,093,797	3.6

Source: Authors' analysis of 1989 NDATUS.

Note: Funding from Medicaid estimated as the sum of public third party funding at facilities which accept Medicaid fees.

The response rate among Michigan facilities to the 1989 NDATUS was estimated as 70.9 percent (NIDA and NIAAA, 1990).

Table 8: Medicaid Eligibility Thresholds and Other Public Expenditures on Substance Abuse for States in Bottom and Top Thirds

Rank on Generosity	Eligibility Thresholds Percent of Poverty *	Other Public Expenditures	
Dimensions	Pregnant Women and Infants, Jan. 1993	Per Capita	Rank
TOP THIRD - ALL DIMENSIONS			
Michigan	185 %	$ 4.21	(27)
New York	185	16.23	(4)
North Dakota	133	1.12	(47)
Pennsylvania	185	4.64	(28)
Vermont	200	5.69	(14)
Wisconsin	155	7.30	(12)
BOTTOM THIRD - ALL DIMENSIONS			
California	185 %	$ 4.17	(28)
Delaware	185	4.64	(23)
District of Columbia	185	45.81	(1)
Hawaii	185	2.45	(37)
South Dakota	133	2.19	(39)
Texas	185	0.27	(50)
Virginia	133	5.26	(17)
Washington	185	8.32	(9)

Source: * Pope, 1993.

Note: The three generosity dimensions are characteristic of Medicaid expenditures for substance abuse facilities: 1) the expenditures per recipient; 2) the proportion of substance abuse from Medicaid; and 3) the proportion of facilities accepting Medicaid funds.

Figure 1. "Highest" and "Lowest" Third of States Classified by Medicaid Expenditure Characteristics

Top third on all measures

Neither top nor bottom

Bottom third

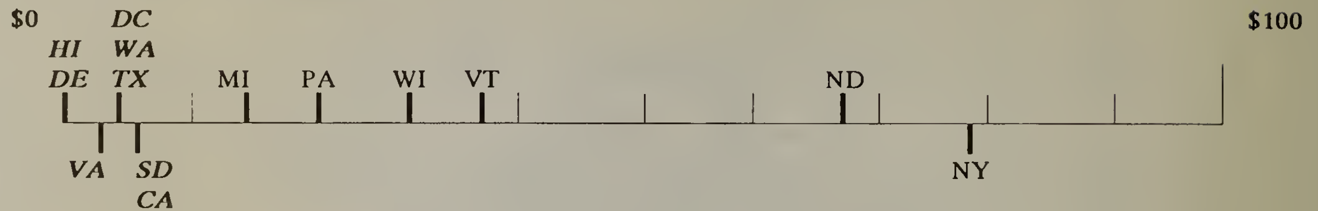
Arizona not studied see endnote #12.

Source: Brandeis University calculated from the 1989 National Drug and Alcohol Treatment Unit Servay.

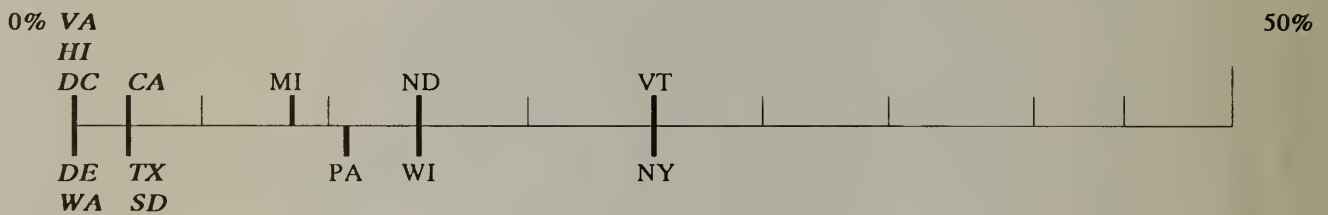
Figure 2. Three Measures of Medicaid Expenditure Patterns

States plotted are those that are in the top third on all measures or the bottom third on all measures *

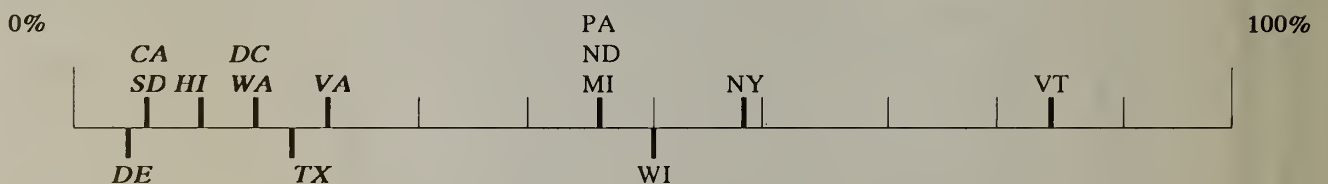
Rate per Recipient (Substance Abuse $ / Medicaid Recipient)



Medicaid Share (Medicaid $ / Total Treatment $)



Scope (# Medicaid Facilities / # Total Facilities)



* States which appear in bold/italics have "lowest" expenditure characteristics; other states have "highest" expenditure characteristics. Low spending states are in the bottom third on all three dimensions (HI, DE, VA, DC, TX, WA, SD, and CA). High spending states are in the top third on all dimensions (MI, PA, WI, VT, ND, NY).

Note: The NDATUS response rates at five states is so low (less than average of 78 percent) that the result's reliability must be interpreted cautiously (VA, WA, SC, PA, and WI). Some of the variation observed here may be related to some bias introduced by having only selected facilities reporting.

Source: Authors' analysis of 1989 NDATUS and HCFA 2082 reports.

Figure 3. Illustration of Benefits Commonly Used to Reimburse for Substance Abuse Treatment Services

General Hospital / Non–Detox

None

TX | ***SD***
MI | ***VA***
CA | ***DC***
HI | ***DE***
PA | ***WA***

Unlimited
(365 days)

WI | NY
ND | VT

Detox / Hospital Care

None

VA DC
DE

WA ***

SD **
TX **

Unlimited
(365 days)

VT | ***HI***
WI | NY
PA | ***MI***
ND | CA

Rehabilitation (Optional)

None

VT | ***VA***
SD | ***DE***
WA | ***DC***
CA | ***HI***
NY | ND
TX | PA

Unlimited
(365 days)

WI
MI

Clinic (Optional)

None

| ***SD***
VA | ND
WI | MI
VT | ***TX***

PA #

Unlimited
(365 days)

HI |
NY | ***DE****
CA | ***WA**** ##

Outpatient General Hospital (Optional)

None

| WI
VA | ***WA***
VT | ***CA***
DC | MI

TX #

Unlimited
(365 days)

SD | NY *
ND | ***DE***
HI | PA ###

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*	Methadone only.
**	6 days per admission.
***	3 days per admission.
#	$313 per year.
##	Coverage limits unknown; Fox et al. (1991), reports no coverage for substance abuse clinics; Rosenbach and Huber (1993) report these are covered services.
###	Varies with intervention
Note:	States which appear in bold/italics have "lowest" expenditure characteristics; other states have "highest" expenditure characteristics. Low spending states are in the bottom third on all three dimensions (HI, DC, VA, TX, DC, WA, SD, and CA). High spending states are in the top third on all dimensions (MI, PA, VT, ND, NY).
Source:	Authors' analysis based on information presented by Fox et al. (1991).

Appendix A. Expenditure Patterns of State Medicaid Programs Using Three Measures, Alphabetic Listing of States, 1989

State	Expenditures Per Recipient	Percent Revenue From Medicaid	Percent of Facilities Accepting Medicaid
TOTAL (3)	$14.65	7.6%	32.6%
* Alabama	0.02	0.0	31.4
Alaska	0.21	0.0	12.8
Arkansas	5.35	8.6	31.5
California	3.27	1.5	6.8
Colorado	15.77	3.8	14.8
Connecticut	12.86	3.8	36.7
Delaware	0.08	0.0	3.8
District of Columbia	1.05	0.9	16.7
Florida	4.75	2.4	32.9
* Georgia	3.35	3.3	54.0
Hawaii	0.02	0.0	11.5
* Idaho	6.32	5.8	4.0
Illinois	4.87	3.5	37.6
Indiana	31.39	10.0	53.2
Iowa	19.82	8.2	36.7
Kansas	16.00	9.7	34.4
Kentucky	8.77	14.7	40.8
Louisiana	7.66	9.6	36.7
* Maine	9.61	9.5	75.6
* Maryland	14.21	5.3	31.9
* Massachusetts	13.33	8.4	39.7
Michigan	13.37	7.9	47.4
Minnesota	7.62	3.0	19.9
Mississippi	1.37	5.8	35.4
Missouri	9.71	6.6	22.5
Montana	5.46	1.5	14.3
Nebraska	4.73	0.4	28.0
* Nevada	0.48	0.1	9.4
* New Hampshire	17.72	3.2	35.3
New Jersey	14.24	6.2	42.0
* New Mexico	1.29	0.7	30.8
New York	77.33	25.4	58.2
* North Carolina	9.68	6.4	58.1
North Dakota	67.94	14.9	46.7
Ohio	7.84	4.8	48.2
Oklahoma	10.18	5.9	27.8
Oregon	4.13	1.7	35.0
* Pennsylvania	19.09	12.2	46.1
Rhode Island	5.06	1.2	47.9
South Carolina	2.56	1.5	50.9
* South Dakota	2.90	1.3	7.7
* Tennessee	5.87	8.2	45.0
* Texas	1.52	1.3	18.8
* Utah	5.71	2.6	39.0
Vermont	36.75	24.2	85.7
* Virginia	0.65	0.4	21.6
* Washington	1.22	0.7	16.3
* West Virginia	1.74	9.9	61.9
* Wisconsin	29.96	14.2	48.7
Wyoming	3.93	1.4	38.5

* NDATUS response rate was less than 70% of surveyed facilities for this state (NIDA, NIAAA, 1990).
Note: Arizona did not report recipient data on HCFA 2082.
Sources: Authors' analysis of 1989 NDATUS and the HCFA 2082 reports.

UTILIZATION AND COST OF DRUG ABUSE TREATMENT UNDER MEDICAID: AN IN-DEPTH STUDY OF WASHINGTON STATE

Margo L. Rosenbach, Ph.D. and Joyce H. Huber, Ph.D.

INTRODUCTION

Motivation

In August 1990, in response to States' requests for clarification, the Health Care Financing Administration (HCFA) issued a memorandum to State Medicaid directors describing the potential opportunities for using Medicaid funds to treat alcohol and other drug problems (GAO 1991). Among the avenues currently available are: (1) primary care services, such as physicians' services, clinic services, and pharmaceuticals; (2) home health services, EPSDT, and home and community-based waivers for day treatment services; (3) hospital inpatient detoxification and other hospital treatment programs; (4) residential care in specialized facilities with fewer than 17 beds; and (5) rehabilitation services in a wide range of inpatient and outpatient settings.

While there is clearly potential, through these avenues, for Medicaid to play a significant role in the treatment of substance abuse, our knowledge of Medicaid's actual role in financing drug abuse services is quite limited.

Recent studies have expanded our understanding of Medicaid. For example, several studies have dealt with the variations among States in many of the aspects of their Medicaid programs such as limits on mandatory services (GAO 1991), the extent of optional benefits (Larson et al. 1992), and the participation of providers (OTI 1991). Another study (Wright and Buck 1991) compared Medicaid expenditures for mental health services to those for substance abuse treatment.

Despite these recent studies, we still know very little of an empirical nature about the role of Medicaid in funding drug abuse services. This study seeks to fill that gap through an in-depth analysis of Medicaid costs and utilization of drug abuse services in Washington State. This study is based on HCFA's Medicaid Statistical Information System (MSIS). Washington State was chosen because it was one of the larger (and more urban) States included in MSIS, and had reported such optional fields as diagnosis and procedure codes.

Scope of This Study

This study addresses the following questions:

1. *Amount Spent:* What are Medicaid expenditures on drug abuse services in the aggregate, relative to total Medicaid spending, and on a per-eligible and per-recipient basis?

2. *Population Served:* How many Medicaid eligibles receive drug abuse services? What are their characteristics? What is their geographic distribution?

3. *Providers:* Who provides drug abuse services? What is the locus of care (inpatient versus outpatient)? Who are the high-volume providers?

4. *Unit Costs:* How much do inpatient drug abuse services cost per day or per stay? What is the cost per outpatient procedure? How does the average cost per person vary by client characteristics?

Two shortcomings of the Medicaid Statistical Information System database limited the analysis. First, the limited information on diagnoses (two diagnoses on inpatient claims and one on outpatient claims) may have resulted in an underestimate of drug abuse treatment costs and utilization. Second, absence of procedural detail on inpatient claims precluded the separation of drug abuse treatment from hospital stays with a drug abuse diagnosis but during which no treatment was provided. This may have resulted in an overestimate of drug abuse treatment costs and utilization. Moreover, the content of inpatient drug abuse treatment (detoxification, rehabilitation) cannot be identified.

A final limitation of the study is its restriction to Medicaid costs and utilization. Other State-funded treatment for the same or other individuals--especially residential treatment provided in institutions for mental diseases (IMDs) with over 16 beds, and detoxification in freestanding facilities--is excluded from the analysis.

Organization of Report

The remainder of this report is divided into four sections. The first section describes the Washington State system for financing substance abuse treatment services. The MSIS data source is described in the second section, along with the methods used to construct the analytic file. Results of the claims analysis are presented in the third section. The final section discusses the policy implications and caveats of our results.

FINANCING OF SUBSTANCE ABUSE SERVICES IN WASHINGTON STATE

Sources of Funds

The Division of Alcohol and Substance Abuse (DASA), located within the Department of Social and Health Services, is responsible for developing and enhancing the statewide network of prevention and treatment services for alcohol and other drug abuse for the State of Washington. The agency is funded by three main State laws:

- *Uniform Act of 1974*, which established basic treatment and prevention services for alcoholics and drug addicts, especially those who were low income.
- The *Alcoholism and Drug Addiction Treatment and Support Act (ADATSA) of 1987*, which established a system of assessment, treatment, shelter, and financial support for indigent alcoholics and drug addicts.
- The *Omnibus Drug Act (ODA) of 1989*, which expanded treatment programs for adolescents, authorized additional funds to treat pregnant and postpartum women, and increased funds for methadone maintenance.

The state also receives Federal funds from several sources. The *Alcohol, Drug Abuse, and Mental Health Services (ADMS) Block Grant* provides Federal funds (through a block grant mechanism) for treatment and prevention services.

In addition, DASA receives funding through four Federal categorical project grants: waiting list (or waiting period) reduction grant; community youth activity program; critical populations grants; and perinatal substance abuse research and demonstration grant.

Between FY 1986 and FY 1990, State expenditures for substance abuse increased (excluding Medicaid) more than twofold from $20.2 million to $43.9 million (table 1; figure 1). During that period, State funds doubled from $14.7 million to $29.6 million, the ADM block grant increased from $5.0 million to $8.2 million, and other Federal support (categorical project grants) experienced a tenfold increase from $0.6 million to $6.1 million.

As shown in table 1, total State expenditures on substance abuse treatment jumped 48 percent from FY 1987 to FY 1988 alone. This was due to the implementation of the ADATSA program, in which funds were shifted from the general assistance--unemployable program to DASA. Alcoholism and drug addiction were no longer considered incapacities for welfare eligibility; instead, receipt of financial support was contingent upon participation in treatment.

Another large increase in DASA spending--27 percent--was observed between FY 1988 and FY 1989, due to the infusion of dollars through the Omnibus Drug Act, largely to expand programs for adolescents and pregnant/postpartum women.

Between FY 1989 and FY 1990, State funds actually fell 20 percent, but Federal dollars

increased substantially, so that by FY 1990, one third of all funding was from Federal sources.

As a percentage of total State expenditures (from both Federal and State sources), spending on substance abuse treatment climbed slightly between 1988 and 1990, accounting for 0.48 percent of State expenditures by 1990, up from 0.39 percent in 1988 (SADAP 1991; NASBO 1991).

As can be seen from figure 2, per capita spending for substance abuse services (excluding Medicaid) almost doubled between FY 1986 and FY 1990, from $3.29 to $6.08. Per capita expenditures in Washington State exceeded per capita U.S. spending throughout the entire period.

Flow of Funds

In order to understand the role of the Medicaid program in financing drug abuse services in Washington State, it is first necessary to understand the flow of funds within the State substance abuse treatment system (see figure 3). The State does not provide any direct client services; rather it contracts for services, either directly or through county agencies. DASA contracts with residential treatment programs for inpatient (short- and long-term) beds. Contracts are awarded for a specified number of bed days (serving as a ceiling on the quantity of services), with payment on a rate per bed-day basis. Residential beds are considered "statewide," meaning that individuals can cross county lines to be admitted for inpatient care.

Nonresidential substance abuse services are provided through grants-in-aid to counties for community services. These grants are made through a variety of State block and categorical grant mechanisms, with varying formulas. The county allocations can be used to provide the services directly (through the local health department, for example) or to subcontract with non-profit agencies to perform services such as methadone maintenance, detoxification, or outpatient treatment. Eligibility for community services is based on county of residence. County governments must prepare and submit plans for local alcohol/drug programs, which are reviewed and approved by DASA's Regional Administrators.

Only those providers with county subcontracts are eligible for Title XIX (Medicaid) contracts because of the requirement for State matching funds. The county grant-in-aid funds serve as the State match for Medicaid-covered services.

The ADATSA Continuum of Care

The ADATSA treatment system is the centerpiece of the State-financed substance abuse treatment system. Implemented in July 1987, ADATSA formalized a continuum of care within the State substance abuse treatment system. As shown in figure 4, individuals enter the system through the community service office (CSO), the agency which establishes financial eligibility for social services (e.g. welfare, Food Stamps). Financial eligibility criteria are the same as those established for AFDC or general assistance, except for pregnant women and adolescents who have higher income thresholds. Those suspected of having a substance abuse problem, based on a short set of screening questions administered by an eligibility worker, are referred to the ADATSA assessment center, where a more in-depth assessment is conducted by a certified alcohol/drug counselor. If a substance abuse problem is confirmed, a treatment plan is developed and the most appropriate (available) placement is obtained. The usual continuum of care for an ADATSA client is a 1-month intensive inpatient treatment program, a 2-month placement in a recovery house, and a 3-month outpatient treatment program. Individuals may receive up to 6 months (one full sequence) of treatment within a 2-year period. ADATSA clients also receive financial support ($340 stipend per month) through a protective payee program, conditional upon participation in treatment.

Pregnant women with a substance abuse problem may follow a slightly different path, given their high treatment priority within the State. Women may enter a hospital-based medical stabilization program or other specialized treatment program

(usually based on a physician referral). Generally, to expedite the beginning of the treatment program, the CSO and ADATSA assessments take place immediately after admission.

Those individuals eligible for Medicaid may bypass the ADATSA assessment center after a substance abuse problem is confirmed and proceed directly to outpatient treatment or methadone maintenance. Access to all other services, however, is through the ADATSA assessment center, given the lack of Medicaid coverage for residential and recovery services.

While the ADATSA program has accomplished much to bring about self-sufficiency of its clients (ORDA 1991), long waiting lists for an initial assessment (averaging 21 days) as well as for placement (averaging 20 days) serve as deterrents to entering the system or starting treatment. In addition, a lack of treatment resources may result in an inappropriate placement (either too restrictive or not restrictive enough). Moreover, the 180-day treatment limit is frequently exhausted before recovery is complete. Nevertheless, the program has reformed the system of financial assistance to alcoholics and addicts, providing support based on continued treatment rather than ongoing addiction.

What Does Medicaid Pay For?

In August 1990, the HCFA clarified (but did not change) the substance abuse treatment services which Medicaid would reimburse (GAO 1991). Among the services available are primary care services (physicians' services, clinic services, and pharmaceuticals), inpatient hospital benefits, and rehabilitation services. The major exclusion concerns services provided in institutions for mental disorders, that is, specialized facilities with more than 16 beds.

For FY 1990, the Medicaid program paid 53.88 percent of the Medicaid costs in Washington State (HCFA 1990). That is, of every dollar spent on covered services, the State paid about 46 cents while the Federal Government paid about 54 cents.

According to conversations with State officials as well as review of the Title XIX state plan, Medicaid reimbursement for drug treatment services include the following inpatient and outpatient treatment.

- **Inpatient Treatment**

Medical stabilization services are provided for chemically dependent pregnant women, consisting of a 26-day inpatient stay in an acute care hospital. The first 5 days consist of medical detoxification and the next 21 days are allotted to the monitoring of medical complications. Such services are exempt from the State's DRG payment method.

- **Outpatient Treatment**

Intensive outpatient treatment involves a minimum of 72 hours of treatment over a maximum of 12 weeks and includes individual counseling sessions, group therapy, and education on alcohol and drugs. This mode of treatment is indicated for clients with support of family and job, so that they can continue to live at home and work.

Regular outpatient treatment often includes individual or group counseling and family therapy.

- **Detoxification**

The State Medicaid program covers up to 5 days of drug detoxification services (and 3 days for alcohol detoxification) in an inpatient hospital setting, but only in counties where a freestanding detox facility is not available. The State Medicaid program does not pay for subacute detoxification services in freestanding facilities.

As a result, most detox services are paid through county grant-in-aid funds because of the lower cost of freestanding facilities (even taking into account the Federal Medicaid match). Detox services are either provided directly by county agencies or via subcontracts to private, nonprofit providers. Thus, for all intents and purposes, detoxification services are not reimbursed through Medicaid.

- **Methadone Maintenance**

Methadone treatment is community-based and is funded through county grant-in-aid funds. Clients in Clark County (where no methadone programs are located) receive methadone maintenance services from providers in Portland, Oregon.

METHODS

Data Sources

Medicaid Statistical Information System

The primary data source for this analysis is the Medicaid Statistical Information System, which provides microdata for research and analytic uses. States not participating in MSIS submit much more aggregate information on expenditures and utilization (HCFA-2082) in a hard-copy format.

The MSIS data contains four files:

- Eligibility records for all Medicaid enrollees;
- Hospital inpatient claims;
- Long-term care institutional claims; and
- All other claims (including physicians' services, pharmaceuticals, and laboratory services).

MSIS data for the State of Washington were obtained under an intra-agency agreement between HCFA and the National Institute on Drug Abuse (NIDA) for the purpose of analyzing drug abuse-related expenditures and utilization. Washington was selected because it is one of the urban States that consistently provides diagnostic and procedural detail on inpatient and outpatient claims.

HCFA extracted all claims with dates of service between October 1, 1989 and September 30, 1990, that is, Federal fiscal year (FFY) 1990. Eligibility records were also provided for individuals who were eligible for Medicaid during FFY 1990, irrespective of whether or not they received any services. HCFA aggregated the quarterly eligibility records into an individual record with details on month-by-month eligibility status.

This analysis is based on all four files maintained in MSIS (eligibility, inpatient claims, long-term care, and "other"). Each Medicaid enrollee is distinguished by a unique Medicaid ID number, facilitating linking of records within and across files.

The ***eligibility file*** contains data on age, gender, race, county and zip code, and monthly eligibility status. Eligibility status is characterized along several dimensions: (1) maintenance assistance status, i.e., whether or not cash assistance is received; (2) basis of eligibility, such as aged, blind, disabled, or being a dependent child or a caretaker relative in a low-income family; and (3) duration of Medicaid coverage, either continual or part-year.

The ***inpatient claims file*** contains dates of service, provider identification number, type and place of service, and submitted and allowed charges. Procedure codes and diagnoses are optional fields in the MSIS. Inpatient claims from Washington State include primary and secondary ICD-9-CM diagnoses but are missing procedure codes.

The ***long-term care file*** includes mental health, SNF and ICF services and contains most of the same information as the inpatient claims file; however, diagnosis and procedure codes were *not* reported. Thus, claims from the long-term care file could not be used to identify drug abusers or drug abuse treatment. However, long-term care expenditures were included in the calculations of Medicaid expenditures on individuals with a drug abuse diagnosis.

The ***"other" file*** (with outpatient and physician services) has only primary ICD-9-CM diagnoses; procedures were coded with a mix of CPT-4 and State-specific procedure codes. This file includes claims for individual and group therapy, methadone maintenance, and case management, among other services.

FFY 1990 HCFA-2082 Summary Report

The HCFA-2082 report provides summary information by age, race, gender, and eligibility status on all individuals who were Medicaid-eligible in FFY 1990 (October 1, 1989 to September 30, 1990) and by place and type of service on all spending that has a date of payment during this period.

The analysis in this report uses a different reference date from the FFY 1990 HCFA-2082 report. This report is based on *date of service* and 2082 is based on *date of payment*. Therefore, the values for total expenditures are not strictly comparable, although data on the number and demographics of Medicaid enrollees are identical.

National Drug and Alcohol Treatment Unit Survey (NDATUS)

Provider-level data were obtained principally from the National Drug and Alcohol Treatment Unit Survey, a national survey of substance abuse treatment facilities. NDATUS gathers information on capacity, number, and demographics of clients served by treatment modality, source of revenue, and type of ownership. Of the 359 approved drug treatment facilities listed in the Washington State *Directory of Alcoholism and Drug Addiction Service* (DASA 1990), 144 treatment units from Washington State (44 percent) responded to the 1990 NDATUS. Slightly over half (32 units, or 54 percent) of the 59 Medicaid-contracted substance abuse providers in our sample responded to NDATUS. Given the high level of nonresponse, the NDATUS was used only as a supplementary source of information on several high-volume providers, rather than being merged with the claims file.

File Construction

This section describes the steps that were taken to construct the file used in the analysis.

Identifying the Sample of Drug Abusers

The first task was to identify Medicaid enrollees with a drug abuse diagnosis on either an inpatient or outpatient claim. The specific diagnoses used to identify drug abusers are displayed in table 2.

We also examined all claims with a ***procedure code*** indicating drug abuse treatment or ***provider ID*** indicating treatment at a substance abuse treatment facility. However, no additional drug abusers were identified with these criteria.

Altogether, 4,220 individuals were found to have a diagnosis of drug abuse. Almost 90 percent (3,773 individuals) were identified based on an outpatient diagnosis, and another 10 percent (447 individuals) had an inpatient diagnosis only. Once the sample was identified, all of their inpatient, outpatient, and long-term care claims were extracted.

In identifying our sample, we chose to err on the side of type I error, that is, to falsely reject drug abusers, rather than type II error, to falsely accept those who were not abusers. In this spirit, diagnoses indicating poisoning (overdose) from various substances were not used as the sole criterion for identifying drug abusers since they are likely to identify suicide attempts and accidental poisonings. Likewise, alcohol abuse diagnoses and procedure codes were excluded from the selection criteria.

Eliminating Duplicate and Reprocessed Claims

Many of the records were duplicate or reprocessed claims. In general, adjustments to an original claim took place in three records: the original record, a second claim negating the values on the original record, and a third record with revised charges and payments. Reprocessed claims were identified as claims that matched on the following variables:

- Medicaid identification number,
- Type of service,
- Provider identification number,
- Procedure code (if available),
- Modifier (if available), and
- Starting date of service.

If claims matched on these criteria, the later claims were considered adjustments to the original claim. Some claims were coded as an adjustment, although no matching original claim was found. These claims were treated as original claims. All monetary variables (submitted charge, Medicaid-allowed charge, Medicare coinsurance and deductible payments, and other third-party payments) as well as number of services were aggregated across the original and adjusted claims. If Medicaid-allowed charges and number of services summed to zero across the consolidated claim, the claim was considered denied and was deleted from the sample. Variables that should have been the same across original and adjusted claims--such as diagnosis, procedure code, place of service, type of coverage, and starting and ending dates of service--took the value of the original claim. The date the claim was received for processing took on the value from the original claim, and the final payment date took the value from the last record. Approximately 25 percent of all claims were found to have been reprocessed and consolidated with an original claim.

Some consolidated claims had a negative Medicaid allowed charge. In most cases, these claims had been coded as an adjustment but had no matching original claim. It was assumed that the original claim occurred prior to FFY 1990 and thus fell outside of the FY 1990 date of services in this study, or that the claim was invalid for some other reason. Such claims were therefore eliminated from the analysis. No individual had a negative value over all claims, so no individual was excluded from the sample.

Crosswalking FIPS/ZIP Codes to MSA Codes

Analysis of geographic variation in utilization rates was performed at the MSA level. The following table shows the correspondence between counties and MSAs:

MSA	COUNTY
Seattle	King, Snohomish
Bellingham	Whatcom
Bremerton	Kitsap
Richland	Benton, Franklin
Olympia	Thurston
Spokane	Spokane
Tacoma	Pierce
Vancouver	Clark
Yakima	Yakima

The remaining counties are rural and were grouped together because of the low number of cases in each individual county. Figure 5 presents a map of Washington State MSAs.

MSA identifiers were merged onto the eligibility file first by FIPS county code and then by ZIP code (if no match for county was found). Out of 550,835 eligibles on the MSIS eligibility file, approximately 80 percent matched on county; another 19 percent matched on ZIP code, for a 99.9 percent overall match rate. An additional 24 eligibles were hand-coded based on ZIP code. Of the 1,304 nonmatches, 1,107 had no county or ZIP code, 113 had out-of-State ZIP codes, and 84 had invalid ZIP codes. Once those IDs with zero months of eligibility were eliminated, there were only 175 nonmatches on MSA. The number of eligibles within each MSA and rural area was aggregated to provide denominators for utilization rates and other statistics.

Merging on Eligibility Characteristics

The MSIS eligibility file provided information on demographic characteristics (age, gender, race), eligibility status, and geographic location for the individuals identified as receiving drug treatment. The eligibility and claims files were linked by the unique Medicaid ID assigned to each individual. Forty-five individuals in the claims file had no eligibility records. A large percentage of these IDs had diagnoses or procedure codes indicating newborns.

Eligibility records with zero months of eligibility were assumed to identify individuals eligible in previous years but who may have received services

for which they were no longer eligible. Following HCFA's practice, these individuals were excluded from the eligibility and claims files. Altogether, six IDs from the original sample of 4,220 were excluded from the analytic file of drug abusers due to zero months of eligibility, resulting in a final sample size of 4,214.

Classifying Drug Abuse and Other Claims

The next step in file construction was to identify whether inpatient and outpatient claims were related to drug abuse, other medical care, or long-term care. Claims were considered to be ***drug abuse-related*** if they had an outpatient or inpatient diagnosis of drug abuse or drug poisoning, or a procedure code indicating drug abuse treatment or testing. (See appendix A, table A-1.) Claims were considered to be ***other medical care*** if they had none of the above diagnosis or procedure codes, or ***long-term care*** if they came from the long-term care file.

For the 4,214 individuals in the sample, 71,270 claims were identified as *drug abuse-related*. Of these claims, the vast majority (92.5 percent) were identified by diagnosis; the remaining were identified by drug abuse procedure (4.1 percent), drug testing (2.6 percent), and drug poisoning diagnosis (0.8 percent). The bulk of the claims, however, were identified as *other medical care* (233,181), including 231,634 claims from the outpatient/physician file and 1,547 claims from the inpatient file. *Long-term care* accounted for another 513 claims.

Classifying Type of Drug(s) Used

The next phase of file construction involved an attempt at classifying cases according to the type of drug(s) used. All drug abuse-related claims for each individual were examined. Unfortunately, the majority of outpatient claims (70 percent) were coded with ICD-9-CM code 304.9 indicating "unspecified drug abuse." However, it was hypothesized that across all claims for an individual there might be at least one claim that identified a particular drug. If any claim indicated a particular category of drug, then that individual was considered to be using that type of drug. Individuals could be classified as using more than one type of drug.

A specific substance was identified for 1,601 of the 4,214 individuals in the sample (38 percent), of which 799 (50 percent) were identified as heroin users, 378 (24 percent) were alcohol users (with unspecified drug abuse), and 329 (21 percent) were cocaine users. Over one-fourth (434 individuals; 27 percent) used multiple drugs.

Identifying Pregnant and Postpartum Women

The next file construction task involved identifying pregnant and postpartum women. All drug and nondrug claims for individuals in the sample were examined for diagnosis and procedure codes indicating delivery, prenatal care, and newborn care. (Unfortunately, this approach missed some women who were pregnant during the study period but who did not deliver until after the study period. Because payment for prenatal, delivery, and postpartum care is made on the basis of a global fee, individual obstetrical claims are not always observed. This problem was minimized, however, by the inclusion of special drug treatment procedure codes for pregnant women.) Newborn diagnoses were examined closely since infants often share the mother's identification number for as long as 6 months postpartum.

After excluding people whose age was missing or whose age indicated a newborn, 892 pregnant women were identified. This represents 30 percent of the women in the sample (21 percent of the overall sample). The diagnosis and procedure codes used to identify pregnant women are displayed in appendix A (table A-2).

RESULTS

Overview of Medicaid Spending for Drug Abuse-Related Services

Between October 1, 1989 and September 30, 1990, the Washington State Medicaid program served

4,214 individuals with a drug abuse diagnosis. This is 0.8 percent of the 532,010 individuals who were enrolled in Medicaid during that period, or approximately eight individuals per 1,000 enrollees. The total amount spent by Medicaid on behalf of individuals with a drug abuse diagnosis was $24.4 million, for an average of $5,789 per recipient and $7,228 per recipient year (table 3). By comparison, the average Medicaid dollars per recipient amounted to $2,128 (based on the Washington State HCFA-2082 report), a little more than one-third the amount spent per individual with a drug abuse diagnosis.

Medicaid expenditures on these individuals fall into three categories: drug abuse-related services, other medical care, and long-term care.

- ***Drug abuse-related services*** amounted to $5.7 million (23.4 percent). This is a conservative estimate in that it includes only those claims for which there was a diagnosis or procedure related to drug abuse. This translates to about $11 in drug abuse spending per Medicaid enrollee. Medicaid expenditures for drug abuse-related services represented 0.9 percent of the total $647 million spent by the Washington State Medicaid program for services provided during this period. On a per-recipient basis, drug abuse spending averaged $1,353; adjusting for part-year coverage, spending averaged $1,690 per recipient year.

- ***Other medical care*** was by far the largest category of expenditures, accounting for $17.6 million (72.0 percent). It is likely that a large share of these expenditures were for medical complications of drug abuse.

- ***Long-term care***, which includes, for example, treatment in skilled nursing facilities or inpatient psychiatric care for those under age 21, accounted for only $1.1 million (4.6 percent) of the total amount spent by Medicaid on individuals with a drug abuse diagnosis.

Who Received Drug Abuse Services Under Medicaid?

Demographic Characteristics

As shown in table 4, the typical client was white (72 percent), female (69 percent), and between the ages of 21 and 44 (74 percent). For the most part, the profile of individuals with a drug abuse diagnosis mirrors that of the Washington Medicaid-enrolled population at large.

Table 4 presents utilization rates according to age, gender, and race. The overall utilization rate was 7.9 per 1,000 Medicaid enrollees. Women had slightly higher utilization rates than men. This is an interesting finding since household surveys suggest that women have a lower incidence of drug use relative to men (NIDA 1990). The higher utilization by women may reflect greater willingness of women to seek treatment (especially during pregnancy) or differences in the pattern of drug use within low-income populations.

Blacks were more likely (15 per 1,000 enrollees) than others to have a drug abuse diagnosis. As expected, Medicaid enrollees between the ages of 21 and 44 had the highest utilization rates (19.4), followed by adolescents (10.7) and those age 45 to 65 (8.3). These results must be interpreted cautiously--it is unclear whether lower rates of use signify less need or less access to services.

The last column of table 4 shows Medicaid expenditures per recipient year. This indicates how much would have been spent per individual if they had been enrolled for the entire year. Expenditures per recipient year generally increase with age, although those over 65, for whom Medicare is the primary insurer, cost one-third as much as those age 45 to 65.

Women have higher expenditures per recipient year than men. This reflects the higher cost of drug abuse-related services for pregnant women (over $3,000 on average). Expenditures for nonpregnant women averaged $1,344, comparable to those for men. Blacks and Hispanics have higher spending than other Medicaid enrollees.

Medicaid recipients with a drug abuse diagnosis have a different profile than individuals served by the ADATSA treatment program (see above). Only 35 percent of ADATSA clients are women, compared with 69 percent of the Medicaid recipients. The median age of ADATSA clients is 32 versus 29 for Medicaid recipients. Minorities account for a larger share of ADATSA clients (32 percent) than Medicaid recipients (22 percent). Whereas the Medicaid program imposes categorical eligibility criteria severely restricting coverage of single males, the majority of individuals served by the ADATSA program are unmarried (83 percent) and male (65 percent) (ORDA 1991).

Eligibility Status

As shown in table 5, the vast majority (87 percent) of the sample received cash assistance, either through Aid to Families with Dependent Children (AFDC) or Supplemental Security Income (SSI). Over 50 percent were eligible by virtue of their status as caretakers/relatives of low-income dependent children, accounting for the single largest category of eligibility. This group had a utilization rate well above the average (21.4 per 1,000 enrollees). The categorically eligible receiving cash assistance (AFDC/SSI) had a utilization rate almost three times as high as a comparable population not receiving cash assistance (9.6 versus 3.3). The high rate among low-income adults (caretaker/relatives) may be a function of intervention by child protective services (CPS)--a woman who is using drugs may lose custody of her child(ren) unless she enters treatment. The low utilization rate among the medically needy (4.2 per 1,000 eligibles) is indicative of the infrequency with which this eligibility category is used to gain access to Medicaid reimbursement for drug abuse treatment.

Table 5 also shows that over half (52 percent) of those using drug abuse services were enrolled in Medicaid for the full year, 32 percent were enrolled for 6 to 11 months, and 15 percent were enrolled for less than 6 months. The percentage of individuals continuously enrolled was slightly higher among Asians (66 percent) and children ages 1 to 14 (71 percent) and considerably lower among adolescents (36 percent). Those eligible for the full year had a slightly higher rate of utilization (8.5) than those eligible for only part of the year (7.2). However, expenditures were considerably higher for part-year enrollees, averaging $3,835 per recipient year for those eligible for 1 to 5 months and $2,195 per recipient year for those eligible for 6 to 12 months, compared to $1,458 for those eligible continuously.

Geographic Distribution

The Medicaid drug abuse population is heavily concentrated in urban areas, with 83 percent in MSAs and 17 percent in rural areas (table 6). Seattle (40 percent) and Tacoma (19 percent) alone accounted for nearly three-fifths of the recipients of drug abuse services. Utilization rates were highest in these two areas as well, with 11 individuals seeking treatment per 1,000 enrollees in both MSAs, significantly higher than those MSAs with the lowest utilization rates--Yakima (3), Bremerton (4), and Bellingham (4). These higher-than-average utilization rates could reflect a higher level of need in these two urban areas, or a higher degree of access to drug treatment facilities, or a combination of these two factors.

