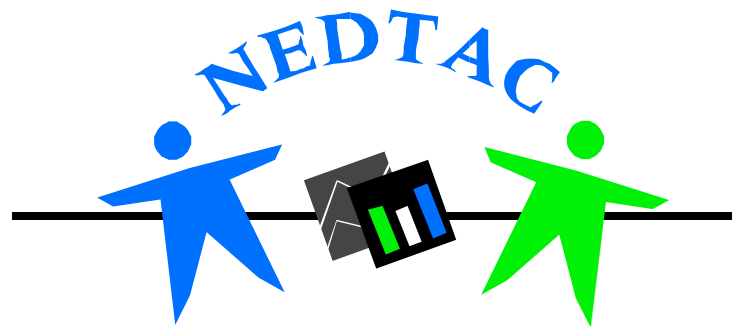


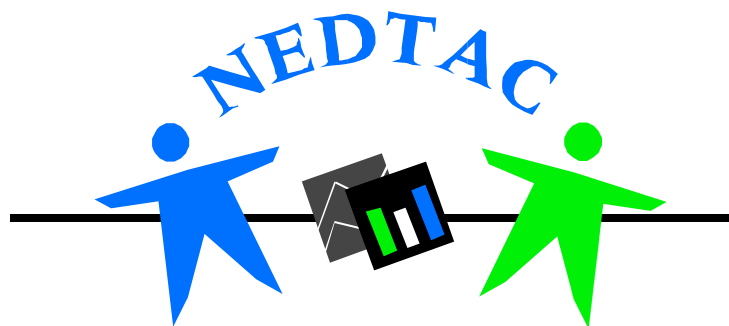
**NATIONAL EVALUATION DATA AND
TECHNICAL ASSISTANCE CENTER**



**OUTCOME AND EFFECTIVENESS IN
SUBSTANCE ABUSE TREATMENT: SELECTED
BIBLIOGRAPHY OF NATIONAL EVALUATIONS, 1990-1998**

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CSAT
Center for Substance
Abuse Treatment
SAMHSA

FOREWORD

One of the missions of the Center for Substance Abuse Treatment is to enhance the nation's substance abuse treatment system by identifying, developing, and supporting appropriate policies, approaches, and programs. In short, for the field of substance abuse treatment, CSAT seeks to determine what works, for whom, how well, and at what cost.

Building knowledge through evaluation is the key to answering these questions. From CSAT's perspective, evaluation—including cost analysis and performance measurement—is an integral component of program management and part of an ongoing process of knowledge development, assessment, and improvement. Toward this end, CSAT's Program Evaluation Branch established the National Evaluation Data and Technical Assistance Center (NEDTAC) to advance state-of-the-art evaluation in the field of substance abuse treatment.

A primary NEDTAC activity was to provide evaluation technical assistance and support to substance abuse treatment providers and evaluators. NEDTAC produced a series of bibliographies in key topic areas as one avenue to accomplish this goal. This document belongs to that series. This compilation was prepared for evaluators and service providers in the field of substance abuse treatment as a reference for materials on outcome studies conducted on the national level. National studies conducted from 1990 to publication date were included, as were those studies that discussed outcome measures in general (for context).

This bibliography, along with others in the series, was developed under the guidance and direction of the NEDTAC Government Project Officer, Ron Smith, Ph.D., Program Evaluation Branch, Office of Evaluation, Scientific Analysis, and Synthesis. We also wish to thank Tifney Franklin for compiling and Beth Archibald Tang for reviewing this document.

Sharon Bishop
Project Director
National Evaluation Data and
Technical Assistance Center (NEDTAC)

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OUTCOME AND EFFECTIVENESS IN SUBSTANCE ABUSE TREATMENT: SELECTED BIBLIOGRAPHY OF NATIONAL EVALUATIONS

Ager, C.R., Ferrer, H., Fillmore, K., Golding, J., Lerno, E., et al. (1996). Aggregate-level predictors of the prevalence of selected drinking patterns in multiple studies: A research synthesis from the collaborative alcohol-related longitudinal project. Substance Use and Misuse, 31, 1503-1523.

This paper examines the prevalence of two “at-risk” alcohol drinking patterns (infrequent heavy drinking and frequent heavy drinking) within age/gender groups in multiple general population studies. When heterogeneity in findings across studies is found, we test the hypotheses that suicide, divorce, unemployment rates, and the per capita consumption of alcohol in each country are associated with the prevalence of these drinking patterns. These analyses should inform the literature on the relationships between societal factors and the prevalence of persons in different societies and periods in history that drink at these levels. (Author abstract)

Amodeo, M., & Robb, N. (1998). Evaluating outcomes in a substance abuse training program for Southeast Asian human service workers: Problems in measuring change cross-culturally. Journal of Drug Education, 28(1), 53-63.

This article describes the evaluation challenges faced in a cross-cultural substance abuse training program. Non-Southeast Asian instructors designed and taught courses for Cambodian and Vietnamese human service workers over a 2-year period. Although cultural considerations were a central focus in the design of the program, instructors underestimated the difficulty of modifying standard questionnaires for use with Southeast Asian participants. As a consequence, the formal evaluation process had limited benefit but several insights were gleaned through alternative evaluation methods.

Armor, D.J. (1981). The Rand reports: Reconciling research and treatment perspectives. Evaluation of the Alcoholic: Implications for Research, Theory, and Treatment. NIAAA Research Monograph Series, 5, 335-347.

This paper discusses how the Rand reports relate to the disagreement regarding treatment goals for alcoholics. It is contended that, although the Rand research helped fuel the debate, it also had produced a set of findings that may ultimately contribute to a resolution of the conflict. The paper begins with a brief review of the first Rand report, focusing on what it said about normal drinking, followed by a summary of findings of the second Rand report regarding the drinking versus abstention issue. These empirical results set the stage for a discussion of the origins of the abstention-drinking debate, and the way in which the Rand research may help reconcile existing research and treatment perspectives. (Author abstract modified)

Bell, D.C., Richard, A.J., & Feltz, L.C. (1996, September/October). Mediators of drug treatment outcomes. Addictive Behaviors, *21*, 597-613.

Treatment for drug use, like the process by which a person comes to use illicit drugs, may be seen to be at least in part a psychosocial process involving emotional, cognitive, and relationship domains. Treatment programs attempt to improve the psychosocial functioning of clients with the ultimate goal of effecting change in drug-use behaviors. In a longitudinal study of clients in an intensive outpatient treatment program using a cognitive behavioral model to treat crack cocaine use, it was found that length of treatment was directly associated with improvement in emotional well-being, cognitive functioning, and relationships. Of the three psychosocial domains, improvement in relationships had the strongest effect on self-reported decreases in cocaine usage, verified by urinalysis. Improvement in cognitive functioning had a small impact on cocaine use, whereas improvement in emotional well-being had almost no independent effect in this cognitive behavioral treatment program. (Author abstract)

Booth, R.E., Crowley, T.J., & Zhang, Y. (1996). Substance abuse treatment entry, retention and effectiveness: Out-of-treatment opiate injection drug users. Drug and Alcohol Dependence, *42*, 11-20.

