



Organizational and Financing Factors and Patient Characteristics Affect How Substance Abuse Treatment Is Delivered

Analysis of the substance abuse treatment delivery system

SUMMARY

Researchers from [Brandeis University's Heller School for Social Policy and Management](#) analyzed data from a national survey of substance abuse treatment facilities.

The goal was to examine how differences in the financing and organization of individual treatment facilities, as well as the personal characteristics of the clients served, may influence the duration and success of treatment.

Key Findings

- Chronically unemployed clients who received job counseling as part of their substance abuse treatment stayed in treatment longer and were more likely to find employment after discharge than were those who did not receive job counseling.
- Facilities that treat only adolescents and young adults tend to offer more support services, emphasize academic services over employment services and have lower client-to-staff ratios.
- Clients who have a mental disorder in addition to their substance use problem were more likely to receive treatment from facilities that had a high proportion of these "dual diagnosis" patients.
- Hospital inpatient facilities were the most likely of all substance abuse treatment facilities to have managed care contracts; outpatient methadone clinics were the least likely to have such contracts.

Funding

The Robert Wood Johnson Foundation (RWJF) supported this project with a grant of \$289,264 from September 2001 through February 2004.

THE PROBLEM

With new treatment advances and the growing use of managed care strategies, the substance abuse treatment field experienced a profound transformation during the 1990s. As providers, funders and policy-makers tried to adapt to the changing environment, questions arose about the variety of facilities currently operating, the nature of the treatment that clients received in them and the degree to which certain financial and organizational characteristics—size, revenue sources and client groups served—influence the way services are provided and their effectiveness.

In previous work, researchers with the Schneider Institute for Health Policy, a research center at Brandeis University, surveyed a nationally representative sample of substance use treatment facilities as part of a study funded by the federal Substance Abuse and Mental Health Services Administration (SAMHSA). (See the [Appendix](#) for details on the Alcohol and Drug Services Study [ADSS]). In earlier data analyses, the researchers described the numbers and different types of substance abuse treatment facilities operating. Further analyses were needed to reveal how organizational and financial characteristics of the facilities affect treatment delivery.

CONTEXT

This grant occurred as RWJF was winding down its focus on substance abuse prevention and becoming more interested in treatment for substance abuse. The Addiction Prevention and Treatment Team's current strategic objective is, by 2007, to increase the number of treatment settings employing approaches that have been proven to work. The strategy will involve:

- Designing and tracking an appropriate measure of the use of effective approaches in treatment settings.
- Demonstrating organizational changes to promote use of effective services and document efficiencies (e.g., cost-effectiveness) relative to treatment alternatives.
- Identifying and encouraging policies and standards for purchasers, licensers, accrediting bodies and payment sources that promote the use of proven service approaches.

THE PROJECT

Researchers from the Schneider Institute for Health Policy analyzed data from the federally sponsored Alcohol and Drug Services Study. The analyses focused on:

- Organizational and financial factors, such as the presence of managed care contracts, which influence the way services are delivered and the outcome of treatment for patients.

- Patient characteristics, including employment status, gender and age, which may affect treatment duration or completion.
- Methodological issues in data collection that may affect survey response rates and costs, such as the use of incentive payments for "hard-to-reach" populations.

FINDINGS

The project team reported the following key findings in a series of published and unpublished papers, as well as presentations at national professional meetings (see the [Bibliography](#)):

- **Chronically unemployed clients who received employment counseling as part of their substance abuse treatment stayed in treatment longer and were more likely to find employment after discharge than were those who did not receive employment counseling.** However, clients who received employment counseling were no more likely to complete treatment or remain abstinent after discharge than were clients who did not receive employment counseling.—"The Impact of Employment Counseling on Substance User Treatment Participation and Outcomes," *Substance Use and Misuse*, 39(13): 2391–2424, 2004.
- **Facilities that treat only adolescents and young adults tend to offer more support services, emphasize academic services over employment services and have lower client-to-staff ratios.**—"What are the Characteristics of Substance Abuse Treatment Facilities that Treat Adolescents and Young Adults?" Unpublished.
- **Facilities with a high proportion of clients referred from the criminal justice system tend to offer special programs for DUI (driving under the influence) and DWI (driving while intoxicated), have higher client-to-staff ratios and have lower percentages of female clients or those over 35.**—"Substance Abuse Treatment Organizations and Criminal Justice-Referred Clients." Unpublished.
- **Clients who have a mental disorder in addition to their substance use problem were more likely to receive treatment from facilities that had a high proportion of these "dual diagnosis" patients.** Facilities that treated the dually diagnosed did not routinely provide a higher number of services than other facilities.—"Substance Abuse Clients with Mental Health Disorders: Characteristics of Facilities that Treat Them." Unpublished.
- **Hospital inpatient facilities were the most likely of all substance abuse treatment facilities to have managed care contracts; outpatient methadone clinics were the least likely to have such contracts.** Facilities in the Northeast were more likely than those in other regions to have managed care contracts. Facilities that relied on public funds for 90 percent or more of their revenue were much less likely to have managed care contracts compared with facilities that were only moderately dependent on public funds. Facilities with a high proportion of patients referred by employers were