Rural areas accounted for 23.7 percent of Medicaid enrollees but only 16.8 percent of those with a drug abuse diagnosis. The utilization rate of 5.6 per 1,000 enrollees was well below the State average of 7.9.

Expenditures and Utilization by Site of Care

Patterns of Use

Of the $5.7 million in Medicaid expenditures for drug abuse-related services, $3.4 million (60 percent) went for inpatient care and the remaining $2.3 million (40 percent) for outpatient care. This is in sharp contrast to the pattern of utilization observed in the sample, with only 23 percent of the Medicaid recipients using inpatient services. In other words, inpatient services were used by only 23 percent of the

sample but consumed 60 percent of the expenditures for drug abuse-related services.

As shown in table 7, about 12 percent of the sample used only inpatient services during the year. An important caveat, however, is that only Medicaid-reimbursed services are represented in the analysis. For example, if an inpatient hospital stay is followed by residence in a recovery house, this would not be reflected in the Medicaid claims, because such treatment is not covered by Medicaid. Likewise, those with outpatient utilization only--the majority of the sample--may have received inpatient treatment through non-Medicaid auspices. In particular, residential treatment in a facility with over 16 beds is not covered by Medicaid. As a result, this analysis does not represent a complete picture of the pattern of services used by Medicaid recipients with a drug abuse diagnosis.

Table 7 shows variations in patterns of utilization of inpatient and outpatient care by demographic characteristics. First, inpatient services were more heavily used by the very young (less than 1 year) and the elderly (over age 65). This pattern is not surprising given that newborns experiencing withdrawal symptoms are generally hospitalized, and the elderly often require hospitalization because of comorbidity and/or polydrug use (especially alcohol and other drugs).

Second, women in general (31 percent) and pregnant women in particular (63 percent) were more likely to receive inpatient care. Higher rates of hospitalization among pregnant women were due in part to Medicaid coverage of specialized programs for medical stabilization. In fact, if pregnant women are excluded, women were less likely to receive inpatient care (11.5 percent) than men (16.2 percent). This may be due to women's child care and household responsibilities that make them less able to use inpatient services.

Third, utilization of inpatient services was more likely among those who were eligible for only part of the year. Thirty percent of those who were eligible for less than 6 months and 32 percent of those eligible for 6 to 11 months used some inpatient care, compared to only 23 percent of those who were continuously eligible.

What are the relative costs to the Medicaid program of these patterns of utilization? As shown in table 7, those who received only outpatient treatment cost one-fifth as much as those who used only inpatient services ($783 versus $3,737). A combination of inpatient and outpatient treatment costs $4,838 on average, about one-third more than inpatient treatment alone. Of course, this analysis does not control for differences in the populations using these three patterns of care, nor are non-Medicaid treatment costs included. These data simply show how much the Medicaid program spends by locus of care.

Inpatient Utilization and Expenditures

Sixty percent of all expenditures on drug abuse-related services was spent on inpatient care ($3.4 million). Since no procedure codes are available for inpatient stays, it is impossible to determine what proportion of this amount was for drug abuse treatment (detoxification, rehabilitation) and what proportion was for complications of drug abuse or other medical problems with some drug abuse component. Diagnoses alone can provide some indication of the importance of drug abuse in the cost of inpatient care. Fifty percent of all inpatient expenditures were on stays which had drug abuse and mental disorders as the *only* diagnoses. An additional 11 percent of expenditures were on inpatient stays that had a *primary* drug abuse diagnosis. The secondary diagnoses were primarily for rehabilitation (52 percent), pregnancy-related care (21 percent), or poisoning/overdose (5 percent). An additional 4 percent had poisoning/overdose as the primary diagnosis, with or without drug abuse as a secondary diagnosis. Given the lack of procedure codes, we cannot assume that drug abuse treatment was provided during the stay.

The remaining 36 percent of inpatient expenditures were on stays that had only a *secondary* diagnosis of drug abuse. Of these, about half of the expenditures (or 17 percent of all inpatient expenditure) were for stays with a primary

diagnosis of management of pregnancy or delivery, and the remaining 53 percent had miscellaneous other diagnoses including skin and respiratory diseases, injuries, and others. Again, it is not known the extent to which the secondary drug abuse diagnoses contributed to costs or whether or not individuals were treated for their drug problem.

Across both primary and secondary diagnoses, the most common diagnosis for inpatient stays with any drug abuse diagnosis was drug dependence complicating pregnancy, which accounted for 30 percent of inpatient stays and 29 percent of expenditures. An additional 8 percent of claims (9 percent of expenditures) were for drug-affected newborns. Thus, perinatal substance abuse (as defined by diagnosis) accounted for one-third of the dollars spent by the Medicaid program for drug abuse-related inpatient care. The next most common diagnoses for inpatient stays were cocaine dependence/abuse (15 percent) and opiate dependence/abuse (11 percent). The distribution of expenditures by diagnosis is similar to the distribution of claims.

Outpatient Utilization and Expenditures

- *Distribution of Expenditures Across Outpatient Providers*

  Table 8 shows the distribution of outpatient expenditures by place of service. The vast majority of outpatient drug treatment expenditures (84 percent) were for treatment at one of 59 Medicaid-contracted drug treatment clinics. Three high-volume providers accounted for 50 percent of *total* Medicaid expenditures for outpatient services and 41 percent of total Medicaid expenditures for pregnant and postpartum women (PPW).

  Evergreen Treatment Services, a private non-profit facility located in Seattle, accounted for 23.1 percent of Medicaid outpatient expenditures and 6.5 percent of total Medicaid spending on pregnant/postpartum women. The program has State/county contracts for both methadone treatment and outpatient treatment, and the program is certified for drug services only (no alcohol treatment).

  The Tacoma/Pierce County Methadone Maintenance Program, operated by the Pierce County Health Department, accounted for 15.1 percent of outpatient expenditures and 22.0 percent of expenditures on pregnant/postpartum women. County grant-in-aid funds are received for methadone treatment, outpatient treatment, and intensive outpatient care; the program is certified for drug services only (no alcohol treatment).

  Therapeutic Health Services operates two private non-profit clinics in Seattle. Together, the clinics accounted for 12.1 percent of outpatient expenditures and 12.2 percent of expenditures on pregnant/postpartum women. The Summit clinic is certified to provide both alcohol and drug services, while the Midvale clinic is certified to provide drug services only. Both clinics have State/county contracts for methadone treatment and outpatient treatment. In addition, the Summit clinic provides intensive outpatient treatment.

  As noted, these high-volume outpatient providers were also the top outpatient providers for pregnant and postpartum women. Tacoma/Pierce was more heavily oriented towards providing services to PPW clients than the other two.

  The high concentration of Medicaid spending among Medicaid-contracted drug treatment facilities, and among a few providers within that group, is not surprising given the requirement that participating facilities have a county subcontract in order to receive State matching funds. This requirement limits not only the number of participating facilities, but also the extent of a facility's participation, subject to the budget constraint imposed by county grants-in-aid.

  A further disincentive to participation may be low reimbursement rates. Table 8 indicates the Medicaid rate of reduction for services by type

of provider. The rate of reduction, an indicator of Medicaid generosity relative to submitted charges, varies substantially, ranging from virtually no reduction for Medicaid-contracted clinics to a very significant reduction for office-based and hospital-based providers. The low rate of reduction for clinics is likely to be an artifact of their billing practices--their submitted charges approximate Medicaid-allowed charges because they operate on a fixed budget, rather than fee-for-service. In effect, Medicaid reimbursement expands their available pool of resources by shifting a portion of the cost onto the Federal Government. For office- and hospital-based providers, in contrast, the high rate of reduction is likely to reflect a true disincentive to Medicaid participation, and may account for the low level of Medicaid participation by individual providers.

- *High-Volume Outpatient Procedures and Reimbursement Rates*

High-volume outpatient procedures are shown in table 9, ranked by level of Medicaid expenditures. Average allowed charges have been adjusted for the quantity of services billed; this results in quite a substantial adjustment for methadone treatment, case management, and group therapy, where it is common to bundle multiple visits or encounters into a single claim.

Two-thirds of outpatient expenditures were accounted for by three procedures. Four more procedures account for another 11 percent of outpatient spending. Thirty percent of the outpatient expenditures were for full individual therapy visits, with payments averaging $46 per visit. Methadone treatment was the next most significant procedure, accounting for 20 percent of expenditures. Medicaid paid about $3 per unit of service for each of these procedures. When weighted by the quantities of service, methadone treatment accounted for 70 percent of the total outpatient encounters. The third most significant procedure was group therapy, accounting for 16 percent of outpatient dollars. Group therapy with pregnant/postpartum clients accounted for an additional 2 percent of outpatient spending. Medicaid payments for group therapy averaged $15 per visit.

Table 10 compares Medicaid payments for procedures involving pregnant/postpartum women (PPW) with those for "regular" Title XIX clients. The only procedure with a substantial difference was intake evaluation, where providers were paid 12 percent more for PPW clients. The rationale for higher payments for *intake* of pregnant and postpartum women is the greater complexity in evaluating drug effects and treatment options. The reimbursement rates observed in this sample are the same or lower for treatment procedures. It should be noted that these payment rates reflect actual reimbursements (adjusted for quantity of services) rather than fee schedule amounts.

This table also compares payments for related procedures. For example, under individual therapy, a *full* visit for a regular client was reimbursed 89 percent more on average than a *brief* visit ($47 versus $25), reflecting the greater time input to the full visit. Similarly, *individual* therapy visits were reimbursed at more than three times the amount for *group* therapy visits for regular clients ($47 versus $15). However, for the provider, group therapy could still have been more remunerative per hour than individual therapy given multiple claims for the service.

Utilization and Expenditures on Pregnant and Postpartum Women

Considerable attention has been focused recently on the incidence of perinatal substance abuse, and Medicaid's role in paying for early intervention and treatment services. HCFA is currently sponsoring a five-site demonstration to test the cost-effectiveness of enhanced outreach and case management as well as expanded treatment options for pregnant substance abusers. One of the five demonstration sites is located in Yakima County,

Washington and builds on the existing maternity case management program to coordinate early intervention and substance abuse treatment. Additional slots for short- and long-term inpatient treatment of pregnant substance abusers are being established in two existing programs, which are currently excluded from Medicaid reimbursement because they are institutions for mental diseases (IMDs) with more than 16 beds. In addition, a medical stabilization program is being developed in one of these facilities.

Table 11 compares the demographic characteristics, utilization patterns, and expenditures of pregnant and postpartum women to those for other women ages 15 to 44 with a drug abuse diagnosis. Regarding demographics, pregnant women were quite a bit younger than other female clients; they had a median age of 25 years versus 31 years, and nearly two-thirds of pregnant women, as compared to only one-third of the other female clients, were between the ages of 20 and 29. In addition, pregnant women were more likely to be black or Native American.

Despite Medicaid eligibility expansions for pregnant women (up to 185 percent of the Federal Poverty Level), basis of eligibility did not differ markedly between the two groups. About 85-90 percent of both pregnant and nonpregnant women were categorically eligible and receiving cash assistance (e.g., AFDC, SSI). Nevertheless, a higher proportion of nonpregnant women were eligible through SSI (disability) than through AFDC. Pregnant women were much more likely to be eligible for only part of the year.

Patterns of service utilization and attendant costs were found to be dramatically different between pregnant women and all other women. Pregnant women were four times as likely to receive inpatient services under Medicaid, either alone or in combination with outpatient services. Over three-fifths of pregnant women received some inpatient services, compared with less than one-sixth for all other women.

The higher rate of inpatient care among pregnant women may reflect a number of factors:

- *More Comprehensive Inpatient Benefits*

  Medicaid in Washington State covers specialized inpatient treatment for pregnant women for medical stabilization of the fetus. Inpatient treatment for other women covered by Medicaid is quite limited, mostly detoxification in rural counties with no freestanding detox facilities. However, inpatient treatment for both groups can be provided through State-supported facilities but not reimbursed under Medicaid.

- *Linkage of Prenatal/Obstetrical Care with Drug Abuse Diagnosis*

  The actual amount of inpatient "treatment" received by pregnant women may be exaggerated since all inpatient stays with a drug abuse diagnosis are included. Thus, hospitalizations that are primarily pregnancy-related are included if drug abuse was considered a complicating factor.

- *Differential Patterns of Drug Use*

  Pregnant women had higher rates of cocaine use which is more often treated in the inpatient setting, and then followed by outpatient care. Other women were more likely to use heroin, which is generally treated through outpatient methadone maintenance.

- *Patterns of Eligibility*

  As noted above, pregnant women were far more likely to have part-year enrollment, perhaps a function of their newly eligible status during the pregnancy. They may have received inpatient treatment initially, followed by outpatient treatment (consistent with the higher rate of pregnant women with both inpatient and outpatient treatment). Other women, who were more likely to be continuously enrolled, may be at a later stage of treatment, with inpatient care provided in a prior period.

Consistent with the higher rates of inpatient use among pregnant women, expenditures on drug

abuse-related services are two and a half times those for other female clients--$3,181 versus $1,291.

Comparison of Utilization and Expenditures for Cocaine and Heroin Users

As discussed earlier, the majority of recipients of drug abuse services (62 percent) could not be associated with a particular drug because most outpatient claims were coded as "unspecified drug abuse." (This may be due to the extent of co-dependency on different types of drugs and on drugs and alcohol.) However, using diagnosis codes across all claims for an individual, we were able to identify 799 individuals affected by heroin abuse and 329 individuals affected by cocaine abuse. Some of these individuals had more than one type of substance abuse; for the purpose of this analysis, only those individuals whose *only identified* abused substance was heroin (755) or cocaine (267) were included.

Table 12 compares the demographics and utilization of those individuals uniquely identified with a heroin or cocaine diagnosis. Cocaine users tended to be younger, with 12 percent under the age of 21. Cocaine users were mostly women, including 54 percent who were pregnant or postpartum. Blacks accounted for a disproportionately high share of cocaine users. Both groups were heavily concentrated in urban areas, although a larger percentage of cocaine users than heroin users were rural.

Cocaine users were far more likely to receive inpatient services, with 80 percent using some inpatient services compared to 22 percent of heroin users. However, due to the relatively high cost and frequent encounters in methadone maintenance treatment compared to regular outpatient treatment, spending per recipient year for cocaine users is only about 35 percent higher than spending for heroin users.

DISCUSSION

Context of Medicaid Spending for Drug Treatment Services

In summary, during FFY 1990, the Washington State Medicaid program provided drug abuse-related services to 4,214 people, spending a total of $24 million on their medical care, of which $5.7 million (23 percent) was for drug-abuse related services.

This estimate of Medicaid spending for drug treatment services is considerably higher than that obtained from the 1989 National Drug and Alcoholism Treatment Unit Survey (NDATUS). Tabulations by Larson et al. (1994) showed that 22 out of 135 units (16.3 percent) in Washington State accepted Medicaid fees, amounting to about $488,000 in 1989. According to Larson's figures, Medicaid represented only about 0.7 percent of funding, which ranks Washington State 42nd among the 50 States and the District of Columbia in the level of support from the Medicaid program. Clearly, NDATUS underestimates the extent of Medicaid payments for such services; our estimate of $5.7 million is more than ten times higher than the NDATUS estimate. One explanation is the high level of nonresponse to NDATUS from the State of Washington. Another cause for the discrepancy is the exclusion of certain types of facilities from the NDATUS sample frame (e.g., inpatient units and scatter beds, non-State-supported clinics or residential treatment programs, private physicians, etc.). A third cause is the inclusion in *our* sample of all services with a drug abuse diagnosis, including some inpatient services for complications, rather than treatment, of drug abuse. Thus, NDATUS provides only a limited picture of Medicaid's role in supporting drug abuse services.

This study does not examine the extent to which Medicaid recipients obtained drug abuse-related services from non-Medicaid providers. Medicaid, for example, does not pay for services provided in IMDs with more than 16 beds; most residential treatment facilities in the State, however, have more than 16 beds. Additionally, the State has

found it more cost-effective to pay for detoxification services in freestanding facilities, rather than in higher-cost inpatient general hospitals (which would be eligible for Medicaid reimbursement). Another issue has been the "hassle factor" involved in obtaining Medicaid reimbursement; some providers may prefer to forego the Federal Medicaid match and rely on State funding through the county grant-in-aid mechanism.

Our results can be placed in perspective by comparing Washington State's Medicaid experience with that of a private payor. Unfortunately, most studies addressing the issue of spending on drug abuse are not comparable to this study because they do not separate drug abuse services from alcohol abuse services (for example, Frank et al. 1991; Wright and Buck 1991).

In one study that *does* provide some useful comparisons, Ellis (1992) disaggregates spending on individuals with a drug abuse diagnosis employed by one large firm and covered by one private insurance company. The results from that study are not completely comparable to this study for two reasons: first, the composition of the Medicaid population is very different from a privately insured population, and second, the study includes diagnosis of tobacco abuse and excludes pregnancy and newborn drug abuse diagnoses. Nonetheless, comparisons between the two populations are instructive. Ellis found the utilization rate of drug treatment services to be 6 per 1,000 enrollees, slightly lower than the Medicaid utilization rate of 8 per 1,000 enrollees. Expenditures per recipient in that population were $4,232, more than double the Medicaid spending of $1,690 per recipient year. Finally, the Washington State Medicaid program devoted 60 percent of its expenditures to inpatient treatment compared with 92 percent for the private insurer. This is likely a function of the limited coverage of inpatient treatment under Medicaid.

Limitations of the Medicaid Program for Funding Substance Abuse Treatment

Following are five dominant themes concerning Medicaid "limits" on paying for substance abuse treatment services, including not only formal regulatory limits but also operational impediments to Medicaid participation.

- *Medicaid Has A Medical Orientation.*

  The medical orientation of the Medicaid program is in direct conflict with the philosophy and origins of substance abuse programs. Historically, substance abuse programs have evolved from social, rather than medical, treatment models. Nonphysician providers play a large role, as do recovering addicts, many of whom are not certified as alcohol/drug counselors. Medicaid requirements of physician involvement are alien to the philosophy of the programs and serve to raise costs. Many programs do not meet the conditions for participation.

  One way around the medical orientation of the program is to use the rehabilitation services mechanism (rather than clinic services) for substance abuse services. Washington State has recently switched from the clinic service to rehabilitation service approach because it is less restrictive and ultimately less costly. Under the rehabilitation services approach, referrals to treatment can be made by nonphysician providers (such as nurse practitioners) in addition to physicians. Moreover, physicians need not sign off on all decisions; instead, case reviews are required every 30 days.

- *The IMD Exclusion Precludes Participation by Specialized Facilities With Over 16 Beds.*

  Medicaid excludes specialized facilities, termed institutions for mental disorders, with more than 16 beds. Although most residential facilities have more than 16 beds, State officials acknowledge that Medicaid participation by smaller freestanding facilities has not been fully explored. Some units may

actually be able to qualify with only minor modifications to their programs.

- *Clinic Services Provided in Federally Approved Clinics Must Be Paid at 100 percent of Reasonable Costs.*

  Under the Omnibus Budget Reconciliation Act of 1989, Congress required that State Medicaid programs reimburse Federally qualified health centers at 100 percent of reasonable costs. This includes community health centers, migrant health centers, and providers of health care for the homeless, as well as clinics that qualify for but do not actually receive grant funds. This provision went into effect April 1, 1990. The State is concerned about lack of budget control over clinic-based services.

- *Limited State Dollars Constrain the Pool of Matching Medicaid Dollars. Limitations on Voluntary Donations Serve to Constrain the Pool Even Further.*

  The State requires that all Medicaid-participating substance abuse providers have county contracts, and that they provide the State matching dollars for Federal Medicaid contributions from these contracts or other eligible sources. In other words, the county grant-in-aid funds (provided through the county contracts) are used as the State Medicaid match for outpatient and methadone maintenance services. On one hand, this maximizes the "value" of the State dollar, because State funds pay for only 46 cents on the dollar, while the Federal Government pays 54 cents. On the other hand, Medicaid expenditures are effectively capped by the grant-in-aid budgets provided to counties (which limits the availability of State matching dollars).

  The newly enacted limits on voluntary donations serve to tighten the pool of matching dollars even further. Previously, private donations/gifts, non-Federal grants, and client fees were used as matching funds to augment State dollars, thereby stretching not only the State funds to serve more indigent clients, but also expanding the pool of resources to serve Medicaid-eligible clients. Thus, fewer Medicaid-eligible *and* other indigent clients can be served under the tightened rules regarding voluntary donations.

- *Programs Must Send a Match Check Prior to Receiving Medicaid Reimbursement.*

  The State controls Medicaid outlays for substance abuse services by requiring programs to submit a check, indicating that State matching dollars are available. Only then will Medicaid reimbursement be provided. The intent is to ensure that the State does not request Federal match in excess of State budgeted levels. However, the requirement for "up-front matching" can have negative cash-flow implications for programs already operating on a shoestring. (This requirement, however, was eliminated subsequently.)

Limitations of This Research

The first and most significant caveat for this study is the limited number of diagnoses recorded on each claim: inpatient claims carried two diagnoses and outpatient claims carried only the primary diagnosis. The State's Medicaid Management Information System allows for up to five diagnoses, but this detail is not carried onto the MSIS. The lack of these additional diagnoses in MSIS is a major drawback for analyzing utilization and expenditures related to substance abuse. Providers may code a substance abuse diagnosis in a secondary position in order not to stigmatize a patient. Providers may also use "unspecified drug abuse" as the primary diagnosis in cases of multiple-drug abuse to avoid emphasis on one type of drug; more specific diagnoses may appear in secondary positions. In cases of codependency, alcohol or tobacco abuse may be designated as the primary diagnosis with drug abuse diagnoses placed in secondary positions (and hence, not identifiable on MSIS outpatient claims).

Given the lack of diagnosis data, especially on the outpatient claims, it is likely that the number of

individuals identified as drug *abusers* is understated.

A second limitation of this analysis stems from the inability--due to the lack of inpatient procedure codes in the MSIS data--to identify inpatient drug abuse *treatment*, as distinct from inpatient stays with a drug abuse diagnosis during which no treatment was provided. As a result, it is likely that inpatient costs related to drug abuse are overstated since drug abuse may have been a complicating factor, but not the primary reason for hospitalization. Furthermore, the lack of procedural detail precluded analysis of the content of inpatient substance abuse treatment (e.g., detoxification, rehabilitation).

Finally, this analysis provides a snapshot of treatment provided through the Medicaid program. Any treatment paid for by other public sources--either because the service was not covered by Medicaid or because the provider was unwilling or unable to receive Medicaid reimbursement--was not included in this analysis. This omission could be especially significant for residential treatment provided in IMDs with over 16 beds (especially for pregnant women) and detoxification in freestanding facilities.

Future Directions

This paper has presented descriptive information on utilization of and expenditures for drug treatment services under Medicaid. It has dealt with important first questions such as: What drug abuse-related services does Medicaid pay for? How many enrollees are served? How much is spent? and Which providers participate? Future research would enable a more thorough investigation of the gaps in Medicaid coverage and variations in treatment between Medicaid and non-Medicaid recipients.

Two future research directions have been identified during the course of this study. One extension of this work would involve multivariate analysis to identify the independent effect of each variable on the level of drug treatment expenditures. For example, are Medicaid expenditures for drug abuse-related services higher for pregnant women once we have controlled for type of drug use, locus of care (inpatient/outpatient), age, race, geographic location, etc.? Likewise, do blacks have higher rates of use, other things equal?

A second extension would develop comprehensive data on drug treatment utilization by Medicaid enrollees. The State of Washington gathers detailed information on all individuals assessed and treated through DASA-funded programs (e.g., drug use history, demographic characteristics, and treatment patterns). The Substance Abuse Management System (SAMS) uses a person-level ID code similar to the Medicaid ID, allowing for a match between the two data systems. Analyses on such merged data would provide a more complete picture of drug abuse diagnosis and treatment services received by Medicaid enrollees. A merged data set also may identify individuals who received their drug treatment services through State-funded programs, but who were enrolled in Medicaid. Further research could also include a comparison of demographic characteristics, utilization patterns, and expenditures among Medicaid and non-Medicaid recipients.

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Table 1: Sources of Funds for Direct Substance Abuse Services in Washington State (Excluding Medicaid), FY 1986 - FY 1990 (Thousands of Dollars)

	FY 1986		FY 1987		FY 1988		FY 1989		FY 19[illegible]	
	Expense	Percent	Expense	Percent	Expense	Percent	Expense	Percent	Expense	Percent
Total	$20,188	100.0	$23,828	100.0	$35,268	100.0	$51,744	100.0	$43,910	100.0
State Alcohol/Drug Agency	14,667	72.7	19,971	83.8	29,110	82.5	36,901	71.3	29,606	67.4
Alcohol/Drug Abuse Block Grant	4,960	24.5	3,109	83.8	5,100	14.5	13,573	26.2	8,208	18.7
Other Federal Government	561	2.8	748	3.1	1,058	3.0	1,270	2.5	6,096	13.9

Source: Washington Department of Social and Health Services, Division of Alcohol and Substance Abuse, unpublished data.

Table 2: ICD-9-CM Diagnoses Used To Identify Drug Treatment Users

Drug Psychoses	
292	Drug Psychoses
292.0	Drug Withdrawal Syndrome
292.1	Drug Paranoid/Hallucinos
292.2	Pathologic Drug Intoxication
292.8	Other Drug Mental Disorder
292.9	Drug Mental Disorder (Not Otherwise Specified)
Drug Dependence	
304	Drug Dependence
304.0	Opioid-Type Dependence
304.1	Barbiturate Dependence
304.2	Cocaine Dependence
304.3	Cannabis Dependence
304.4	Amphetamine Dependence
304.5	Hallucinogen Dependence
304.6	Other Specified Drug Dependence
304.7	Opioid/Other Drug Dependence
304.8	Combination Drug Dependence (Excluding Opioid Type Drug)
304.9	Drug Dependence (Not Otherwise Specified)
Drug Abuse	
305.2	Cannabis Abuse
305.3	Hallucinogen Abuse
305.4	Barbiturate Abuse
305.5	Opioid Abuse
305.6	Cocaine Abuse
305.7	Amphetamine Abuse
305.8	Antidepressant Abuse
305.9	Other Mixed or Unspecified Drug Abuse
Perinatal Drug Use	
648.3	Drug Dependence in Pregnancy
655.5	Fetal Damage Due to Drug
760.72	Maternal Narcotic Affecting Newborn
760.73	Maternal Hallucinigen Affecting Newborn
760.75	Maternal Cocaine Affecting Newborn
779.5	Newborn Drug Withdrawal Syndrome

Table 3: Medicaid Expenditures for Individuals With Drug Abuse Diagnosis, Washington State, FFY 1990

Type of Service	Total Expenditures		Spending Per:		
	Dollars (in Thousands)	Percent of Total	Enrollee (n=532,010)	Recipient (n=4,214)	Recipient Year (n=3,375)[1]
Total	$24,394	100.0%	$45	$5,789	$7,228
Drug Abuse[1]	5,703	23.4	11	1,353	1,690
Other Medical Care[2]	17,569	72.0	33	4,170	5,206
Long-Term Care	1,122	4.6	2	266	332

[1]Includes services with "Drug Abuse" diagnosis or procedure, poisoning and testing.

[2]Includes all other medical services (inpatient and outpatient). See text for further details.

Source: Health Care Financing Administration, Medicaid Statistical Information System.

Table 4: Demographic Characteristics of Medicaid Recipients With Drug Abuse Diagnosis, Washington State, FFY 1990

	Recipients		Medicaid Enrollees			
	Number	Percent	Number	Percent	Utilization Rate[2]	Medicaid Drug Abuse Expenditures Per Recipient Year
Total	4,214[1]	100.0%	532,010	100.0%	7.9	$1,690
Age						
Less than 1	40	0.9	22,211	4.2	1.8	380
1 to 5	21	0.5	101,271	19.0	0.2	90
6 to 14	123	[illegible].9	111,259	20.9	1.1	1,305
15 to 20	540	12.8	50,496	9.5	19.4	1,239
21 to 44	3,116	73.9	160,519	30.2	19.4	1,776
45 to 65	279	6.5	33,636	6.3	8.3	1,997
Over 65	50	1.2	52,564	9.9	1.0	656
Gender						
Male	1,252	29.7	205,757	38.7	6.1	1,255
Female	2,917	69.2	326,253	61.3	8.9	1,860
Race						
White	3,053	72.4	385,603	72.5	7.9	1,588
Black	585	13.9	39,231	7.4	19.4	2,261
Native American	150	3.9	20,778	3.9	7.2	1,620
Asian	39	0.9	12,293	2.3	7.3	1,588
Hispanic	91	2.2	39,779	7.5	3.2	2,371
Unknown	251	6.0	34,326	6.5	7.3	1,115

[1]Includes 45 Medicaid enrollees for whom demographic characteristics were unknown.

[2]Per 1000 enrollees.

Source: Health Care Financing Administration, Medicaid Statistical Information System.

Table 5: Eligibility Status of Medicaid Recipients With Drug Abuse Diagnosis, Washington State, FFY 1990

	Recipients		Medicaid Enrollees		Utilization Rate[2]	Medicaid Drug Abuse Expenditures Per Recipient Year
	Number	Percent	Number	Percent		
Total	4,214[1]	100.0%	532,010	100.0%	7.9	$1,690
Basis of Eligibility						
Categorically Needy With Cash Assistance	3,671	87.1	382,821	72.2	9.6	1,700
Aged Blind/Disabled	910	21.6	68,621	12.9	13.3	1,864
Children	590	14.0	212,928	40.1	2.8	1,100
Caretaker/ Relatives	2,171	51.5	101,272	19.1	21.4	1,776
Categorically Needy Without Cash Assistance	310	7.4	93,312	17.6	3.3	1,341
Medically Needy	120	2.8	28,659	5.4	4.2	1,669
Other	68	1.6	25,555	4.8	2.7	2,556
Length of Eligibility						
Full Year	2,204	52.3	258,677	48.6	8.9	1,458
Part Year	1,965	46.6	273,333	51.4	7.2	2,195
1 to 5 Months	622	14.8	N/A	N/A	N/A	3,835
6 to 11 Months	1,343	31.8	N/A	N/A	N/A	1,889

N/A = Not Available.

[1]Includes 45 Medicaid enrollees for whom eligibility status was unknown.

[2]Per 1000 Enrollees.

Source: Health Care Financing Administration, Medicaid Statistical Information System.

Table 6: Geographic Distribution of Medicaid Recipients With Drug Abuse Diagnosis, Washington State, FFY 1990

MSA	Recipients		Medicaid Enrollees		Utilization Rate[2]
	Number	Percent	Number	Percent	
Total[1]	4,214	100.0%	532,010	100.0%	7.9
Urban	3,458	83.6	405,707	76.3	8.5
Seattle	1,673	40.2	156,392	29.4	10.7
Bellingham	50	1.2	11,465	2.2	4.4
Bremerton	66	1.6	17,222	3.2	8.5
Richland	105	2.5	18,689	3.5	8.5
Olympia	160	3.8	16,333	3.8	8.5
Spokane	306	7.3	50,782	9.5	8.5
Tacoma	796	19.1	72,497	13.6	11.0
Vancouver	208	5.0	26,870	5.1	7.7
Yakima	94	2.3	35,457	6.7	2.7
Rural	708	17.0	126,128	23.7	5.6

[1]Includes 48 Medicaid recipients and 175 enrollees for whom MSA was unknown.

[2]Per 1,000 enrollees.

Source: Health Care Financing Administration, Medicaid Statistical Information System.

Table 7: Patterns of Inpatient and Outpatient Utilization

Characteristics	Outpatient Only	Inpatient Only	Inpatient and Outpatient
Total	76.8%	11.6%	11.6%
Age			
Less than 1	83.8	37.5	2.5
1 to 5	100.0	0.0	0.0
6 to 14	84.2	8.1	6.7
15 to 20	75.7	12.4	11.9
21 to 44	72.5	9.6	18.7
45 to 65	76.7	12.2	11.1
Over 65	76.9	26.0	4.0
Gender			
Male	83.8	10.0	6.2
Female	69.4	10.8	19.8
(Pregnant)	(37.4)	(18.0)	(44.6)
Race			
White	75.5	10.0	11.9
Black	62.4	11.6	26.0
Native American	60.7	18.0	21.3
Asian	76.9	10.0	12.8
Hispanic	68.5	18.7	18.7
Unknown	84.2	0.0	3.2
Basis of Eligibility			
Categorically Needy With Cash Assistance	74.0	10.0	16.0
Categorically Needy Without Cash Assistance	69.7	14.8	15.5
Medically Needy	79.2	14.2	6.7
Length of Eligibility			
1 to 5 Months	69.8	18.0	12.4
6 to 11 Months	68.5	11.7	19.8
12 Months	77.2	8.0	14.2
Geographic Location			
Urban	73.4	10.1	16.5
Rural	75.1	12.3	12.6
Medicaid Drug Abuse Expenditures			
Per Recipient Year	$783	$3,737	$4,838

Source: Health Care Financing Administration, Medicaid Statistical Information System.

Table 8: Outpatient Medicaid Expenditures by Type of Drug Abuse Provider, Washington State, FFY 1990

Type of Provider	Medicaid Expenditures	Percent of Total	Average Rate of Reduction[1]
Total	$2,268,200	100.0%	
Medicaid Contracted Substance Abuse Clinic	1,912,131	84.3	0.6%
Other Clinic	199,116	8.8	0.4
Outpatient Hospital	78,226	3.4	46.2
Office	72,966	3.2	27.6
Other	5,761	0.3	15.0

[1]Represents the average percentage difference between the submitted charge and Medicaid reimbursement.

Source: Health Care Financing Administration, Medicaid Statistical Information System.

Table 9: High-Volume Outpatient Drug Abuse Procedures, Washington State, FFY 1990 (Ranked by Level of Medicaid Expenditures)

Rank	Procedure Code	Definition	Medicaid Expenditures	Percent of Total	Average Medicaid Reimbursement*
4	0144M	Individual Therapy (Full Visit)	$684,981	30.2%	$46.20
2	0146M	Chemotherapy (Methadone Only)	465,701	20.5	2.96
3	0145M	Group Therapy (Regular Client)	365,022	16.0	14.62
4	0144M	Individual Therapy (Brief Visit)	77,055	3.4	24.78
5	0568M	Outpatient Case Management (15 Minutes)	62,201	2.7	25.80
6	0141M	Intake Evaluation	59,642	2.6	73.81
7	0155M	Group Therapy (Pregnant/Postpartum Client)	47,077	2.1	14.64

Note: *Means adjusted for quantity of services per payment.

Source: Health Care Financing Administration, Medicaid Statistical Information System.

Table 10: Comparison of Medicaid Reimbursement for Drug Abuse Services for Pregnant/Postpartum Women (PPW) and Regular Clients, Washington State, FFY 1990

Procedure Code[1]	Definition	Regular Clients	PPW Clients	Percent Difference
0140M/0150M	Chemical Dependency Assessment	$74.81	$75.00	0.3%
0141M/0151M	Intake Evaluation	73.81	82.49	11.8
0143M/0153M	Individual Therapy (Full Visit)	46.76	46.24	-1.1
014[illegible]M/015[illegible]M	Individual Therapy (Brief Visit)	24.78	24.15	-2.5
0145M/0155M	Group Therapy	14.82	14.64	-1.2

[1]The first code refers to "regular" clients while the second code is used for PPW clients.

Source: Health Care Financing Administration, Medicaid Statistical Information System.

Table 11: Profile of Pregnant Women, Washington State, FFY 1990

Characteristic	Pregnant Women (n=892)	Other Women (n=1,774)[1]
Age		
15 to 19	11.2%	8.1%
20 to 29	65.1%	34.0%
30 to 39	22.9%	49.8%
40 to 44	0.3%	8.1%
Race		
White	65.0%	49.8%
Black	23.0%	12.6%
Native American	6.5%	2.7%
Asian	1.1%	2.7%
Hispanic	2.9%	2.0%
Unknown	1.5%	8.6%
Basis of Eligibility		
Categorically Needy With Cash Assistance	85.3%	89.6%
Aged, Blind, Disabled	1.1%	14.2%
Low-Income Children	11.7%	7.7%
Low-Income Adults	72.3%	65.1%
Categorically Needy Without Cash Assistance	8.0%	7.2%
Medically Needy	0.3%	2.5%
Other	6.4%	2.7%
Length of Eligibility		
1 to 5 Months	17.8%	12.6%
6 to 11 Months	45.9%	27.0%
12 Months	36.3%	60.4%
Geographic Location		
Urban	81.7%	82.0%
Rural	18.3%	17.0%
Pattern of Use		
Inpatient Only	18.1%	6.3%
Outpatient Only	37.3%	65.1%
Inpatient and Outpatient	44.6%	8.6%
Medicaid Drug Abuse Expenditures		
Per Recipient Year	$3,181	$1,291

[1]Includes females age 15 to 44.

Source: Health Care Financing Administration, Medicaid Statistical Information System.