This study was designed to assess the effect of client characteristics and community interventions on treatment entry and retention, and to evaluate the relative effectiveness of treatment, compared to other interventions, in reducing drug use and crime among out-of-treatment opiate injectors. Subjects (N=2,973) from 15 cities were randomly assigned to: standard intervention (SI)-HIV testing and counseling; or enhanced intervention (EI)-SI plus additional educational sessions stressing responsible drug use. EI in some cities included staff assistance with treatment admission (i.e., 'active' referral). All locations provided intervention by community outreach workers. Factors positively associated with treatment entry included: prior treatment, intervention by community workers, assignment to the EI, not injecting cocaine, injecting opiates, and fewer program interventions received. Sites where the EI included active referral achieved significantly higher treatment entry rates than sites where the EI did not. Findings supported the efficacy of treatment over other interventions in reducing drug use and arrests, the addition of staff assistance to facilitate client entry into treatment, and the involvement of community outreach workers in achieving treatment entry. (Author abstract)

Bradley, C.J., French, M.T., & Rachel, J.V. (1994). Financing and cost of standard and enhanced methadone treatment. Journal of Substance Abuse Treatment, *11*, 433-442.

Although some national surveys of drug abuse treatment have examined cost and financing issues, this study is one of the first to rigorously analyze the costs and financing of methadone treatment at the program level. These findings are similar to those found at the national level for treatment cost but deviate significantly from the National Drug and Alcoholism Treatment Unit Survey (NDATUS) findings on funding sources. In addition to examining financing and total cost,

resources were grouped into particular categories and variations were examined at the client, program, regimen, and setting levels. Specific findings show that public funding sources overwhelmingly support the programs examined; the average annual cost per client for standard methadone treatment was between \$3,750 and \$4,400; the marginal cost of providing enhanced treatment was between 5 percent and 6 percent of the total annual cost of standard treatment; and the average annual cost at the freestanding community-based programs was significantly different from the average annual cost at the hospital-based treatment program. Results provide a treatment cost methodology along with a financial profile of treatment operations at three clinics that can be compared across programs and settings. (Author abstract)

Breslin, F.C., Sobell, S.L., Sobell, L.C., & Sobell, M.B. (1997, March/April). Alcohol treatment outcome methodology: State of the art, 1989-1993. *Addictive Behaviors*, 22, 145-155.

This article reviews the 61 alcohol treatment outcome studies published from 1989-1993 with respect to methodology. Although better assessment of subjects' pretreatment characteristics was noted, a minority of studies met even the basic requirements of experimental studies. Further, some reversals of methodological progress were observed in several areas, particularly in collecting outcome data from multiple sources. It is suggested that funding agencies and journal editors require that submissions meet minimum standards for adequate outcome evaluation. (Author abstract)

Burnam, M.A. (1997). Measuring outcomes of care for substance use and mental disorders. Santa Monica, CA: RAND.

Measures available for the successful treatment of mental health and substance use problems are described, advancing the notion that mental health and substance abuse treatment and rehabilitation service systems might benefit from routinely monitoring the outcomes of the care they provide. One of the practical challenges facing routine outcomes monitoring efforts, however, is how to measure the outcomes of mental health and substance abuse treatment (i.e., how to determine what outcomes are relevant and how to evaluate and select tools for measuring those outcomes). The main purpose of this paper is to provide an overview of issues to consider when selecting mental health and substance abuse measures for routinely monitoring the outcomes of treatment. This paper provides an overview of the key domains that clinical and service researchers have focused on, summarizes criteria for evaluating the utility of outcome measures as tools for routine monitoring, and considers for each of the outcome domains the extent to which existing measures adequately satisfy these criteria. Finally, the author comments on the other essential components of an outcome monitoring system, i.e., assessment of case mix and process of care and use of analytic strategies that clarify the causal links between treatment processes and outcomes.

Campbell, J., Gabrielli, W., Laster, L.J., & Liskow, B.I. (1997). Efficacy of outpatient intensive treatment for drug abuse. Journal of Addictive Diseases, 16(2), 15-25.

Outpatient intensive treatment for drug and alcohol abuse has become an alternative approach to management of substance abuse. The authors evaluated the efficacy of an outpatient intensive treatment program for crack cocaine abusers; and the impact of psychiatric diagnosis on outcome variables. Subjects participating in an outpatient intensive treatment program underwent descriptive testing at entry and at 6-month follow-up. Outcome variables included Addiction Severity Index composite scores and retention in treatment. Subjects demonstrated significant improvement in ASI scales, over time, with an interaction effect of time and scale. Minimal interaction of psychiatric diagnosis and outcome was found. Outpatient intensive treatment demonstrated efficacy in reduction of ASI composite scores. Comparison with standard outpatient treatment and inpatient treatment is needed.

Condelli, W.S., & Hubbard, R.L. (1994, January-February). Relationship between time spent in treatment and client outcomes from therapeutic communities. Journal of Substance Abuse Treatment, 11, 25-33.

Research found that therapeutic communities and other types of residential programs are effective in reducing drug use, unemployment, and criminal behavior and that length of time spent in treatment is an important predictor of client outcomes. Studies vary considerably, however, in terms of the amount of time they found clients need to stay in treatment to produce those outcomes. Data collected for the Treatment Outcome Prospective Study (TOPS) were analyzed to explore the relationship between time spent in treatment and client outcomes from therapeutic communities and other types of residential drug treatment programs. The analysis took into account client characteristics and whether clients received drug treatment during the follow-up year. The results indicate there is a stronger relationship between time spent in treatment and client outcomes from therapeutic communities than was suggested in earlier analysis of TOPS data. (Author abstract)

Crowe, A.H., & Reeves, R. (1994). Evaluation. In A.H. Crowe, & R. Reeves, R., (Eds.), Treatment for alcohol and other drug abuse: Opportunities for coordination (pp. 113-119). Rockville, MD: Center for Substance Abuse Treatment.

Evaluation or accountability is a critical component of treatment. It enables the program director to determine whether the program is achieving its stated goals, to decide if modifications are necessary, to generalize the efficacy of the program to other populations, and to justify its costs to funding agencies. An effective evaluation design contains the following five components: the evaluator should clarify program objectives; develop a management information system to collect and retrieve information in an efficient manner; select evaluation methods, such as descriptive, pretest/post-test, and/or experimental studies; choose evaluation procedures that define standard means of collecting, recording, organizing, and analyzing the data; and report and disseminate the

evaluation findings. This chapter reviews the results of two major treatment outcome evaluations, the Drug Abuse Reporting Program and the Treatment Outcome Prospective Study, and discusses the Drug Abuse Treatment Outcome Study, a third study that was still in process at the time this chapter was written.

Crowe, A.H., & Reeves, R. (1994). Who needs treatment: An overview of addiction and its treatment. In A.H. Crowe & R. Reeves (Eds.), Treatment for alcohol and other drug abuse: Opportunities for coordination (pp. 1-10). Rockville, MD: Center for Substance Abuse Treatment.

This chapter provides an overview of the process of addiction from the initial stage of experimental and social use through problem use to the final stage of dependency and addiction. As an individual moves through these stages, which may take 5-10 years to complete, related physical, social, and psychological problems evolve. It is not inevitable that every individual will proceed through all of these stages, but once a person has developed a chemical addiction, he or she cannot return to earlier stages and cannot be cured. Treatment is essential to begin the recovery process. The chronic and relapsing nature of addiction requires that recovery must involve sobriety, abstinence, relapse prevention programs, and continuing supportive intervention. Effective treatment includes the following five critical components: assessment, patient-treatment matching, comprehensive services, relapse prevention, and accountability. Often treatment programs will employ pharmacological and/or behavioral modalities to reduce or eliminate clients' substance abusing patterns.