more likely to have managed care contracts than were facilities with fewer employer referrals.—"The Substance Abuse Treatment System – What Facilities are Involved with Managed Care?" Unpublished.

- **Incentive payments of \$25.00 or \$35.00 substantially increased the response rates of clients to a follow-up survey.** Clients who received no incentive payment or a payment of \$10.00 were less likely to complete a follow-up interview and provide a urine sample than were clients who received higher payments. Telephone and computer tracing from a central office, another method used to increase response rates, was not cost-effective. Centralized tracking of clients lost to follow-up was less effective and more costly than having interviewers locate clients in the field.—"Are Incentive Payments Cost-Effective in Surveying a Hard-to-Interview Population: the Experience in ADSS." Presented at the Annual Meeting of the American Public Health Association, 2002.

Communications

The researchers summarized their findings in an article published in the journal *Substance Use and Misuse* and in seven papers submitted to peer-reviewed journals. They also presented their findings at the 2002, 2003 and 2004 annual meetings of the American Public Health Association. (See the [Bibliography](#) for details.)

SIGNIFICANCE TO THE FIELD

According to the investigators, the finding that offering patients larger incentives can be a cost-effective strategy for increasing response rates is of key importance in the field of substance abuse research, where low response rates from "hard-to-reach" clients often bias study results.

LESSONS LEARNED

1. **Analysis of a national database like the Alcohol and Drug Services Study can benefit individual substance abuse treatment facilities by providing benchmarks for setting goals.** In order to set a specific objective (for example, reducing the "no-show" rate among clients in treatment), a facility may use such a database to compare itself with other facilities on a national level. (Project Director/Horgan)

AFTERWARD

The investigators plan to disseminate further findings from the Alcohol and Drug Services Study through their work with the Brandeis/Harvard Center on Managed Care and Drug Abuse, which is also located at the Heller School. In addition, the investigators will use lessons learned from this study in another project designed to help substance

abuse treatment providers in non-research settings collect post-treatment follow-up data at a realistic cost.

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APPENDIX

Description of the Alcohol and Drug Services Study

The Alcohol and Drug Services Study is a nationally representative survey of specialty substance user treatment facilities in the United States and their clients, which consisted of three phases:

- In Phase I (1996–1997), investigators collected facility level organizational, staffing, service and revenue data through telephone interviews with the directors of 2,394 facilities in hospital inpatient, nonhospital residential, outpatient methadone and outpatient nonmethadone facilities.
- In Phase II (1997–1999), investigators collected more detailed facility information through site visits to a subset of 280 facilities, excluding hospital inpatient facilities, and abstracted 5,005 client records primarily for information about the sampled treatment episode, including services received, but also certain client descriptive characteristics, including demographic and background information, criminal justice system information, medical information, substance abuse history, substance abuse testing, substance abuse treatment history, discharge information and financial information.

Phase II also included two substudies: A cost study to collect detailed information related to the costs of treatment and a methadone treatment study that compared a sample of methadone patients currently in treatment with a sample of discharged methadone patients.

- In Phase III (1998–1999), investigators conducted 1,802 follow-up interviews with clients whose records were abstracted in Phase II and who were older than 18 at the time of the interview, collecting information for time periods before, during and since the sampled treatment episode, as related to client characteristics, substance use, criminal justice status, employment and income and the sampled treatment episode, including services received.

Another 671 clients discharged from outpatient nonmethadone treatment were interviewed as part of the Alcohol and Drug Services Study Incentive Study, with the amount of payment for the interview being the only difference from clients in the main study.

(Source: "The Impact of Employment Counseling on Substance User Treatment Participation and Outcomes.")

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Grantee Websites

<http://sihp.brandeis.edu/ihs>. The Website for the Brandeis Schneider Institute for Health Policy contains a brief description of the project.