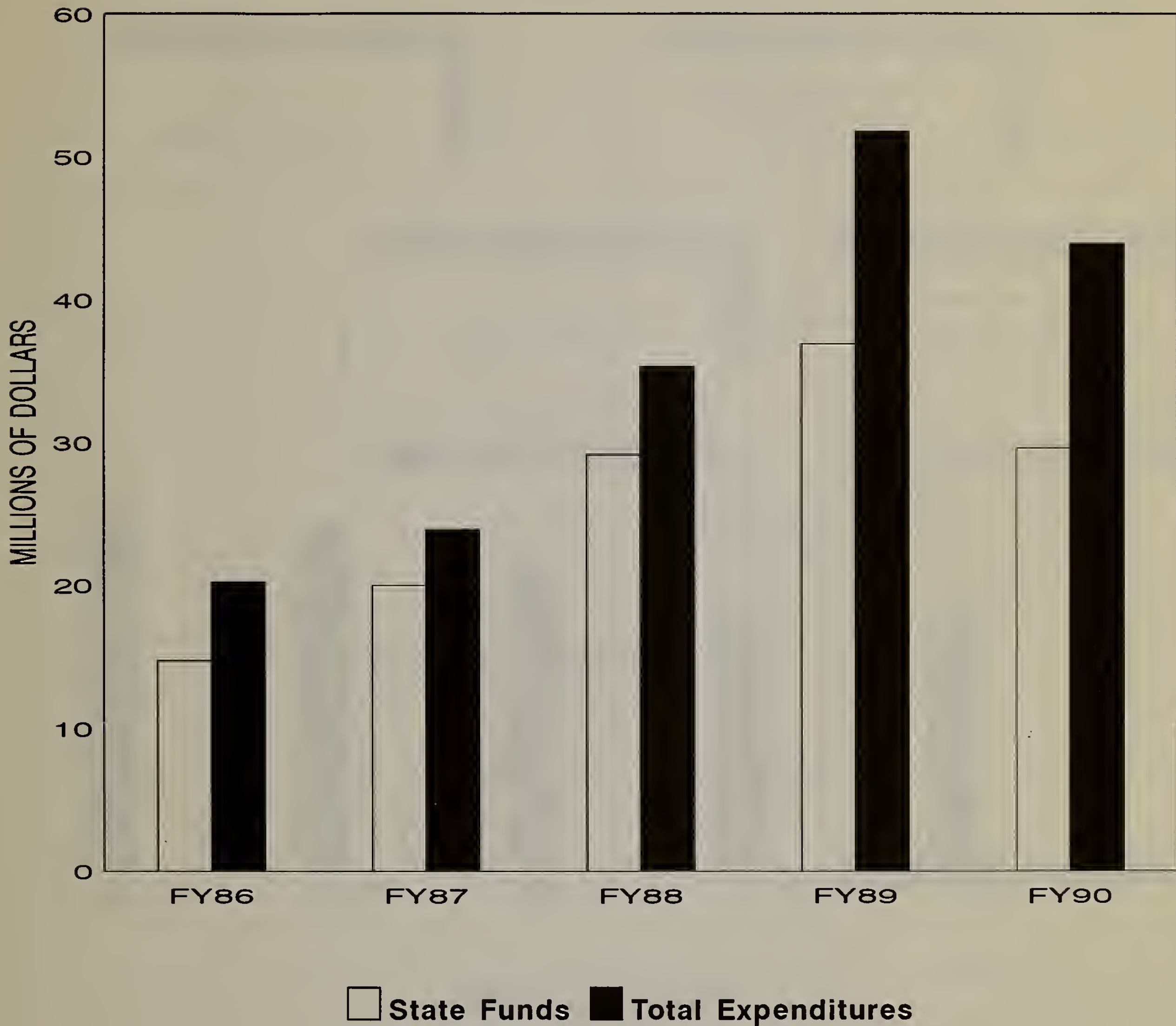
Table 12: Comparison of Heroin and Cocaine Users (Including Drug-Affected Newborns), Washington State, FFY 1990

Characteristic	Heroin Users (n=755)[1,2]	Cocaine Users (n=267)[2]
Age		
Under 15	--[3]	3.3%
15 to 20	--[3]	8.7%
21 to 44	72.9%	84.2%
45 to 65	15.8%	8.7%
Over 65	1.2%	--[3]
Gender		
Male	31.4%	12.4%
Female	68.6%	87.6%
(Pregnant)	4.0%	53.0%
Race		
White	72.9%	53.0%
Black	17.4%	36.8%
Native American	2.7%	3.9%
Asian	1.1%	--[3]
Hispanic	3.1%	8.7%
Unknown	2.7%	2.3%
Basis of Eligibility		
Categorically Needy with Cash Assistance	95.0%	19.9%
Categorically Needy without Cash Assistance	5.3%	9.0%
Medically Needy	4.0%	--[3]
Geographic Location		
Urban	95.0%	28.8%
Rural	5.0%	13.9%
Pattern of Use		
Inpatient Only	5.3%	28.8%
Outpatient Only	77.7%	19.9%
Inpatient and Outpatient	17.0%	51.3%
Medicaid Drug Abuse Expenditures		
Per Recipient Year	$2,866	$4,164

[1]Includes individuals whose eligibility information is unknown.
[2]Only single-drug users. Individuals indentified with multiple drug use are excluded.
[3]Less than one percent.

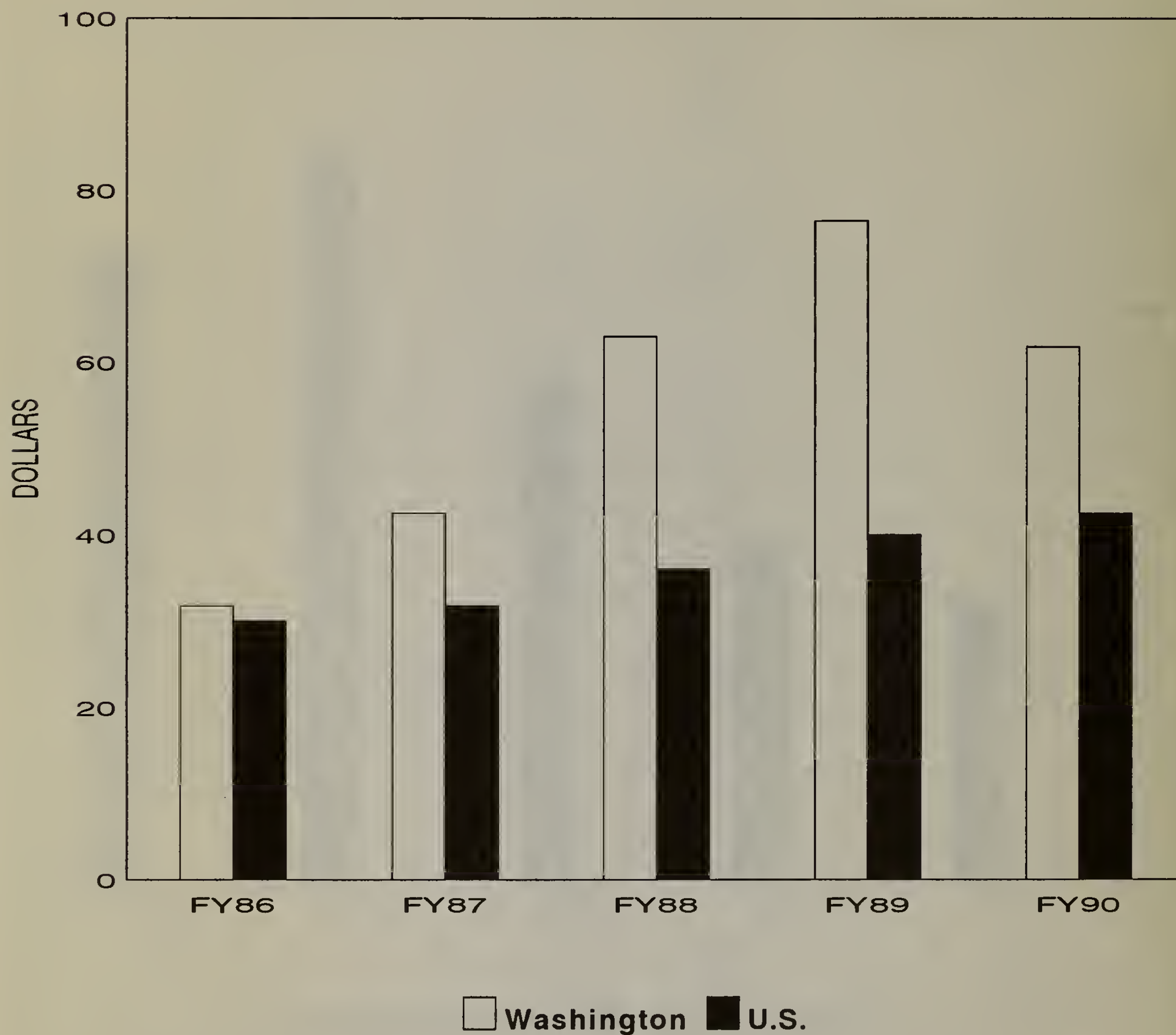
Source: Health Care Financing Administration, Medicaid Statistical Information System.

FIGURE 1: EXPENDITURES FOR SUBSTANCE ABUSE SERVICES IN WASHINGTON STATE (Excluding Medicaid)



Source: Washington Department of Social and Health Services, Division of Alcohol and Substance Abuse, unpublished data.

FIGURE 2: PER CAPITA EXPENDITURES FOR SUBSTANCE ABUSE SERVICES: WASHINGTON STATE AND U.S.



Source: Washington Department of Social and Health Services, Division of Alcohol and Substance Abuse, unpublished data; SADAP, 1986-1990; Statistical Abstract of the United States, 1991.

FIGURE 3: FLOW OF FUNDS FOR SUBSTANCE ABUSE SERVICES IN WASHINGTON STATE

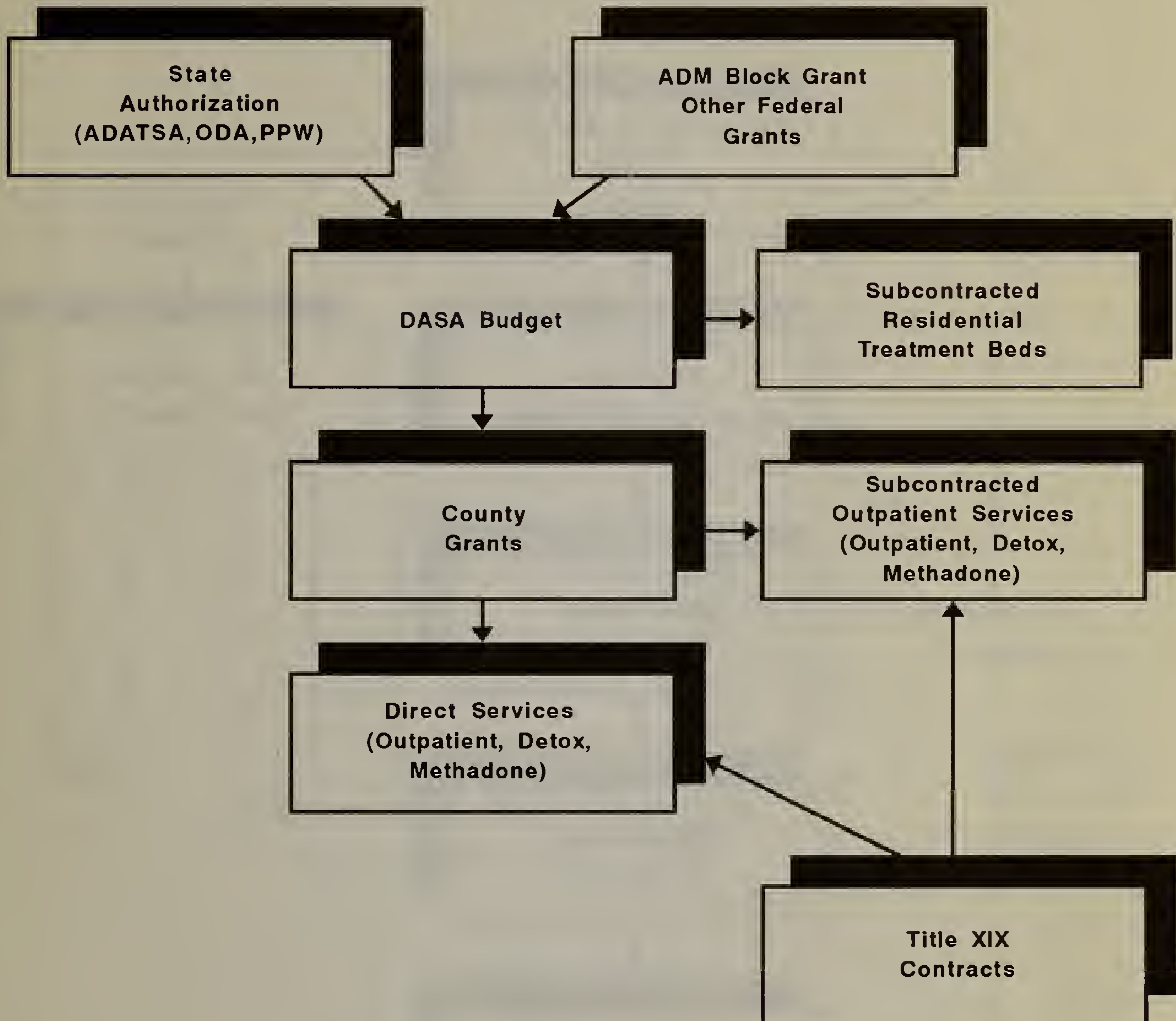


FIGURE 4: CLIENT FLOW THROUGH THE ADATSA CONTINUUM OF CARE

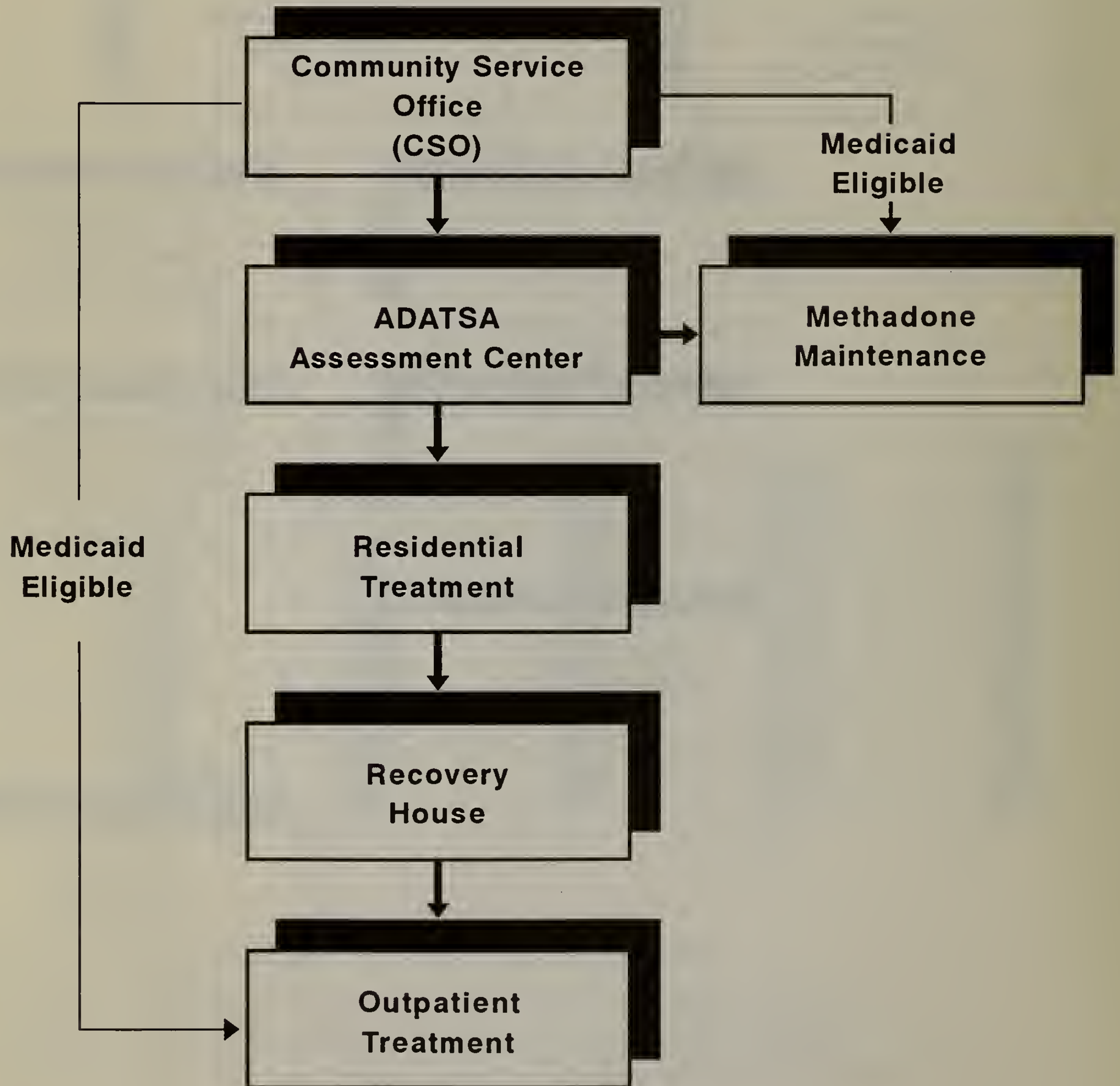


Figure 5. Washington State Metropolitan Statistical Areas (MSA's) & Rural Areas

APPENDIX

Table A-1. Additional Diagnosis and Procedures Codes Used to Identify Drug Abuse Claims and Other Substance Abuse Claims for Individuals Receiving Drug Treatment

(a) Local Procedure Codes for Substance Abuse Counseling/Treatment

Local Procedure Code	Diagnosis
0140M/0150M*	Chemical dependency assessment
0141M/0151M	Intake evaluation
0142M/0152M	Physical examination
0143M/0153M	Individual therapy - full visit
0144M/0154M	Individual therapy - brief visit
0145M/0155M	Group therapy
0146M/0156M	Chemotherapy (methadone only)
0147M/0157M	Medication adjustment (methadone only)

(b) CPT-4 Codes for Drug Testing

CPT-4 Code	Diagnosis
82100	Alkaloids urine screening (heroin, codeine)
82101	Alkaloid urine screening (quantitative)
8220[illegible]	Barbiturates; quantitative
82210	Barbiturates; quantitative and identification
82418	Chlorazepate dipotassium (valium like drug)
82520	Cocaine
82660	Drug screen (amphetamines, barbiturates, alkaloids)
82662	Enzyme immunoassay technique for drugs (emit)
83860-83862	Morphine
83840	Methadone
83992	Phencyclidine (PCP)
84147	Propoxyphene (Darvon)
84408	THC (Marijuana)
84447	Toxicology screen
84448	Toxicology screen sedatives

(c) Drug Poisoning Diagnoses (not otherwise specified)

Code	Diagnosis
969	Pois-analgesic/antipyret
965.0	Poisoning-opiates
967	Poison-sedative/hypnotic
967.0	Poisoning-barbiturates
967.5	Poisoning-glutethimide
967.8	Pois-sedative/hypnot nec
967.9	Pois-sedative/hypnot nos
969	Poison-psychotropic agt
969.0	Poisoning-antidepressant
969.1	Pois-phenotheriazine tranq
969.2	Pois-butyrophenone tranq
969.3	Poison-antipsychotic nec
969.4	Pois-benzodiazepine tran
969.5	Poison-tranquilizer nec
969.6	Poisoning-hallucinogens
969.7	Poison-psychostimulants
969.8	Poison-psychotropic nec
969.9	Poison-psychotropic nos

Note: *The second code is used to indicate treatment for pregnant and postpartum women (PPW).

Table A-2. Diagnosis and Procedure Codes Used to Identify Pregnant and Postpartum Women

(a) ICD-9-CM Diagnoses

ICD-9CM Code	Diagnosis
640	Hemorrhage in early pregnancy
641	Antepart hemorrhage plac prev
642	Hypertension compl pregnancy
643	Excess vomiting in pregnancy
643	Early/threatened labor
645	Prolonged pregnancy
646	Other complications of pregnancy
647	Infective disease in pregnancy
648	Other current condition in pregnancy
650	Normal delivery
651	Multiple gestation
652	Malposition of fetus
653	Disproportion
654	Abnormal pelvic organ in pregnancy
655	Fetal abnormality affecting otherer
656	Other fetal problems affecting mothers
657	Polyhydramnios
658	Other amniotic cavity problems
659	Other indicat care deliver
660	Obstructed labor
661	Abnormal forces of labor
662	Long labor
663	Umbilical cord complications
664	Perineal trauma with delivery
665	Other obstetrical trauma
666	Postpartum hemorrhage

ICD-9CM Code	Diagnosis
667	Retain placenta without hemorrhage
668	Complications of anesthesia in delivery
668	Other complications labor/delivery
670	Major puerperal infect
67[illegible]	Venous complications in pregnancy
672	Puerperal pyrexia (not otherwise specified)
674	0B pulmonary embolism
674	Puerperal complications nec/(not otherwise specified)
676	Infect breast in pregnancy
676	Other breast/lact disease pregnancy
760	Matern condition aff fetus/newborns
V22	Normal pregnancy
V23	Supervis high-risk pregnancy
V23	Postpartum care/exam
V27	Outcome of delivery
V28	Antenatal screening
V36	Single liveborn
V31	Twin, mate liveborn
V32	Twin, mate stillborn
V33	Twin (not otherwise specified)
V34	Other mult birth, all live
V35	Other mult birth, all stillborn
V36	Other mult birth, some live
V37	Other/unspecified multiple births
V39	Liveborn (not otherwise specified)

(b) Local Procedure Codes

Local Procedure Code	Diagnosis
Substance Abuse Treatment of Pregnant Women	
0156M	Chemical dependency assessment
0154M	Intake evaluation
0152M	Physical examination
0154M	Individual therapy - full visit
0154M	Individual therapy - brief visit
0155M	Group therapy
0156M	Chemmorhageotherapy (methadone only)
0157M	Medication adjustment (methadone only)
Prenatal Care	
5941M	High risk vaginal delivery
5946M	Prenatal care, 1st trimester
5945M	Prenatal care, 2nd trimester
5946M	Prenatal care, 3rd trimester
5959M	Additional fee - high risk C-section
5930M	Initial assessment

(c) CPT-4 Procedure Codes

CPT-4 Procedure Code	Diagnosis
59000	Amniocentesis, any method
59012	Cordocentesis (intrauterine), any method
59015	Chorionic villus sampling, any method
590[illegible]0	Fetal contraction stress test
59025	Fetal non-stress test
59030	Fetal scalp blood sampling
59050	Initiation and/or supervision of internal fetal monitoring during labor by consultant with report
59[illegible]00	Hysterotomy, abdominal (eg, for hydatiform mole, abortion)
59120	Surgical treatment of ectopic pregnancy; tubal or ovarian, requiring salpingectomy and/or oophorectomy, abdominal or vaginal approach
59[illegible]	Tubal or ovarian without salpingectomy and/or oophorectomy
59[illegible]30	Abdominal pregnancy
59135	Interstitial, uterine pregnancy requiring total hysterectomy
59136	Interstitial, uterine pregnancy with partial resection of uterus
59[illegible]30	Cervical, with evacuation
59150	Laparoscopic treatment of ectopic pregnancy; without salpingectomy and/or oophorectomy
59151	With salpingectomy and/or oophorectomy
59160	Curettage, postpartum (separate procedure)
59[illegible]00	Insertion of cervical dilator
59300	Episiotomy or vaginal repair, by otherer than attending physician
59320	Cerclage of cervix, during pregnancy; vaginal

(c) CPT-4 Procedure Codes (continued)

CPT-4 Procedure Code	Diagnosis
59325	Abdominal
59350	Hysterorrhaphy of ruptured uterus
59400	Routine obstetric care including antepartum care, vaginal delivery (with or without episiotomy and/or forceps) and postpartum care
59410	Vaginal delivery only (with or without episiotomy and/or forceps) including postpartum care
59412	External cephalic version, with or without tocolysis (list in addition to code(s) for delivery)
59414	Delivery of placenta
59420	Antepartum care only
59430	Postpartum care only
59510	Routine obstetric care including antepartum care, cesarean delivery, and postpartum care
59515	Cesarean delivery only including postpartum care
59525	Subtotal or total hysterectomy after cesarean delivery

PAYING FOR PUBLIC DRUG ABUSE SERVICES IN THE SIX NEW ENGLAND STATES

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SUMMARY

This study describes publicly funded drug abuse treatment in the six New England States. The authors focus on reimbursement and contract design in order to better understand the incentives and institutional environment faced by providers.

The chief data source for the study at this stage is information from State agencies about their regulations and contracting practices. In addition, the NDATUS survey of drug treatment units was used to gain some preliminary insights into the existing organization of the market. The work so far does not systematically address the actual outcomes of competitive bidding and the provider viewpoint. These will be examined in later stages of the investigation.

The market structure analysis identifies special features of the market for public substance abuse treatment, and finds the following: (1) demand is jointly determined by clients and the State; (2) product differentiation exists across modalities and localities; (3) suppliers may not be profit maximizers; and (4) extensive nonprice competition exists for both clients and funding. In addition, the authors identify various differences among the New England States including the way administrative areas are defined, the extent to which States channel funds to preferred providers, and the degree to which drug treatment facilities diversify (into alcohol treatment). Provider discretion is identified as an important factor in the drug treatment sector, highlighting the relevance of studying contracts for their incentive properties.

Our analysis of contracting finds that States vary considerably in their use of competitive bidding, and in the level of detail at which they regulate providers. Most States pay either per unit of service or based on costs, with the latter payment system more likely to be associated with detailed regulation, probably due to its incentive properties. We find that while most States use competitive bidding for new services, only Massachusetts and Maine currently require periodic systemwide bidding for existing services. (Maine only recently passed this legislation and, at the time of this study, the administrative rules were in the process of being written). We also find that in addition to the formal contractual relationship between the State and the provider, there is a set of informal relationships; this is most apparent in States which contract with a relatively small number of providers with whom relationships have been built over a period of years.

The authors discuss some payment system innovations which are in progress. The Maine office of substance abuse has implemented performance-based contracting which focuses on whether the providers are meeting standardized outcome and accessibility objectives. Providers meeting the standards may retain any surplus funds while those who do not meet the standards may face a decrease in funding in future years. "Purchase of Service Reform" in Massachusetts began in 1987 and includes changes to the contracting system and the implementation of a uniform financial reporting system. In 1992, the Massachusetts department of public welfare, which oversees the State's Medicaid program, established a managed care program under which the State contracts with one organization who will establish and administer the program statewide and will be paid a monthly capitation rate.

In general, we find that the States have substantially different approaches to their relationships with providers. Future work on this project will look at the reasons for these different approaches, and the implications for outcomes of interest, such as the costliness and effectiveness of treatment programs in different States.

INTRODUCTION

One of the central features of the U.S. drug treatment sector noted by many observers is its "two-tier" character. This refers to the fact that most drug treatment programs specialize in either publicly funded clients or private ones, rarely both (Institute of Medicine 1989; Pauly 1991). Treatment intensity, success rates, and funding levels are very different between tiers, to an extent which may justify analyzing them as separate "industries." This report focuses on one of the tiers, the publicly funded one, and asks how States deal with providers[1] of drug abuse treatment. The focus is on reimbursement and contract design, with a view to understanding the incentives and institutional environment facing providers. A contract cannot be so detailed as to specify what a provider should do in all contingencies. Many decisions about volume, quality, and type of services are left to a provider after the contract has been set. This discretion makes it important to look at the incentives present in State-provider contracts in order to understand provider decisionmaking. The paper's focus on State-provider relations makes it to some extent complementary to other related projects which are analyzing intergovernmental transfers and the determination of total drug treatment capacity (Schlesinger and Dorwart 1992; Pope 1994; Rosenbach and Huber 1994).

Our focus is on the six New England States. We have not studied States outside this region and cannot, at this preliminary stage, discuss the similarities and differences between New England and other regions. The New England States have some similarities in cultural and socioeconomic characteristics, along with important differences in approaches to provider regulation and reimbursement. We discuss the levels of funding from various sources and the procedures used to distribute the funds among different modalities and across geographic regions. This report is primarily descriptive. We do not evaluate any of the alternative contracting and financing methods described. Future, more detailed study of the different States may provide insight into the rationale for and effectiveness of the different approaches.

All of the State agencies in New England have jurisdiction over both alcohol and drug abuse services. Accordingly, our report focuses mainly on the substance abuse service system administered by the State substance abuse agency (SAA). Where possible, we attempt to distinguish funding or procedures that are specific to drug abuse treatment but, in general, the New England States do not separate the two fields. We also note that we have not examined all the different State governmental entities (e.g. departments of corrections or mental health or the State Medicaid department) which provide or finance substance abuse treatment services.

The work presented here has focused on how the contracting system is designed rather than how it functions in practice, and in many places we pose questions rather than showing results. In particular, the State case studies are based mainly on information gathered through telephone conversations with staff at State agencies, and through examination of sample documents they supplied. Future stages of the research will address the broader questions of how the rules are actually applied and what outcomes result.

PUBLIC FINANCING OF SERVICES

Sources of State Funding

State substance abuse agencies are the largest single payor for public substance abuse services. The State agencies receive funding from two major sources: State general fund appropriations, whose primary source is State taxes, and Federal government grants. Table 1 and figure 1 compare the relative magnitude of these two sources in four of the New England States; these data were not provided by the State agencies in Rhode Island and Connecticut. Responsibility for the financing of services appears to be relatively evenly split between the States and the Federal Government: State appropriations account for 64 percent of the

State agency budget in Maine, 53 percent in Massachusetts, 49 percent in New Hampshire and 51 percent in Vermont, not counting 1) Medicaid; 2) local government; 3) public welfare; and 4) other public third-party. The largest source of Federal funding for SAAs is the Alcohol, Drug Abuse and Mental Health block grant. On average, 80 percent of Federal funding received by the State is through this block grant program (see table 1).

It is important to note that not all public funding for substance abuse services flows through the SAA. According to the 1991 NDATUS, treatment units report receiving 8.9 percent of their total funding from Medicaid, 6.6 percent from local government and 5.6 percent from other public sources (public welfare, Medicare and other public third-party). Other sources of Federal funds include drug free schools grants, and financing which supports data collection and demonstration projects. Unless otherwise noted, this study focuses on the funding received by the State substance abuse agency which it then disburses to providers (some of the analysis in the elements of the structure of supply section below examines total public funding due to the difficulty in disaggregating the data).

It should also be noted that in some States, State agencies other than the substance abuse agency receive Federal and State funds for the provision of both prevention and treatment services. For example, in Maine, the department of education is responsible for activities within schools, the department of mental health and mental retardation oversees provision of substance abuse treatment to the dually diagnosed, and the department of corrections provides services to prisoners. The figures reported in this paper reflect only the funding of the lead substance abuse agency unless it is specifically stated otherwise. The funding and services provided by other State agencies, and the interconnection between them and the lead agency are important areas for future research but are beyond the scope of this paper.

Cross-State comparisons are somewhat hampered by differences in State data reporting methods. For example, one State may report all expenditures for residential services under one category while another reports separate amounts for residential rehabilitation, extended care, and/or long-term residential. One State may report estimated funding allocations for the full fiscal year while another reports funding as allocated at a particular point in the fiscal year.

Division of Responsibility Among State Agencies

With an increasing emphasis placed on the problem of substance abuse and the resulting increase in funding and availability of treatment services, there has been a definite trend towards consolidating fragmented administrative responsibility within State government. In many cases, different State agencies developed services geared toward their respective clients: State mental health agencies contracted for services for the mentally ill; State correction departments provided services for criminals; and departments of education supported prevention and early intervention programs. In most cases, the State mental health agency also had jurisdiction over the provision of substance abuse services to the general public. None of the New England States continue to place primary responsibility for substance abuse services within the State mental health agencies. For some States, however, this is a very recent development, and for others, services continue to be provided by other State agencies even though the State substance abuse agency has overall responsibility for the service delivery system. State government organization charts showing the separate lines of authority can be found at the end of this report. This study examines the administrative procedures of the SAA and not those of every State agency providing or financing substance abuse services within a State. We do not attempt to present a description of the entire State substance abuse services system.

The Rhode Island office of substance abuse was established July 1, 1991 in an effort to consolidate the activities of all State agencies under one central administrative unit. Statewide needs assessment, planning and policy development are now the responsibility of the office of substance abuse, as is the administration and monitoring of the grant and

contract system. The office of substance abuse is currently in the process of integrating the staff and budgets of the various State agencies previously responsible for pieces of the service delivery system.

In July 1990, Maine established its office of substance abuse with the same goals: creation of an integrated and comprehensive system of services, and establishment of a single administrative unit which is accountable for this system. Prior to this point, a committee composed of the commissioners of various State agencies was responsible for the joint planning and coordination of services. The Maine office of substance abuse is now responsible for the planning of services as well as the determination and allocation of funding for all the substance abuse services provided by State departments. In addition, the office of substance abuse has authority over the development of uniform contracting practices and operating and treatment standards. However, certain State agencies continue to be responsible for services offered to their clients: the department of education oversees activities within schools, and the department of mental health and mental retardation and the department of corrections continue to contract for services provided within their respective institutions.

Connecticut completed the transfer of substance abuse treatment services from its department of mental health to the Connecticut alcohol and drug abuse commission (CADAC) in 1989. The commission has 23 members of which eight are heads of State agencies such as the departments of education, children and youth services and correction. CADAC is responsible for planning, development, and administration of substance abuse services but does not license facilities. The department of health services continues to license substance abuse facilities in the State. Connecticut is the only State in New England which separates the licensing function in this manner.

All the New England States combine alcohol and drug abuse treatment within a single State agency. For example, the Massachusetts bureau of substance abuse services, a branch of the department of public health, is the result of the consolidation of the division of alcoholism and the division of drug rehabilitation. The division of alcoholism was established by the department of public health in 1950. The division of drug rehabilitation was established in 1963 and was transferred back and forth between the department of public health and the department of mental health until 1982, at which time this division was formally placed under the jurisdiction of the department of public health. Since that time the two divisions have been slowly merged into the bureau of substance abuse services.

Allocation of State Funding Among Catchment Areas/Programs

In general, States attempt to ensure an even geographic distribution of funds throughout the State. There does not appear to be a standard approach specifically relating funding to need or demand. For example, Vermont attempts to ensure that outpatient treatment services are available in the major cities of each county. The Vermont office of alcohol and drug abuse programs requires that State funds support services provided to the uninsured but does not allocate its funds based solely on any particular measure of need. In Massachusetts, officials use the percentage of individuals below 150 percent of the Federal poverty level in an area as a principal measure of need and this in turn forms the basis for funding decisions. This measure targets funds into large, older urban areas, which is consistent with other indicators of need used by the bureau of substance abuse services. Officials in Maine report that they are shifting their focus away from needs assessment and are including analysis of treatment demand patterns to determine funding allocations; they have found that underutilized programs may exist even though needs assessments indicate a need in the area served. The office of substance abuse measures utilization based on units of services delivered rather than number of clients enrolled, as it is active clients who really constitute the demand for services. In general, allocations to providers are based on historical amounts--adjusted for inflation and changes in State budgets--with changes

in service availability accomplished by requiring providers to shift existing resources among different modalities. The companion paper summarizing State programs includes tables which contain regional data such as population, size and, where available, funding and contracting amounts. These tables report aspects of the situation at the time of this study and are not meant to imply that State agencies consider only these data when allocating funds.

Economic analysis of the financing of public substance abuse services requires a geographic definition of a "market area." Where possible, we use the administrative areas designated by the States for purposes of geographic definition of markets. In addition, the section on elements of the structure of supply compares the "average" area's characteristics across States.

There are some limits to States' discretion in interprogram allocation. In particular, funds derived from Federal grants may be subject to mandatory "set-asides," requiring, for example, that a certain percentage of funds be allocated to programs for treating pregnant women. The number of these set-asides appears to be increasing, reintroducing "categorical" elements into the financing system, which was converted to a block grant 10 years ago.

Federal allocations among States differ sharply from the intrastate allocations in that the Federal government uses explicit need-based formulas to set each State's share. Between 1988 and 1992, the ADAMHA grant has been heavily targeted to urban areas. Analysis performed by the General Accounting Office argued that the formula overstated the extent to which substance abuse and mental illness are urban phenomena. The ADAMHA Reorganization Act, which was passed into law in July 1992, amends the formula by eliminating the urban weight component of the old formula but double-counting each State's population of urban 18-24 year olds and adding to the formula a "cost of services" index, constrained to within 10 percent of the national average, that reflects the higher cost of providing services in urban areas.[2] States may well be reluctant to commit to need-based formulas for their own discretionary funding in light of the Federal Government's experiences with formulas.

There are also limits to States' ability to reallocate funds previously awarded to existing, established providers. Many States report that there may be political repercussions from any attempt to remove funds from providers who have historically received State funding. Provider lobbies and State legislators encourage State agency directors and governors' offices to maintain the status quo.

State Budget Environment

The economic and budgetary situation in New England has affected the States' ability to finance substance abuse services. All State contracts or grant agreements contain standard clauses making contracts and/or contract amounts subject to the availability of appropriations. All of the New England States have recently decreased funding. For example, in Massachusetts, State budget appropriations for the bureau of substance abuse services have dropped from $38.5 million in FY 1990 to $32.2 million in FY 1991 and 27.8 million in FY 1992.

In some respects, fiscal stringency may encourage change in contracting arrangements, to the extent that States expect savings to result, but on the other hand, it may be harder to compensate providers who lose from changes, in a context of overall budget cuts. This implies greater provider opposition and lobbying, which may thwart efforts to change.

ELEMENTS OF THE STRUCTURE OF SUPPLY

This section organizes information about the financing and supply of public substance abuse treatment services into a unified conceptual framework. The framework is that of the "industrial organization" field within economics, which looks at issues such as:

- *seller concentration*: How many suppliers sell the product? Are they of similar size, or do a few large suppliers dominate the market?

- *product differentiation*: Are the firms selling an identical product, or are there differences which affect consumer preferences between firms?

- *barriers to entry*: How easily can new suppliers enter the market? Does the threat of potential entry serve to discipline incumbent suppliers?

Of course, the market for public substance abuse treatment departs from the more traditional markets studied by industrial organization in several important ways. The suppliers are often not-for-profit firms, which may choose not to exploit monopoly power even if they get it. (Or they may choose to; this is an empirical question.) The demand is jointly determined by the client and the payer (with some provider influence), so that treatment cannot persist without some level of commitment by each. Demand may not be price-sensitive, since the client is seldom paying himself, and political constraints tend to perpetuate existing purchase arrangements. The production function is highly uncertain, with little known about which modalities work best, either in general or for a specific individual.

Nonetheless, the basic hypothesis in this section is that we can learn something by applying the industrial organization framework and noting where it does not fit. In some cases there is as yet little data to support analysis and conclusions. Collecting data about market conditions and payment practices is part of our ongoing research.

Determinants of Demand

In a long-run sense, the demand for publicly funded treatment is determined by States' willingness to fund treatment programs and clients' willingness to utilize them. It is useful to look separately at the determinants of each type of demand.

The client is often in treatment due to coercion, such as court-ordered or court-recommended treatment. In cases where demand is truly voluntary, the client is more likely to seek treatment, and persist with it, when the out-of-pocket cost (which is often zero), the time price (travel and waiting time, as well as treatment time), and the level of "negative" features of treatment (e.g., drug tests or mandatory therapy) are all low.

In the case of the State, aggregate willingness to pay is strongly influenced by Federal transfers through block grants (see section on the public financing of services) and by the competing demand for these funds for alcohol and mental health treatment. A portion of the State's demand is therefore, to some degree, exogenously set.

In addition, the State's willingness to pay for treatment is influenced (but not determined) by the local electorate's willingness to pay via taxes. The State is willing to pay more when the concern among voters for drug clients' welfare is great, the negative social costs, such as crime and AIDS, imposed by drug addiction (and the social benefits from removing them) are significant, and/or the cost to the State is relatively low.