Darke, S. (1992). Measurement of outcome in opiate treatment evaluation studies. Drug and Alcohol Review, 11, 169-174.

One of the major contributors to the fragmentation of the opiate treatment outcome literature has been the plethora of measurement techniques employed by researchers. This has led to a situation where direct comparability between studies is often extremely difficult, if not impossible. In this article the measurement methodologies employed in the major treatment outcome studies are reviewed, and the implications for future research discussed.

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

Findings from a number of sources over the past decade have documented a decline in the resources available for drug abuse treatment and the services being provided to clients in community-based drug abuse treatment programs. We compared client reports of services received and unmet service needs in a national cross-modality sample of clients in two studies of drug abuse treatment: the Treatment Outcome Prospective Study (TOPS), 1979-1981, and the

Drug Abuse Treatment Outcome Study (DATOS), 1991-1993. Findings showed a marked decrease over the past decade in the number and variety of services clients reported receiving. Most striking was the large increase in self-reported unmet service needs in the DATOS investigation. Although most clients reported having received at least some sessions of drug abuse counseling during treatment and the level of satisfaction with treatment and services was generally high across modalities, client reports indicated that drug abuse counseling alone did not address their wider ranging service needs. Programs in the methadone modality generally reflected the lowest level of drug abuse counseling and services. (Author abstract)

Executive Office of the President. (1996). Treatment protocol effectiveness study. Washington, DC: Author.

There are four major studies that support the efficacy of treatment. They are the Drug Abuse Reporting Program (DARP), the Treatment Outcome Prospective Study (TOPS), the Drug Abuse Treatment Outcome Study (DATOS), and the California Drug and Alcohol Treatment Assessment (CALDATA). These studies were conducted at varying times from 1969-1993. They found that treatment had more positive outcomes if clients stayed involved for at least 3 months. Those who stayed less than 3 months showed few signs of improvement and those who stayed longer, did better. None of these studies found a treatment method that would work for everyone, all the time. There are many effective methods and the one that will work best depends on the substance abused, the severity of abuse, and the personality of the abuser. If the client is appropriately matched to treatment, therapeutic communities, pharmacological treatment, outpatient drug-free, inpatient, and assorted therapy-based programs are effective in reducing substance abuse.

French, M.T. (1995). Economic evaluation of drug abuse treatment programs: Methodology and findings. American Journal of Drug and Alcohol Abuse, 21, 111-125.

Research has shown that drug abuse treatment can help many individuals. Yet funding is often lacking for treatment because these programs compete for scarce resources with other important and effective social programs. This study shows how drug abuse treatment programs can be made more attractive to decision makers and funding agencies by first highlighting why economic evaluation is a critical component of drug abuse treatment research. Next, an evaluation methodology is presented that can be employed by program staff and researchers. The evaluation methodology includes aspects of cost and outcome analysis, cost effectiveness analysis and benefit cost analysis. Methods and findings are then discussed from most of the major economic evaluation studies of drug and alcoholism treatment. Last, guidelines for conducting future economic evaluations are presented along with suggestions for how the results can be used for policy purposes and program planning. (Dialog abstract)

French, M.T., Zarkin, G.A., Hubbard, R.L., & Rachal, J.V. (1991). Impact of time in treatment on the employment and earnings of drug abusers. American Journal of Public Health, 81, 904-907.

Data was used from a longitudinal study to estimate the effects of time in drug abuse treatment on post-treatment weeks worked and earnings for 2,420 clients in three treatment modalities. The regression analysis show that time in treatment had a positive and statistically significant impact on these labor market outcomes, but the effects were small for all modalities. Although residential clients experienced the largest relative changes in weeks worked and real earnings, a benefit-cost calculation suggests that additional residential treatment cannot be justified from earnings improvements alone. These results may indicate a need for more employment services while in treatment.

French, M.T., Zarkin, G.A., Hubbard, R.L., & Rachal, J. (1993). The effects of time in drug abuse treatment and employment on posttreatment drug use and criminal activity. American Journal of Drug and Alcohol Abuse, 19, 19-33.

This article examines the simultaneous impact of length of treatment and employment outcomes on posttreatment drug use and criminal activity through analysis of survey data on 2,240 drug abusers undergoing either an outpatient methadone maintenance, residential, or outpatient drug-free treatment modality. Time in treatment showed a significant negative relationship with drug use and criminal activity for all treatment modalities. Clients undergoing residential treatment experienced the largest relative impact. This association was independent of employment effects. (Sociological Abstracts abstract)

French, M.T., Zarkin, G.A., & Bray, J.W. (1995, Spring). A Methodology for evaluating the costs and benefits of employee assistance programs. Journal of Drug Issues, 25, 451-470.

Employee Assistance Programs (EAPs) represent a relatively new fringe benefit for workers; the number of these programs has been steadily increasing in work sites of all sizes. Despite this surge in growth of EAPs, few studies have estimated their costs or benefits. To guide future economic evaluation studies of EAPs, we have developed a methodology with four components: a process description to understand the structure, operating environment, and goals of the EAP; a cost analysis to comprehensively identify and estimate the full range of EAP costs; an outcome analysis to estimate the effectiveness of the EAP on employee performance and workplace productivity; and an economic evaluation to estimate cost-effectiveness ratios, dollar benefits, and net benefits of the EAP. Our methodology is based on standard economic theory, but we present the evaluation strategy in a nontechnical way so that it can be used by employers and other researchers to estimate the costs and benefits of EAPs. (Author abstract)

General Accounting Office. (1990). Methadone maintenance: Some treatment programs are not effective; Greater federal oversight needed. General Accounting Office, Washington, DC.

The evaluation of 24 methadone maintenance programs revealed many differences—mostly surrounding philosophies in treatment. There were broad ranges in the amount of methadone given, how often the patients were tested, what happened to patients who tested positive, patient-to-counselor ratio, and general size of the program. Another finding concerned drug use by those in treatment. In 10 out of 24 programs, 20 percent or more were still using heroin or another drug while enrolled. The GAO recommended that the government develop better guidelines and evaluation procedures so that a more comprehensive methadone maintenance program can be established. Another recommendation was that the Federal government repeal the provision that allows for providing methadone without counseling because it has not proven to be helpful.

Gottheil, E., Weinstein, S.P., Sterling, R.C., Lundy, A., & Serota, R.D. (1998). A randomized controlled study of the effectiveness of intensive outpatient treatment for cocaine dependence. Psychiatric Services, 49, 782-787.

A randomized controlled study design was used to compare the effectiveness of intensive outpatient treatment with individual outpatient counseling and a combination of individual and group outpatient counseling for cocaine-dependent patients. Volunteers for this study were recruited from among first admissions to an inner-city, public-sector outpatient substance abuse clinic. In-treatment, end-of-treatment, and 9-month follow-up assessments were compared for participants randomly assigned for 12 weeks to one of three treatment modalities—weekly individual outpatient counseling, weekly individual counseling plus one weekly group session, or a newly designed intensive group treatment program consisting of 3 hours of group treatment 3 days a week. Patients who completed the intensive program showed significant improvement from intake to end-of-treatment scores on the Addiction Severity Index, the Beck Depression Inventory, and the Symptom Checklist. At 9-month follow-up, patients who had remained in treatment longer had fewer drug problems, a smaller proportion of positive urine drug screening tests, a better employment status, and fewer psychological problems compared with patients who left treatment earlier. Patients who remained in treatment were also more likely to be attending self-help meetings, continuing in outpatient treatment, or attending school. However, for the 447 patients randomly assigned to the three conditions, there were no significant differences between treatment modalities on any of the variables at 9-month follow-up. The new intensive treatment program was not shown to be superior to more traditional treatment programs. (Author abstract modified)

Harwood, H.J., Hubbard, R.L., Collins, J.J., & Rachel, J.V. (1988). The cost of crime and the benefits of drug abuse treatment: A cost-benefit analysis using TOPS data. Compulsory Treatment of Drug Abuse: Research and Clinical Practice. NIDA Research Monograph series. 209-235.

The toll of drug abuse on society is high, both in social and economic terms. Despite increases in Federal and state budgets, the public resources for addressing the problems of drug abuse are still limited. To reduce the high cost of drug abuse, available resources must be allocated for cost-effective public efforts. Allocation of resources requires careful consideration of the probable costs and benefits of alternative public efforts to address the problems. One of the principal efforts to reduce the social cost of drug abuse, particularly the costs attributed to crime, is drug abuse treatment. This paper uses data from the Treatment of Outcome Prospective Study (TOPS) to assess the benefits of crime reduction attributable to drug abuse treatment.

Howard, D.L., LaVeist, T.A., & McCaughrin, W.C. (1996). The effect of social environment on treatment outcomes in outpatient substance misuse treatment organizations: Does race really matter? Substance Use and Misuse, 31, 617-638.

This study examines whether the racial mix of clients is related to treatment organization outcome rates after controlling for the social environment in which the organization operates. A nationally representative sample of 326 nonmethadone outpatient substance misuser treatment organizations was surveyed in 1990. The unit of analysis is the treatment organization. Outcome measures are the percentages of clients who completed and dropped out of treatment. The percentage of black clients treated at the organization, the socioeconomic status of the organization's area, and other client characteristics, organizational factors, and treatment practices are evaluated through multivariate regression to determine their impact on organizational rates of treatment success and failure among clients. Ordinary least-squares regression analysis indicated that race is not a predictor of treatment success once socioenvironmental factors are included in the analysis. Results suggest that treatment organizations must be wary of assigning a person for treatment based only on his or her racial or ethnic group membership. Treatment approaches should place more emphasis on the socioenvironmental influences to which the client is exposed and less emphasis on a client's race.

Hubbard, R.L. (1997). Evaluation and outcome of treatment. In J.H. Lowinson, P. Ruiz, R.B. Millman, & J.G. Langrod, (Eds.), Substance abuse: A comprehensive textbook (3rd ed., pp. 499-511). Baltimore, MD: Williams and Wilkins.

This chapter reviews and updates major findings on treatment effectiveness, identifies client differences and treatment variations as two major issues of treatment effectiveness, and reviews prospective epidemiologic multiprogram studies to identify the nature and range of client and treatment variables and their relative contribution to treatment outcomes. Major sections discuss the characteristics of clients' drug use patterns, impairment, and treatment experience and criminal

justice involvement in different types of treatment programs; treatment outcomes (drug use, depression indicators, criminal behavior, and posttreatment support); benefit-cost studies and cost effectiveness; changes in treatment clients and the treatment system; new research questions; the potential of drug abuse treatment in the acquired immunodeficiency syndrome (AIDS) epidemic; the clinical implications of client differences; and the clinical implications of treatment structure and process. Treatment research of the 1990s, building upon prior multiprogram and clinically based research, is focusing on improved assessment of clients and more refined measures of treatment.

Hubbard, R.L., & French, M.T. (1991). New perspectives on the benefit-cost and cost-effectiveness of drug abuse treatment. Economic Costs, Cost-Effectiveness, Financing, and Community-Based Drug Treatment. NIDA Research Monograph Series, 113, 94-113.

This chapter is a synopsis of the conclusions on effectiveness and cost-effectiveness data analyses obtained in the Treatment Outcome Prospective Study (TOPS) during the late 1970s and early 1980s. The major issue was to determine the ways to get the most return on the money invested in treatment. Data from clinical trials and outcome studies show that treatment helps to change client behavior during and after treatment and that the benefits of these changes outweigh the costs of treatment. The comparative cost-effectiveness of different treatment components or treatment versus prevention or enforcement is not known since many factors limit the effectiveness of treatment. There are three new perspectives on the cost effectiveness of drug treatment that need to be considered. These include treatment career versus individual treatment episodes; the model of treatment structure and process components versus program-level descriptors; and the definitions of client subgroups with differing types of impairments versus general characteristics of client populations.

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

This book documents the findings of a national study on the effectiveness of drug abuse treatment. The Treatment Outcome Prospective Study (TOPS) is a long-term, large-scale study of the nature of treatment, clients, and client behaviors before, during, and after treatment in publicly funded programs. More than 11,000 drug abusers who entered treatment in 1979, 1980, and 1981 were interviewed upon their admission to 41 selected drug abuse treatment programs across the nation. The study included publicly funded methadone, residential, and outpatient drug-free programs. The evidence shows that treatment of appropriate quality and duration does have positive results, both for drug abusers and for American society as a whole, and must be a major component of a national drug policy.

Hubbard, R.L., Rachel, J.V., Craddock, S.G., & Cavanaugh, E.R. (1984). Treatment outcome prospective study (TOPS): Client characteristics and behaviors before, during, and after treatment. Drug Abuse Treatment Prospects. NIDA Research Monograph series. Pittsburgh, PA: U.S. Government Printing Office, 42-69.

This chapter describes the design of the TOPS research, summarizes some of the key findings from the Intreatment and Follow-up Studies, and presents recommendations for future research. The overall design of TOPS has been the result of a systematic attempt to develop and implement state-of-the-art methodologies in drug treatment evaluation research, particularly in sampling, measurement, and analysis. Many of the key elements of the design can be incorporated into evaluation studies of different scopes and purposes. The early results of TOPS generally support the findings of previous evaluation research. The overall design, however, allows researchers and policy makers to increase their understanding of treatment effects. The recommendations presented suggest ways to use the TOPS data and other studies to develop this understanding.

Kidorf, M., Hollander, J.R., King, V.L., & Brooner, R.K. (1998). Increasing employment of opioid dependent outpatients: An intensive behavioral intervention. Drug and Alcohol Dependency, 50(1), 73-80.

The impact of a new, mandatory employment requirement in a community-based methadone treatment program was evaluated. All patients who had been in the methadone substitution program for at least 1 year but who were not currently employed (n = 36) were required to enhance their treatment with 20 hours of employment (paid or volunteer). Patients with significant psychiatric or medical disabilities were excluded from the routine treatment requirement. Patients were informed by counseling staff that they had 2 months to secure employment. Those who did not accomplish the goal within that time period were transferred to more intensive weekly counseling (i.e., up to 8 hours/week) for 10 weeks, with the enhanced counseling focusing primarily on resistance to the employment goal. Patients who remained resistant to the treatment plan were eventually started on a 21-day methadone taper until employment was verified. Seventy-five percent of the patients secured employment and maintained the position for at least 1 month. Positions were found in an average of 60 days. Most patients (78%) continued working throughout the 6-month follow-up. Those who failed to find work or maintain employment engaged in more illicit drug use. These results demonstrate that behavioral contingencies can motivate many methadone maintenance patients to obtain verified employment in the community.