Newman (1987) has argued that governments have mainly funded methadone treatment out of an overly optimistic belief in its social benefits (e.g., crime reduction or more recently AIDS prevention), with the result that funds are cut when results fall short of expectations. Schlesinger and Dorwart (1992) develop city-level measures of treatment capacity, and relate them to various measures of treatment need. They find that cities with higher capacity are ones where (among other factors) residents are more at risk from violent crime, suggesting that a belief in social benefits has a significant impact on expenditures.

However, the effects of belief in social benefits may be reduced, if voters believe they can "free-ride" on the spending of neighboring jurisdictions. Pope (1994) analyzes the determinants of State spending in more detail and suggests there are also interstate differences in the taste for law enforcement versus prevention as drug control

strategies. A further consideration is that both State and client are likely to have higher demand, the more effective they believe treatment to be. From the State's point of view, success may mean simply abstinence or an end to criminal activity, whereas the client may have other goals such as securing a job or release from probation. For methadone maintenance, the definition of success is even less clear, since many proponents see lifetime maintenance, rather than abstinence, as an acceptable goal (Newman 1987).

Pauly argues that uncertainty about the effectiveness and benefits of treatment is fundamental and that a significant part of market behavior represents attempts to cope with that uncertainty (Pauly 1991).

One way to compare demand across the six New England States is to look at such measures as State substance abuse agency spending and numbers in treatment. Table 1 presents State agency spending for substance abuse in four States, broken out by funding source. One relevant statistic is the funding per capita, which varies from $4.68 in New Hampshire to $12.61 in Massachusetts (data were not available for Connecticut and Rhode Island).

NDATUS as a Data Source

Much of the analysis in this section is based on the 1989 National Drug and Alcohol Treatment Unit Survey (NDATUS), conducted by the States for the National Institute on Drug Abuse. It is worth noting two limitations of this data source for the present purpose:

- Response rate

  NDATUS is voluntary, and in 1989 response was particularly low in Maine (60 percent) and New Hampshire (66 percent). The response rate in Massachusetts was 68.9 percent and in Connecticut was 73.8 percent. On the other hand, the response was over 95 percent in Vermont (96.3 percent) and Rhode Island (98.8 percent) (NDATUS 1989). The 1989 report suggests that private units were less likely to respond, and less likely to provide funding data if they responded. The implication is that analyses based on NDATUS will understate the relative importance of the private tier.

- Underreporting of Drug Spending

  The survey form required programs to attribute their funding to either alcohol or drug purposes, whereas programs often receive funding for combined alcohol/drug purposes. It appears that many facilities were unable to identify any of their revenues as "drug" funding. One result is that 209 New England units which reported having drug clients also reported receiving no drug funding from any source.

- Underreporting of Drug Client Census

  The 1989 NDATUS survey required units to classify all their patients as having either drug or alcohol problems. Subsequent surveys have allowed units to classify patients as dually diagnosed, which has resulted in a large increase in the number of clients reported to have drug problems. The comparison suggests that drug client numbers for 1989 are likely to be artificially low, with many dually diagnosed clients reported only as "alcohol clients."

State officials expressed concern with the reliability of NDATUS information, echoing our reservations and citing examples where the State agency's information does not agree with NDATUS. This is of particular importance to State officials as NDATUS may form the basis for State and national policy decisions. In addition to the problems identified above, State officials believe that NDATUS does not afford an accurate account of utilization and capacity or of total funding for substance abuse-related services.

The States participate in NDATUS by identifying all active treatment units and distributing and collecting the NDATUS forms. In some cases, States do not believe the information is accurately recorded by the providers, but the States do not have the resources or data to cross-check the information. While State representatives receive

training and technical assistance in the administration of NDATUS, State officials believe they should have more input into the preparation of the survey questionnaires. For example, it is felt that units of service should be better defined and reported.

NDATUS does not claim to be a perfect data set. The issues discussed above should be taken into consideration when interpreting results. However, it is the only State-specific nationwide data set which attempts to include private providers who do not receive public funds.

Definitional Issues

Defining drug treatment units. Our analyses of client concentration consider only those facilities with a positive number of drug clients in treatment at the time of the NDATUS census. This excludes 106 nontreatment units in New England, as well as 80 units which reported treating only alcohol clients.

Computing public funding. Given the problems with isolating drug funding in NDATUS data, we rarely attempt to do so. Instead, our analyses of funding consider all payments for substance abuse care, whether for drug or alcohol treatment. Public funding includes payments by States, Medicaid, Medicare, public welfare and local authorities.

Findings

Table 2 presents the NDATUS units' report of the amount of public drug spending they received. From the table, it appears that the highest spending in relation to population was in Connecticut ($6.32) and Rhode Island ($4.93). At the other extreme, public payers in Maine were reported to have spent only 77 cents per 1,000 of population, compared to a New England average of $3.67. There was also some variation in the ratio of reported public spending to estimated capacity, with New Hampshire spending $4,634 per slot in New Hampshire compared to $345 in Maine.[3] Capacity includes units with no public funding, so States with large private tiers would have correspondingly lower public spending per slot.

The spending in table 2 should not be expected to match State SAA spending in table 1, since table 2 includes all public spending and excludes alcohol spending, among other differences. Nonetheless, State officials regarded the drug funding reported in tables such as this one as being unrealistically low, which encouraged us to instead analyze combined drug and alcohol funding rather than drug funding only (see above).

Table 3 shows the implications of using total substance abuse funding. Of the 616 treatment units in New England which responded to NDATUS, 430 had at least some drug clients. Of those 430, about 75 percent reported receiving some public funding, and these accounted for 86 percent of the drug clients. The difference in share suggests that publicly funded units tend to be somewhat larger than other units. A more restrictive definition of the public tier would be to consider only those facilities receiving funding from the State substance abuse agency. In 1989 there were 230 such units, implying that there were another 93 units receiving public funding only from non-SAA sources (data not shown).

Spatial Differentiation

Most States organize their drug treatment planning around some geographical unit smaller than the State, called a catchment area. Implicit in such planning is the idea that most people are likely to seek treatment within their own catchment area, or can be persuaded to do so. For States which use preferred providers (like Vermont), there may also be a presumption that a provider at one location can serve the whole catchment area.

In economic terms, these assumptions address the extent of geographical differentiation. For more standard economic goods, differentiation can be measured by the responsiveness of demand in area A to a price change in area B. If the response is low, geographical differentiation is high, and we may be able to distinguish local markets.

In the case of substance abuse treatment, the service is nontransportable, so buying from another

area means the client must travel there. However, the client is usually paying little or nothing, so the "price sensitivity" of demand cannot really be measured. Instead, facilities may compete on other dimensions, and geographical differentiation may be addressed via the client's willingness to travel.

If clients are very willing to travel within their catchment area and very unwilling to travel beyond it, then the catchment area will be an appropriate level at which to measure competition, via concentration indices, for example. One case where this condition is less likely to be met is in Massachusetts, which has very large catchment areas. It is unlikely that providers in Provincetown really face stiff competition from those in Fall River, which is about 70 miles away but in the same catchment area. A client's willingness to travel may vary depending on the type of service demanded; residential or inpatient treatment facilities may have larger catchment areas than would an outpatient facility.

There has been considerable research using alternative methods to define hospital market areas (which, it seems likely, would be applicable to the substance abuse treatment market as well). The methods which have been used fall into four broad categories: (1) definitions based on administrative or geopolitical areas; (2) radius measures which use the hospital as a centerpoint and draw a circle around it, (3) clustering methods which define an area based on the origin of a certain percentage of total clients, and (4) definitions based on the ability of a hospital to attract patients or employees (Wright and Marlor 1990; see also Porell and Adams 1991 for a review and critique of the different methods).

Reflecting data availability, we have used States' administrative planning areas or counties as catchment areas and our results are dependent on this choice of definition. Future researchers may be able to construct catchment areas empirically using client origin information to determine where residents of an area seek treatment. This will be a substantial undertaking, however, and may involve client confidentiality issues.

Table 4 presents some descriptive information about the typical catchment area in each of the six States. Figure 2 shows the range of per capita contract dollars in the catchment areas of three of the New England States.

Product Differentiation

So far, this section has discussed publicly funded drug treatment as if it were a single product. In reality, it is known that there are important differences between modalities and settings of care, and the clinical literature stresses the importance of matching clients to the right modalities. If modalities are poor substitutes for each other, then the drug treatment market may be less competitive than it appears in the aggregate. For example, competition between units in a town would be weaker if each unit had a different modality, and each client had a strong preference for one modality.

What makes two modalities close substitutes, in an economic rather than a clinical sense? First, we would call two modalities close substitutes if clients are willing to switch in response to small changes in cost, travel time or other client-valued characteristics. Second, substitution implies that the State is willing to switch funds between programs with differing modalities, for example, in response to small changes in costs.

An extreme case of differentiation is certain States' (Maine and Vermont) refusal to fund any methadone treatment whatsoever. For these markets, methadone maintenance is not competitive with the other modalities. In fact, it is not even a "product" in the public-sector market, since clients from these States who are receiving methadone maintenance services must be paying for it themselves or through private financing such as health insurance.

Provider Concentration

A traditional concern of industrial organization has been the number of sellers and the dispersion of market shares. In the present case, one measure of market share is the provider's share of total public funding for drug treatment. Unfortunately this statistic could not be reliably computed from the NDATUS survey of drug and alcohol treatment units, owing to data problems with the self-reported funding variables. (See section on NDATUS as a data source.) Instead, we measure market share by the facility's share of total clients in treatment, also taken from NDATUS.

Table 5 presents concentration measures based on shares of clients in treatment (publicly funded or not), at the catchment area level. The two measures used are the Herfindahl index, which sums the squared market shares of facilities; and the two-firm concentration ratio, which gives the combined market share of the two facilities with largest shares. Areas with a Herfindahl index of 1 are monopolized; areas with a concentration ratio of 1 are either monopolies or duopolies (the top two firms have the whole market). Area-level monopolies appear most common in Vermont (8 out of 12 catchment areas) and New Hampshire (2 out of 8). The range of concentration within each State (using the two-firm concentration ratio) is presented in figure 3.

In addition, an "average" concentration index for each State is presented, based on combining the catchment area indices (using numbers of clients as weights). The State-level index may be interpreted as the concentration faced by the "average" client in a given State. The two indices agree as to the ranking of States, with Vermont appearing most concentrated (Herfindahl=0.79, concentration ratio=0.92) and Massachusetts appearing least concentrated (Herfindahl=0.14, concentration ratio=0.39).

Since these indices combine the public and private treatment tiers, they may understate concentration in the public tier. On the other hand, concentration may be overstated in some States due to omission of nonresponding facilities. Response was particularly low in Maine (60 percent) and New Hampshire (66 percent).

Table 6 presents measures of concentration at the State level, considering each modality to be a separate product. Concentration rates are typically lower for the outpatient drugfree modality, with a Herfindahl index ranging from 0.03 (Massachusetts) to 0.21 (Vermont). In the case of methadone maintenance, Massachusetts has considerably higher concentration than Connecticut (Herfindahl of 0.17 compared to 0.09) despite the same number of treatment units (18). These measures may understate concentration by treating the whole State as one market, and by including private-tier units receiving no public funding. However, as with table 5, concentration may also be overstated due to omission of nonresponding facilities.

Purchaser Concentration

The measured power of the purchaser depends on how narrowly one defines the public tier of the market for drug treatment. First, suppose that the public tier consisted only of facilities serving clients of the State abuse substance agency, and that those facilities saw no other clients. In this case, the State SAA would be in the position of a monopsonist (i.e., a single purchaser), and could use its power to drive down provider reimbursements.

More realistically, facilities funded by the State SAA are also funded by other public agencies such as Medicaid. This should reduce the monopsony power of any one public agency over providers. In addition, some publicly funded units receive private reimbursements, further diluting State power. (The larger the number of units which see both public and private patients in this way, the less valid is the "two-tier" metaphor as a description of the drug treatment sector.)

Table 7 examines the extent to which public agencies are the dominant purchasers of drug and alcohol treatment in each State, using data from the NDATUS survey of facilities. (Alcohol treatment is included due to the difficulties in distinguishing

drug from alcohol funding.) In panel (a), we find that on average the State SAA only pays for 33 percent of total funding reported by facilities, ranging from 12 percent in New Hampshire to 50 percent in Connecticut. More broadly, the public sector provides 57 percent of facilities' funding in New England, rising to over 60 percent in three States. However, one could argue that these numbers understate the public payers' true market power because they include facilities which receive no public funding (the private tier).

To address this objection, Panel (b) presents data only on facilities with some public funding. The exclusion of private-tier facilities raises the public share of funding from 57 percent to 59 percent in the region as a whole. The exclusion has little effect since it only removed 38 facilities from the total.

The data in table 7 imply that the public payers are the dominant purchasers of outpatient substance abuse treatment in publicly funded facilities; however, they are not a monopsonist overall. (Of course, it may be that the public tier is better defined by a more stringent cutoff than "any public funding," e.g., "x percent of funding comes from the public payers." In this case, the public payers' measured dominance would be greater). Calculations based on the data in table 7 show that the State SAAs account for a large share of all public funding: 59 percent overall, and over 40 percent in four States.

It was not possible to conduct the State-share analysis separately for drug funding, owing to apparent underreporting of drug treatment funding by facilities in the NDATUS file. Future work on this project may help identify such biases by collecting State funding data to compare with NDATUS.

An alternative source of data on purchaser concentration is the SADAP survey of State alcohol/drug agencies (Butynski et al. 1990). In Vermont, an estimated 98 percent of alcohol and/or drug treatment units received funding from the State alcohol/drug agency, whereas in New Hampshire the proportion was 31 percent. The other New England States were reported as follows: 96 percent (Rhode Island), 85 percent (Massachusetts), 58 percent (Maine), 53 percent (Connecticut). A low proportion could indicate a large number of private-tier units relative to public-tier units, or a concentration of State contracts among a minority of units, or both factors. Concentration of contracts is known to be important in New Hampshire.

Horizontal Integration

Horizontal integration occurs when a single organization owns multiple firms, or in this case, treatment units. This may be relevant to market behavior, if, for example, competition is weakened by the common ownership. The Institute of Medicine report (1990) noted that in the U.S. as a whole, the public sector mostly comprises small nonprofit outpatient clinics, along with a few multisite residential and methadone programs. The latter may be underrepresented in New England. This issue could not be addressed using NDATUS, as the survey does not ask units about their chain affiliations.

The apparent lack of horizontal integration in public substance abuse treatment poses an interesting contrast with patterns in other related markets. Multiunit chains are common among drug and alcohol treatment facilities serving the private sector, as well as among psychiatric hospitals and other health care markets. The publicly funded sector is more heavily regulated, but this could actually encourage multisite operation if the costs of regulatory compliance decrease with scale. Such savings might occur, for example, if the chain could apply for permits and do paperwork at a lower cost than the separate units. On the other hand, State agencies may regard chain membership and for-profit ownership as signals of undesirable goals or may value nonintegrated services due to the value of community investment in local programs, and will therefore steer contracts away from multiunit chains, thereby discouraging horizontal integration.

Diversification

Another traditional aspect of industrial organization concerns the ease and extent of diversification between related products. How common is it for facilities to offer more than one modality, and does the State regulation process (deliberately or not) discourage this? Are there many publicly funded facilities combining alcohol and drug treatment, as are found in the private sector? These issues could not be addressed using NDATUS, owing to problems in attributing clients to specific modalities.

A second question concerns the prevalence of combined alcohol/drug units. Table 8 shows that 84 percent of units with any drug clients also had alcohol clients. According to NDATUS data, these units only treated 70 percent of all drug clients, suggesting that the drug unit at the average alcohol/drug facility is smaller than the average specialized drug facility. However, these results should be treated with caution, given the problems in reporting dually diagnosed clients (see earlier discussion).

A third direction of diversification could be between the public and private tiers. There is some evidence that this is difficult, in part due to the differing (and costly) accreditation requirements in each sector (see below).

Barriers to Entry and Exit

Market behavior may be affected by the ease with which programs can enter or leave the market. In the case of public treatment facilities there appear to be significant startup costs in order to enter the market. It is not clear that these barriers actually benefit incumbents, as in traditional oligopoly models. Some barriers are described below.

Licensing/Regulatory Barriers

States potentially have two decisions: how many facilities to allow, and how many to contract with. The former is addressed by licensing procedures; the latter by prequalification and contracting rules. Both practices are discussed briefly below. In addition, see Framework for Contracts, also below, for a more extensive discussion on contracting practices.

Licensing activity varies considerably by State. On the one hand, New Hampshire and Vermont do not separately license substance abuse treatment providers (although in New Hampshire the contracting process looks at issues such as physical site requirements, which other States address at the licensing stage.) On the other hand, Connecticut, Maine and Massachusetts have elaborate regulations governing all substance abuse treatment programs, even if they do not seek State contracts or funding. Licensing requirements vary in scope from those that are general to all facilities to those that are specific to particular modalities or services, or even to particular providers. General requirements address issues such as whether the building meets fire and safety rules, whether it has adequate laundry arrangements, etc. Treatment-specific requirements specify such things as required levels of service availability, staffing, and referral procedures. Facility-specific requirements set goals and objectives each specific facility must meet in order to retain its license. All three levels of regulation are used in Connecticut, Maine and Massachusetts. The license period is one or two years in most States. Only federally provided services are exempt from Massachusetts regulation.

There is also a separate layer of Federal regulation not discussed here. For example, both the Food and Drug Administration and the Drug Enforcement Administration regulate methadone maintenance treatment programs.

Many of these regulatory costs impose irrecoverable costs on the provider. For example, a provider who leaves the market can sell the building and other fixed assets but not the license or program approval. The licensing costs are "sunk," and therefore irrelevant to the exit decision. On the other hand, if providers were farsighted enough, they would take account of this irrecoverability before entering the market. In this case the regulatory costs would serve to deter entry, rather than hastening exit.

Selective Contracting

It has been noted that most providers belong to either a "public" tier, relying on State and Federal funds, or a private tier, but not both. To the extent that "public drug treatment" is a distinct product, the State's contracting procedures (e.g., channeling purchases to preferred providers) can pose a significant barrier to entry into that market.

The section Framework for Contracts provides more detail on how far the different States seek to contract selectively. The purchaser concentration indices discussed in this section suggest an important role for the States' contracting procedures in determining concentration.

Neighborhood Resistance

One obstacle to the creation of new treatment facilities is resistance from neighborhoods around prospective locations. McAuliffe (1990) reports that "in Massachusetts, State officials have been unsuccessful in finding communities that would allow siting of methadone programs, even when the community itself has a large untreated addict population with high rates of HIV infection." Massachusetts officials report that they have, in fact, had success siting methadone services (methadone sites have doubled in the last 3 to 4 years) using creative strategies. For example, in one community methadone medication has been delivered by vans parked at the police station, rather than at a fixed site, with counseling provided by existing outpatient treatment providers. In this way, Massachusetts responded to neighbors' fears of attracting addicts who would then "hang out" where methadone was dispensed. In economic terms, each community either does not recognize the external benefits of drug treatment or feels it can capture the benefits without incurring the costs (real or perceived) of proximity to a treatment facility.

NIDA sees neighbor resistance as a major problem and is offering siting assistance to public programs, as well as sponsoring research into siting barriers (SAR 1991).

Private-Tier Accreditation

Public-tier facilities apparently face a barrier to diversification into the private tier, because most private payers require that services be provided in an accredited facility. But public treatment facilities find it costly and time-consuming to get (and maintain) accreditation from the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), whose process is designed for hospitals rather than rehabilitation facilities. The public-tier facility would have to anticipate a significant number of private clients to justify the cost of seeking and maintaining accreditation. Advantages cited include prestige and educational benefits, but most clients whose care is reimbursed by public agencies are treated in nonaccredited facilities (Amodeo 1991).

The existence of this barrier between tiers also seems likely to affect entry decisions. Individuals deciding whether to establish a public treatment program will presumably bear in mind that they will find it hard to diversify.

Form of Competition

We have characterized the demand for public substance abuse treatment as being jointly determined by addicts and public payers. In most cases, treatment can only occur (or at least persist) if the payer is willing to pay and the addict is willing to show up. This jointness of demand raises the question of how providers compete: are they more likely to emphasize characteristics valued by the addict, or those valued by the State payer?

Ben-Yehuda has argued that without regulation, methadone programs compete for clients by reducing the therapeutic component, in the limit acting as mere "filling stations," providing methadone only. His analysis implies that therapy and counseling are public goods in that they contribute to the social goals of treatment, but they are private "bads" because the client finds them irksome. In this view, public mandates are needed to prevent interfacility competition from eliminating

the external benefits of treatment (Ben-Yehuda 1982).

How facilities compete for public funds will depend on the form of the contract, which is discussed below. In the typical case where the State is offering a fixed budget, facilities appear likely to compete in terms of quality and contribution to goals, not only in terms of cost.

Cost Structures

One would typically expect the organization of an industry's suppliers to be strongly influenced by the structure of production costs. For example, decreasing returns to scale provide an incentive to suppliers to merge, creating a more concentrated market organization. Massachusetts pays a lower rate per unit of service to residential providers with more than 20 beds, which suggests that treatment costs decrease with scale. In the case of substance abuse treatment, there are at least two cost functions which should be distinguished: one relating cost to outcomes, and one to treatments.

A theoretically appealing measure would be the cost of producing desired outcomes, such as abstinent clients. If facilities were paid based on outcome, and the cost per abstinent client declined with the scale of the facility, then one would expect to see most clients channeled to a few large facilities.

However, for reasons discussed in the upcoming section, payment by results is rare in the public substance abuse treatment sector. It is more common for facilities to be paid based on their actual or prior-year costs, or on budgets using preset prices per unit of service. In this situation it is important to distinguish the cost-of-service function from the cost-of-outcome function, since the two may have different characteristics and implications for provider behavior.

Where price per unit of treatment is set independently of the cost of treatment, the provider faces greater pressure to be efficient, compared to a cost-based contract. However, lower costs may also be achieved by methods other than efficiency improvements, for example by avoiding more seriously ill clients. As a result, the interpretation of cost differences across providers and contractual forms is not straightforward.

Conclusion

This section has identified a wide variety of special features of the market for public substance abuse treatment, including (1) demand which is jointly determined by clients and the State; (2) product differentiation across modalities and localities; (3) suppliers who may not be profit maximizers; and (4) extensive nonprice competition for both clients and funding.

In addition, there is considerable variation among the States in some of the conventional measures of market structure, such as seller concentration and regulatory barriers to entry.

Several of these features result in considerable provider discretion about treatment decisions. This makes it important to look at the incentives which providers face, and the institutional environment in which they operate. A major determinant of both incentives and environment is the contracting process, which is discussed in the next section.

A second conclusion from this section is that the "industrial organization" perspective provides a useful framework for addressing many of the issues in State-provider relations. Economists studying other industries have looked at issues such as the effect of regulatory sunk costs, and the behavior of not-for-profit suppliers with incomplete contracts. There is considerable scope for applying these insights to the substance abuse treatment sector.

FRAMEWORK FOR CONTRACTS

This section presents a framework for looking at State-provider relations through the contracts they sign. The first subsection describes what the State is contracting for: What is the unit of service? How is it priced? How does the State make sure its

other objectives are met? The second subsection looks at how contracts are allocated, including whether and why the request for proposals (RFP) is used. Examples are taken from the six New England States. Our research focuses on the regulations rather than the outcomes of the contracting process. Table 9 summarizes how contracts are defined and let in the six New England States. Figure 4 shows the distribution of contract funds between outpatient and residential services for four of the States.

Defining the Contract

For any organization, one alternative to contracting for services is to "do it yourself." For example, Connecticut operates its own residential facilities in addition to contracting with vendors. This is partly due to historical reasons, since the substance abuse agency was spun off from the mental health department and inherited some of the institutional sites.

The simplest case of contracting involves an arm's length transaction between independent entities, rather than an internal relationship between two parts of the same organization. Contracting out requires the purchasing organization to specify what it wants to purchase in greater detail than would be necessary for an internal transaction. Within an organization, management can oversee and alter the agreement or relationship between two divisions. Changing the terms of the transaction is more difficult if it is defined by a contract.

While the goal of human services is some desired output (e.g., the number of addicts cured), it is rarely possible to contract directly for the output. Instead, the human services purchaser typically buys inputs (e.g., hours of counselor time) and is concerned with the cost of services rather than the cost of outcomes (see discussion on cost structures above). This increases the importance of how the service is defined.

The simplest measure of service volume is the number of visits or inpatient days provided, about which most States collect information whether or not payment is directly tied to volume. However, high utilization (input) may not guarantee good outcomes, since it may be achieved by socially undesirable means such as avoiding sicker clients. For this reason most States evaluate performance with respect to multiple goals, not just utilization.

To control selectivity, Connecticut requires contractors to State their admission criteria and prohibits exclusion based on ability to pay, number of previous treatment episodes, or level of motivation. The State agency may also negotiate admission criteria during the award process. Another approach is to specify minimum numbers of certain target populations that must be treated by a provider, as in Maine's new performance contracts.

Quantifiable performance indicators typically measure aspects of the treatment process, rather than its outcome: for example, the number of hours the facility was open.

Other performance criteria may be judgment-based and nonquantifiable, such as whether the facility is involving the local community sufficiently.

One State, Maine, has developed performance indicators which include treatment outcomes which were added to its FY 1993 contracts. The outcomes include patient's maintenance of employment, abstinence in last 30 days before discharge, and lack of arrest. Maine calls these "effectiveness" measures, and combines them with the usual "efficiency" measures (such as units of service) to evaluate performance. The relative weight accorded to efficiency and effectiveness will be determined by the State agency.

Maine's use of outcome measures should provide information about provider preferences and incentive design. One way for providers to improve their outcome measures would be to select patients with better prognoses, the process known as "creaming." Maine is seeking to address incentive problems by defining client populations which must be treated and criteria for treatment.

For the six States studied, the contractible service is the unit of treatment (hour, visit or day). The typical State also addresses other dimensions of treatment via performance criteria, which nearly always relate either to stated goals, or to process measures such as staffing levels and opening hours (the exception being Maine's experiment with outcome measures). The next attribute is how the service is paid for, with a key distinction being between cost reimbursement contracts and fixed-price contracts.

Cost Reimbursement Contracts

Under cost reimbursement contracts, the provider is paid based on a previously agreed budget which specifies the reimbursable amount for each line item. Massachusetts uses this approach for a few providers, who are required to complete a program budget as part of their response to an RFP. The contractor is then reimbursed for costs it reports each month and has one year in which to reach the maximum. Connecticut, New Hampshire and Maine also have some form of cost reimbursement, albeit with important differences.

This type of contract offers little incentive for the provider to be efficient in use of inputs or to buy cheaply. For example, the State's objectives would not be met if providers cut back services in order to pay higher salaries or administrative costs. One way to control abuse is to specify a minimum acceptable utilization level and penalize the contractor for any shortfall. For example, Connecticut reduces funding for detoxification and shelter programs which deliver less than 80 percent of the maximum attainable number of patient days. New Hampshire has similar minimum levels which differ across service types.

Another issue in cost reimbursement is how the State verifies provider costs. Nearly all States require submission of regular cost reports, with varying levels of detail. However, in small States some informal monitoring appears to occur too. For example, Vermont has few providers to deal with and apparently knows their costs through close involvement in facility operations.

Cost-based reimbursement is regularly implicated as a cause of the high rate of growth of general health costs in the U.S. (Newhouse, 1988; Weisbrod, 1991). Despite frequent criticism for undesirable incentive properties, cost reimbursement remains widespread in the health care sector, because of the apparent complexity of making changes. This prevalence also applies to the public treatment sector, where reimbursement methods have received less attention to date.

Fixed-Price Contracts

Under fixed-price contracts, the provider is paid a fixed price per unit of service and sets volume, subject to some ex post monitoring. The key questions then become: what is the unit of service, and how is its price determined? The typical unit of service is the visit, day or hour of treatment, as discussed above. The determination of price raises a different set of issues, discussed below.

One option is to base the price per unit of service on the provider's own historic costs. In Massachusetts, provider-specific historic costs are used to set higher "individual rate" contracts (subject to some negotiation) for providers who can convince the State they offer a unique, non-standard service addressing an unmet need. As with cost reimbursement, this approach may discourage efficiency. For example, if the provider were simply paid its own historic costs, any productivity improvements would simply reduce its unit rate in subsequent years. On the other hand, if historic costs are only the starting point for the unit price, then providers can be allowed to share the benefits of any productivity improvements.

Another way to set price is to base it on the average cost of a group of providers. In Massachusetts, contracts for the standard treatment modalities are paid on class rates, e.g., one rate for methadone counseling, another for detoxification, etc. For each class, the rate is negotiated between the State Rate Setting Commission and the providers prior to the contracting process. One result is that prices are set prior to bids being sought, and bidders must compete along other dimensions. This may create incentives for

providers to keep per-unit costs down, which might be accomplished through increased efficiency but might also be the result of reduced quality.

In the "class-rate" case, a key question is whether there are systematic differences in providers' cost structure, and whether grouping dissimilar providers together would result in unfair penalties for some. For example, in the case of mental health, Medicare excluded specialized psychiatric facilities from its prospective payment system in light of evidence that they attract more severely ill patients. This question can be addressed by "peer grouping," i.e., defining relatively homogeneous subgroups of providers and paying a different class rate for each subgroup. (McGuire et al. 1990 describe a recent application of peer groups in New Hampshire's Medicaid program.)

Another issue is the allocation of joint costs in a multiple-payer setting. For example, Maine has a formula for determining the reimbursable cost per unit of service which uses a State "contract share," defined as the ratio of the State's contract value to the total program cost (which presumably includes overhead). Similarly, New Hampshire contracts with some providers who mainly offer mental health treatment, and pays part of their overhead, presumably based on an allocation rule.

Finally, fixed-price contracts may result in surplus funds being generated, if, for example, the contractor manages to keep costs below the levels budgeted. Connecticut specifies its share of the surplus as being proportionate to the State award of funds, and requires return of that share to the State agency. In contrast, Maine's new performance contracts (in FY 1993) will allow the provider to keep any surplus as long as it meets performance objectives.

Monitoring Performance

Monitoring techniques include site visits and review of written reports by contractors. Reports may be annual, or more frequent. In Massachusetts, providers with class rate contracts need only file cost reports and audited financial statements, but other providers must supply considerably more information, perhaps because of the greater scope for provider discretion in their contracts.

Anecdotal comments suggest that monitoring activity is often reactive, in that provider reports are collected but not examined unless information from another source alerts state agency staff to an emerging problem. Low levels of monitoring may be due to staffing shortages and lack of resources.

Finally, Vermont reportedly monitors provider costs fairly accurately by virtue of frequent interaction with the small number of providers. This type of informal monitoring is less applicable to larger States seeking to spread contracts widely, such as Massachusetts.

Letting the Contract

Defining Who Is Eligible To Contract

In States which license providers, the State agency requires bidders to be licensed. (The licensing processes are discussed above.) Various States impose additional requirements, as described below.

In Massachusetts, the bureau of substance abuse services has defined standards that facilities must meet in order to be eligible for contracts from the bureau. Bidders must also be prequalified by their principal purchasing agency, that is, the State agency which has awarded the most contract dollars to the bidder in the most recent fiscal year. (New bidders must submit other evidence of ability to meet minimum administrative and fiscal standards.) In Connecticut, State funding regulations require treatment and rehabilitation programs to have explicit policies for admission, referral and a variety of other procedures.

In Vermont and New Hampshire, there is no clear prequalification process, and in practice the State continues to fund existing vendors unless it is funding a new type of service. In practice, therefore, the providers who are eligible for contracts (or funding) are those already dealing with the State. No new providers may enter the market unless a new service is requested by the

State. (See discussion on barriers to entry and exit above.)

Requests for Proposals

Throughout the private and public sectors, competitive purchasing, through requests for proposals (RFP), is used to buy products and services at lower cost. State substance abuse agencies do not make heavy use of the competitive process. New services or significant expansions are subject to RFPs in Connecticut, Maine, Massachusetts and Rhode Island. However, RFPs are much less widely used for rebidding existing contracts. Massachusetts laws mandate a systemwide RFP every 5 years. New regulations in Maine require that all contracts above $100,000 be recompeted at least once every 6 years. At the time of this study, the administrative procedures to put these regulations into practice are being written. The Maine SAA expects to request proposals for one-third of the contracts in FY 1994. New Hampshire has restored its RFP system after a few years' hiatus, but its RFP is generic, requesting proposals for substance abuse services in general without specifying areas or modalities. The other States typically extend existing grants or contracts without a formal RFP.

The low use of RFPs may reflect special characteristics of human services. Frequent changes in contractors could result in disruptions of treatment, so that the State agency must weigh losses in continuity of care against possible budget savings from competition. Unless higher authorities (or State laws) require use of RFPs, the State agency is likely to give more weight to continuity-of-care considerations. This may be a rational for selective contracting (see discussion above).

It may be that RFPs can have anticompetitive effects, since the time and effort needed to respond becomes a barrier to entry by small providers. States concerned about this effect may offer technical assistance to all bidders (as is done in Massachusetts purchase-of-service contracts), or even seek to recruit or establish new provider agencies in the area (Kramer and Grossman 1987). In a more theoretical framework, McGuire and Riordan (1991) have applied principal-agent economic theory to drug treatment contracting, and found that incomplete information biases the optimal market structure toward sole sourcing, unless the social cost of profit is large. Since State agencies' definitions of social cost may differ, this raises the question of where competitive bidding rules come from. In Massachusetts the substance abuse agency works with general contracting regulations set externally by bodies such as the Executive Office of Human Services, the government entity with authority over all State human services departments. In other States the substance abuse agency may have more discretion.

Criteria for Selection of Contractor

Selection criteria are relevant only when the State is choosing among multiple proposals, which is rare in most States. In New Hampshire, the State agency reviews proposals and chooses which providers to negotiate with. Since the RFP is generic, the State agency is not bound to specific terms and all contract terms are negotiable. State regulations do not specify the criteria to be used in selecting contractors.

In Massachusetts, the review process is spelled out more explicitly in the RFP. Proposals are reviewed and ranked separately by the local regional director and by a proposal review committee (comprising staff from the bureau of substance abuse services and other State agencies). The two groups present overviews of the proposals and recommended rankings to a senior management review committee, whose members in turn develop their own rankings. The final rankings are averaged and the highest ranked proposals are prioritized for funding. However, if negotiations with a prioritized provider are not completed in a reasonable time, the State may disqualify that provider and start negotiating with the next prioritized bidder. Massachusetts also has an appeals process for unsuccessful bidders.

It is worth noting that for Massachusetts class-rate contracts, reimbursable costs per service unit are fixed before bidding, so that bidders cannot

compete on price (see discussion above on form of competition).

Connecticut uses RFPs to fund new services or expansions of existing ones. The criteria used to review proposals include: (1) the extent of the problem addressed; (2) how the program will correct it; (3) the program's budget and costs; (4) support from local community; and (5) admission criteria.

Where States pay providers, they are likely to be concerned that their funds are not simply substituting for other public or private sources. Connecticut, New Hampshire and Vermont require funded providers to seek reimbursement for services from clients or third parties. Where providers are allowed or required to bill clients, there are usually rules specifying that providers may not reject clients due to inability to pay.

Contracting Decisions In Between RFPs

Even if a State regularly recompetes statewide, there are decisions between RFPs which affect the competition among providers. For example, if a contract expires between RFPs, does the State consider changing providers? How much discretion does the State have in allocating unexpected extra funding? How does it treat unsolicited proposals?

In Massachusetts, if the bureau receives additional funds, it may add them to existing contracts rather than issuing an RFP as long as the new amount is less than 125 percent of the original contract amount. Contracts are effective for 5 years, with annual renewals to adjust for budget cuts or cost-of-living increases. It is apparently very rare for the State to withdraw a contract during the 5-year period, and doing so can only be justified if there are serious problems. Presumably the State could not refuse to renew merely because a new vendor had appeared whose services were better or cheaper. The State's discretion between RFPs is therefore limited.

Despite a formally competitive setup, incumbency provides considerable advantages. (Schlesinger et al. 1986 provide an interesting analysis of bidding outcomes for mental health contracts in Massachusetts.)

Unsolicited proposals may be important if RFPs are infrequent, as a way for funds to reach new providers and newly identified problems. Connecticut accepts applications for supplemental funding but only reviews them if new funds become available during the fiscal year.

Subcontracting

Market competitiveness may also be affected by States' attitude to subcontracting. For example, a blanket ban on subcontracting might prevent small providers from combining with other providers to respond to an RFP and may encourage horizontal integration (see discussion above). The result would be to favor large providers. On the other hand, States may be concerned that subcontracting could be used to get around licensing requirements, unless it too is regulated.

Massachusetts requires prior written approval from the department of public health for subcontracting arrangements. Among the requirements are that the subcontractors should comply with licensing requirements, that conflicts of interest be avoided, and that the bidder have sufficient funds to pay the subcontractor.

The definition of subcontracting is inevitably somewhat arbitrary, involving use of some cutoff level of purchases. Massachusetts defines a subcontract as the contractor's purchase of services involving the lesser of $25,000 or 10 percent of the contract amount, or as significant delegation of financial or programmatic responsibility.

Summary

The following summarizes the analysis of contracting in the six New England States:

- Most States pay providers based on units of service or past costs, not on outcomes (although they may monitor outcomes).

Exception: Maine's new performance contracting initiative.

- States which pay based on cost reimbursement are most likely to specify detailed targets for utilization, given the risk of inefficiency/gaming.

- Although most States use competitive bidding to let new services, only Massachusetts and Maine mandate systemwide RFPs for existing services. Massachusetts has more elaborate rules to encourage competition, although their actual effects are still to be studied.

- There is a considerable amount of variation among States in how detailed they make their bidding procedures, monitoring rules, etc. Massachusetts is probably the most regulated, New Hampshire the least.

In addition to the formal contractual relationship between State and provider, there may be an additional informal relationship such as direct monitoring of costs. The importance of informal control is still unclear, but it appears to be greater in Vermont and New Hampshire, which contract with a minority of providers.

Some of these views may be modified as we learn more about how contracting and reimbursement function in practice.

INNOVATIONS IN PAYING FOR SERVICES

In addition to describing State-provider relationships at a point in time, it is also helpful to describe the evolution in these relationships. In conjunction with the increased emphasis on and financing for substance abuse services, States have attempted to increase their ability to control the expanding service delivery systems. In the case of Rhode Island and Maine, this has occurred through an administrative restructuring within the State government and the establishment of separate State agencies responsible for the coordination of all services funded by the State and the standardization of policies and procedures governing the service providers. As reported elsewhere, this has occurred very recently in Rhode Island and the office of substance abuse is still under development.

Maine: Performance Contracting

The Maine office of substance abuse has already begun to change its contracting practices. Since July 1, 1992, contracting for substance abuse services has been based on performance rather than expense. The expense-based contracts focused on a detailed budget submitted by the provider; the contract amount was derived from the number of service units the office was purchasing. Providers were also required to list their goals (describing long-term results) and objectives (defining attainable targets with measurable results such as number of service units to be provided).

Under performance-based contracting, the focus is on whether the provider is meeting standard outcome and accessibility objectives defined by the office of substance abuse, in consultation with service providers. Separate standards are included in three areas for each type of service provided under the contract: required efficiency indicators and minimal standards; required effectiveness indicators and minimal standards; and special conditions. Efficiency indicators define units of service to be made available and may include minimum monthly staff hours or minimum occupancy levels. Effectiveness indicators include such outcome measures as maintenance of employment, drug-free for 30 days prior to termination, no arrests, and reduction of problems with family members. Minimum percentages of primary clients meeting these qualifications are defined for each effectiveness indicator and the provider is required to meet a specific number of indicators (e.g., providers of outpatient services must meet 8 out of the 12 performance indicators). Special conditions define the minimum percentages of each target population which must be served.

The performance indicators were included in FY 1992 contracts, but no penalties were attached to nonperformance. Beginning with FY 1993

contracts, providers who do not meet the performance standards will have funding for the following year decreased. Providers who meet the performance standards will be permitted to retain all surplus funds.

Also in Maine, the legislature has recently passed legislation requiring that all contracts above $100,000 be recompeted at least once every 6 years. This could make the contracting process more competitive, although it is not known how many providers will bid for contracts. Providers of outpatient services in Maine are required to be certified only if they wish to be considered for State funding or private insurance payment. Opening up State contracts to all providers may induce noncertified providers to seek certification.

Vermont: Elimination of Fee-Based Reimbursement

In the appropriations act for FY 1987, the Vermont legislature required that the office of alcohol and drug abuse programs (OADAP) change its basic policy for awarding grants from one of the supporting programs to one of the supporting individual clients. The act required that OADAP use 75 percent of its funds to reimburse providers, on a sliding fee scale, for services provided to individuals who were not eligible for Medicaid or covered by private insurance. The remaining 25 percent of funds could support what were termed programs of care and included early intervention and assessment services. The fee-based system covered all providers of outpatient, residential and intensive outpatient services; certain programs geared to specific target populations continued to be funded on a program basis. Under this system, fees were set for specific services and programs were permitted to earn up to a preset amount per year. The funding cap was specific to the provider and was based on its total capacity. If additional funds were available, however, a provider could bill the State for amounts above its cap. In the following year, again if funds were available, a provider's cap could be raised based on the amount of its overclaims.

OADAP abandoned the fee for service system in FY 1992, and has returned to the grant-in-aid funding format where funds are targeted to support specific programs and capacities. The office prepares an annual service plan which specifies the State's priorities and allocates aggregate amounts to different treatment modalities. Providers are required to submit service and staffing plans and a balanced budget (based on historical costs) which is commensurate with the objectives of the service plan.

New Hampshire: Generic Requests for Proposals

For FY 1992, New Hampshire began to request proposals annually from providers rather than automatically renewing existing contracts each year. New Hampshire's RFP is generic: one RFP seeks proposals for all types of services rather than separate proposals for each service. All proposals received were from existing contractors. It is expected that this will continue to be the case in the near future.

Massachusetts

Purchase of Service Reform

In May 1987, the Massachusetts legislature established the office of purchased services and mandated that it "implement a consistent, efficient and accountable system for agencies of the Commonwealth which contract for social and rehabilitative services..." (chapter 206 of acts of 1986). The office proposed to refocus the process on client needs and away from the bureaucratic complexity which had been building for many years. In January 1990, the office submitted its proposals in a report entitled "Purchase of Service Reform: Final Report" and was closed. Two of the proposals have been implemented: a 5-year contract cycle and uniform financial reporting.

The contracting system was changed from one which required that contracts be negotiated annually to one which requires that contracts be rebid once every 5 years and renewed with minimal revision

annually during this period. The financial reporting system was changed so that virtually all contractors are required to file the same standard reports. The aim of this change was to streamline the reporting process and to allow comparison between providers and between services.

The office also proposed a system of component pricing. Components of the program would be based on the goals and objectives of the program which were, in turn, based on the client profile defined in the contract. The resources necessary to support the program components would then be priced at current market value. This proposal has not been implemented.

The authors have not performed a pre/post analysis of these changes. However, State officials report that the longer contract cycle has significantly reduced the amount of paperwork and has freed up resources which can be devoted to contract negotiation and monitoring.

Medicaid Managed Care Program

Massachusetts has changed the State Medicaid program for mental health and substance abuse services. The department of public welfare selected Mental Health Management of America, Inc. (MHMA) to establish and operate a managed care program covering mental health and substance abuse services for certain Medicaid recipients.

The program has the following components: (1) service authorization; (2) utilization management and review; (3) quality management; (4) subcontracted service network; (5) claims processing and payment; (6) MIS operation and reporting; and (7) interagency service coordination.

The contract requires that MHMA administer the program Statewide through six regional management centers. The department will pay MHMA a monthly capitation rate for each recipient assigned to the program, and MHMA is responsible for payments to the service providers. Providers have reported to us that the managed care program is operating smoothly and that they have not experienced any major difficulties with the utilization review process or decisions.

Conclusion

A majority of the New England States are instituting significant changes to their contracting and reimbursement procedures, indicating some dissatisfaction with the previous arrangements. However, the reforms are not uniform in direction. For example, performance contracting is the centerpiece of Maine's reforms, a deferrable long-term goal of Massachusetts' reforms, and absent from Vermont's.

All the States appear to share a concern for greater accountability from their providers. The accountability aspects of the reforms may become more pronounced at some future point. Whether funds are expanding or contracting, it will be important to have an understanding of what works and what does not, among the variety of reform options currently being tested.

CONCLUSIONS

Below we present some preliminary conclusions from the work so far. These conclusions are necessarily tentative, in that further work remains to be done on how contracting functions in practice.

With regard to the structure of supply:

- There is considerable variation among the States in measures of market structure, such as seller concentration and regulatory barriers to entry. Some of these differences appear to relate to State size, some to the degree of State commitment to competitive contracting.
- In several key dimensions, Vermont and New Hampshire are the States where State contracting appears most concentrated, and Massachusetts and Connecticut the least.

- An "industrial organization" perspective is useful for addressing many of the issues in State-provider relations. There is a literature on the behavior of not-for-profit suppliers with incomplete contracts which may be relevant to the substance abuse treatment sector.

With regard to contracting:

- Most States pay providers by the unit of service or past costs, not by the outcome, although they may monitor outcomes. The notable exception is Maine's new performance contracting initiative.

- Although most States use competitive bidding to let new services, only Massachusetts and Maine mandate systemwide RFPs for existing services. Massachusetts has more elaborate rules to encourage competition than other States, although their actual effects are still to be studied.

- There is a lot of variation among States in how detailed they make their bidding procedures, monitoring rules, etc. Massachusetts is probably the most regulated, New Hampshire the least.

- In addition to the formal contractual relationship between State and provider, there is an additional set of informal relationships such as direct monitoring of costs. The importance of informal control is still unclear, but it appears to be greater in Vermont and New Hampshire, which contract with a minority of providers.

- Current reform efforts are diverse, varying from Maine's experiment with performance contracting to Vermont's abandonment of fee-based reimbursement. A common thread appears to be the States' concern for greater accountability from treatment providers.

NOTES

[1] In this report we will use the term "provider" when discussing the private organization which delivers the services to the client and the term "agency" to describe the arm of the State government which oversees the substance abuse service system and licenses and/or finances the provision of services.

[2] This act reorganizes ADAMHA as the Substance Abuse and Mental Health Services Administration and transfers three research institutes - the National Institute on Drug Abuse, the National Institute of Mental Health and the National Institute on Alcohol Abuse and Alcoholism - to the National Institutes of Health.

[3] In addition to the low NDATUS response rate in Maine, the per capita and per slot figures reflect the fact that the office of substance abuse in Maine has placed increasing importance on monitoring the units of actual service delivered and the cost per unit rather than the number of clients and cost per client as discussed above.

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Table 1: Substance Abuse Agency Funding Comparisons for Four States

(a) State Agency Budget: Funding by Source

State (Budget Year)	State Funding	Federal Funding			Other Funding	Percentage Share		Funding Per Capita
		Total	ADAMHA Block Grant	Other		Federal	State	
ME (FY 1991)	$ 5,857,347	$ 3,294,758	$ 2,837,153	$ 457,605		36.00	64.00	$ 7.45
MA (FY 1991)	$40,085,210	$35,599,543	$25,995,993	$9,603,550		47.04	52.96	$12.61
NH (FY 1990)	$ 2,522,273	$ 2,347,180	$ 2,201,551	$ 145,629	$318,053	45.25	48.62	$ 4.68
VT (FY 1991)	$ 3,479,330	$ 3,330,200	$ 2,238,077	$1,092,123		48.90	51.10	$12.10

(b) Contracting

State (Budget Year)	Total Dollars Contracted	Percent of Budget	By Modality	
			Percent Outpatient	Percent Residential
ME (FY 1991)	$ 7,336,200	80.16	46.33	38.75
MA (FY 1991)	$62,779,534	82.95	22.13	29.70
NH (FY 1991)	$ 2,968,127	57.22	25.17	44.25
VT (FY 1991)	$ 3,236,084	47.52	29.82	34.14

Sources:
ME: State Plan, January 1991; FY 1991 OADAP Agency Allocations
MA: FY91 Budget by Account and Subsidiary; FY91 Allocations by Location of Vendor, Type of Program
NH: SADAP for FY 1990; OADAP FY 1991 Contracts
VT: Description of Current Programs, Services, Resources; Pref. Treatment Providers, Funding by Sub-Recipient

Notes:

1. Excludes funds not handled through State substance abuse agencies e.g., Medicaid.
2. New Hampshire - FY 1990 budget figures; FY 1991 contracting figures.
3. Massachusetts - budget figures as of May 2, 1991; contracting figures as allocated August 1990 (95.15% of total FY91 funds budgeted for contracts).
4. Maine - Office of Substance Abuse only; do not reflect funding cuts in second half of fiscal year.

Table 2: Public Funding of Drug Abuse Treatment Providers Compared to State Population and Drug Treatment Capacity (1989)

State	Public Funding of Drug Treatment Providers (000)	State Population (000)	Public Funding per Capita	Budgeted Treatment Capacity	Public Funding per Slot
CT	$20,426	3,233	$6.32	8,046	$2,539
MA	$15,053	5,889	$2.56	9,634	$1,562
ME	$ 922	1,205	$0.77	2,676	$ 345
NH	$ 4,152	1,085	$3.83	896	$4,634
RI	$ 4,898	993	$4.93	3,309	$1,480
VT	$ 2,179	557	$3.91	854	$2,552
New England	$47,630	12,962	$3.67	25,415	$1,874

Sources: NDATUS 1989, Tables 19, 48 and Statistical Abstract of the US 1990, Tables 26, 704. See section regarding limitations of NDATUS

Note: Budgeted capacity includes units receiving no State funding including hospitals.

Table 3: Distribution of Substance Abuse (Drug and Alcohol) Facilities, Clients and State Funding by Type of Facility for Six New England States (1989)

Facility Type	Number of Facilities	Number of Drug Clients	Public Funding
No Drug Clients	186	0	$22,795,000
Drug Clients, Publicly Funded	323	18,053	$105,745,000
Drug Clients, Not Publicly Funded	31	186	$0
Drug Clients, Funding Not Reported	76	2,025	$0
All Facilities	616	20,892	$128,539,000

Source: NDATUS file.
See section regarding limitations of NDATUS

Note: State funding includes funding for alcohol treatment.

Table 4: Characteristics of Average Catchment Area, by State (1989)

State	Number of Areas	Average Catchment Areas:		
		Population	Size (square miles)	Number of Drug Clients
CT	15	217,000	334	457
MA	5	1,200,000	2,100	1,791
ME	5	246,000	6,199	249
NH	9	123,000	1,005	74
RI	7	143,000	221	346
VT	12	47,000	773	62

Source: NDATUS file (numbers of clients)
See section regarding limitations of NDATUS
State appendices (other data)

Table 5: Distribution of Drug Clients Across Facilities, By State and Catchment Area (1989)

Catchment Area	Number of Drug Clients	Number of Facilities	Herfindahl Index[1]	Concentration Ratio[2]
CONNECTICUT				
1.b	320	12	0.19	0.49
1.b	535	5	0.44	0.67
4.b	807	18	0.06	0.61
2.b	4	1	0.30	0.49
2.b	1,303	18	0.12	0.35
2.c	51	2	0.44	0.76
2.c	80	4	0.45	1.00
3.a	136	4	0.44	0.84
3.a	278	6	0.30	0.49
4.b	51	2	0.52	1.00
4.b	2,530	12	0.45	0.70
4.b	80	6	0.27	0.70
5.a	255	6	0.19	0.63
5.b	320	6	0.27	0.63
5.c	42	6	0.30	0.76
All CT[3]	6,861	106	0.06	0.63
MASSACHUSETTS				
Central	1,900	28	0.17	0.33
Metro	2,484	59	0.06	0.27
Northeast	1,236	40	0.06	0.23
Southeast	1,966	40	0.06	0.64
West	1,367	29	0.15	0.50
All MA[3]	8,953	189	0.14	0.39

Table 5 (continued)

Catchment Area	Number of Drug Clients	Number of Facilities	Herfindahl Index[1]	Concentration Ratio[2]
MAINE				
1	710	14	0.29	0.45
2	174	3	0.35	0.98
3	166	6	0.50	0.70
4	139	7	0.50	0.98
5	57	7	0.45	0.44
All ME[3]	1,246	38	0.37	0.93
NEW HAMPSHIRE				
1	38	2	0.61	1.00
2	38	3	0.35	0.98
3	40	4	0.45	0.98
4	3	1	1.00	1.00
5	285	6	0.42	0.70
6	58	3	0.45	0.76
7	143	6	0.29	0.55
8	58	2	0.93	0.98
9	6	1	1.00	1.00
All NH[3]	670	28	0.45	0.73
RHODE ISLAND				
Kent	189	6	0.29	0.50
Newport	152	4	0.48	0.98
Northern RI	119	4	0.48	0.92
Northwestern RI	131	5	0.37	0.98
Pawtucket	112	4	0.47	0.44
Providence	1,568	21	0.11	0.33
Washington	139	4	0.42	0.54
All RI[3]	2,420	48	0.21	0.46

Table 5 (continued)

Catchment Area	Number of Drug Clients	Number of Facilities	Herfindahl Index[1]	Concentration Ratio[2]
VERMONT				
Addison	13	1	1.00	1.00
Bennington	39	1	1.00	1.00
Caledonia	39	1	1.00	1.00
Chittenden	338	5	0.83	0.93
Franklin	2	1	1.00	1.00
Lamoille	37	1	1.00	1.00
Orange	13	1	1.00	1.00
Orleans	55	1	1.00	1.00
Rutland	39	2	0.52	1.00
Washington	58	1	1.00	1.00
Windham	102	4	0.32	0.70
Windsor	22	2	0.52	0.59
All VT[3]	742	21	0.79	0.92

Source: NDATUS file.
See section regarding limitations of NDATUS

Notes: [1]Herfindahl index = sum of squared market shares. Value of 1 indicates monopoly, close to 1 indicates high concentration.

[2]-firm concentration = share of clients accounted for by the two facilities with largest shares. (1 = duopoly or monopoly).

[3]All-State average index = average of catchment area indices, weighted by catchment area's share of clients.

Table 6: Drug Client Concentration Among Facilities, by Modality for All Drug Clients (State Substance Abuse Agency Funded or Not)

(a) Drugfree Modality

State	Number of Drug Clients	Number of Facilities	Herfindahl Index[1]	Two-Firm Concentration Ratio[2]
Connecticut	4,383	78	0.13	0.43
Massachusetts	4,383	155	0.03	0.14
Maine	1,062	28	0.12	0.43
New Hampshire	618	23	0.12	0.38
Rhode Island	1,535	42	0.04	0.16
Vermont	716	21	0.21	0.51

(b) Methadone Maintenance

State	Number of Drug Clients	Number of Facilities	Herfindahl Index[1]	Two-Firm Concentration Ratio[2]
Connecticut	1,962	18	0.29	0.26
Massachusetts	1,438	18	0.17	0.42
Maine[3]	43	5	0.38	0.74
New Hampshire[3]	25	4	0.29	0.40
Rhode Island	758	6	0.35	0.60
Vermont[3]	0	0	-	-

Source: NDATUS file, 1989.
See section regarding limitations of NDATUS

Notes: [1]Herfindahl index = sum of squared market shares (close to 1 denotes high concentration).

[2]Two-firm concentration = combined market share of two largest facilities.

[3]Maine, New Hampshire, and Vermont do not publicly finance methadone maintenance services.

Table 6 (continued)

(c) Detoxification

State	Number of Drug Clients	Number of Facilities	Herfindahl Index[1]	Two-Firm Concentration Ratio[2]
Connecticut	516	17	0.39	0.66
Massachusetts	662	32	0.14	0.45
Maine	141	17	0.58	0.83
New Hampshire	27	9	0.18	0.44
Rhode Island	127	9	0.28	0.63
Vermont	26	3	0.58	0.73

Source: NDATUS file, 1989.
See section regarding limitations of NDATUS.

Notes: [1]Herfindahl index = sum of squared market shares (close to 1 denotes high concentration).

[2]Two-firm concentration = combines in-patient/residential and outpatient.

Table 7: Sources of Funding for Alcohol and Drug Treatment Facilities

(a) All Facilities

State	Number of Units	Funding ($ million)				Share of Funding	
		State SAA	Other Public	Private	Total	State SAA	All Public
Connecticut	122	$34.4	$12.5	$21.9	$66.7	50%	65%
Massachusetts	167	$24.4	$27.4	$27.3	$79.0	31%	65%
Maine	28	$3.7	$2.7	$5.0	$11.3	32%	56%
New Hampshire	22	$2.3	$4.9	$11.9	$19.2	12%	38%
Rhode Island	65	$2.3	$3.0	$28.4	$39.6	21%	28%
Vermont	20	$2.1	$3.0	$2.6	$2.7	28%	66%
All	424	$75.2	$53.4	$97.0	$225.5	33%	57%

(b) Facilities With Any Public Funding

State	Number of Units	Funding ($ million)				Share of Funding	
		State SAA	Other Public	Private	Total	State SAA	All Public
Connecticut	108	$34.4	$12.5	$19.8	$66.7	52%	70%
Massachusetts	160	$24.4	$27.4	$25.5	$77.2	32%	67%
Maine	20	$3.7	$2.7	$4.5	$10.9	34%	59%
New Hampshire	21	$2.3	$3.0	$11.9	$19.1	12%	38%
Rhode Island	51	$2.3	$3.0	$24.5	$35.7	23%	38%
Vermont	20	$2.1	$3.0	$2.6	$7.7	27%	66%
All	386	$75.2	$53.4	$88.8	$217.3	35%	59%

Source: NDATUS file, 1989.
See section regarding limitations of NDATUS

Notes: 1. Facilities include alcohol-only units, funding includes alcohol treatment.

2. SAA = Substance Abuse Agency.

Table 8: Distribution of Units and Clients by Facility Specialization (1989), for All Units with Any Drug Clients

State	Drug-Only Units		Alcohol/Drug Units			
	Number of Units	Number of Drug Clients	Number of Units	Number of Drug Clients	Percent of Total Units	Percent of Drug Clients Served
Connecticut	39	3,654	67	3,207	63	47
Massachusetts	12	1,401	177	7,552	97	84
Maine	1	24	37	1,222	97	84
New Hampshire	3	123	25	547	89	82
Rhode Island	12	989	36	1,431	75	84
Vermont	0	0	21	742	100	100
Total	67	6,191	363	14,701	84	70

Source: NDATUS file, 1989.
See section regarding limitations of NDATUS

Note: Includes facilities receiving no State substance abuse agency funding.

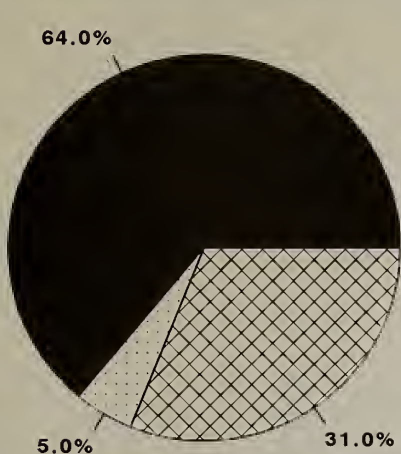
Table 9: Comparison of State Licensing and Contracting Processes

	CONNECTICUT	MAINE	RHODE ISLAND
LICENSING			
Policy	Private, freestanding facilities only		
State Agency	Department of Health Services	Office of Substance Abuse (ME-OSA)	Office of Substance Abuse (RI-OSA)
Period	One year	One or two years	Two years
Review Procedures		Annual review of compliance; inspections at any time	Inspection during renewal process
CONTRACTING			
State Agency	Connecticut Alcohol and Drug Abuse Commission (CADAC)	ME-OSA	RI-OSA
Eligible Contractors	Private, non-profit organizations or municipalities	Licensed providers	For-profit and non-profit organizations
Process	RFP for new or expansion services; annual refunding upon application for existing services	RFP for new or expansion services; annual renewal for existing services	RFP for new or expansion services; annual refunding upon application for existing services
Form	Grant-in-aid covering portion of operating costs with minimum level of acceptable utilization specified	Unit-cost contracts: Current - expense-based FY 1993 - performance-based	
PRICING			
State Agency	CADAC	ME-OSA	RI-OSA
Process	Funding negotiations	Contract negotiations	Contract negotiations
MONITORING			
State Agency	CADAC	ME-OSA	RI-OSA
Process	Performance monitored annually through site visit and/or document review and reports	Costs monitored with quarterly reports; utilization with monthly reports	

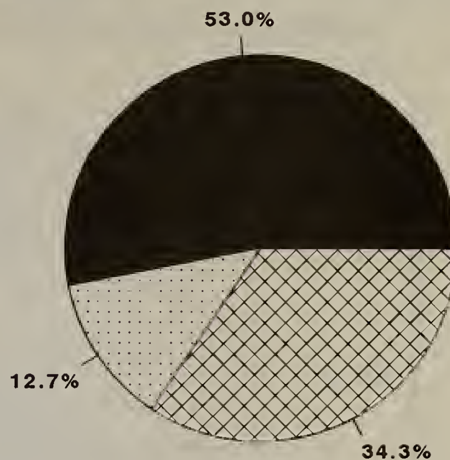
Table 9 (continued)

	MASSACHUSETTS	NEW HAMPSHIRE	VERMONT
LICENSING			
Policy		Providers are not licensed	Providers are approved, not licensed
State Agency	Bureau of Substance Abuse Services (BSAS)	All regulation performed through contracting process	Office of Alcohol and Drug Abuse Programs (VT-OADAP)
Period	Two years		
Review Procedures	At renewal, site visit and review of performance, financial viability and compliance with regulations		
CONTRACTING			
State Agency	BSAS	Office of Alcohol and Drug Abuse Prevention (NH-OADAP)	VT-OADAP
Eligible Contractors	Prequalification to determine viability		Approved providers only
Process	RFP every five years, annual contract renewal within five year period	Single RFP for substance abuse services in general	Non-competitive annual grants; small number of contracts for prevention
Form	Unit rate (class, individual and cost reimbursement)	Cost reimbursement	
PRICING			
State Agency	Rate Setting Commission and BSAS	NH-OADAP	VT-OADAP
Process	Negotiations and public hearings for RSC; contract negotiations for BSAS	Contract negotiations	Funding negotiations
MONITORING			
State Agency	DSAS		VT-OADAP
Process	Costs monitored through annual reporting requirements	Performance monitored through annual site visits which include review of services records	Quarterly and annual reports for costs; monthly reports and client data submissions for utilization

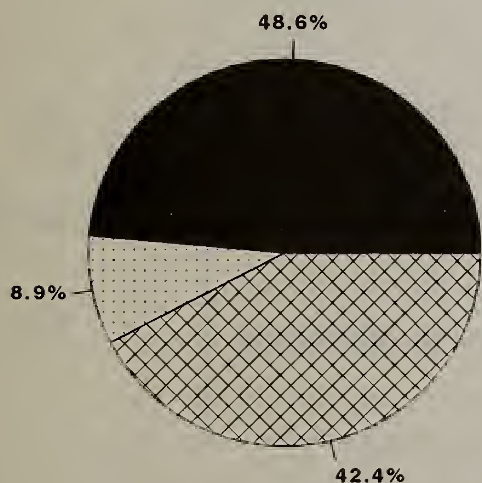
Figure 1. Sources of State Agency Budget



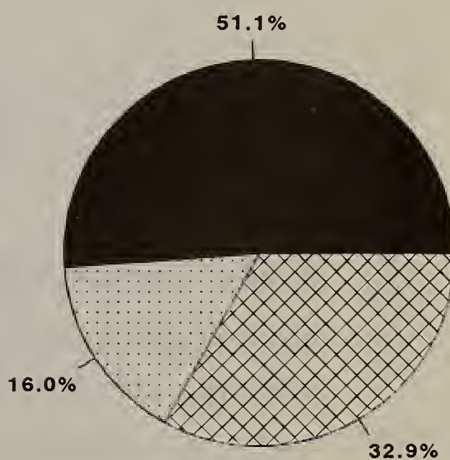
MAINE
$9.2 million (FY 1991)



MASSACHUSETTS
$75.7 million (FY 1991)



NEW HAMPSHIRE
$5.2 million (FY 1990)

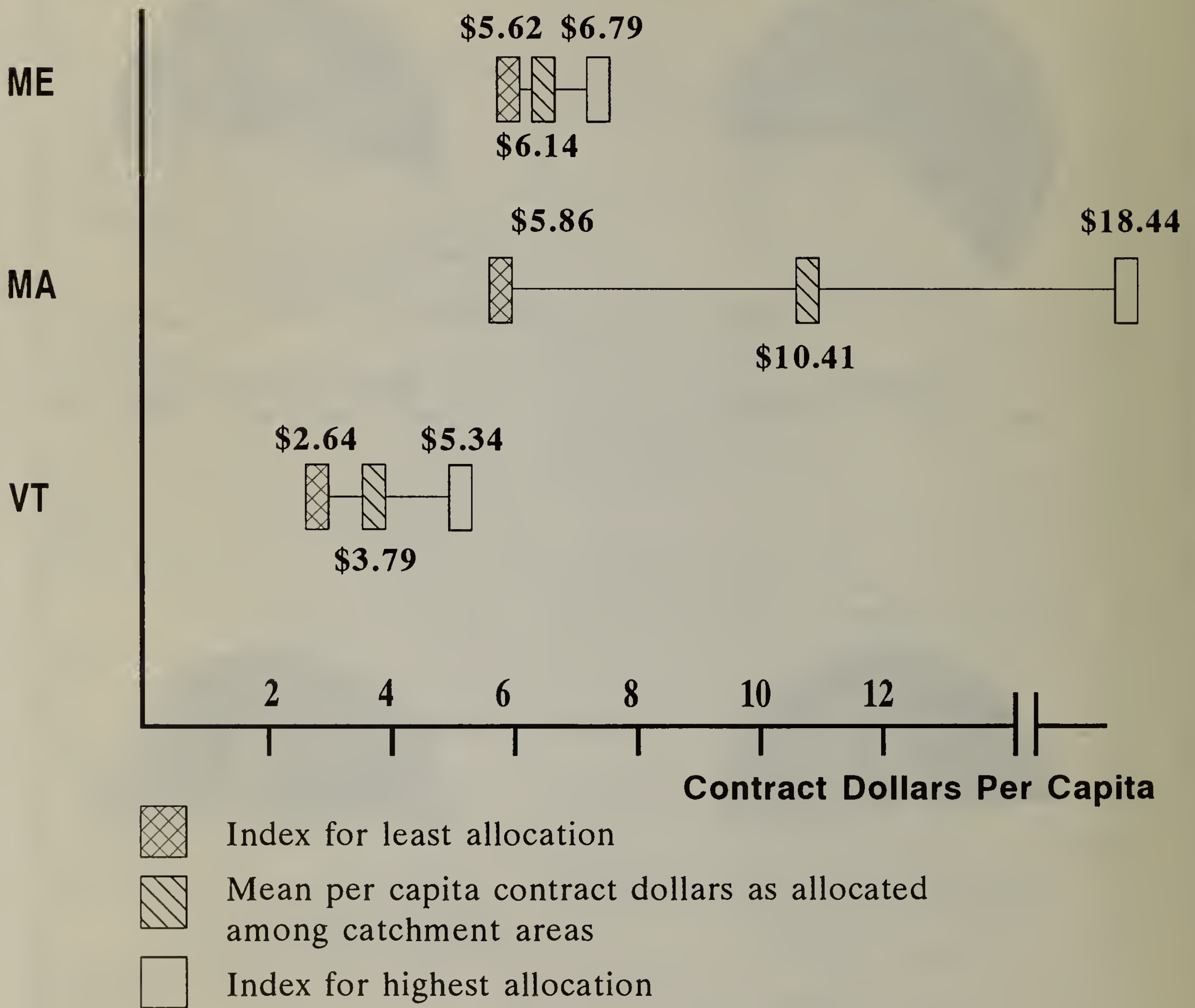


VERMONT
$6.8 million (FY 1991)

State Funds | Other Funds | ADAMHA Block Grant

Source: Table 1

Figure 2. Per Capita Contract Dollars in Catchment Areas: Range Within Each State



Source: Summaries of State Programs

Figure 3. Market Share Concentration in Catchment Areas: Range of Concentration Within Each State

State	Index for least concentrated area	Mean value for state	Index for most concentrated area
CT	0.35	0.63	1.00
MA	0.23	0.39	0.64
ME	0.45	0.60	0.98
NH	0.55	0.73	1.00
RI	0.33	0.46	0.92
VT	0.59	0.92	1.00

Note: Index is percent of clients treated by the two facilities with largest shares.

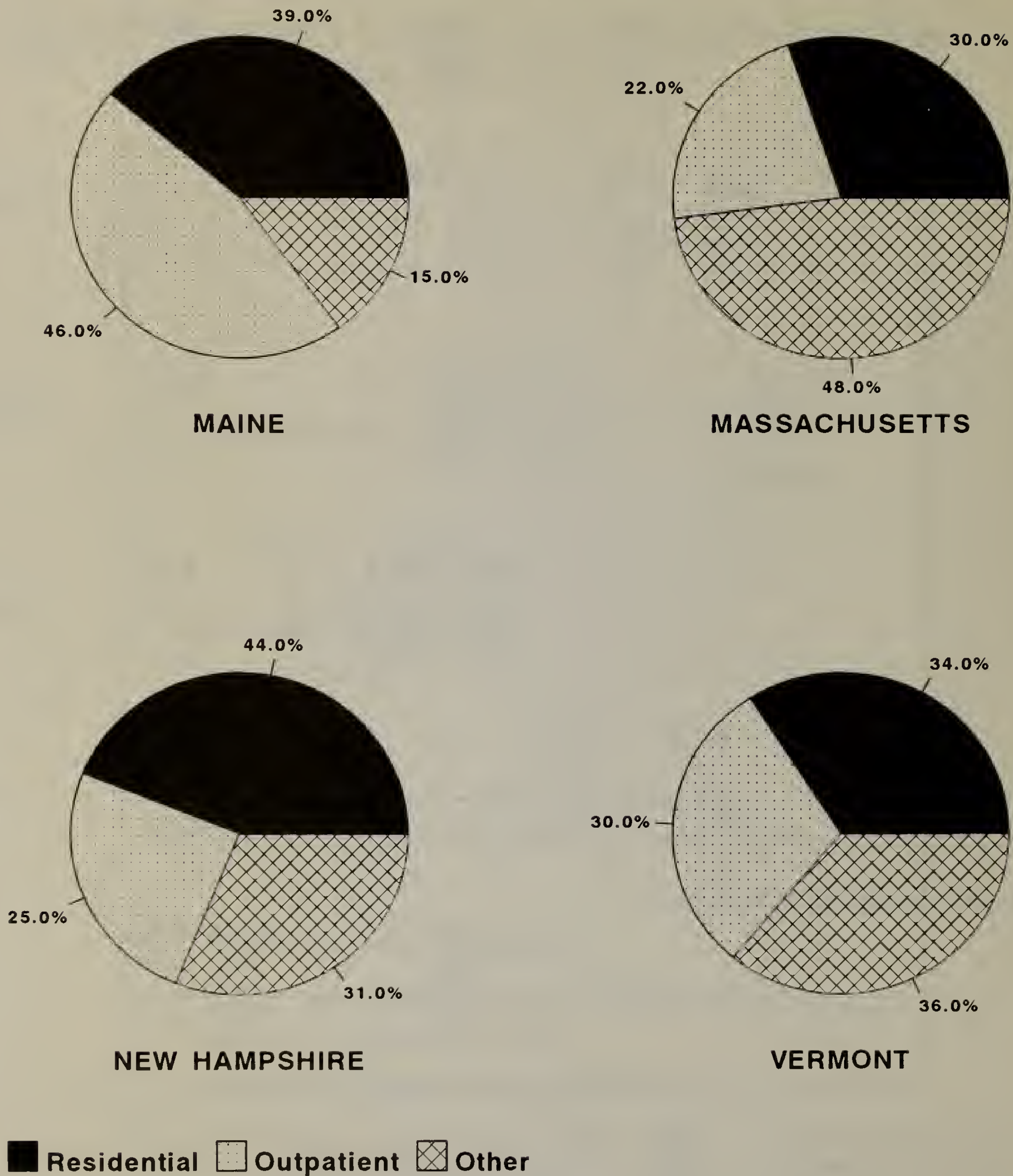
Source: NDATUS File, 1989

Index for least concentrated area

Mean value for state

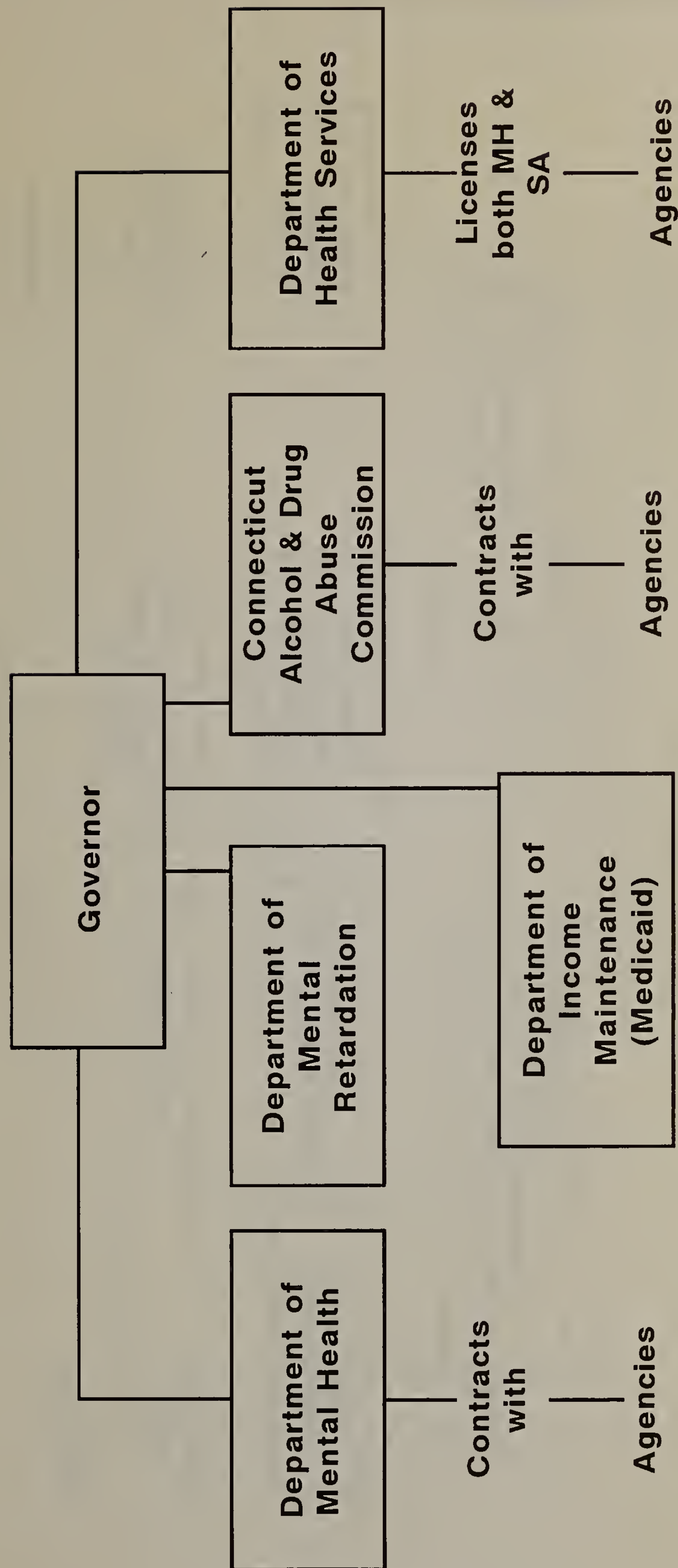
Index for most concentrated area

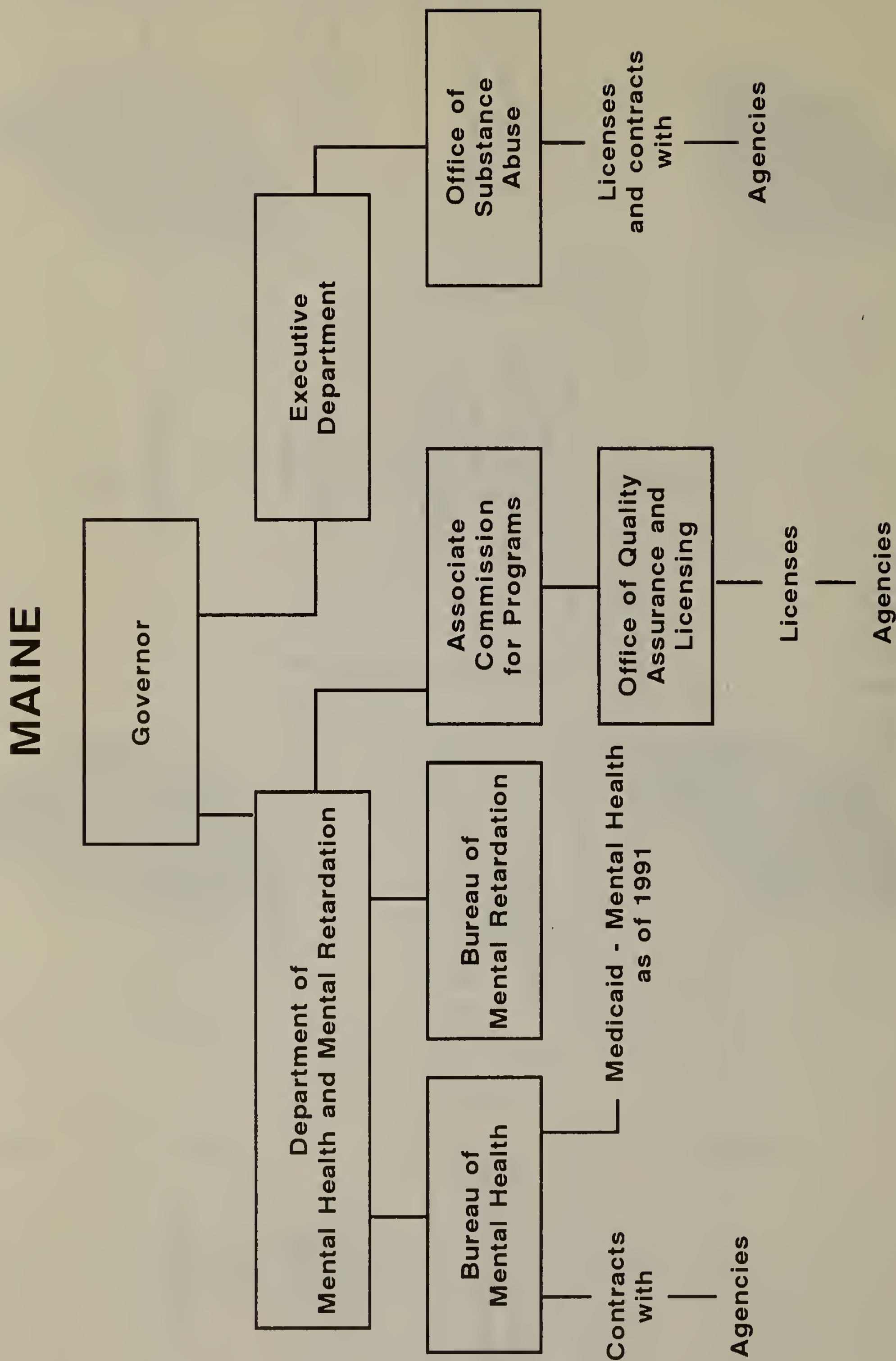
Figure 4. Distribution of Contract Funds