Landry, M.J. (1995). Overview of addiction treatment effectiveness. Rockville, MD: National Clearinghouse for Alcohol and Drug Information.

To determine what treatment approaches work and the factors that influence treatment effectiveness, treatment approaches, treatment settings, and treatment components services are described and the effectiveness of each analyzed. The primary goal of treatment is to meet the

biological, psychological, and social treatment needs of patients. The primary treatment approaches reviewed include methadone maintenance, the therapeutic community, the traditional chemical dependency treatment (usually including medically supervised detoxification in combination with a range of biopsychosocial treatment services and encouraged participation in a 12-step program), and outpatient drug-free non-methadone treatment. The continuum of treatment settings evaluated include inpatient hospitalization, residential treatment, intensive outpatient treatment, and outpatient treatment. A number of factors that can significantly influence the effectiveness of addiction treatment, dealing with the program, therapist, and patient, also are discussed. (NCADI abstract)

Longabaugh, R. (1991). Monitoring treatment outcomes. Alcohol, Health and Research World, 15, 189-200.

In this article, the author argues that monitoring treatment outcomes facilitates improved treatment methods and allows more appropriate patient-treatment matching. In addition, monitoring treatment outcomes provides tangible evidence to third-party payers and government funding agencies of a particular intervention's effectiveness and cost benefits. He offers practical recommendations for routine treatment monitoring and identifies necessary areas for future research. To date, practitioners and evaluators have not agreed on a standard set of minimum data elements that would enable comparisons across programs. The California Society of Addiction Medicine, however, has developed a core set of variables that include alcohol involvement, other drug use, physical health status, psychological health status, use of treatment resources, social role functioning, and environmental support systems. These variables could be used as a standard. Examples are provided for each set of variables, and critiques of their potential usefulness in assessment are given.

McCusker, J., Bigelow, C., Luippold, R., Zorn, M., & Lewis, B.F. (1995). Outcomes of a 21-day drug detoxification program: Retention, transfer to further treatment, and HIV risk reduction. American Journal of Drug and Alcohol Abuse, 21, 1-16.

The authors investigated outcomes of a 21-day inpatient drug detoxification and rehabilitation program including length of stay, transfer to further treatment, and HIV risky behavior. Clients (n = 567) were predominantly white, male, currently unemployed, and their treatment was not covered by third party payment; 78 percent were detoxified with methadone. The median length of stay was 18 days. Higher education, not living with spouse or children, English as primary language, admission during fall or winter months, and greater knowledge of HIV transmission were independent predictors of greater length of stay. Among those with follow-up (n = 450), 19 percent were transferred to residential drug-free programs and 7 percent to outpatient programs. Taking into account loss to follow-up, the overall rate of treatment transfer could be as low as 21 percent. Greater length of stay was associated with higher rates of transfer to residential treatment. Relapse rates to either any drug use or injection drug use were lower among subjects transferred to residential treatment than either clients transferred to outpatient programs or those

with no further treatment. Among subjects who continued to inject drugs at follow-up, no reduction in HIV risky behaviors was found regardless of further treatment. The authors conclude that detoxification programs have the potential for reducing relapse to drug use when followed by residential drug-free treatment. (Author abstract modified)

McLellan, A.T. (1990). Relative efficacy of treatment for dependence on alcohol and other drugs. Advances in Alcohol and Substance Abuse, 9, 140.

This article considers measurement issues involved in determining the effectiveness of substance abuse treatment. Data are presented for each of the following questions to illustrate methods used in evaluating treatments and in tailoring an evaluation to the special circumstances associated with treatment for pregnant addicts and their children. How is patient improvement posttreatment measured? How is patient change during treatment measured? How is patient outcome status measured? Generic issues include: interviews versus written evaluations; drop-outs; exclusion versus inclusion in evaluation; experimental versus quasi-experimental designs; integration of research and quality assurance needs. Prior to evaluation, development of clear and appropriate expectations of treatment benefits is critical. Measures of patient status should be integrated into clinical evaluations at the start, end, and follow-up points of treatment. Measures of treatment delivery methods and amount of intended services patients receive are essential. Follow-up evaluations can be integrated into treatment aftercare.

Miller, N.S., Millman, R.B., & Keskinen, S. (1990). Outcome at 6 and 12 months post-inpatient treatment for cocaine and alcohol dependence. Advances in Alcohol and Substance Abuse, 9, 101-120.

This study presents outcome rates for inpatient treatment for alcohol, cocaine, and other drug dependence. The abstinence rates at 6 and 12 months post-discharge and other demographic information are compiled on 1,627 patients admitted to an inpatient treatment unit for the rehabilitation of cocaine, alcohol, and other drug dependence. The percent of the 1,627 patients with the diagnosis of alcohol dependence only was 42 percent, cocaine, alcohol, and other drug dependence 25 percent, and alcohol and other drugs, 28 percent. The abstinence rate at 6 months for patients with alcohol dependence only was 75 percent; alcohol and other drug dependence was 82 percent; and cocaine dependence was 76 percent. At 12 months, the abstinence rates were 71 percent, 66 percent, and 62 percent respectively.

Miller, W.R. (1992). Effectiveness of treatment for substance abuse: Reasons for optimism. Journal of Substance Abuse Treatment, 9, 93-102.

Reviews of treatment research have sometimes drawn gloomy conclusions that clash with the experiences of clinicians. Yet the same literature provides reasons for optimism about the future of substance abuse treatment. There are treatment strategies with encouraging evidence of

effectiveness that are only beginning to be applied in practice. Furthermore, research is clarifying the mechanisms and reasons for successful treatment, pointing to factors to be emphasized in therapy. Approaches that yield even short-term advantages can promote more rapid recovery, and may provide clues for how to prevent relapse. In difficult economic times, hope is also provided by evidence that even relatively brief treatment can be substantially more effective than none at all. Recent evidence also supports the importance of matching clients to alternative treatment strategies. To the extent that practitioners can keep abreast of such developments and adjust their clinical work accordingly, there is reason to believe that the effectiveness of substance abuse treatment can be greatly increased. (NCADI abstract)

Monahan, S.C. & Finney, J.W. (1996, June). Explaining abstinence rates following treatment for alcohol abuse: A quantitative synthesis of patient, research design and treatment effects. Addiction, 91, 787-805.

The relationships of treatment, patient, and research design characteristics to treatment outcome (i.e., abstinence rates) were examined in a sample of 150 treatment conditions drawn from 100 alcohol treatment outcome studies published between 1980 and 1992. Treatment characteristics were related to abstinence rates: more intensive treatments had higher abstinence rates than less intensive treatments, whereas treatments with an expressed goal other than abstinence had lower abstinence rates than treatments with an abstinence goal. When the public versus private ownership status of the treatment facility was taken into account, the presence of behavioral elements in the treatment condition also was related to higher abstinence rates. Because of inconsistent reporting in primary studies, the effects of only one patient pre-treatment characteristic were assessed; treatment conditions with a higher proportion of socially stable patients had better outcomes. Research design characteristics were also related to abstinence rates. Treatment conditions with shorter follow-ups and treatments drawn from studies that did not use criteria to exclude more impaired subjects had better outcomes. Possible reasons why these findings regarding the effects of treatment intensity and the use of exclusionary criteria differ from those in previous reviews are discussed. (Author abstract)

Moras, K. (1993). Substance abuse research: Outcome measurement conundrums. In L.S. Onken, J.D. Blaine, & J.J. Boren (Eds.), Behavioral treatments for drug abuse and dependence (NIDA Research Monograph No. 137, pp. 217-248). Rockville, MD: National Institute on Drug Abuse.