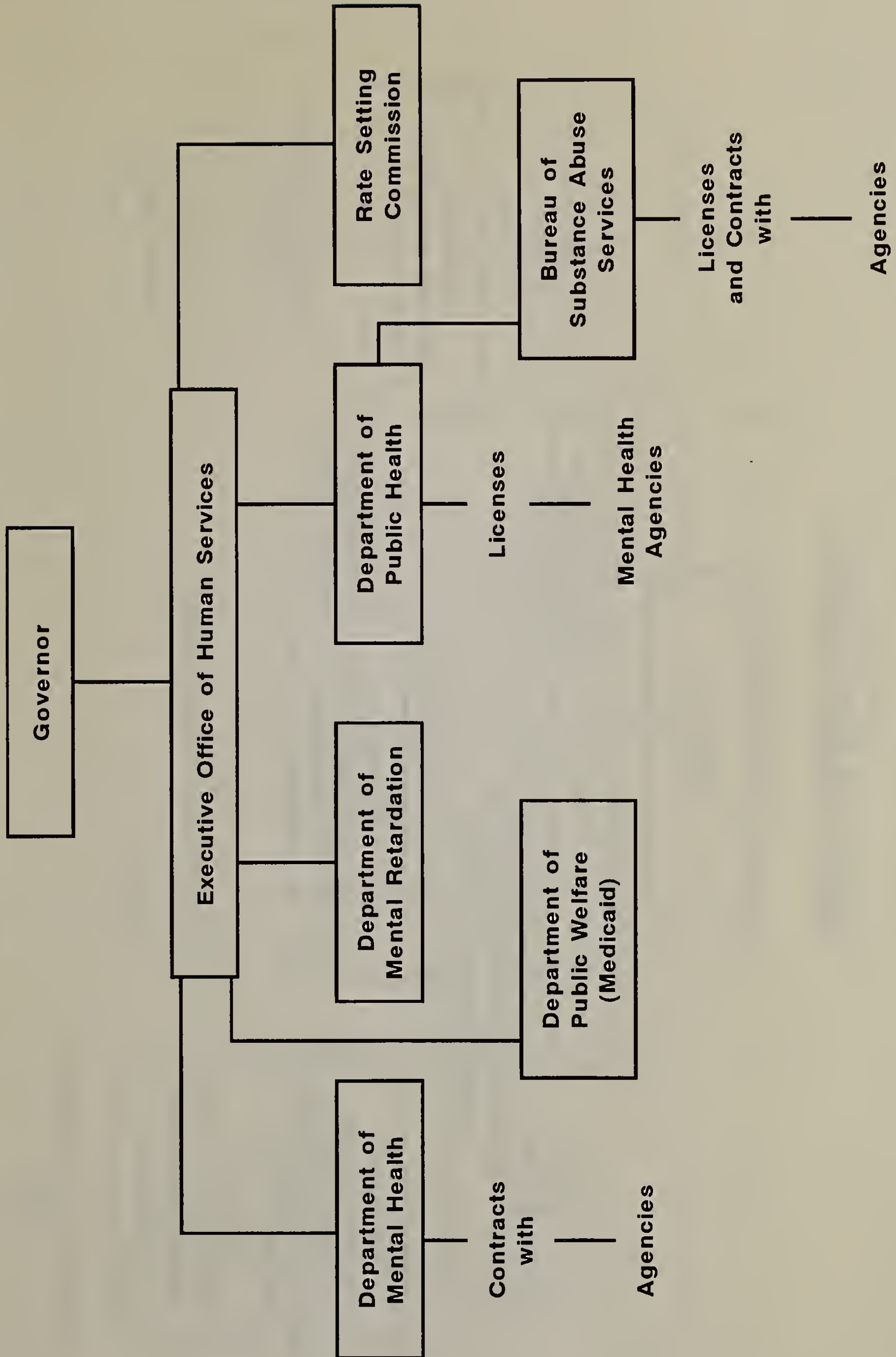


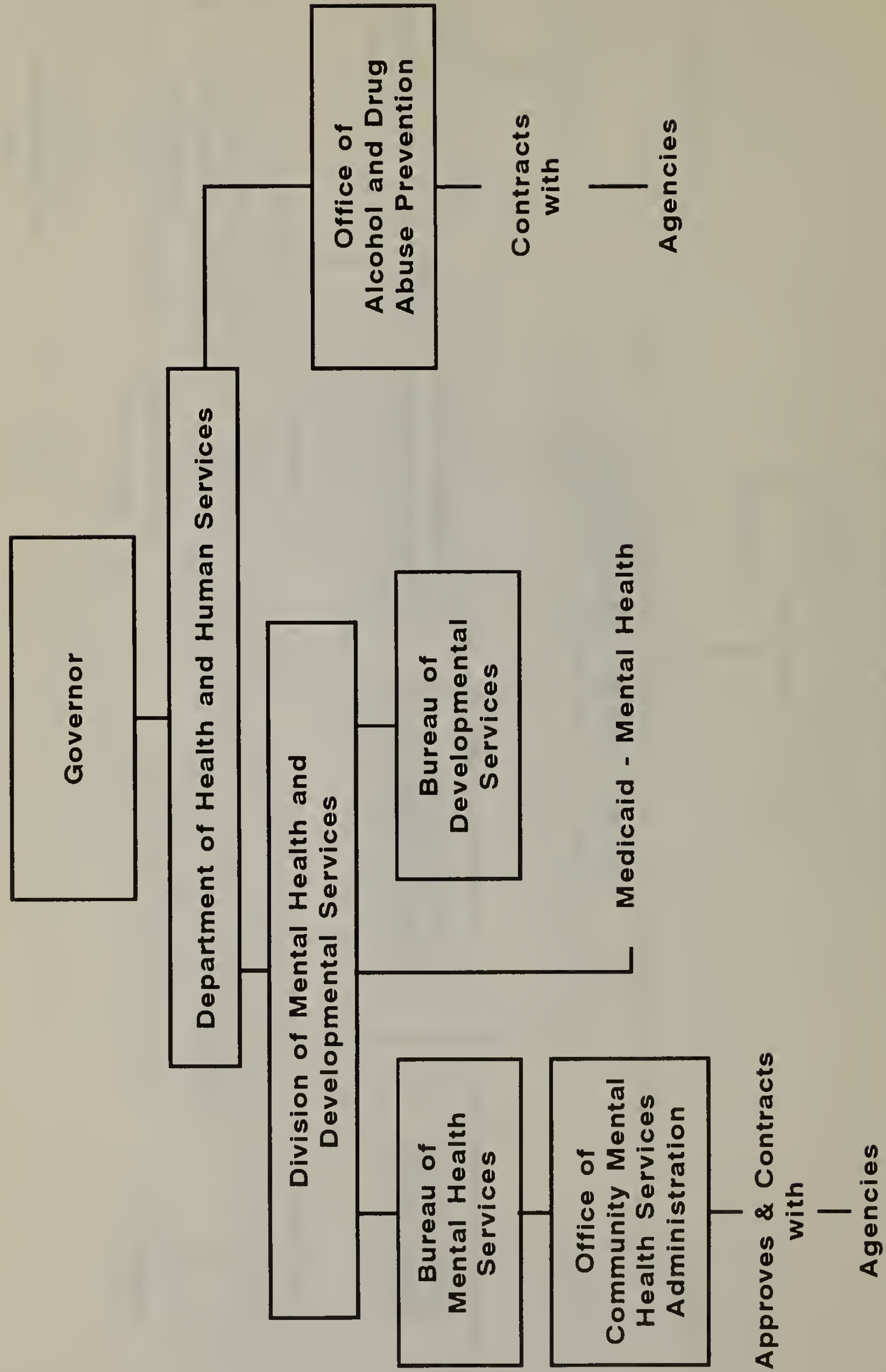
Source: Table 1

CONNECTICUT

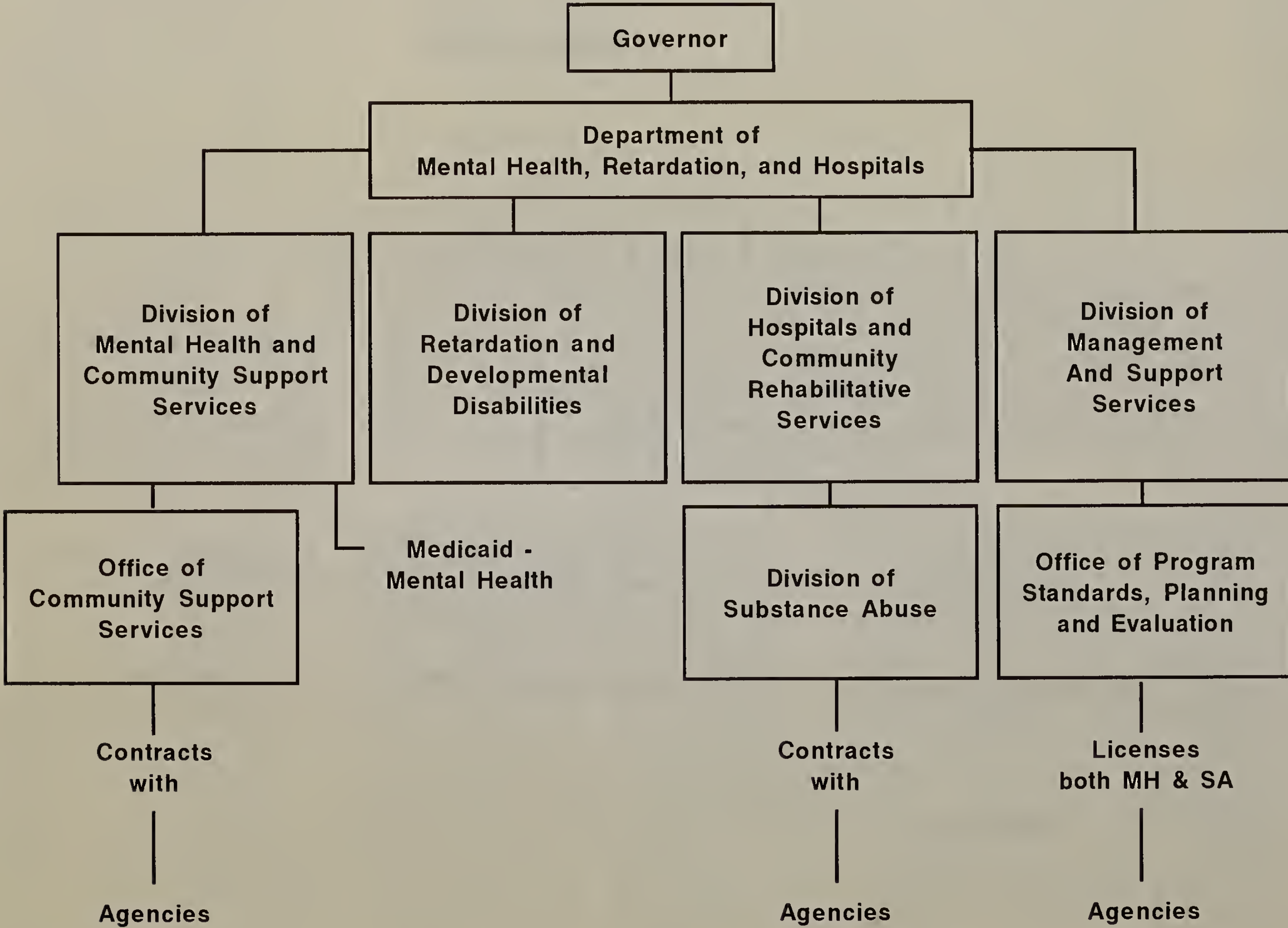



MAINE
Governor
Executive Department
Office of Substance Abuse
Licenses and contracts with
Agencies
Department of Mental Health and Mental Retardation
Bureau of Mental Health
Contracts with
Agencies
Medicaid - Mental Health as of 1991
Bureau of Mental Retardation
Associate Commission for Programs
Office of Quality Assurance and Licensing
Licenses
Agencies

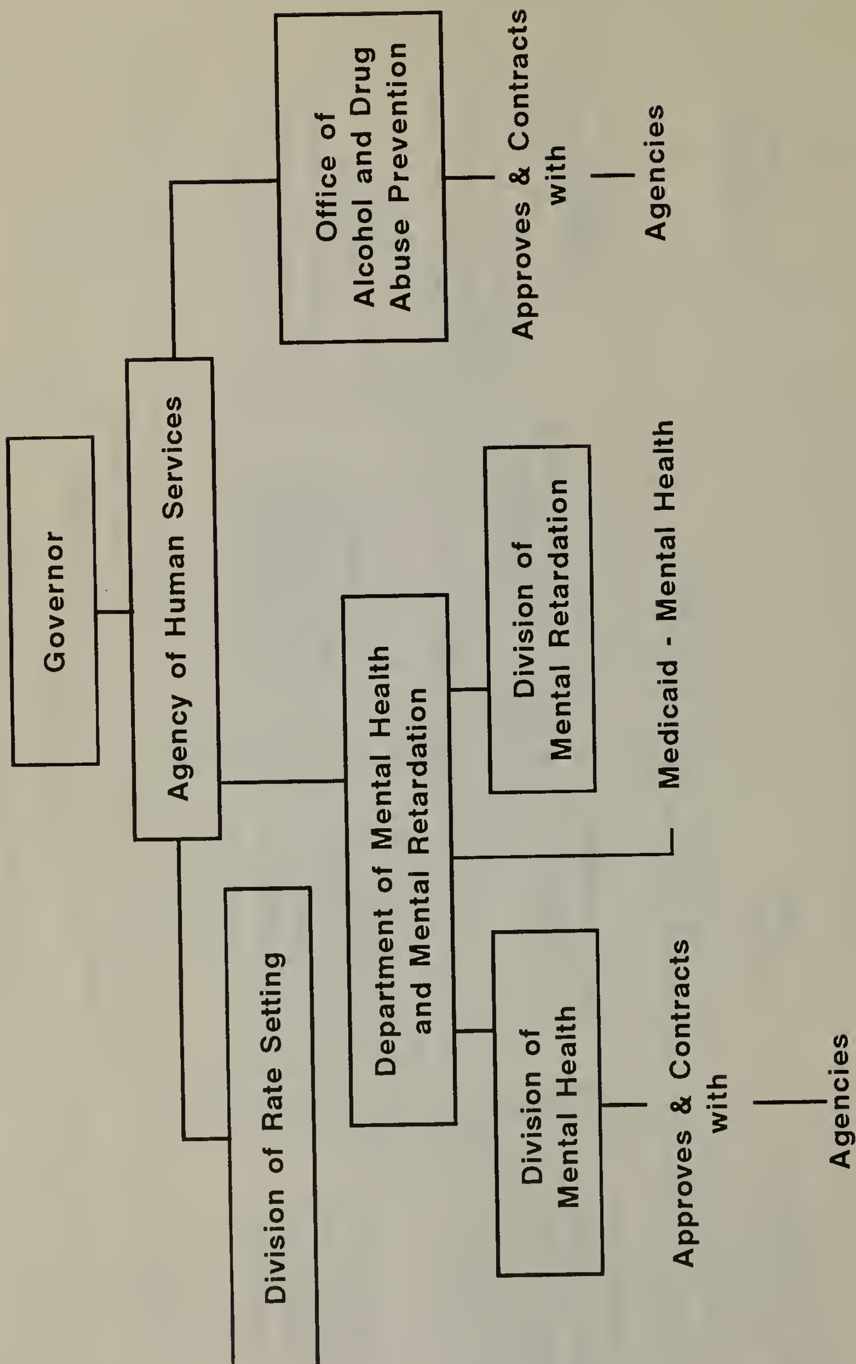

MASSACHUSETTS
Governor
Executive Office of Human Services
Rate Setting Commission
Department of Public Health
Bureau of Substance Abuse Services
Licenses and Contracts with
Agencies
Licenses
Mental Health Agencies
Department of Mental Retardation
Department of Public Welfare (Medicaid)
Department of Mental Health
Contracts with
Agencies


NEW HAMPSHIRE
Governor
Department of Health and Human Services
Office of Alcohol and Drug Abuse Prevention
Contracts with
Agencies
Division of Mental Health and Developmental Services
Bureau of Developmental Services
Medicaid - Mental Health
Bureau of Mental Health Services
Office of Community Mental Health Services Administration
Approves & Contracts with
Agencies

RHODE ISLAND



NOTE: The Office of Substance Abuse was established July 1, 1991. The Division of Substance Abuse has been merged into the Office of Substance Abuse. The Office of Substance Abuse, a branch of the Executive Department, has responsibility for licensing and contracting with substance abuse services providers.


VERMONT
Governor
Agency of Human Services
Office of Alcohol and Drug Abuse Prevention
Approves & Contracts with
Agencies
Department of Mental Health and Mental Retardation
Division of Mental Retardation
Medicaid - Mental Health
Division of Mental Health
Approves & Contracts with
Agencies
Division of Rate Setting

Margaret Commons, M.A., M.P.H., Dominic Hodgkin, M.A., Thomas G. McGuire, Ph.D., Michael H. Riordan, Ph.D.

CONNECTICUT

Overview

Connecticut has a population of over 3,287,000 (1990) and covers an area of 5,012 square miles. The Connecticut Alcohol and Drug Abuse Commission (CADAC) oversees substance abuse treatment services.

CADAC was established in 1977 through the consolidation of the State Alcohol Council and the State Drug Council. Public Act 86-371 transferred substance abuse treatment services, which had been provided in State hospitals and mental health centers operated by the Connecticut Department of Mental Health (DMH), from DMH to CADAC. This transfer was completed on June 30, 1989.

The commission has 23 members: eight heads of State agencies[1], 10 appointees of the governor, two individuals appointed by the legislative majority and two by the legislative minority, and the president of the Connecticut Association of Substance Abuse Agencies. The executive director of CADAC is appointed by the governor.

CADAC-operated programs include Blue Hills Hospital, Berkshire Woods Chemical Dependency Treatment Center (on the grounds of Fairfield Hills Hospital), Boneski Chemical Dependency Treatment Center (on the grounds of Norwich Hospital), and Dutcher Chemical Dependency Treatment Center (on the grounds of Connecticut Valley Hospital). In addition, CADAC currently contracts with DMH for services provided at the Connecticut Mental Health Center (New Haven) and the Greater Bridgeport Community Mental Health Center. CADAC also funds services provided by private nonprofit organizations through direct grants for operating expenses and through fee-for-service contracts.

CADAC aims to provide services on the "continuum of care model," which recognizes that there are varying degrees of need and funds services targeted to meet these needs under three major categories: prevention, intervention, and treatment and rehabilitation. Consequently, CADAC defines different target populations for each category. Table 1 describes the CADAC service system and the associated target populations.

Market Areas

CADAC has defined five health service delivery areas and 15 health service delivery subareas. In November of 1988, CADAC approved the Statewide regional planning network which was to include sub-regional action councils (RAC) and five regional planning boards (RPB). RPB membership would include delegates from the RACs in that region and would participate in CADAC's State plan steering committee to develop a statewide plan for services. RAC membership would consist of local citizens, providers, funders and consumers, who would have responsibility for establishing and implementing a plan to develop and coordinate services in their area. RACs would be encouraged to solicit local public and private funds from municipalities, foundations and corporations but would not provide services directly to clients. The geographical jurisdiction of RACs was not completely defined; subregions may be the same as the 15 service delivery subareas or may be otherwise defined as natural political and geographical boundaries dictate. RAC members would be volunteers but were to be supported by paid professional staff; core funding was to come from CADAC to provide basic staffing and support to the RACs.

The CADAC 3-year policy plan states that as of July 1990, five RACs had received support with funds available for five more. However, the FY 1992 budget recommended by the governor

proposed to restructure the support for this planning system by eliminating support for RACs and providing support for the five RPBs instead. It is not clear whether this recommendation was followed in the final budget or how this will impact the planning system. CADAC continues to have jurisdiction over the actual provision of services; both RACs and RPBs were to have advisory responsibilities only.

Each region receives services from either a CADAC-operated program or a program for which CADAC contracts with DMH. All regions are also served by private providers receiving funds from CADAC. Table 2 provides regional and State data on population, area, and average population density. Table 3 contains a list of the CADAC facilities and the number of licensed private providers in each region as of May, 1991. We are unable to report regional funding amounts as this data was not made available by CADAC. The NDATUS survey of facilities was not a reliable alternate source of funding data because many facilities which reported treating drug clients did not report drug funding.

Licensing

Private, freestanding substance abuse treatment facilities are licensed by the State through the Department of Health Services. One regulation (Section 19a-495-570) covers all of the following services:

- Ambulatory chemical detoxification treatment
- Care and rehabilitation
- Chemical maintenance treatment
- Day or evening treatment
- Intensive treatment
- Intermediate and long-term treatment and rehabilitation
- Medical triage
- Outpatient treatment
- Residential detoxification and evaluation

An application for the grant or renewal of a license requests the following information:

- evidence of compliance with local zoning and building codes (with initial application and thereafter only if applicable);
- certificate of compliance with fire safety regulations;
- a statement of ownership and operation;
- a certificate of liability insurance;
- a current organizational chart;
- the service classification(s) for which the license is requested together with a description of the services to be offered; and
- the names and titles of all professional staff.

Licenses are valid for one year and may not be transferred to any other organization, location or facility. Changes in location or services may be approved by DHS, but a change in ownership necessitates applying for a new license. DHS may deny or revoke a facility's license if it has been refused access to either the facility or the facility's records.

Most of the licensing provisions apply to all types of facilities. These include administrative requirements related to the responsibilities of the governing body; agreements with outside practitioners; and personnel requirements, responsibilities and records. Requirements also apply to the physical plant, for example, storage facilities, minimum room size, temperature during heating season, etc. Most of these environmental requirements may be waived by DHS if it deems that the health, safety and welfare of clients will not be harmed. Operational requirements include the maintenance of client records; annual program evaluation procedures; and written policies for admissions, discharges and referrals.

Service-specific requirements include food and laundry services in residential facilities; physical examinations for all clients in detoxification, chemical maintenance, and intensive or long term treatment facilities; and pharmaceutical administration and storage for services dispensing medication. Staffing requirements (physicians, nurses with specific training) also depend on the type of service being offered.

There are currently 83 substance abuse treatment facilities licensed in Connecticut. Half of the facilities are residential; there are a total of 1,203 beds in 42 facilities.

Contracting

CADAC funds programs through grants-in-aid which cover from 20 to 80 percent of a program's costs. In general, existing programs receive non-competitive continuation awards from CADAC each year so long as they file an annual application for funding.

New services or expansion of currently offered services are funded through a competitive Request for proposals (RFP) process. RFPs depend upon the availability of additional funding for CADAC-supported services and do not occur on a regularly scheduled basis.

Funding applications must include a description of the program, the proposed site, the admissions criteria, proposed budgets, letters of community support, and local ordinances and other regulations and requirements.

Proposals are reviewed as well for the clinical and administrative experience of the applicant, the accessibility of services to special and/or minority population groups, the client/staff ratio, and the experience and training of staff. Proposals which pass the review process are submitted to CADAC's budget and operations committee, which submits its recommendations for funding to the full commission.

If funding is approved (either a noncompetitive continuation award or through the RFP process), a letter of award (LOA) is signed which incorporates the funding application and general terms and conditions relating to compliance with the Uniform Administrative Procedures Act, Federal block grant requirements, and nondiscrimination and affirmative action policies. Submission of admission and discharge reports and an annual audit is required. CADAC must give prior approval to any changes in the funded programs or the organizational structure or key personnel as outlined in the funding application.

The LOA also defines the minimum acceptable level of utilization of the funded services. If this level is not maintained, funding may be reduced. Residential services are measured by the number of patient days. The minimum acceptable level for detoxification and shelter programs is 80 percent of the maximum attainable number of patient days. The minimum for all other residential programs is 85 percent. Outpatient treatment is measured by the number of counseling sessions provided and the number of clients in treatment. The minimum acceptable level of utilization is 80 percent of both the budget capacity and the number of counseling sessions reported in the funding application. Intervention, prevention and community awareness services must complete 80 percent of the service objectives described in the funding application.

A provider must meet all requirements of other agencies in order to be eligible for CADAC funding. This includes any licensing or certificate of need requirements as well as zoning, building, and fire and safety requirements. Section 17-226d of the Connecticut General Statutes ("Funding Regulations") sets forth the minimum standards a private, nonprofit organization or municipality must meet to be eligible for CADAC funding.

The funding regulations require certain organizational and administrative structures. The composition of the governing body and its responsibilities are defined as well as the type of information which must be contained in philosophical and policy statements. Confidentiality and nondiscrimination policies and procedures are required. Personnel practices, including job descriptions, supervision procedures, staff training, and the content of personnel records are outlined. All treatment and rehabilitation programs must meet minimum requirements in a number of areas. For example, written admission criteria must, at a minimum, consider age, sex, physical health, mental status, previous treatment history, history of substance abuse, and current use of mood-altering substances. The areas with requirements include: written admission criteria; intake procedures; client orientation to the policies and operation of the

program, including the client's rights and responsibilities; written assessment procedures to be used in the creation of an individualized treatment plan; aftercare services; written discharge summaries; referral policies; a detailed client record system; required medical services and medication procedures; and involuntary discharge policies.

Further requirements are outlined for specific modalities. These may include any of the following: a description of the services to be provided, admission criteria, hours of operation, maximum length of stay, staffing requirements, record-keeping requirements, referral policies, and required medical services.

Unless Federal or State regulations specifically allocate funds to a geographic area or to a type of service, the amount, service type, and location of services to be funded are determined by majority vote of the commission members. The commission may also grant waivers of the funding regulations (if not otherwise required by law) if it deems this to be in the best interests of service recipients. CADAC may also reduce the amount of any award if utilization projections made in the funding application are not being met during the award period.

CADAC reviews and evaluates the performance of each awardee on at least an annual basis. The review may include either a review of documents and reports submitted by the awardee, a site visit, or a combination of document review and site visit. Performance is evaluated on the basis of (1) compliance with CADAC, State and Federal regulations, including the letter of award or contract; (2) the awardee's progress in meeting the goals and objectives stated in the funding application; (3) financial reports and annual audit; and (4) the awardee's operational efficiency. CADAC requires full access to all program records, employees, facilities and clients during a site visit.

Organizations currently providing CADAC-funded services may apply for supplemental funding during an award period if they can demonstrate that the funding is needed and that they have attempted to receive funds from other sources but have been unsuccessful. Applications for supplemental funding are only reviewed if unallocated or unencumbered funds are available or become available during the fiscal year.

A provider wishing to receive funding for a new or expanded service may submit an unsolicited proposal but must first notify CADAC of its intention to do so and demonstrate that the services are needed in its area but either are not met or the level of services is inadequate, or that there is not enough funding from other sources. Unsolicited proposals are held by CADAC for 1 year and are reviewed during that time only if CADAC has unallocated funds.

Unless specifically permitted in the letter of award, no changes may be made to either the program or budget by the awardee without prior approval of CADAC. Failure to receive approval is cause for termination of the award or the placement of the awardee on probation. Other reasons for termination or probation include noncompliance with CADAC regulations or with the terms of the letter of award and denial of access to client or fiscal records.

The disposition of surplus funds depends on the source of funds. Surplus funds in an amount proportionate to CADAC's award of State funds must be returned to CADAC. CADAC may direct that the portion of the surplus funds which is proportionate to the award of Federal funds be (1) used as an offset against a continuation award; (2) used as a carryover in a subsequent budget; or (3) returned to CADAC. A portion of unrestricted operating income or public support which is in excess of CADAC funding may be reserved for future use, if approved by CADAC, and will not be considered a surplus and therefore not subject to return. In addition, funds received for the operation of an employee assistance program are not considered surplus.

Awardees providing treatment services are required to charge recipients for all or part of the costs incurred in providing the services. Awardees providing other services may impose charges but

are not required to do so. Charges for services must be reviewed annually and be based on actual costs and on the client's ability to pay. Awardees are required to attempt to receive payment for services either from clients or from third-party payors.

All organizations must seek out local financial support or goods and services. Awardees must document their efforts in the annual funding application. Applicants for funding for new programs must submit plans for obtaining local support with their applications. CADAC funds may not be used to replace funding from other sources unless specifically permitted in the letter of award.

MAINE

Overview

The State of Maine covers an area of 30,995 square miles and has approximately 1,228,000 inhabitants (1990). The Office of Substance Abuse, a branch of the Executive Department, coordinates the provision of substance abuse services in the State.

The Office of Substance Abuse was established under the Maine Substance Abuse Prevention and Treatment Act which became effective on July 14, 1990. The act has two major objectives: (1) to create an integrated approach to substance abuse problems in the State, encouraging the development of a comprehensive and effective range of prevention and treatment services, and (2) to give a single administrative unit, accountable directly to the governor, responsibility for planning, developing, implementing and coordinating all of the State's activities and services.

Prior to this time, responsibility for the joint planning and coordination of substance abuse services rested with the alcohol and drug abuse planning committee (ADPC), composed of the Commissioners of the Departments of Corrections; Educational and Cultural Services (now named the Department of Education); Human Services; Mental Health and Mental Retardation; and Public Safety (since 1987). The new Office of Substance Abuse took on the responsibility for the coordination of the services provided by these departments. The OSA was authorized to develop uniform contracting formats, contract for community services, establish operating and treatment standards, and certify compliance. However, the director of OSA may delegate this contracting and licensing authority to the other departments. Each department allocates funding and staff to provide or oversee the provision of substance abuse related activities.

The Department of Education is generally responsible for all activities within schools and administers all programs in elementary and secondary schools which are funded under the Federal Drug-Free Schools and Communities Act of 1986. This department oversees the development of and provides training to 117 school/community teams who develop local prevention and education programs, and 15 specialized teams comprised of education and treatment professionals who provide support to the school/community teams. The Department of Education is also involved in research and evaluation activities designed to determine the need for different programs and judge the effectiveness of different program models.

The Office of Alcohol and Drug Abuse Prevention within the Department of Human Services is responsible for prevention and early intervention efforts through the Maine alcohol and drug abuse clearinghouse. In addition, this office provides training programs for substance abuse professionals and its division of driver education evaluation program provides education, evaluation, and if necessary, treatment and rehabilitation services to persons who have lost their licenses due to driving under the influence of alcohol.

The Department of Public Safety continues to have jurisdiction over all highway safety and drug enforcement activities.

The Department of Mental Health and Mental Retardation supports community-based assessment, detoxification and stabilization services for persons with dual disorders, in addition to substance abuse services for individuals in State psychiatric institutions and county jails. This department also

provides training on dual disorders for mental health and substance abuse professionals.

The Department of Corrections provides substance abuse services to prisoners within the State's correctional institutions and two county jails, and for probation and parole clients in the community. The chemical alternative program, a mandatory alcohol and drug abuse information and education program for juveniles at the Maine Youth Center, is run by this department.

Both the Department of Mental Health and Mental Retardation and the Department of Corrections continue to contract for treatment services within their institutions but increasingly depend on the Office of Substance Abuse for the purchase of services for their clients in the community. Both departments receive legislative appropriations to support their overall provision of services from which they fund contracts for substance abuse treatment within their institutions. This contracting process is, in general, completely independent of OSA; a few providers have contracts that are jointly funded by OSA and one or both of the other departments. Due to budget decreases, the Department of Corrections is no longer able to support community-based treatment services. A person released from a correctional facility is directed to one of the agencies funded by OSA for substance abuse treatment, often as part of the parole agreement. The Department of Mental Health and Mental Retardation funds some substance abuse services at community mental health centers. An individual released from a DMH/MR institution is usually referred to one of these providers.

Table 4 contains a breakdown of the funds allocated for substance abuse services by the departments and the Office of Substance Abuse for FY 1991. Table 5 summarizes the FY 1992 original approved budget requests of these agencies and shows the source of funds (State or Federal).

Market Areas

The Office of Substance Abuse uses five regional planning areas defined along county boundaries:

- Region 1 - York, Cumberland, Sagadahoc, Lincoln, Knox and Waldo Counties
- Region 2 - Franklin, Oxford and Androscoggin Counties
- Region 3 - Somerset and Kennebec Counties
- Region 4 - Piscataquis, Penobscot, Hancock and Washington Counties
- Region 5 - Aroostook County

Each region contains both providers who receive funds from the State and those who receive funds only from private sources. Table 6 provides regional and State data on population, area, number of providers receiving only private funds, number of providers receiving OSA funds, and FY 1991 allocations. This table may omit some providers who do not receive funds from the State as they are not required to report to the State.

Licensing

The Office of Substance Abuse licenses residential treatment programs and certifies nonresidential treatment programs. In addition, providers of driver education evaluation program (DEEP) evaluation or treatment services must be approved by OSA. Licensing is a mandatory process; providers offering residential services of any kind are required to be licensed by OSA. Certification is not mandatory. A provider of nonresidential, outpatient treatment services may operate without certification but is not eligible for reimbursement from OSA, Medicaid, or any of the major insurance companies. A provider of both residential and outpatient services is required to be both licensed and certified (if it wishes to be eligible for reimbursement).

The following services are licensed/certified:

- Detoxification - medical model and social setting

- Shelter - emergency and extended
- Rehabilitation - residential and nonresidential
- Halfway house
- Extended care
- Outpatient care

Residential programs operated by hospitals which are licensed by OSA, certified by Medicare and accredited by the Joint Commission on Accreditation of Healthcare do not need to be separately licensed (except those providing DEEP services which must meet the pertinent licensure requirements).

All programs must comply with requirements relating to governing authority and management of programs. These requirements relate to the program organization, fiscal management, policies, and procedures governing client admission, treatment and discharge, client case records, client rights and responsibilities, personnel requirements and policies, the physical environment, program evaluation procedures, and outreach activities. There are specific requirements for each type of treatment. These may include specialized admission requirements, service availability requirements, specific staff requirements and duties, record-keeping activities, additional discharge planning activities, and medication requirements. Regulations specific to residential facilities detail such things as required laundry and shower facilities, and referral procedures to other substance abuse treatment and medical care providers.

As part of the application process, all programs must submit a policy manual and may be required to complete a certificate of need process prior to applying to OSA. Upon receipt of the application and approval of the policy manual, OSA arranges for State fire, health and plumbing inspections and performs its own on-site program inspection and review of (1) plans for services; (2) budget and financial/billing procedures; (3) procedures governing clinical supervision and admission; (4) selected case records; and (5) personnel policies and files.

Applicants who have not previously operated the facility for which an application has been made or who are licensed but have not operated during the license term, and cannot comply with those regulations applicable only to an operational program are granted provisional licenses. These licenses are issued for a minimum of three months and a maximum of 1 year.

A license or certificate may not be transferred and applies both to the program and the premises in which the program is operated. Therefore, any person or legal entity who has a license/certificate and wishes to operate another program in a different location or transfer to a separate location must apply for a separate license/certificate for each program or site.

Programs must notify OSA if there is a change in the director, medical director, or clinical supervisor or if services or components provided have changed.

Providers of outpatient treatment services receive a certificate which is valid for two years but are monitored at least once a year through a site visit and full review of the administrative, clinical and financial departments. Residential providers receive a license which is valid for 2 years and are also monitored at least once a year. In this case, however, the monitoring also includes a review of the medical director, staffing, nutrition, medication control, and physical plant and a meeting with clients. DEEP providers are issued a 3-year certificate, and their annual monitoring includes a review of the physical office and case records.

Providers who do not comply with regulations may be issued a conditional license/certificate or have their license/certificate revoked. If the deficiencies cannot be or are not corrected within the required time frame, OSA may issue a second conditional license/certificate for a shorter period of time. If the deficiencies remain uncorrected, OSA will revoke the license/certificate.

As of January 1991, 43 providers statewide were certified by OSA, 12 providers were licensed, and an additional 6 providers were both certified and licensed. As discussed above, licensed providers offer residential services and certified providers offer nonresidential, outpatient services. The number of certified providers does not reflect the

total number of providers offering outpatient services but only those desiring to be reimbursed by other than private individuals.

Contracting

The Office of Substance Abuse does not directly operate any substance abuse treatment services but instead funds services through annual contracts with private providers. In general, providers maintain funding from year to year through annual contract negotiations. A request for proposals process is used if OSA has decided not to renew a contract or in order to allocate any new funding. Both of these rarely occur.

Contracting for substance abuse services was expense-based through FY 1991. Performance standards (described in more detail below) were added to FY 1992 contracts, although no penalties were attached to nonperformance. As of July 1, 1992, the beginning of FY 1993, this hold harmless provision was removed, and providers will be held accountable for their performance. In general, expense-based contracts focus on a detailed budget submitted by the provider; OSA funding is then based on the number of service units for which OSA contracts. Under performance-based contracting, the focus is on whether or not the provider is meeting general OSA outcome or accessibility objectives. If the provider meets the performance objectives, it retains any surplus funds. If a provider's performance is not acceptable, it may lose all or a part of its funding for the next year. Providers receive regular quarterly feedback from OSA on their performance and are offered technical assistance if it appears a trend is developing which may impact their performance and therefore their funding. OSA provides opportunities throughout the contract year to help providers meet the standards but does not expect to change performance standards in individual providers' contracts to allow a provider to avoid nonperformance.

The discussion which follows describes the general language of OSA contracts and notes the differences between OSA's expense-based contracts and performance-based contracts.

Contracts specify the compliance requirements which are applicable to each funding source. For example, if a contract is funded in part from ADAMHA block grant funds, the contract specifies the statutes, rules and/or regulations which must be followed. In addition, the standard administrative policies and procedures applicable to the contractor are specified. For example, if the contractor is a nonprofit entity, the contract specifies the OMB circulars which apply.

Standard contract language is included which regulates subcontracts, assignment of contracts, State access to records, and confidentiality. Equal employment opportunity language provisions are included as are civil rights regulations. The contractor agrees to hold the State harmless from any liability and warrants that no State employee has benefited from the execution of the contract and that the contractor has not agreed to pay any fee, commission, or gift contingent upon the award of the contract.

Contracts detail the general program requirements such as the hours of service availability, the geographic area served, and the license/certificate information. A description of the substance abuse services provided is included which outlines the type of services offered, the qualifications of the staff, the intake process, and the relationships with other agencies, both private and public, offering services to the client population. All services are listed and those performed under the contract are checked. This section differs between the two contract formats. In the FY 1991 contract, services are listed but not specifically defined; instead reference is made to service area policies for specific definitions. In the FY 1992 contract, definitions of services are included as part of the contract language. Definitions include the type of individual toward whom the service is aimed, actions which must be taken, i.e., medical evaluation, or services which must be available (for example, extended shelter must arrange for counseling services), the amount of time services

must be offered per day, and the measurement of the service (day, hour, etc.).

The major difference between the two contracts is found in the section detailing program goals and objectives. In the FY 1991 contracts, program goals and objectives must be listed for, at a minimum, direct services, program administration, personnel/staffing needs, staff training, and program evaluation. Program goals are defined as broad statements describing long-term results of the program. Objectives are defined as attainable targets with measurable results and may include (1) the number of service units to be provided and/or the number of clients to be served during the contract period; (2) the number of hours of staff training offered; and (3) the development of specific policies or procedures regarding personnel or program evaluation.

In the FY 1992 contracts, performance standards are detailed in place of the program goals and objectives. Separate standards are included for each type of service provided. Standards are separated into three sections: required efficiency indicators and minimal standards, required effectiveness indicators and minimal standards, and special conditions. Efficiency indicators define units of service to be made available and may include minimum monthly staff hours (outpatient) or minimum occupancy (residential). Effectiveness indicators include such outcome measures as maintenance of employment, drug-free for 30 days prior to termination, no arrests, and reduction of problems with family members. Minimum percentages of primary clients meeting these qualifications are defined for each effectiveness indicator. As an example of the types of effectiveness performance standards, table 7 contains the standards for outpatient services. Special conditions define the minimum percentages of each target population which must be served.

Both contract formats include general provisions defining client eligibility, priority clients, sliding scale fee approval by OSA, required submission of client information, and fiscal and service reports. The specific requirements attached to Federal funds are also listed. They also contain detailed budgets and payment provisions. All funding sources -- Federal, State and municipal, private, in-kind and program income -- are detailed. Program expense categories include personnel, equipment, subcontracts and such other operational expenses as utilities, materials and supplies, and staff travel.

Rates for each service type are calculated as follows. The total amount of the contract is determined; this is based on historical contract amounts and any cost of living increases or budget cutbacks. This amount is divided by the cost of the total program (for all services provided regardless of payor) to determine the percentage of units purchased or costs which should be applied to the OSA contract. For each service type, the total cost (multiplied by the contract percentage) is divided by the total number of service units (staff hours or beds available, again multiplied by the contract percentage) to determine the contract unit cost.

Contracts are monitored by requiring periodic reports from the provider. Quarterly financial and narrative service reports and client information required by the Maine management information system are specified in the FY 1991 contract. This changed slightly under the FY 1992 contract: quarterly expenditure reports, monthly service reports, monthly management information system reports, and a final financial report are required.

MASSACHUSETTS

Overview

The Commonwealth of Massachusetts covers an area of approximately 10,500 square miles and has about 6 million inhabitants (1990). The Executive Office of Human Services is the branch of State government which oversees substance abuse services. The Bureau of Substance Abuse Services (BSAS) within the Department of Public Health is responsible for both alcohol and drug treatment services.

It is the philosophy of BSAS that alcohol and drug treatment should not be separate entities and the bureau is currently in the final stages of merging two divisions (the Division of Alcoholism and the

Division of Drug Rehabilitation). The reasons cited for this merger include (1) the similarities between treatment interventions; (2) the increasing numbers of polydrug abusers; and (3) the efficiency of joint purchasing of services. Therefore, the following data include both alcohol and drug treatment services.

Within the Bureau of Substance Abuse, four units handle key administrative functions: office of the director, program development unit, program management unit, and program evaluation unit. The office of the director oversees the entire bureau and sets its goals, priorities, and long-range plans. It is this office which coordinates systemwide AIDS policies and training. The program development unit establishes performance standards and reimbursement strategies, develops programmatic and financial models for service delivery, and negotiates joint purchase agreements with other State agencies. It also oversees the bureau's management information system. The program management unit includes six regional managers, who are responsible for assessing regional needs, preparing regional plans, and coordinating service delivery in their area. The program evaluation unit is responsible for the licensing of public and private treatment services, reviews program proposals, and conducts quality assurance reviews of providers. This unit coordinates legislative affairs and oversees provider and community task forces. It is this unit which develops, coordinates and assesses prevention programs and high-risk youth programs.

The treatment system has two service categories: residential and ambulatory. BSAS also provides support services including training to human service agencies and providers, an information and referral hotline, and research and evaluation. Table 8 provides an outline of the system including the number of programs within each service type.

The Bureau of Substance Abuse Services received a total of $75,684,753 for fiscal year 1991, of which 53 percent was State funds. The State substance abuse account provides the majority of the State funds (79.5 percent), funds earmarked for AIDS contribute 18 percent, with the remainder from clients in driver alcohol education and gamblers treatment programs. Of the $35,599,543 contributed by the Federal Government, 73 percent was received from the Alcohol, Drug Abuse and Mental Health Administration block grant (ADAMHA). The remainder of the Federal funds are smaller, earmarked funds such as the Waiting List Reduction Grant or the AIDS grant from the Centers for Disease Control and Prevention.

By August 1990, BSAS had allocated $62,779,534 as follows: 29 percent to acute care, 30 percent to residential services, 22 percent to outpatient services, and the remainder to prevention and early intervention services. A total of 350 contracts for residential and ambulatory services were funded by BSAS in FY 1990 at a total cost of approximately $65 million. Ninety-five percent of total BSAS FY 1991 revenues were used to purchase services.

Market Areas

There are six administrative regions in Massachusetts: western, central, northeastern, southeastern, metro north and metro south. The City of Boston is divided, with a portion in metro north and the remainder in metro south. The tables for this paper combine metro north and metro south into a single region, metro.

General regional data is presented in table 9. This includes regional population and area figures, number of licensed facilities, allocations of FY 1991 contract dollars and client admissions and discharge figures for FY 1990. Table 10 presents more detail on the regional allocations and includes funding by type of program.

Licensing

Bureau of Substance Abuse Services oversight of substance abuse treatment facilities includes licensing, specialized approval, standards, and individual program descriptions.

All major treatment services, whether privately or publicly operated and regardless of their source of funding, must be licensed or approved by the

Bureau. The following services are licensed: outpatient methadone medical services, recovery homes, residential therapeutic communities, residential detoxification, short-term intensive inpatient treatment, youth residential, and outpatient substance abuse counseling. Regulations govern the physical environment in which the services are offered, the administration and personnel requirements and such aspects of treatment services as hours of operation, admission and evaluation requirements, service plans, minimum service types and amounts, and termination procedures.

Only services offered by the Federal government are exempt from Massachusetts regulation. A department, agency or institution of the State proposing to offer these services must apply for approval from the bureau. Any other individual or entity must apply for a license.

Prior to issuing a license or certificate of approval, the bureau investigates the applicant, inspects the facility to ensure compliance with the applicable licensing regulations, and determines whether there is a need for the service at that location. The investigation of the applicant includes: (1) consideration of past performance as a service provider; (2) financial viability; (3) absence of criminal activity; (4) compliance with regulations under previous licenses, approvals, or contracts; and (5) compliance with other regulations (such as the building code).

Licenses are valid for a period of 2 years from the date of issue. An application may be denied, renewal refused, or current license revoked or suspended if the bureau determines that proper patient care is not being delivered. The grounds for these actions include lack of legal capacity, responsibility, or suitability as outlined in the previous paragraph; failure to submit the required fee; denial of entry for inspections; or failure to submit a suitable correction plan or correct any violations cited during an inspection. The licensee has the right to a hearing on the bureau's actions, and the decision of the hearing officer is reviewed by the Department of Public Health and the Public Health Council. The decision resulting from this last review is final and is subject only to judicial review.

In the case of acupuncture detoxification services, driver alcohol and drug education services, and all services for pregnant addicts, the bureau specially approves certain licensed facilities to provide these services. A provider must first be licensed or approved as an outpatient substance abuse counseling provider before applying for approval to offer these special services.

The bureau defines standards that facilities must meet in order to receive contracts from the Bureau. These standards are attached to provider contracts. An "Attachment A Addendum" describes the program, defines the program goals, objectives, and target population; and outlines the primary and secondary service elements. Service types in this category include: nontraditional, transitional care facilities, vocational/educational programs, and all prevention and early intervention programs.

Finally, further regulating may occur through the specification of more detailed service requirements, specific to individual providers, within the attachment A addendum to the contract.

Contracting

All contracts with private providers must be competitively rebid at least once every 5 years. The bureau may contract for new services at any time. After publication of a notice in the "Goods and Services Bulletin", a request for proposals (RFP) follows and a bidders' conference is held. All bidders must submit a letter of intent stating the program type being bid and the bidder's principal purchasing agency (the agency within the Executive Office of Human Services that has awarded the greatest total contract dollars to the provider in the most recent fiscal year) which must prequalify the bidder. New bidders submit financial and organizational information which demonstrates their ability to meet minimum administrative and fiscal standards.

In general, proposals must include a description of the program, a proposed budget, an agency and/or program organizational chart, job descriptions for all program staff positions, proof of license if the contracted service is one which the bureau licenses,

and certification from the State Office of Minority and Women Business Assistance (SOMWBA) if applicable.[2] Further qualifications and/or requirements may be specified in the RFP itself. Contents of the proposal may become part of the final contract.

Subcontracting[3] is permitted if the provider receives prior written approval from the Department of Public Health. Bidders must identify all subcontracts and ensure that they comply with State procurement statements including that: (1) funds are available to the bidder to pay the subcontractor; (2) the subcontractor complies with licensing requirements; (3) conflict of interest and unnecessary purchases are avoided; and (4) incentives are offered to minorities and physically handicapped persons.

Proposals are evaluated according to the priorities and programmatic guidelines specified in the RFP. There are three levels of review: The bureau; the regional director(s); and a senior management review committee consisting of the director and associate directors of the bureau and often including representatives of other State agencies and organizations. The rankings given to the bids by each member of the senior management review committee are averaged and the highest ranked proposals are prioritized for funding. The decisions of the senior management review committee are the deciding factor. These decisions are then recommended to the commissioner of public health as the preferred funding options.

Contract negotiations are limited to terms and conditions which were not specifically addressed in the RFP or the proposal. If the bureau cannot reach agreement with the first prioritized bidder after a reasonable time, it may disqualify that bidder and begin contract negotiations with the next prioritized bidder.

The Bureau of Substance Abuse Services contracts to buy services from private providers in two ways: paying a specified rate per unit of service, or reimbursing providers for previously agreed upon costs. All contracts specify a maximum amount that will be paid during the contract period, and all are subject to adequate funds being appropriated by the legislature. In general, ambulatory services and new services are very competitive. The bureau receives few proposals for residential services, as the rate it is able to pay is not enough to warrant beginning a new program; only those programs that are currently operating, that own their buildings, or that have long-term, low-cost leases are willing to bid.

The majority of all BSAS contracts are unit-cost based contracts based upon a class rate which is set by the rate setting commission. Using historical costs as a starting point, the rate setting commission and providers negotiate the final class rate through a long process which includes public hearings. These negotiations are not part of the contracting process. All contracts for the major treatment modalities are class rate contracts: detoxification, recovery home, residential drug-free, outpatient counseling, methadone counseling, driver alcohol education, case management, and all services for pregnant addicts. Rates are set for types of services within these modalities; for example, outpatient and methadone counseling includes different rates for individual, couple/family, and group counseling and case consultation. In recognition of the fact that economies of scale apply and that operating with less than 20 beds is more costly, residential services providers (detoxification, recovery home, residential drug-free) receive a higher rate per day if they contain less than 20 beds (these small providers exist to serve small communities).

Individual, i.e. nonclass, rate contracts are used for the smaller service types. If a contractor wishes to provide a service which he believes is non-standard, he files financial reports documenting projected costs and requests the setting of a unit rate specific to his service. If BSAS agrees that the proposed service is unique to the provider and addresses an unmet need, BSAS and the provider negotiate a special rate, but as BSAS is aware of the standard costs of providing services, negotiation is limited.

Under cost reimbursement, the bidder submits a program budget which becomes the basis for the negotiations involved in a cost-reimbursement

contract. The budget specifies in detail the total anticipated expenditure and the requested reimbursable amount per line item on staff, supplies, facilities and capital equipment. Once the contract is agreed upon, the bureau will only reimburse up to the specified amount for each line item. The contractor is reimbursed for costs documented and submitted to BSAS each month and has a full year to reach the maximum.

It is rare for the contract rate to change, other than a cost of living adjustment, during the period covered by an RFP, but it is possible. Rates can change during a contract period or at the start of a new contract under an existing RFP. As outlined above, all class rates must be negotiated with the rate setting commission. Providers with cost-reimbursement contracts may request permission to move funds between line items.

If the bureau receives additional funds, it may add up to 125 percent of the total contract amount to existing contracts. Any amount above the 125 percent maximum must go through the RFP process. The Bureau may also reduce contract amounts. During the past year, the State took 1 percent from all contracts.

A service contract is not legally enforceable until a one-time master agreement is executed and filed with the comptroller. Under this agreement the provider certifies that it will comply with general State conditions such as nondiscrimination in hiring and service delivery, avoidance of conflict of interest, and compliance with confidentiality and affirmative action policies.

The standard service contract specifies the provider, the principal purchasing agency, and the agency contracting for services under the contract. It details the program capacity, the applicable rate regulation, the unit rate, the total maximum obligation, the contract capacity, and the billable units. It specifies the type of contract (cost reimbursement or unit rate), the type of payment, and the process by which the contract was procured (noncompetitive, RFP, request for qualifications[4]).

Contracts are generally renewed annually for up to 5 years, at which point the entire RFP process is repeated. The bureau may refuse to renew the contract if it is concerned with the quality of care clients are receiving; this may involve a licensing problem, concern with program performance, or concern with the financial ability of the provider to continue providing services throughout the contract period.

Contracts are monitored through the annual submission of cost reports by the provider. Providers with class-rate contracts must file the rate setting commission cost report and audited financial statements at the end of their fiscal year. The Commission may impose a penalty if reports are not filed; the approved rate is reduced by 25 percent for the number of late days.

All other providers must file the uniform financial statements and independent auditor's report (UFR) with the bureau of purchased services, a branch of the executive office for administration and finance. Providers are asked to submit the following audited financial statements: balance sheet, statement of revenues and expenses and changes in fund balances, and statement of functional expenses. They must also submit supplemental schedules detailing revenues, expenses, employee costs, and program statistics allocated to the different programs offered.

NEW HAMPSHIRE

Overview

New Hampshire has approximately 1.1 million inhabitants (1990) and covers approximately 9,000 square miles. Substance abuse treatment services offered in the State are overseen by the Office of Alcohol and Drug Abuse Prevention (OADAP).

OADAP provides treatment services to substance abusers, prevention and other services to at-risk populations and families, and training to service providers. OADAP services include treatment, crisis intervention, prevention, education, training, technical assistance, quality assurance, and outreach efforts.

New Hampshire does not provide any funding for methadone programs. This results, in general, from the belief that the State should not support addiction and, more particularly, from the doubts of agency staff that methadone treatment is superior to the treatment modalities which are funded.

Table 11 outlines client admissions to type of treatment unit (for treatment units receiving some OADAP-administered funds). It is interesting to note that no treatment is provided in hospitals; all detoxification is provided in free-standing residential facilities, and no hospitalization is shown under the rehabilitation/residential category. Data on clients show they are overwhelmingly white (95 percent, reflecting State demographics) and male (76 percent). The primary drug of abuse is cocaine (49 percent), followed by marijuana/hashish (33 percent) and heroin (12 percent).

OADAP's FY 1990 total budget was $5,187,506, 45.25 percent from the Federal government and 48.62 percent from the State. Treatment services accounted for 68 percent of spending; prevention for 15 percent; and administration, evaluation, research and training combined equalled 17 percent of total spending. Table 12 provides additional detail on the funding sources and activities funded.

The vast majority of treatment and prevention services are contracted to private providers; the State provides AIDS-related services and staffs some programs, such as a halfway house. The OADAP management team reviews numerous sources of data and types of indicators to determine the services to be implemented and to allocate its funds.

All contractors are allowed to establish a sliding scale fee structure which must be submitted to OADAP for approval. However, no potential client may be refused treatment due to his inability to pay.

In most cases, OADAP contracts with providers who offer only substance abuse treatment. However, in some rural areas of the State, OADAP contracts with providers who offer primarily mental health treatment. In these cases, OADAP will pay for services based on the time spent providing substance abuse treatment with additional funds for overhead costs.

According to information reported in the SADAP for FY 1990, 31 combined alcohol/drug treatment units received funds administered by OADAP. This number represented 31 percent of all known treatment units (regardless of funding source) in the State during that fiscal year.

In FY 1991, OADAP executed 41 contracts at a total cost of $2,968,127. The Federal Government provided 65 percent of the funds for these contracts. Residential services accounted for the largest amount of spending. Table 13 provides a breakdown of the contracts by broad treatment categories and by State vs. Federal funds.

The crisis intervention providers are specialized substance abuse agencies which receive 65 to 75 percent of their funding from OADAP, with the remaining funding coming from the United Way and very minor fees. Outpatient services provided by nonmental health contractors receive the major portion of their funding from OADAP.

Market Areas

OADAP does not contract for services based on a geographic regional plan. While planning and funding take into consideration the need for and availability of services throughout the State, no specific regions are defined or monitored.

Licensing

All regulation of providers is performed through the contracting process. New Hampshire does not separately license substance abuse treatment providers. As will be seen in the discussion of financing issues, licensing functions are handled through the contracting process. For example, the contract for outpatient services delineates the information which must be included in client case records, and the contract for comprehensive services defines requirements of the physical site;

both of these contracts deal with issues that are handled in the licensing regulations in other States. All contracts contain language specifying the required qualifications of staff who perform specific services, which is again more commonly defined in the licensing regulations.

Contracting

Recently, contracts have been allocated based on continuing relationships between OADAP and existing providers rather than on a competitive process. The RFP process was restored for FY 1992, and in subsequent years OADAP will request proposals annually. The State publishes a single RFP for substance abuse services in general rather than separate requests for specific treatment modalities or geographic areas.

Once proposals are received from providers, OADAP selects providers and begins negotiations. All terms of the contract are negotiable (as the State lets a generic RFP, it is not tied to specific terms or conditions in the RFP). OADAP examines the budget submitted with each proposal line by line, taking into consideration the differing costs among providers. The final approved budget becomes part of the contract. Costs are not regulated by the State but are instead individually negotiated with each provider.

For FY 1992, all of the proposals received are from existing contractors. OADAP expects to fund all of the proposals, although at modified amounts.

A standard contract form, titled "Agreement," is used for all service categories; Exhibit A, "Scope of Services"; Exhibit B, "Contract Price"; and Exhibit C, which sets forth any special provisions, contain the service-specific terms and conditions. Exhibit D is the program budget, which requires the same data from all providers.

The agreement specifies the contract period and maximum contract price and contains standard contract language regarding compliance with all Federal, State, county or municipal laws, statutes, and regulations, including equal employment opportunity regulations. Personnel are required to be qualified to perform their duties, are provided at the contractor's expense, and may not have a contractual relationship or be employees of the State. All obligations of the State are contingent upon the availability of and continued appropriation of funds; the State is not liable for payments under the contract if adequate funds are not appropriated.

Exhibit A, Scope of Services, contains different terms and conditions for four main service categories: prevention, outpatient, residential and comprehensive services. All contain reporting requirements.

Prevention contracts specify the catchment area, target group, required amount of time per week, and the type of personnel who must perform the services. The contractor is required to develop and implement a system for evaluating the program.

Outpatient contracts stipulate that the provider must serve a specific percentage of clients with a primary diagnosis of alcohol abuse and a specific percentage with a primary diagnosis of drug abuse. Minimum qualifications of staff are defined. Specific services which must be offered and services which may not be performed using Federal funds are delineated. Minimum utilization levels are defined, as are penalties for not meeting the minimum. Contractors must establish a sliding fee scale (based on the Federal poverty guidelines) and bill clients for services, but they may not deny services on the basis of inability to pay. The standard case record format is defined and the information which must be included is delineated. The contractor is also required to establish a post-treatment survey form, which must be sent to discharged clients periodically during the year after discharge. The contractor must develop and implement an in-house quality assurance program according to the guidelines specified. In addition, the contractor must report all third-party billings and payments and document the provision of all services to State-supported clients.

A contract for residential services is essentially the same as that for outpatient services. It differs in defining specific counties whose residents must be given preference for admission.

A comprehensive services contract may cover crisis intervention, social detoxification, and sobriety maintenance services. Many of the requirements are the same as those in outpatient contracts. Providers are required to provide HIV risk assessment, testing and counseling and provide outreach and treatment services to IV drug abusers. In addition, there are many requirements relating to the physical plant and amenities; for example, the type of cots to be used, the ratio of bathrooms and showers to beds, and the availability of meals and juices is specified. Contractors must obtain OADAP approval before relocating the service site and must maintain written agreements with area medical facility(ies) for the provision of medical back-up services. The contractor must also use any and all counseling services to provide individual counseling to all resident clients. The contractor is required to develop a crisis intervention community advisory committee and, with its cooperation, encourage community awareness and support of crisis intervention. In addition, training must be provided to area EMTs in the evaluation of substance problems. Contractors are required to develop and maintain a standards and procedures manual which describes the operation and staffing of the crisis intervention service and the maintenance of the site; routine and emergency procedures must be posted at each site.

The contract price section is the same for all contracts with the exception of the actual price itself and the percentage of allowable costs from which the contract price is derived. The contractor is required to provide the remainder of the funds as a match which consists of actual disbursements for goods and services during the contract period. Allowable costs are as defined in the budget and no expenditures above the budgeted line item amount will be reimbursed without prior approval. Funds from one contract may not be used to provide services under any other contract or as part of the provider's required match. Restrictions on the use of Federal funds are listed; for example, Federal funds may not be used for the provision of inpatient services or to purchase land or facilities.

OADAP monitors and evaluates the performance of the contractors through annual site visits and client admission/discharge forms. During the site visit, a review of the treatment services records is performed which examines the adequacy of case record content (personal history, substance at issue, substance history, medical history, primary counselor) and clinical assessments (treatment plan, assessment update, progress notes, discharge summary). Providers are required to file admissions and discharge data forms with OADAP for each client. These forms request general information such as the client's gender, age, ethnic background, marital status, whether he/she is employed at admission, and the availability of medical insurance. Information related to substance abuse includes the substance(s) abused, their source, method of use, severity and frequency of use, and related arrests. Discharge information includes whether or not treatment was completed and the prognosis and referral information. In cases of crisis intervention, medical vital sign information is included as well.

RHODE ISLAND

Overview

The State of Rhode Island has a population of 1,003,000 (1990) and covers an area of 1,545 square miles. The Office of Substance Abuse (OSA), a branch of the Executive Department, oversees the provision of substance abuse treatment services in the State.

The Office of Substance Abuse was established July 1, 1991 by executive order of the governor to consolidate the substance abuse activities of all State agencies under one central administrative authority. Previously, substance abuse services had been provided by the Division of Substance Abuse (within the Department of Mental Health, Retardation and Hospitals), and by many other State agencies offering services to their specific client groups or statewide, including the Departments of Corrections, Health, and Children, the State Police, and the Governor's Justice Commission.

OSA is responsible for coordinating substance abuse programs in all State departments and agencies; developing statewide policies, needs assessment, and planning; evaluating and monitoring grants and contracts with local providers; and auditing all programs administered by State agencies by examining programmatic content and procedures for monitoring contracts and grants.

The executive order directs all State agencies to provide OSA with whatever information is necessary and gives OSA the authority to enter into memoranda of understanding with other State agencies in order to effect a smooth transition of management responsibilities. In general, these memoranda ensure that no changes will be made by the other State agencies until a final agreement on the division of functions is completed. The executive order also directs the director of OSA to determine which State department and agency programs and functions are affected by the order and to transfer these programs and functions to OSA. This authority includes the transferring of operating budgets, personnel, and physical property.

The Office of Substance Abuse contains four divisions. Direct services oversees the State detoxification facility and program for DUI first offenders. Administration and grant management is responsible for grant and contract administration and monitoring, licensing, OSA administration, ADAMHA block grant administration, and data collection. The policy division is responsible for developing substance abuse legislation and applying for Federal grants. The community development division is responsible for the statewide resource center, training and certification of substance abuse counselors, and administering the funding for the 37 community task forces.

OSA is in the process of consolidating the various programs offered by other State agencies, developing standard policies and procedures to govern contracting, monitoring and auditing, and reviewing all contracts. Since the entire State-funded services delivery system is being reorganized, we were unable to obtain recent funding information from OSA.

Another focus of OSA has been the collection and dissemination of data. To this end, OSA prepared a client profile and statistical report summarizing data for the period from January to June 1991. Data was collected from all services providers which receive funding from OSA; the report states that this reflects the services provided by at least 90 percent of the licensed providers.

During this 6-month period there were 2,008 admissions for drug treatment (39 percent female, 61 percent male), occurring overwhelmingly as a result of self-referral. The Office of Substance Abuse was the greatest source of payment for drug treatment services (58.02 percent), followed by self-pay (13.60 percent). Table 14 contains a further breakdown of the sources of referral and payment.

Outpatient services was the treatment modality with the largest number of clients during this period. Table 15 lists the treatment modalities and associated number of clients and percentage of total clients. There were a total of 1,972 discharges between January and June of 1991; 28 percent of clients were discharged after completing treatment. Table 16 contains a breakdown of the reason for discharge and the client's condition at discharge.

Market Areas

No data are available on the market structure of substance abuse services in Rhode Island. Due to the recent creation of the Office of Substance Abuse, the entire structure of the system is under review and will be changed.

Licensing

The licensing regulations were amended in January 1989, while substance abuse services were administered by the Department of Mental Health, Retardation and Hospitals. The licensing function is now performed by the Office of Substance Abuse.

With the exception of certain facilities and programs already licensed by other State

departments (health care facilities and shelter care facilities licensed by the Department of Health, and facilities and programs licensed by the Department for Children and Their Families), all facilities and programs providing substance abuse services in Rhode Island must be licensed.

Licenses are reviewed for compliance with the regulations. Providers may receive a 6-month provisional license if they do not meet all of the requirements, provided that both the OSA and the State fire marshall determine that there is no undue hazard to clients. All new programs are eligible for a provisional license. During this period, an on-site review is performed, and the provisional license may be revoked if the program is not operating.

Licenses are valid for a period of 2 years and may be renewed upon application and after an inspection by the Licensing Office. Licenses may be denied, suspended or revoked after notice is given to the provider and a hearing, if requested by the provider, is held. Providers may apply for a variance of the licensing standards; a permanent variance may be granted if the variance review committee deems it is necessary for the program to best accomplish its goals or purpose, and a time variance may be granted to allow the provider to comply with a specific standard. Plans to construct new facilities, renovate existing facilities, or change sites must be approved.

There are general requirements which must be met by all substance abuse treatment facilities. The facility must have a policy and procedure manual, written philosophy of care goals and performance objectives, and a plan for community education and involvement. The facility must be able to show that it is reasonably assured of the funds necessary for operation, have sound accounting and bookkeeping practices in place, and submit an annual audit. The regulations require a governing board or board of directors and place conditions on its membership, functions, and meetings. Personnel qualifications and practices are detailed together with in-service training requirements.

A written statement of admissions criteria must be developed and maintained, and intake and assessment procedures must be standardized and must collect specific information from each client. All facilities must have a written description of the programs and services available to clients which includes, at a minimum, the hours and days of operation, available emergency services, cooperative agreements with other providers, and mechanisms for providing services not available at the facility. All programs must provide at least the following services: (1) individual, group and/or family counseling; (2) information and education related to substance abuse issues; and (3) education related to support services, e.g., Alcoholics Anonymous.

All facilities must provide medical services either directly or through contracts with a licensed physician and a hospital. Administration of medication at the facility is regulated as well. Regulations governing the physical facilities require that adequate space be provided to allow privacy and that facilities comply with all Federal, State and local fire and safety codes.

The licensing regulations also include additional general requirements for residential programs. Additional numbers or types of staff are required, e.g., staff available on a 24-hour basis, and additional services or activities are required, e.g., recreational and leisure activities. These regulations also govern the provision of meals and the physical characteristics of the facilities.

Specific requirements are added for the following treatment modalities: residential rehabilitation, day/evening treatment, detoxification, extended residential care, and outpatient. These requirements specify the staff required, the additional information which must be collected upon admission or recorded at discharge, and/or additional services which must be offered or time periods within which services must be provided. For example, residential rehabilitation and day/evening treatment programs must provide a medical examination within three days of admission, while detoxification programs must perform this service within 24 hours.

Contracting

The entire contracting process is under review due to the recent establishment of the office of substance abuse. Any licensed facility and the community task forces are eligible to receive funding from OSA. In the past, a legislative oversight committee, the grant advisory committee, was involved in the initial award of funding to providers. In general, once funding had been awarded to a provider, the grants were annually renewed. OSA hopes to streamline the application process and is currently analyzing the geographic distribution of funding. OSA is considering the feasibility and advantage of a periodic RFP process, but no decisions have been reached. The contract form is also under review with the aim of standardizing contracts across provider types so that both OSA and the providers know what is expected. As mentioned above, the monitoring function has been consolidated, and standardized policies and procedures are being developed.

VERMONT

Overview

The State of Vermont has an estimated 563,000 (1990) inhabitants and a land area of 9,265 square miles. The Office of Alcohol and Drug Abuse Programs (OADAP), a subdivision of the Agency of Human Services, oversees the public provision of substance abuse prevention, intervention and treatment services.

The OADAP receives funds from four broad categories: State general fund appropriations (39.7 percent), Federal funds (48.9 percent), special funds (6.6 percent) and interdepartmental transfers (4.8 percent). Federal funds include Medicaid payments, the Alcohol, Drug Abuse and Mental Health block grant, drug free schools funds, a NIDA data collection grant, and an Office of Substance Abuse Prevention Community Youth Demonstration grant. Special funds are fees from "Crash Schools" (a course which is required for reinstatement of a drunk driver's license) and program fees. Finally, the interdepartmental transfer consists of funds from the State liquor board. Table 17 provides a breakdown of estimated receipts for FY 1991.

The FY 1991 estimated expenditures totalled $6,463,455. Of this amount, $1,642,452 (25.4 percent) was allocated to personnel and operating expenses and the remainder, $4,821,003 (74.6 percent), to grants. Grants account for 97.4 percent of all resources allocated to treatment services, 71.2 percent of intervention services and 57.9 percent of prevention services. Table 18 details the division of resources by program activity.

The OADAP organization includes central office programs and field unit programs. The intervention/treatment unit in the central office is responsible for planning and coordinating the treatment and intervention service delivery system and provides training and technical assistance to the field units and to grant and contract recipients. In addition, this unit provides employee assistance program screening services to State employees from central Vermont and consults with and trains employers who are developing EAP services.

The prevention unit in the central office manages the Vermont alcohol and drug information clearinghouse and oversees the grants for statewide and community prevention programs. Community groups and ADAP field units receive training and technical assistance from this unit regarding prevention activities.

OADAP operates 9 community-based field units which are separated into a northern region (offices in St. Albans, Burlington, St. Johnsbury, and Middlebury) and a southern region (offices in Barre, White River Junction, Springfield, Brattleboro, Bennington, and Rutland). Intervention specialists at the field units are responsible for treatment assessments for persons convicted of driving while intoxicated and liaison with State-funded providers of community-based treatment and intervention services.

OADAP has established priorities for the provision of outpatient treatment services. State funds

allocated to these services must be used in the following order:

- Treatment of financially needy and uninsured clients;
- Outreach and intervention with women (with emphasis on pregnant women and women with young children);
- Activities to prevent the spread of the HIV virus; and
- Consultation, intervention, and support group services to schools, Vermont human services agencies, and other community organizations and special population groups.

The provision of treatment services is accomplished through a network of preferred providers which grew out of the relationships established during the period of Federal categorical grants. The providers are nonprofit organizations that include both community mental health centers and freestanding programs. Community-based services include outpatient treatment, crash schools, alcohol crisis teams and outreach and intervention services. Outpatient treatment is available to all residents; to be admitted to treatment, however, the individual must have one or more of the major life dysfunctions associated with substance abuse. Uninsured individuals whose income is within State guidelines may have their treatment subsidized on a sliding scale basis. Crash schools offer the course which is required of any individual whose license has been revoked for driving while intoxicated. Courses are offered for both first-time and multiple offenders and consist of four sessions, one each week for 4 weeks. Participants must pay all applicable fees. Alcohol crisis teams provide services for public inebriates. Services include screening, referral, transportation to non-medical detox or home, and supervision in a community shelter. Law enforcement agencies are the primary source of referrals. All preferred providers receive funds to meet the needs of special populations or problems, which include: women, especially pregnant women; victims of domestic violence; youth at-risk in schools and communities; hospital inpatients at risk; and corrections populations. In addition to the preferred providers, five other agencies receive State funds to serve special populations.

Statewide services include residential and intensive outpatient treatment services. While these services are available to any resident of Vermont, residential treatment is provided only after referral from one of the community-based preferred providers. The standard services require daily participation and are normally completed within a month of admission. Special residential services are available as well for those individuals needing long-term halfway care or a therapeutic community and for adolescents or the dually diagnosed. In some cases, however, Vermont refers clients to two residential treatment programs in New Hampshire.

Table 19 shows the number of programs in the service delivery system that are available in each county.

Market Areas

The substance abuse services delivery system is organized within the county structure. In planning for delivery of services, OADAP aims to ensure that outpatient facilities exist in the major cities in each county. The "Directory of Preferred Providers by County" lists 11 areas in addition to the services offered through providers in New Hampshire. The counties in the northern part of the State are combined as follows: Essex, Orleans and Caledonia counties are contained in the Northeast Kingdom area and served by providers in St. Johnsbury and Newport, while Franklin County and Grand Isle County are combined into one area and served for the most part by a provider in Chittenden County. Two counties in southeastern Vermont, Windham and Windsor, are served by the same provider.

Table 20 contains population and size data for each area along with FY 1991 funding amounts by program category.

Licensing

Vermont does not license substance abuse treatment programs; instead, programs must be approved by the Agency of Human Services through OADAP in order to be eligible for State funding or payment from insurance companies. OADAP has developed program standards with which all programs requesting approval must comply. OADAP will also accept certification by the Joint Commission on Accreditation of Hospitals or the Commission on Accreditation of Rehabilitation Facilities as meeting the required standards for approval.

The program standards are separated into four broad categories: client oriented activities, program management, State and local organization and liaison, and program and fiscal accountability. Standards for client-oriented activities include such requirements as written descriptions of the program's treatment approach, intake process, treatment components, record keeping procedures, discharge planning, and outreach activities. The standards of program management define required program planning and evaluation policies and procedures, counselor certification requirements, personnel practices, required characteristics of physical facilities, program management criteria, and policies and procedures regarding quality assurance. Standards for liaison with State and local organizations require that programs provide consultation and community organization services to agencies in their area, maintain cooperative agreements with other providers, develop written policies regarding volunteers, and coordinate with and provide information to statewide organizations. Program and fiscal accountability standards require documentation of efforts to increase funding from charitable organizations and through local and State grants. Programs are required to market their services to the public and to have procedures in place to maximize reimbursement for these services. Fee schedules must be documented and periodically updated, and revenue and expense budgets must be prepared. Accounting and reporting procedures must be developed, and adequate liability insurance must be maintained.

Contracting

In general, the preferred providers in Vermont are refunded annually by OADAP on an appropriation basis. Approximately two-thirds of the providers' budgets come from the State: one-third from State appropriations and one-third from Medicaid payments. OADAP also operates a community grants program, which emphasizes primary prevention projects. This program is more competitive; OADAP receives applications from community action groups statewide rather than funding these services through its preferred provider network. This is a relatively small area of funding ($156,000 in FY 1992).

OADAP prepares an annual service plan outlining the State's needs and priorities and allocating funding among different treatment modalities. Applications for funding commensurate with the service plan specifications are then requested from the preferred providers. Providers apply for State funds by submitting an application containing a balanced budget, a staffing plan, and a service plan for each service area the provider proposes to offer. OADAP reviews the application to ensure that the proposed services and service levels will meet anticipated needs and that costs are reasonable.