Outcome assessment problems that arise in studies of substance abuse treatment are identified, and strategies that can address some of these problems are proposed. Substance-abusing patients pose unique problems for treatment-outcome research, most notably: symptoms of substance use that mimic psychiatric symptoms, low motivation for cure, and a tendency to drop out of treatment at high rates. These and other related features require thoughtful modification of well-established procedures that are used in randomized clinical trial outcome research on psychiatric disorders in adults. (NCADI abstract)

Morley, J.A., Finney, J.W., Monahan, S.C., & Floyd, A.S. (1996). Alcoholism treatment outcome studies, 1980-1992: Methodological characteristics and quality. Addictive Behaviors, 21, 429-443.

The authors examine the methodological characteristics and provision of study information in 339 alcoholism treatment outcome studies reported between 1980 and 1992. Factors are considered in four methodological domains: sampling and description of patients, specification of treatments, outcome variable assessment and follow-up, and treatment effect estimates; the methodological quality of the studies is also considered. Although methodological quality has improved over time, there remains room for improvement. Of special concern is the low statistical power of many studies. Multiple treatment group studies had an average .54 probability of detecting a treatment effect of medium size. (Author abstract)

Najavits, L.M., & Weiss, R.D. (1994). Variations in therapist effectiveness in the treatment of patients with substance use disorders: An empirical review. Addiction, 89, 679-688.

Despite the widespread use of psychotherapy for patients with substance use disorders, the effectiveness of psychotherapists conducting such treatment has received little research attention. In this paper, empirical studies of therapists' differences in patient outcome and dropout rates are comprehensively reviewed. The main conclusions are that therapists show diverse rates of effectiveness, and that such differences appear independent of both therapists' professional background and of patient factors at the start of therapy. The primary therapist characteristic thus far associated with higher effectiveness is the possession of strong interpersonal skills. Guidelines for research on therapist effectiveness are presented.

National Institute on Drug Abuse. (1993). How good is your drug abuse treatment program? A guide to evaluation. Rockville, MD: Author.

Information is provided to help drug abuse treatment program administrators and staff who have no previous experience or formal training in evaluation with planning and conducting evaluation of their programs. Key elements in program description are outlined. Methods of framing evaluation questions are presented. Ways to refine the evaluation questions and selecting input, output, and outcome measures are discussed. Ways to choose an evaluation design are provided. The selection, adaptation, and development of data collection instruments and procedures are explored. Ways to complete evaluation procedures and to implement data collection are described. Data analysis is discussed, as is the reporting and usage of findings.

National Opinion Research Center. (1997). The National Treatment Improvement Evaluation Study: Final Report. Rockville, MD: Center for Substance Abuse Treatment.

The National Treatment Improvement Evaluation Study, (NTIES) a 5-year, multi-site study of treatment effectiveness, was designed to answer questions about effectiveness and improvement in CSAT-supported treatment services, such as: How have demonstration funds been used? What enhancements were deployed? How many and what kind of programs and clients were affected by the demonstration programs? To what extent has the comprehensive treatment model been validated—what is the evidence that more comprehensive treatment yields effective results in terms of client access to services and outcomes of treatment? and What lessons can be learned for future treatment about the implementation and cost of delivering comprehensive drug abuse services? The NTIES designers collaboratively determined that a two-level design would best support the study. The administrative level encompassed a multi-phase survey of the full universe of service delivery units (SDUs) potentially receiving direct support through a CSAT demonstration grant. This level of data provides both a statistical profile of units that received CSAT funds—their treatment orientation, size, budget, staffing distribution, and a description of what was done with the funds—and answers the question of how have demonstration funds been used. The clinical-outcomes level collected data from clients enrolled in treatment at a subsample of these CSAT-funded SDUs. This level included three waves of longitudinal data collection with clients in drug treatment and addresses the second question above. Through links to the program-level data, the client data also permit investigation of the treatment costs by mapping service offerings and other facility attributes to the clients enrolled. This research determined that with treatment, clients were able to decrease their drug use by almost half. The rates of criminal activity greatly decreased as did the rates of behavior that placed individuals at risk for contracting HIV. The clients also reported improvements in employment, housing, and mental and physical health. These improvements lasted through the follow-up period.

Nunes-Dinis, M. & Barth, R. P. (1993, September). Cocaine treatment and outcome. Social Work, 38, 611-617.

This article describes the dimensions of the current cocaine problem in the United States, drug treatment models, and cocaine treatment effectiveness and outcome. Research on the effectiveness of specific drug treatments, including women-sensitive services, is analyzed. The recommended treatment approaches incorporate a variety of rehabilitative services (for example, housing, education, vocational training, medical services, and child care) and call for social workers to improve linkages with treatment programs and to facilitate referrals. The emerging evidence on treatment models and drug treatment effectiveness can guide social workers in better assisting their clientele by incorporating social services that encourage the development of new and rewarding lifestyles to compete with drug-using activities. (Author abstract)

Orwin, R.G. et al. (1992). Community demonstration grant projects for alcohol and drug abuse treatment of homeless individuals: Final evaluation report. Rockville, MD: National Institute on Alcohol Abuse and Alcoholism.

Findings are presented from the National Institute on Alcohol Abuse and Alcoholism (NIAAA) Community Demonstration Projects for Alcohol and Other Drug Abuse Treatment of Homeless Individuals. Total numbers of clients served in NIAAA-funded program components, both initial and extended, are provided. Client characteristics are described, including race-ethnicity, age, and gender. The numbers of clients served in various service activities and units of service delivery by each project during 1990 are outlined. Challenges and accomplishments in the implementation of intervention as a whole, as well as lessons learned from implementing specific program components are detailed. Program completion rates and reasons for non-completion, as well as client characteristics associated with program completion are discussed. Estimates are provided on intervention effectiveness on alcohol and other drug use, employment and economic security, physical and mental health status, and residential stability. Client characteristics associated with intervention effectiveness are described.

Orwin, R.G. et al. (1992). Community demonstration grant projects for alcohol and drug abuse treatment of homeless individuals. Volume 1: Outcome evaluation report. Rockville, MD: National Institute on Alcohol Abuse and Alcoholism.

Findings are presented on client outcomes from the National Institute on Alcohol Abuse and Alcoholism (NIAAA) Community Demonstration Projects for Alcohol and Other Drug Abuse Treatment of Homeless Individuals. Program completion rates and reasons for non-completion are reviewed, as are client characteristics associated with program completion. Intervention effectiveness on alcohol and other drug use, employment and economic security, physical and mental health status, and residential stability are estimated. Client characteristics associated with intervention effectiveness are outlined.

Ouimette, P.C., Finney, J.W., & Moos, R.H. (1997). Twelve-step and cognitive-behavioral treatment for substance abuse: A comparison of treatment effectiveness. Journal of Consulting and Clinical Psychology, 65, 230-240.