There are only a few residential treatment providers (in FY 1991, five providers received State funds). OADAP is therefore able to maintain close contact with these providers, is knowledgeable of the environment within which they operate, and is aware of their operating costs. Providers must submit an annual budget, which OADAP reviews to ensure that service levels correspond to funding and capacity and to ensure that the uninsured are receiving services.

In FY 1987, in response to a legislative mandate expressing concern with the difficulty in differentiating services provided to the indigent (for which the State should be responsible) and services provided to others, OADAP instituted a fee-based system. The system covered all providers of outpatient, residential and intensive outpatient services; certain programs geared to specific target populations continued to be funded on a program

basis. The system was in effect for fiscal years 1988 through 1991.

Fees were set for specific services and programs were permitted to earn up to a preset amount per year. Each agency had a different funding cap which was proportional to its capacity. If additional funds were available, however, programs could earn beyond these caps. OADAP would reimburse providers for claims over the cap through a capitation method based on the total amount of overclaims and of additional funds available; for example, providers could receive 50 cents for every dollar in claims over their cap.

In State FY 1991, the increase in demand and related costs coupled with the recession and recisions to the State budget, forced OADAP to abandon the fee for service system in FY 1992. OADAP has returned to the grant-in-aid funding format where funds are targeted to support specific programs and capacities.

The OADAP program standards require that providers submit treatment admissions and services reports; monthly utilization reports; quarterly progress reports; quarterly and annual financial reports; an annual report of direct service hours provided for the purpose of intervention, consultation, and outreach; and an annual evaluation. OADAP uses this data together with the service plan submitted with the funding application to measure capacity utilization. Performance is measured by looking at whether the types of services promised were, in fact, delivered. If this is not the case, funding in the following year may be cut.

NOTES

[1] The following State agencies are represented: Department of Education, Department of Children and Youth services, Department of Motor Vehicles, Department of Adult Probation, Department of Human Resources, Department of Correction, Department of Health, and Department of Mental Health.

[2] State agencies are required to identify and contract with minority providers if possible. SOMWBA certifies that the business is at least 50 percent owned by a woman or member of a minority group.

[3] A subcontract is the purchase of services involving $25,000 or more, or amounting to 10 percent or more of the total contract (whichever is less), or a significant delegation of financial or programmatic responsibility.

[4] A request for qualifications is used when (1) the number of units of service to be purchased cannot be estimated and therefore a maximum contractual obligation cannot be determined, or (2) the time that services will be required to be delivered cannot be accurately predicted.

Table 1: CADAC Service System and Target Populations

Service	Program	Target Population
Prevention	Community Awareness	All segments of the general population
	Primary Prevention	
	Early Intervention	
Intervention	Employee Assistance Programs	State employees and their immediate family members
	Pretrial Alcohol Education Program	Persons arrested for driving under the influence of alcohol or drugs who have not previously been convicted or participated in this program
Treatment and Rehabilitation	Withdrawal Services, e.g., medical detoxification centers, sobering-up centers	Persons 18 years or older who have limited or no resources and whose use of chemicals impedes their ability to maintain independent and functional lifestyles, are unable to remain substance free in a community setting, or have prolonged substance abuse problems and whose continued exposure to chemicals would result in danger to themselves or others. CADAC is also responsible for adults and juveniles (primarily 16 and 17 years of age) in the criminal justice system who are committed to the Office of Adult Probation and for substance abusing pregnant women of any age and their children.
	Ambulatory Services, e.g., outpatient, day treatment	
	Residential Services, e.g., intensive treatment, long term treatment and rehabilitation	
	Intermediate Residential Services, e.g., intermediate care, halfway houses	
	Chemical Maintenance Services, e.g., methadone maintenance	
	Alternatives for the Chronic Population, e.g., long term care, shelters	
	Support Services, e.g., Alcoholics Anonymous, Narcotics Anonymous, etc.	

Source: CADAC 3-Year Policy Plan, July 1, 1991 - June 30, 1994

Table 2: Connecticut Regional Comparisons

	Region					State Total
	I	II	III	IV	V	
1990 Population	629,643	769,042	399,699	950,087	538,645	3,287,116
Percent of Population	19.15	23.40	12.16	28.90	16.39	100%
Area (sq. miles)	370.5	861.2	1,390.2	1,025.1	1,365.4	5,012.4
Population Density	1,699	893	288	927	394	656

Sources: Connecticut Department of Mental Health Comprehensive Mental Health Plan, 1989-1991, Appendix B. The Connecticut Alcohol and Drug Abuse Commission currently uses the same regional structure.

Bureau of the Census, *1990 Census of Population and Housing*. Washington, D.C., 1991.

Table 3: CADAC Services By Region (1991)

Licensed Private Facilities	Region					State Total
	I	II	III	IV	V	
Total Facilities	18	17	15	15	18	83
Facilities Without Beds	9	12	6	8	6	41
Facilities With Beds	9	5	9	7	12	42
Number of Beds	198	187	206	199	413	1,203
CADAC-Operated Facilities	Greater Bridgeport Community Mental Health Center; CADAC contracts for services with DMH	Dutcher Chemical Dependency Treatment Center on the grounds of Connecticut Valley Hospital Connecticut Mental Health Center; CADAC contracts for services with DMH	Boneski Chemical Dependency Treatment Center on the grounds of Norwich Hospital	Blue Hills Hospital	Berkshire Woods Chemical Dependency Treatment Center on the grounds of Fairfield Hills Hospital	6

Sources: CADAC 3-Year Policy Plan, July 1, 1991 - June 30, 1994.

Substance Abuse and Dependence Facilities listing, Connecticut Department of Health Services, May, 1991.

Table 4: Maine FY 1991 Allocations

State Agency	Prevention[1]	Intervention	Treatment					Enforcement	Total Agency
			Screening/ Referral	Outpatient	Detox	Rehab	Residential		
Office of Substance Abuse	$1,434,669			$2,883,723	$748,949	$916,141	$2,106,351		$8,089,833
Department of Education	3,533,521								3,533,521
Department of Mental Health and Mental Retardation	77,664		$403,815	442,778	276,000				1,200,257
Department of Public Safety	90,000							$4,275,000	4,365,000
Department of Human Services	162,264	$1,048,306							1,210,570
Department of Corrections	9,836	48,256		769,102		47,000	71,646		945,840
TOTAL	$5,307,954	$1,096,562	$403,815	$4,095,603	$1,024,949	$963,141	$2,177,997	$4,275,000	$19,345,021

Source: State Plan for Alcohol and Other Drug Abuse Services in Maine
Office of Substance Abuse, January 1991

Notes: [1] Prevention includes: Information Dissemination, Education, Training, Alternative Activities, Networking, Resource Development, and Community Coordination and Planning.

[2] These figures do not reflect budget cuts which occured in the 3rd and 4th quarters of FY 1991.

Table 5: Maine FY 1992 Sources of Funds

State Agency	State Funds	Federal Funds	Total Funds	Percent State
Office of Substance Abuse	$5,963,982	$3,584,723	$9,548,705	62.46
Department of Education	1,667,682	2,335,254	4,002,936	41.66
Department of Mental Health and Mental Retardation	1,446,132	0	1,446,132	100.00
Department of Public Safety	4,631,295	1,720,253	6,351,548	72.92
Department of Human Services	1,197,028	199,070	1,396,098	85.74
Department of Corrections[1]	569,462	174,633	744,095	76.53
TOTAL	$15,475,581	$8,013,933	$23,489,514	65.88

Source: State Plan for Alcohol and Other Drug Abuse Services in Maine
Office of Substance Abuse, January 1991.

Notes: [1] State Funds for Department of Corrections include: General Fund, Highway Fund, and Special Revenue Fund.

[2] These figures do not reflect state budget cuts which may have occurred after preparation of the 1991 State Plan.

Table 6: Maine Regional Comparisons

	Region					State Total
	I	II	III	IV	V	
1990 Population	540,942	186,869	165,671	247,510	86,936	1,227,928
Percent of Population	44.05	15.22	13.49	20.16	7.08	100 %
Area (sq. miles)[1]	3,600	4,000	5,000	12,000	6,900	30,995
Population Density	150.26	46.72	33.13	20.63	12.60	39.62
No. of Treatment Providers (FY 1991) Receiving:						
Private Funds only	24	7	13	16	3	63
OSA Funds	14	5	4	10	2	35
Total	38	12	17	26	5	98
FY 1991 Allocations:						
Prevention[2]	$ 171,200	$ 53,000	$107,100	$213,300	$ 97,600	$ 642,200
Outpatient	1,503,700	428,500	602,900	464,100	399,600	3,398,800
Residential Rehab	463,600					463,600
Halfway	500,116	542,830		433,100		1,476,046
Emergency Shelter	470,800					470,800
Extended Care	230,000		202,000			432,000
Non-residential Rehab	30,800		30,800			61,600
Adolescent		25,300		164,000		189,300
Detox				406,000		406,000
Total	3,370,216	1,049,630	942,800	1,680,500	497,200	7,540,346
Average State Funding Per Capita	$6.23	$5.62	$5.69	$6.79	$5.72	$6.14

Sources: Fiscal Year 1991 OADAP Agency Allocations, Office of Substance Abuse.

State Plan for Alcohol and Other Drug Abuse Services in Maine, Office of Substance Abuse, January 1991.

Alcohol and Drug Abuse Services in the State of Maine, Office of Substance Abuse, January 1991.

Bureau of the Census, *1990 Census of Population and Housing.* Washington, D.C., 1991.

Notes: [1] Area of each region is rounded to nearest hundred, while actual area of state is given.

[2] An additional $140,100 is awarded through contracts for statewide prevention services.

Table 7: Outpatient Effectiveness Performance Standards (FY 1992)

Program performance must be at or above the minimal level on eight of the following 12 performance indicators for primary clients only.

INDICATOR	MINIMAL STANDARD
Abstinence/Drug free 30 days prior to termination	70%
Reduction of use of primary substance abuse problem	70%
Maintaining employment	90%
Employment improvement	95%
Employability	5%
Reduction in the number of problems with employer	70%
Reduction in absenteeism	25%
Not arrested for an OUI offense during treatment	70%
Not arrested for any offense	95%
Participation in self help during treatment	90%
Reduction of problems with spouse/significant other	70%
Reduction of problems with other family members	70%

Table 8: Massachusetts Treatment Services

Treatment services are offered on an inpatient and outpatient basis, and within these two basic categories there are different treatment options. Unless otherwise noted, all programs are required to serve men and women 18 years of age and older from all racial and ethnic communities. Intravenous drug users are served in all programs.

Treatment Programs	No. of Programs/Centers	No. of Beds
Residential Services	149	2,625
Emergency Services	27	687
Detoxification	27	496
Transitional Care	3	96
Public Inebriate Programs	3	95
Rehabilitative Treatment	80	1,938
Short-term Intensive Inpatient Treatment	3	100
Recovery Homes	49	1,127
Therapeutic Communities	15	330
Youth Residential	7	124
14-day DUIL[1]	3	210
Sober Houses	2	47
Ambulatory Services	245	-
Counseling Services	149	-
Outpatient Counseling	88	-
Methadone Services	80	-
Non-traditional	44	-
Criminal Justice	10	-
Early Intervention	88	-
Driver Alcohol Education	42	-
Youth intervention	46	-
Primary Prevention	2	-
Support Services	3	-
Training	2	-
Information and Referral Hotline	-	-
Research and Evaluation	3	-
TOTAL	352	2,625

Source: Application for Alcohol, Drug Abuse and Mental Health Services Block Grant, 1991, DSAS, August, 1990.

Note: [1] Driving Under the Influence of Liquor

Table 9: Massachusetts Regional Data

	Region					State Total
	Western	Central	North Eastern	Metro	South Eastern	
1990 Population	825,221	1,046,001	1,509,072	1,429,247	1,206,884	6,016,425
Percent of Population	13.72	17.39	25.08	23.76	20.06	100%
Area (sq. miles)[1]	3,028	1,887	907	353	1,878	8,053
Population Density	273	554	1,663	4,049	643	747
Estimated Service Need (Percent Below 150% Poverty Level)	13.3%	12.1%	17.3%	20.6%	16.6%	n.a.[2]
Number of Licensed Facilities	53	54	82	130	67	386
FY 1991 Contract Amounts	$8,445,462	$8,594,802	$8,844,258	$26,359,842	$10,368,053	$62,612,417
Contract Amount per capita	$10.23	$8.22	$5.86	$18.44	$8.59	$10.41
Total Admissions (FY 1990)	16,961	14,597	15,210	26,947	20,188	93,903
Percent of Total	18.06	15.54	16.20	28.70	21.50	100%
Total Discharges (FY 1990)	15,076	12,241	12,623	18,028	15,620	73,588
Percent of Total	20.49	16.63	17.15	24.50	21.23	100%

Sources: Application for Alcohol, Drug Abuse and Mental Health Services Block Grant, 1991; DSAS, August 1990.

FY 1991 Allocations by Location of Vendor and Type of Program; DSAS, August 1990.

Substance Abuse Programs; DSAS, September 19, 1991.

Massachusetts Municipal Profiles, 1989-1990.

Bureau of the Census, *1990 Census of Population and Households*. Washington, D.C., 1991.

Notes: [1] Area figures are calculated by summing the areas of towns in each region and do not necessarily take into account land held by the state or federal governments.

[2] n.a. = not available

Table 10: Massachusetts FY 1991 Allocations by Region

Type of Program	Region					State Total
	Western	Central	North Eastern	Metro	South Eastern	
Acute Care	$2,483,093	$2,936,133	$2,825,179	$6,804,007	$3,154,800	$18,203,212
Percentage of Budget	29.4	30.8	30.8	25.8	30.4	29.07%
Residential	3,073,277	2,392,461	2,390,636	8,128,933	2,659,837	18,645,144
Percentage of Budget	36.4	27.8	22.4	30.8	25.7	29.78%
Outpatient	1,718,671	1,925,894	1,599,087	5,424,990	3,224,523	13,893,165
Percentage of Budget	29.4	22.4	18.1	27.8	31.1	22.19%
Other	1,170,421	1,340,314	2,029,356	6,001,912	1,328,893	11,870,896
Percentage of Budget	13.9	15.6	22.9	22.4	12.8	18.96%
TOTAL	8,445,462	8,594,802	8,844,258	26,359,842	10,368,053	62,612,417
Region as Percent of State Contracts	13.5	13.7	14.1	42.0	16.5	100%

Source: FY 1991 Allocations by Location of Vendor and Type of Program, Massachusetts Department of Public Health, Division of Substance Abuse Services, August 1990.

Table 11: New Hampshire Admissions to Selected Treatment Units (FY 1990)

	Number	Percent
Detoxification, 24 hour/day care		
Hospital inpatient	0	0.0
Free-standing residential	638	43.3
Rehabilitation/Residential		
Hospital (other than detoxification)	0	0.0
Short-term (30 days or less)	78	5.3
Long-term (over 30 days)	108	7.3
Ambulatory		
Outpatient	651	44.1
Detoxification	0	0.0
TOTAL	1475	100.0%

Source: NASADAD, State Alcohol and Drug Abuse Profile (SADAP), FY 1990.

Table 12: New Hampshire Funding Sources and Uses (FY 1990)

Funding Source	Type of Activity						State Total
	Treatment		Prevention		Other[1]		
	Amount	Percent	Amount	Percent	Amount	Percent	
ADAMHA Block Grant	$1,680,249	76.32	$343,746	15.61	$177,556	8.07	$2,201,551
Other Federal	0	0.0	143,953	98.85	1,676	1.15	145,629
State	1,608,872	63.79	295,850	11.73	617,551	24.48	2,522,273
Other Sources	240,556	75.63	0	0.0	77,497	24.37	318,053
TOTAL	3,529,677	68.04	783,549	15.10	874,280	16.85	5,187,506

Source: NASADAD, State Alcohol and Drug Abuse Profile (SADAP), FY 1990.

Note: [1] Other includes OADAP costs for administration, evaluation, research, training, and other non-treatment and non-prevention categories.

Table 13: New Hampshire FY 1991 Contracts

Contractor Type	CONTRACTS			STATE FUNDING		FEDERAL FUNDING		TOTAL FUNDING			
	No.	Average Amount	% of Total Contracts	Total Amount	% of Total for Category	Total Amount	% of Total for Category	Total Amount	% of Total Funding	% of Total State Funding	% of Total Federal Funding
Comprehensive	5	$119,935	12.20	$ 196,658	32.79	$ 403,016	67.21	$ 599,674	20.20	19.06	20.90
Crisis Intervention	1	12,750	2.44	0	0.00	12,750	100.00	12,750	0.43	0.00	0.66
Outpatient	15	49,812	36.59	316,729	42.39	430,444	57.61	747,173	25.17	30.70	22.32
Prevention	14	21,085	34.15	86,750	29.39	208,446	70.61	295,196	9.95	8.41	10.81
Residential	6	218,889	14.63	439,688	33.48	873,646	66.52	1,313,334	44.25	42.61	45.31
TOTAL	41	$72,393	100.00%	$1,039,825	35.03%	$1,928,302	64.97%	2,968,127	100.00%	100.00%	100.00%

Source: Office of Alcohol and Drug Abuse Prevention, FY 1991 Contracts.

Table 14: Rhode Island Client Data: Source of Referral and Payment

Source of Referral	Number of Drug Clients	Percent of Total
Individual	1104	54.98
Alcohol/Drug Abuse Provider	266	13.25
Other Health Care Provider	152	7.57
School (Educational)	21	1.05
Student Assistance Program	12	0.60
Employer	8	0.40
Employee Assistance Program	8	0.40
Other Community Referral	71	3.54
Department of Children, Youth and Families	139	6.92
Court/Criminal Justice Referral	140	6.97
Treatment Alternatives to Street Crime	94	4.68
TOTAL	2008	100.00

Source of Payment	Number of Drug Clients	Percent of Total
Office of Substance Abuse	1165	58.02
Self-pay	273	13.60
Blue Cross/Blue Shield	205	10.21
Medicare	9	4.78
Medical Assistance - Medicaid	101	5.03
Other State Department	96	4.78
Federal	10	0.50
Veterans Administration	2	0.60
Other Private Insurance	2	0.10
CHAMPUS	49	2.44
HMO	27	1.34
Free Service	39	1.94
Other	30	1.49
TOTAL	2008	100.00

Source: Client Profile and Statistical Report: January 1991 - June 1991; Office of Substance Abuse, State of Rhode Island and Providence Plantations, September 1991.

Table 15: Rhode Island Treatment Services

Treatment Services	Number of Drug Clients	Percent of Total
Outpatient	912	45.42
Outpatient Methadone Maintenance	401	19.97
Outpatient Methadone Detox	128	6.37
Intensive Outpatient	75	3.74
Residential - Long Term	180	8.96
Residential - Short Term	147	7.32
Detox Free Standing Residential	164	8.17
Detox Hospital Inpatient	1	0.05
TOTAL	2008	100.00

Source: Client Profile and Statistical Report: January 1991 - June 1991, Office of Substance Abuse, State of Rhode Island and Providence Plantations, September 1991.

Table 16: Rhode Island Discharge Information

Reason for Discharge	Number of Discharges	Percent of Total
Completed treatment, no use	467	23.68
Completed treatment, some use	77	3.90
Discharge to another provider	269	13.64
Non-compliance to program rules	365	18.51
Left before completing treatment	357	18.10
No contact - 30 days (outpatient only)	291	14.76
Incarcerated	65	3.90
Death	6	0.30
Transfer	75	3.81
TOTAL	1972	100.00

Condition at Discharge	Number of Discharges	Percent of Total
Improved	832	42.19
Unchanged	725	36.76
Worse	78	3.96
Undetermined	331	16.78
Deceased	6	0.31
TOTAL	1972	100.00

Source: Client Profile and Statistical Report: January 1991 - June 1991, Office of Substance Abuse, State of Rhode Island and Providence Plantations, September 1991.

Table 17: Vermont Estimated OADAP Receipts (FY 1991)

Source	Estimated Receipts	% of Source Category	% of Total Receipts
General Funds	$2,703,605	100.00%	39.70
Federal Funds			48.90
Medicaid-Vendor payments	438,500	13.17	
ADAMH Block Grant	2,238,077	67.21	
Drug Free Schools	30,000	0.90	
Data Collection Grant	60,241	1.81	
Community Youth Block Grant	90,400	2.71	
Community Youth Demo Grant	420,000	12.61	
Comprehensive Treatment	52,982	1.59	
Total	3,330,200		
Special Funds			6.58
OADAP Treatment/Assessment Fees	238,080	53.13	
DMV/Crash Fees	210,000	46.87	
Total	448,080		
Interdepartmental Transfers	327,645	100.00	4.81
TOTAL	6,809,530		

Source: Program Receipts Estimate Summary, Fiscal Year 1992 Budget, Office of Alcohol and Drug Abuse Programs.

Table 18: Vermont Resources By Program Activity (FY 1991)

Program	Direct	Grants/ Contracts	State Total	Grants/ Contracts as % of Total
TREATMENT	$ 68,063	$2,542,730	$2,610,793	97.39
Subsidized Outpatient		1,160,650	1,160,650	100
Subsidized Residential		1,337,080	1,337,080	100
Purchased Services		25,000	25,000	100
INTERVENTION	571,666	1,412,106	1,983,772	71.18
Crash Schools	84,175	240,800	324,975	74.10
Employee Assistance Program	36,341		36,341	0.00
Public Inebriate Program	49,542	467,344	516,886	90.42
Field Services/Grants	401,608	703,962	1,105,570	63.67
PREVENTION	616,502	848,164	1,464,666	57.91
Clearinghouse	84,175		84,175	0.00
Coordination/Services	98,543	848,164	946,707	89.59
Field Services	433,784		433,784	0.00
ADMINISTRATION	439,786	18,000	457,786	3.93
Vacancy savings	<54,815>			
TOTAL	$1,642,052	$4,821,000	$6,463,052	74.59

Source: Description of Current Programs, Services and Resources, Office of Alcohol and Drug Abuse Programs, 1991.

Note: The column totals are from the source and do not equal the sum of the columns listed.

Table 19: Vermont Service Delivery System (FY 1991)

County	Outpatient	Residential	Intensive Outpatient	Detoxification	State Total
Addison	1	0	0	0	1
Bennington	2	0	0	0	2
Chittenden[1], Franklin and Grand Isle	5	2	1	1	9
Lamoille	1	0	0	0	4
Northeast Kingdom[2]	2	1	1	●	5
Orange	1	0	0	0	1
Rutland[3]	1	1	1	1	4
Washington	2	0	0	0	2
Windham and Windsor[4]	1	1	1	1	7
Out of State[5]	1	2	0	0	3
Total	20	7	4	4	

Sources: Description of Current Programs, Services and Resources, Office of Alcohol and Drug Abuse Programs (OADAP), 1991.

Approved Substance Abuse Treatment in Vermont, Vermont Alcohol and Drug Information Clearinghouse, 1990.

Notes: [1] One of the residential providers is also the provider of detoxification services.

[2] The same provider offers residential, intensive outpatient and detoxification services.

[3] One provider offers both outpatient and intensive outpatient services and another provider offers both residential and detoxification services.

[4] The residential provider offers detoxification services as well.

[5] Both out-of-state providers are in New Hampshire. One offers residential and detoxification services and the other offers only residential services.

Table 20: Vermont Regional Data (FY 1991)

County	1990 Population	Percent of Population	Area (sq. miles)	Population Density	Subsidized Treatment	Intervention Grants	Crash Schools	Alcohol Crisis	Special Needs	State Total	Contract $/Person
Addison	32,953	5.86	773	42.63	$36,760	$41,355	$15,300	$1,500		$94,915	$2.88
Bennington	35,845	6.37	677	52.95	$96,000	$34,010	$14,900	$30,000		$122,910	$3.43
Chittenden, Franklin and Grand Isle	177,059	31.46	1,269	139.53	$254,150	$197,015	$99,800	$186,317	$23,000	$760,282	$4.29
Lamoille	19,735	3.51	461	42.81	$20,960	$24,965	$15,200	$4,000		$65,125	$3.30
Northeast Kingdon	58,304	10.36	2,014	28.95	$65,000	$43,820	$22,000	$23,220		$154,040	$2.64
Orange	26,149	4.65	690	37.90	$96,000	$28,755	$13,100	$1,700		$139,555	$5.34
Rutland	62,142	11.04	932	66.68	$137,900	$62,950	$26,200	$30,320		$257,370	$4.14
Washington[1]	54,928	9.76	690	79.61	$137,750	$19,050			$28,235	$185,035	$3.37
Windham and Windsor	95,643	17.00	1,759	54.37	$172,600	$23,300	$53,800	$41,500	$60,922	$352,122	$3.68
TOTAL	562,758	100%	9,265	60.74	$965,120	$475,220	$260,300	$318,557	$112,157	$2,131,354	$3.79

Sources: Description of Current Programs, Services and Resources, Office of Alcohol and Drug Abuse Programs (OADAP), 1991.

Preferred Treatment Providers, Funding by Sub-Recipient, Office of Alcohol and Drug Abuse Programs (OADAP), 1991.

Services to Special Populations/Needs, Funding by Provider, Office of Alcohol and Drug Abuse Programs (OADAP), 1991.

Approved Substance Abuse Treatment in Vermont, Vermont Alcohol & Drug Information Clearinghouse, 1990.

Bureau of the Census, *1990 Census of Population and Housing.* Washington, D.C., 1991.

Notes: [1] Founders Hall funding is allocated to Washington County where this provider is listed as a preferred provider; Founders Hall also provides services in the Northeast Kingdom.

APPENDIX 1: DATA SOURCES

CONNECTICUT

State Agency: Connecticut Alcohol and Drug Abuse Commission (CADAC)
999 Asylum Avenue
Hartford, Connecticut 06105
(203) 566-2089

Data Sources:

1. CADAC Funding Regulations, approved by the Attorney General July 12, 1984.

2. CADAC section of proposed FY 1991 state budget.

3. Information about Substance Abuse and Dependence Facilities, received from Hospital and Medical Care Division, Department of Health Services, May 28, 1991.

4. Sample Letter of Award (blank form), CADAC, Revised May 1991.

5. Sample CADAC Request for Proposal. In this RFP, dated November 16, 1989, CADAC requests applications for development of residential treatment programs.

6. Sample CADAC Site Visit Report, March 6, 1991.

7. State of Connecticut Regulation of Department of Health Services concerning Regulations for Licensure of Private Freestanding Facilities for the Care or the Treatment of Substance Abusive or Dependent Persons, approved by the Attorney General September 18, 1987.

8. 3-Year Policy Plan, July 1, 1991 to June 30, 1994, CADAC Approved by the Commission October 9, 1990.

MAINE

State Agency: Office of Substance Abuse (OSA)
State House Station #159
Augusta, Maine 04333
(207) 289-2595

Data Sources:

1. Alcohol and Drug Abuse Services in the State of Maine, OSA, January 1991.

2. Foundation for the Future: State Plan for Alcohol and Other Drug Abuse Services in Maine, OSA, January 1991.

3. OADAP Agency Allocations, FY 1991.

4. Regulations for Licensing/Certifying of Substance Abuse Treatment Programs in the State of Maine, OSA, November 1, 1990.

5. Sample Contract, FY 1991 (form used before performance contracting).

6. Sample Contract, FY 1992 (form which includes performance indicators).

7. Sample Performance Standards for:
   a. Outpatient
   b. Residential Rehabilitation
   c. Adolescent Residential Rehabilitation
   d. Detoxification
   e. Halfway House
   f. Extended Care
   g. Extended Shelter
   h. Emergency Shelter
   i. Prevention

MASSACHUSETTS

State Agency: Bureau of Substance Abuse Services (BSAS)
Department of Public Health
105 Tremont Street, 6th Floor
Boston, Massachusetts 02111
(617) 727-1960

Data Sources:

1. Application for Alcohol, Drug Abuse and Mental Health Services Block Grant, 1991, Massachusetts State Plan for the Prevention, Treatment and Control of Alcohol Abuse, Alcoholism, Drug Abuse and Drug Addiction; BSAS; August 1990.

2. Application for Licensure/Approval; BSAS; April 24, 1989.

3. Attachment A Addendum (standardized service descriptions attached to BSAS contracts) for:
   a. Acupuncture Detoxification Services
   b. Driver Alcohol & Drug Education Programs
   c. Non-Traditional
   d. Outpatient Methadone Medical Services
   e. Recovery Homes
   f. Residential Therapeutic Communities
   g. Transitional Care Facilities
   h. Vocational/Educational programs
   i. D.U.I.L. Residential Program
   j. Residential Detoxification services
   k. Youth Residential programs
   l. Youth Intervention Programs
   m. Substance Abuse Primary Prevention Services
   n. Regional Primary Prevention Centers
   o. HIV/Substance Abuse Prevention and Education programs
   p. Supportive Houses
   q. Public Inebriate programs
   r. Outpatient Substance Abuse Counseling
   s. Information and Referral services
   t. Criminal Justice Programs
   u. Short-term Intensive Inpatient Treatment services

4. Code of Massachusetts Regulations, 114.5 CMR: Rate Setting Commission, Bureau of Education, Social and Mental Health Services, Section 6.00 Rates for Certain Substance Abuse Programs.

5. Contracting Forms and Instructions, FY 1992; Division of Purchased Services, Executive Office of Administration and Finance.

6. FY 1991 Allocations by Location of Vendor and Type of Program; BSAS; August 1990.

7. FY 1991 Budget by Account and Subsidiary; BSAS; May 2, 1991.

8. Purchase of Service Reform: Final Report; Office of Purchased Services, Executive Office of Administration and Finance; January 31, 1990.

9. Regulations (State):
   a. 105 CMR 160: Acute Care Inpatient Substance Detoxification Treatment Services
   b. 105 CMR 162: Substance Abuse Outpatient Counseling Services
   c. 105 CMR 165: Halfway Houses for Alcoholics (Regulations for the licensure of Recovery Homes)
   d. 105 CMR 750: Drug Treatment Programs
   e. Rules and Regulations for Short Term Intensive Inpatient Treatment Centers

10. Request for Proposals: Mental Health and Substance Abuse Managed Care Program, Department of Public Welfare, October 30, 1991.

11. Sample Request for Proposal. In this RFP, BSAS requests applications for specialized detoxification services for pregnant substance abusing women, BSAS, June 1990.

12. Sample Uniform Financial Statements and Independent Auditor's Report (blank form) and instructions, June 30, 1990 version.

13. Substance Abuse Programs: All. Listing from BSAS of all licensed substance abuse programs in Massachusetts dated September 19, 1991.

NEW HAMPSHIRE

State Agency: Office of Alcohol and Drug Abuse Prevention (OADAP)
State Office Park South
105 Pleasant Street
Concord, New Hampshire 03301
(603) 271-6100

Data Sources:

1. ADMS Block Grant Annual Report for Federal Fiscal Year 1989, OADAP.

2. OADAP FY 1991 Contracts (listing of contractors and contract amounts).

3. Resource Guide, OADAP, July 1991.

4. Sample Budget proposal: instructions and blank forms including Budget Revenue and Expense Summary (Form 5101), Key Personnel and Their Annual Salaries (Form 5111) and Budget Personnel Salaries and Wages (Form 5102), OADAP, as revised March 1984.

4. Sample Client Admission & Discharge Data forms, OADAP, January 1989.

5. Sample Comprehensive Services form, OADAP, January 1989.

6. Sample Contract including Exhibit A (Scope of Work) and Exhibit B (Contract Price) for:
   a. Outpatient
   b. Prevention
   c. Residential
   d. Comprehensive Services

7. Sample Treatment Services Record Review (site visit form), OADAP, as revised April 1987.

8. State Alcohol and Drug Abuse Profile (SADAP) for FY 1990.

RHODE ISLAND

State Agency: Office of Substance Abuse (OSA)
P.O. Box 20363
Cranston, Rhode Island
(401) 464-2091

Data Sources:

1. Client Profile and Statistical Report, January 1991 to June 1991, OSA, September 1991.

2. Executive Order No. 91-23, July 1, 1991; Establishment of the Office of Substance Abuse.

3. Rules, Regulations and Standards for Licensing of Substance Abuse Facilities and Programs, Department of Mental Health, Retardation and Hospitals, January 1, 1989.

VERMONT

State Agency: Office of Alcohol and Drug Abuse Programs (OADAP)
103 South Main Street
Waterbury, Vermont 05676
(802) 241-2170

Data Sources:

1. Approved Substance Abuse Treatment in Vermont, A Directory of Preferred Providers by County, OADAP, 1990.

2. Code of Vermont Rules, Rule No. 13100001, Alcoholism Treatment Program Approval Procedures and Rule No. 13100002, Financial Assistance for Substance Abuse Treatment Services.

3. Description of Current Programs, Services and Resources, OADAP, FY 1991.

4. OADAP Fiscal Year 1992 Budget.

5. Preferred Treatment Providers, Funding by Sub-recipient, OADAP, FY 1991 (listing of providers, contract amount and contracted services).

6. Program Requirements (requirements which must be met to be eligible to receive state funding), received from OADAP, May 1991.

7. Program Standards, OADAP, May 1990.

8. Services to Special Populations/Needs, Funding by Provider.

9. Vermont Statutes Annotated, Title 8, Banking and Insurance, Sections 4097-4099 (minimum health insurance benefits for alcoholism and substance abuse).

APPENDIX 2: COMMON DATA ELEMENTS

Sources of Data on Costs

State	Cost per Person by Catchment Area	Cost per Unit of Service	Program vs Non-program Costs
CT	a,b	a,b	a,b
ME	c,d	e,f	e,f
MA	g,h	h	h
NH	i,j,k	i,j,k	
VT	l,m,n	l,m	

Connecticut
a Provider's Funding Application to CADAC
b Provider's Annual Audit submitted to CADAC

Maine
c State Plan for Alcohol and Other Drug Abuse Services in Maine, OSA
d OSA Allocations spreadsheet
e Standard Agreement (contract) between provider and OSA
f Provider's Quarterly expenditure reports submitted to OSA

Massachusetts
g Allocations by Location of Vendor and Type of Program
h Uniform Financial Statements

New Hampshire
i Contract Monthly Report and Reimbursement Request submitted by provider to OADAP
j Client Admissions and Discharge Data
k Monthly Activity Summary for Outpatient Treatment Services submitted by provider to OADAP

Vermont
l OADAP Funding Summary of State Supported Treatment Capacity
m Statement of Revenues and Expenses submitted by provider to OADAP
n Client Data Sets - Admissions and Service Transactions

Sources of Data on Funding

State	State Source of Funds	Provider Source of Funding	Program Source of Funding
CT		a,b	a
ME	c,d	e,f	e,f
MA	g,h	i	i
NH	j	j,k,l	
VT	m	n,o,p,q	n,q

Connecticut
a Provider's Funding Application to CADAC
b CADAC Letter of Award

Maine
c State Plan for Alcohol and Other Drug Abuse Services in Maine, OSA
d OSA Allocations spreadsheet
e Standard Agreement (contract) between provider and OSA
f Provider's Annual Audit submitted to OSA

Massachusetts
g Application for Alcohol, Drug Abuse and Mental Health Services Block Grant
h Budget by Account and Subsidiary
i Uniform Financial Statements

New Hampshire
j OADAP contracts spreadsheet
k Contract Monthly Report and Reimbursement Request submitted by provider to OADAP
l Budget Revenues and Expense Summary (estimated; attached to contract)

Vermont
m Fiscal Year State Budget; Program Receipts Estimate Summary
n Notice of Grant Award
o OADAP Funding Summary of State Supported Treatment Capacity
p Substance Abuse Treatment Services Quarterly Report (for Programs of Care only)
q Statement of Revenues and Expenses submitted by provider to OADAP

Sources of Data on Prices

State	State-Regulated	Contract-Determined	Price to Client
CT		a,b	c,d
ME		e	f
MA	g,h	g	i
NH		j	j
VT	k		k

Connecticut
a Provider's Funding Application to CADAC
b CADAC Letter of Award
c Provider fee schedules as required by CADAC Funding Regulations
d Provider intake documentation as required by CADAC Funding Regulations

Maine
e Standard Agreement (contract) between provider and OSA
f Provider fee schedules as required by licensing regulations

Massachusetts
g Purchase of Service contract forms
h 114.5 CMR: Rate Setting Commission, Sec. 6 Rate for Certain Substance Abuse Programs
i Provider fee schedules as required by licensing regulations

New Hampshire
j Agreement (contract) between provider and OADAP

Vermont
k Financial Assistance for Substance Abuse Treatment Services (established pursuant to 18 VSA Section 9142)

Sources of Data on Utilization

State	Admissions/Discharges	Program Utilization	Source of Referrals
CT	a,b	a,c,d	b
ME	e,f	e,f	e,f
MA	g,h	h,i	g,h
NH	j,k	j,k	j
RI	l	l	b
VT	m	n,o	m

Connecticut
a Reports to CADAC Statistical Information System
b Provider intake documentation as required by CADAC Funding Regulations
c Provider's Funding Application to CADAC
d CADAC Letter of Award

Maine
e Monthly Service reports
f Monthly reports submitted to Maine Addiction Treatment System (OSA's management information system)

Massachusetts
g Application for Alcohol, Drug Abuse and Mental Health Services Block Grant
h Substance Abuse Management Information System
i Uniform Financial Statements

New Hampshire
j Client Admissions and Discharge Data
k Monthly Activity Report for Outpatient Treatment Services

Rhode Island
l Client Profile and Statistical Report

Vermont
m Client Data Sets - Admissions
n Client Data Sets - Service Transactions
o Residential Treatment Utilization Report
p Utilization Plan - Substance Abuse Treatment Services submitted by provider to OADAP

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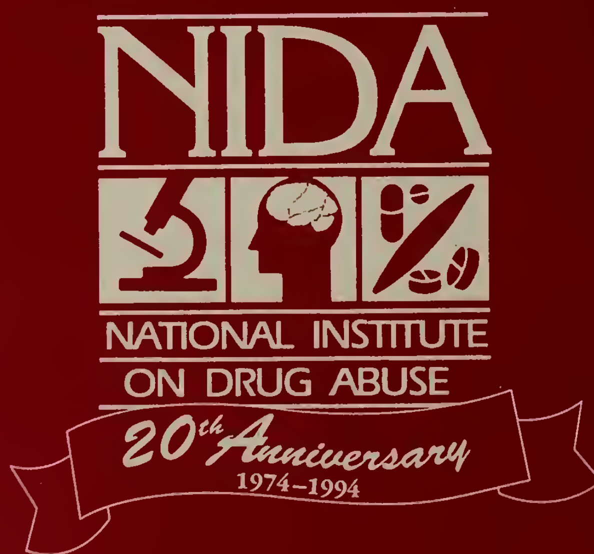

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