The comparative effectiveness of 12-step and cognitive-behavioral (C-B) models of substance abuse treatment was examined among 3,018 patients from 15 programs at U.S. Department of Veterans Affairs Medical Centers. Across program types, participants showed significant improvements in functioning from treatment admission to a 1-year follow-up. Although 12-step patients were somewhat more likely to be abstinent at the 1-year follow-up, 12-step, C-B, and combined 12-Step-C-B treatment programs were equally effective in reducing substance use and improving most other areas of functioning. The finding of equal effectiveness was consistent over several treatment subgroups: patients attending the “purest” 12-step and C-B treatment programs and patients who had received the “full dose” of treatment. Also, patients with only substance

abuse diagnoses, those with concomitant psychiatric diagnoses, and patients who were mandated to treatment showed similar improvement at the 1-year follow-up, regardless of type of treatment received. These data provide important new evidence supporting the effectiveness of 12-step treatment.

Pelissier, B.A., & McCarthy, D. (1992). Evaluation of the Federal Bureau of Prisons' drug treatment programs. In C.G. Leukefeld, F.M. Tims (Eds.), Drug abuse treatment in prisons and jails (NIDA Research Monograph Series No. 118, pp. 261-278). Rockville, MD: National Institute on Drug Abuse.

The Federal Bureau of Prisons' (BOP) recent renewal of intensive drug treatment programming is accompanied by a comprehensive evaluation plan. BOP's effort will involve process and outcome evaluation as well as cost-benefit analysis. The purpose of the evaluation is to provide information for supporting decisions about nationwide efforts to control drug use through drug treatment programs. The research design to be implemented in the evaluation is summarized. Those elements that address issues specific to studying drug treatment programs in prison populations as well as currently existing knowledge gaps are highlighted.

Powers, K.I., & Anglin, M.D. (June 1993). Cumulative versus stabilizing effects of methadone maintenance: A quasi-experimental study using longitudinal self-report data. Evaluation Review: A Journal of Applied Social Research, 17, 243-270.

The study applied a quasi-experimental design to examine whether methadone maintenance treatment demonstrates cumulative (i.e., rehabilitative) or stabilizing effects on behavior of narcotics addicts over multiple treatment episodes. Nearly 1,000 addicts in Southern California methadone maintenance clinics were interviewed to obtain retrospective self-report information on their addiction histories. Nine measures, including use of narcotics and other drugs, crime involvement, and employment, were analyzed using repeated measures analysis of variance. The observed patterns of behavioral changes clearly indicated stabilizing effects for most of the measures, but no indication of cumulative effects were observed.

Prendergast, M.L. (1996). Using sound research to document treatment's effectiveness. Alcoholism and Drug Abuse Weekly, 8(28), 5.

Addiction is a chronic, relapsing disease and cessation or significant reduction in use can take several treatment episodes; however, evaluations have found significant reductions in drug use and crime and improvements in prosocial behaviors for treatment participants. The stigma attached to people with addictions leads some people to oppose funding for treatment. Efforts must be made to get people into treatment earlier and to keep them there so that treatment can work even better. In addition, treatment programs must have the resources to address clients' multiple problems: lack of education and job skills; physical and sexual abuse; medical and psychiatric problems; homelessness; and the need for child care. A holistic systemic approach

could be developed by using case management, formal linkages between treatment programs and social service agencies, and decategorization of funding. Improved treatment outcomes could be achieved simply by increasing the number of individual and group counseling sessions per client, and program staff could make treatment more effective by practical application of research findings. (NCADI abstract)

Ralph, N., & McMenamy, C. (1996). Treatment outcomes in an adolescent chemical dependency program. *Adolescence*, 31(121), 91-107.

A study was conducted of treatment outcomes for all admissions to an adolescent chemical dependency program over a 10-month period. Parents of patients were interviewed regarding their adolescent's past behavioral characteristics, recovery-oriented behaviors, drug use status, and adaptive behavior before and after discharge. Among the adolescents 26 percent had a history of special education placement; 12 percent had been diagnosed as being hyperactive; 57 percent had not used any drugs or alcohol since discharge from the treatment program, and this rate increased to 82 percent for use within the past month. Parents of adolescents who had used drugs or alcohol after treatment most often described it as either a brief relapse, or a series of relapses, or lower levels of use than prior to admission. According to parents' estimates, 17 percent of adolescents were using more than 10 percent of the time since discharge. The effect of various pre-treatment and treatment factors on outcomes were investigated. Better treatment outcome was associated with older adolescents, greater participation in aftercare, and less time passage since discharge. Retrospective ratings by parents of adolescents regarding depressed, delinquent, and hyperactive behaviors showed that before admission all scales were in a "clinical range." After discharge all scales were in the normal range except for depressed behaviors for female adolescents, which showed a borderline clinical elevation.

Saxon, A.J., Wells, E.A., Fleming, C., Jackson, T.R., & Calsyn, D.A. (1996). Pre-treatment characteristics, program philosophy and level of ancillary services as predictors of methadone maintenance treatment outcome. *Addiction*, 91, 1197-1209.

Predictors of methadone maintenance treatment outcome have not been extensively studied as they relate to variations in program philosophy, nor have such predictors received much examination among recently treated, older cohorts of opioid addicts for whom drug use patterns have changed. Predictors of outcome were examined at 18 months post-treatment entry for 353 admissions to methadone maintenance who received random assignment to one of three counseling conditions (medication only, standard counseling, and enhanced services) and one of two contingency conditions (no contingencies and contingency contracting) in a six-cell 3 x 2 design. Subjects in contingency contracting conditions were placed on contingency contracts for positive urine toxicology results and ultimately discharged for unremitting drug use. All subjects completed the Addiction Severity Index (ASI) and provided weekly urine specimens. Predictors of urinalysis results and treatment retention were determined using bivariate and multivariate techniques. Interactions between subject characteristics by experimental condition assignment

were also examined as predictors. Higher rates of total positive urine specimens were predicted by younger age, greater pre-treatment frequency of smoking cocaine, lower ASI psychiatric composite scores, and higher ASI legal composite scores. Higher rates of opiate-positive specimens were predicted by younger age, lower pre-treatment frequency of alcohol intoxication, higher ASI legal and lower ASI employment and psychiatric composite scores, and assignment to medication only/no contingencies condition. Higher rates of cocaine positives were predicted by younger age, black race, lower ASI psychiatric composite score, greater pre-treatment frequency of intravenous and smoked cocaine, less pre-treatment frequency of marijuana use, and lower methadone dose level. Assignment to enhanced/contingency contracting predicted lower rates of cocaine positives. Treatment retention was predicted by older age, non-black race, lower ASI legal composite score, higher methadone dose level and assignment to non-contingent conditions. While subject variables over which treatment providers have little control were, thus, related to outcome, type of treatment provided and methadone dose also influenced outcome. (Author abstract modified)

Simpson, D.D. (1993). Drug treatment evaluation research in the United States. Psychology of Addictive Behaviors, 7, 120-128.

National studies of treatment effectiveness in the United States during the past 20 years have influenced drug policy decisions about treatment funding, the development of new services components, and evaluation methodologies. The Drug Abuse Reporting Program implemented in the early 1970s was the first national evaluation study of community-based treatment programs. It evolved into a 20-year longitudinal research program that included during-treatment assessments of client performance, evaluations of treatment effectiveness based on outcomes in the years immediately following treatment, and long-term studies of addiction careers. The Treatment Outcome Prospective study began in the early 1980s and is now being followed by the Drug Abuse Treatment Outcome Study in the 1990s. These multisite and multimodality studies have helped establish broad-based evidence for treatment efficacy and directions for new studies in the United States.

Simpson, D.D., & Friend, H.J. (1988). Legal status and long-term outcomes for addicts in the DARP follow-up project. Compulsory Treatment of Drug Abuse: Research and Clinical Practice. NIDA Research Monograph Series, 86, 81-98.

The Drug Abuse Reporting Program (DARP) served approximately 44,000 drug abusers in the first few years of the 1970s and over the course of several years, a series of studies were conducted on this treatment population. This chapter examines these longitudinal data concerning the influence of judicial status on client performance during and after treatment. The question posed for the research was "Does the pretreatment legal status of addicts relate to length of stay in DARP treatment, to why they left treatment, and to their behavioral performance after treatment?" With few exceptions, the researchers found that pretreatment legal status did not predict subsequent outcomes. Within each separate treatment modality (methadone maintenance,

therapeutic community, outpatient drug-free, and outpatient detoxification programs), the length of time in treatment, reasons for discharge, and posttreatment outcomes were similar for addicts who were legally involved and those who were not. The data represents black and white male daily opioid users.

Teague, G.B., Drake, R.E., & Ackerson, T.H. (1995). Evaluating use of continuous treatment teams for persons with mental illness and substance abuse. Psychiatric Services, 46, 689-695.

Continuous treatment teams serving persons with co-occurring severe mental disorders and substance abuse disorders at seven sites in New Hampshire were evaluated to determine their fidelity to a model based on the Program for Assertive Community Treatment. Continuous treatment teams and standard case management programs at the seven sites were evaluated on 13 criteria for fidelity to the continuous treatment team model over a 27-month period. Data sources included clinicians' activity logs, agencies' management information systems, interviews, observation of staff activity and practices, and clinical records and other documents. The continuous treatment teams scored significantly higher than the case management programs on 10 of the 13 criteria. The teams were more effective than the case management programs in implementing substance abuse treatment. Evaluation of the programs' fidelity to the model criteria allowed differentiation of successfully implemented continuous treatment teams from standard case management and from an unsuccessfully implemented team. The results confirm the need for careful measurement of model implementation and for investigation of organizational issues such as administrative support and clarity of program mission. (Author abstract modified)

Tims, F.M., Fletcher, B.W., & Hubbard, R.L. (1991). Treatment outcomes for drug abuse clients. In R.W. Pickens & C.G. Leukefeld (Eds.), Improving drug abuse treatment (NIDA Research Monograph No. 106, pp. 93-113). Rockville, MD: National Institute on Drug Abuse.

This chapter highlights major themes and significant issues and findings from 6 large-scale, multiprogram studies investigating treatment effectiveness and outcome. The six bodies of research discussed in this chapter represent major investments by NIDA and provide significant findings in understanding treatment effectiveness in and across major modalities. The studies included are: Evaluation of California Civil Addict Program; Evaluation of 1970-71 and 1974 Admission to Phoenix House; Drug Abuse Reporting Program; Treatment Outcome Prospective Study; Methadone Research Project; and Drug Abuse Treatment Outcome Study. (NCADI abstract modified)

Tims, F., & Ludford, J. P. (1986). Drug Abuse Treatment Evaluation: Strategies, Progress, and Prospects. Rockville, MD: National Institute on Drug Abuse.

The Research Analysis and Utilization System (RAUS) is designed to: (1) collect and classify National Institute on Drug Abuse (NIDA) research findings; (2) evaluate the findings in selected areas of particular interest; (3) disseminate findings to researchers in the field and to administrators, planners, instructors, and others who are interested; and (4) provide a feedback mechanism to NIDA staff and planners. Significant research on drug abuse treatment evaluation was reviewed, including the Drug Abuse Reporting Program (DARP) conducted during the 1970s and on the more recent Treatment Outcome Prospective Study (TOPS).

Tonigan, J.S., Miller, W.R., & Brown, J.M. (1997, July). The reliability of Form 90: An instrument for assessing alcohol treatment outcome. Journal of Studies on Alcohol, *58*, 358-364.

Project MATCH is a randomized clinical trial consisting of five outpatient and five aftercare units at nine sites. Of importance in this multisite trial examining the efficacy of client-treatment matching was the cross- and within-site reliability of the structured interview used to assess alcohol treatment outcomes, the Form 90. Evaluation of the reliability of Form 90 is the subject of this article. The reliability of Form 90 was evaluated in two test-retest studies. The cross-site reliability study consisted of 70 paired test-retest interviews conducted by different interviewers. Clients for this study were recruited from inpatient, outpatient, and college settings. The within-site reliability study had a total of 108 paired test-retest interviews, with 54 of the retests conducted by different interviewers and 54 by the same interviewer. Clients for this study were most often presenting for alcohol treatment at the nine sites and were selected to be representative of the larger Project MATCH sample. Good-to-excellent reliability was found for all key summary measures of alcohol consumption and psychosocial functioning, and most frequently used illicit drugs had moderate reliability. No decay in consistency of self-reported drinking was found at more distal points from dates of test-retest interviews. Application of 68 percent confidence intervals for primary alcohol consumption measures suggests that trained researchers and clinicians can obtain consistent information regarding client drinking. Conclusions: Form 90 appears to be a reliable instrument for alcohol treatment assessment research when interviewers have received careful training and supervision in its use. (Author abstract modified)

Welte, J.W., Perry, P., Longabaugh, R., & Clifford, P.R. (1998). An outcome evaluation of a hospital-based early intervention program. Addiction, *93*, 573-581.

An evaluation was conducted to determine the effectiveness of the Health Care Intervention Service (HIS), an early intervention program for general hospital patients with alcohol dependence or at risk for alcohol dependence. HIS consists of screening, assessment, and assignment to either full or risk-reduction intervention. Full intervention includes a referral to treatment. Outcomes were compared across three groups: those who received a full intervention,

those who received a risk-reduction intervention, and a comparison group of similar patients from hospitals with no HIS program. Patients were screened for alcohol involvement and interviewed during their hospitalization (prior to the intervention in HIS hospitals) and again 6 months following the intervention. Full intervention was effective in increasing the probability of abstinence, reducing the number of heavy drinking days, and encouraging patients to accept the referral to treatment. Risk-reduction intervention was effective in reducing alcohol consumption and consequences, but only for those patients who had some signs of dependence at the first interview. HIS has demonstrated its effectiveness in a “real world” bureaucratic and clinical environment. (Author abstract modified)

Wexler, H.K., Falkin, G.P., Lipton, D.S., & Rosenblum, A.B. (1992). Outcome evaluation of a prison therapeutic community for substance abuse treatment. In C.G. Leukefeld & F.M. Tims (Eds.), Drug abuse treatment in prisons and jails (NIDA Research Monograph No. 118, pp. 156-175). Rockville, MD: National Institute on Drug Abuse.

The rationale for the establishment of the Stay’n’Out prison therapeutic community (TC) derived from outcome research on community-based TCs. One of the justifications for the establishment of the Stay’n’Out program was to test the efficacy of the time-in-program (TIP) variable within an environment where residents are likely to stay longer than 3 months. A study was conducted to rigorously evaluate the effectiveness of prison-based TC treatment and assess the TIP hypothesis. This is the first large-scale, long-term study providing convincing evidence that prison-based TC treatment, such as Stay’n’Out, can produce significant reductions in recidivism rates. The TC approach was more effective than other prison treatment modalities, and the longer that Stay’n’Out clients remained in the prison TC program, the more successful they were after release. There was an unexpected decline in positive outcomes for the more-than-12-month TC clients, possibly suggesting a dosage model whereby greater exposure to treatment produces a positive effect up to the point of satiation.

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