A CASE MANAGEMENT TREATMENT PROGRAM FOR DRUG-INVOLVED PRISON RELEASEES

STEVEN S. MARTIN JAMES A. INCIARDI University of Delaware

This article considers the application of the case management model for community-based treatment of prison releasees. The case management model has been successfully applied to rehabilitation in the social work and mental health fields. The analogies to issues of building protective factors and relapse prevention suggest a direct application to the treatment of drug abusers, and the monitoring components of case management parallel many of the desired supervisory functions of parole and probation. This article reviews the rationale, potential, and few existing applications of case management approaches for criminal justice clients. It then presents findings from an ongoing outcome evaluation of a case management program for parolees. Both the positive and negative results from this study suggest that case management treatment, when mandated in the context of criminal justice supervision, shows promise in reducing relapse to drug use and recidivism.

In the face of rapidly escalating numbers of drug-involved inmates, treatment programs have received renewed interest among policymakers. After losing favor in the 1970s, treatment is once again seen as a potential alternative to incarceration and as a means of intervening in the revolving-door process of relapse to drug use, renewed criminal activity, and rearrest, a pattern that characterizes many offenders. Research on treatment efficacy, however, has lagged behind the resurgence of treatment programs. With few exceptions, the research that exists has focused on in-prison treatment rather than on clients under supervision in the community. However, in the process of reentering the community, former users face the risk factors, life stresses, and availability of drugs likely to lead to relapse to drugs.

An earlier version of this article was presented at the Meetings of the American Sociological Association in Miami, Florida August 17, 1993. This work was sponsored, in part, by PHS Grant #R18 DAO6124, Assertive Community Treatment (ACT) for High Risk Drug Users, a research demonstration grant from the National Institute on Drug Abuse.

Inmates who have histories of chronic drug abuse face many difficulties in reentering the community, whether their justice mandate involves return to the outside community through work release, parole, or some other form of supervised custody. In addition to such complications as reestablishing ties with family, finding stable employment, and providing for life's necessities, former users face the likelihood of relapse to drugs, and active users must deal with the obstacles associated with a continuing addiction career. With renewed or enduring drug use comes criminal activity and a high probability of rearrest. The odds of breaking the drugs/crime connection are even more problematic for those who inject drugs or who trade or sell sex for drugs because of the high risk for HIV infection they face.

The costs to society, as well, from the failure of so many criminal justice clients to avoid relapse and recidivism are rapidly increasing. The associated costs in human, social, health, and economic terms have expanded dramatically in recent years (Hubbard, Collins, Rachal, & Cavanaugh, 1988). In addition to the social and economic costs of the criminal activity, there are the costs associated with incarcerating more offenders each year. The trend toward incarcerating greater numbers of drug offenders each year, coupled with the high cost of providing health care to an expanding population of HIV-positive inmates, points to the need to intervene in the cycle of relapse and recidivism. Even the community supervision of drug-involved offenders has become a major correctional cost. Given these exigencies, criminal justice policymakers have been examining the efficacy of treatment in reducing relapse to drug use and recidivism.

It is a fact that, for lack of prison space alone, the majority of drug-involved offenders must be supervised in the community rather than in the penitentiary. So community-based treatment alternatives have become attractive. Although some studies (O'Brien, 1987; Simpson & Sells, 1982) suggest some efficacy for traditional, counseling-focused outpatient treatment, other research has suggested that treatment outcome is more likely to be successful when drug use is viewed as having a multitude of symptom patterns involving various dimensions of the individual's life (Lipton, 1989; McLellan, Luborsky, Woody, O'Brien, & Kron, 1981).

This perspective is remarkably akin to the rationale for the case management approach to rehabilitation found in both the social work and mental health fields to improve the delivery of health and social services. The basic case management approach is to assist clients in obtaining needed services in a timely and coordinated manner. The key components of the approach are assessing, planning, linking, monitoring, and advocating for clients within the existing nexus of treatment and social services (Bagarozzi & Pollane, 1984). As a treatment tool, case management has been increasingly employed

in a variety of fields for clients who have chronic, multiple problems and whose treatment and service needs are quite complex. This is particularly the case in situations where the available social service delivery systems are highly bureaucratized, and the services provided are fragmented and scattered across both geographical and social service "turf."

As such, the process of linking consumer to services becomes the most salient characteristic of case management. Cohen, Nimec, Cohen, and Farkas (1988) note in a major training package for case management that

— the heart of case management is the linking activity. When linking clients to services, the case manager arranges for the client's use of preferred service providers. The linking activity is more than referring and forgetting. The case manager presents the client's assets and overcomes objections to ensure the service provider's acceptance of the client. (p. 223)

In this manner, case management moves beyond a passive referral system to emphasize the need to follow the client's progress and intervene on the client's behalf when necessary.

In many ways, the linkages between treatment and other primary services needed by the client can best be accomplished when case management takes on both treatment and linking functions. This has been attempted in the mental health field with the continuity of care model for the community treatment of the chronically mentally ill that originated in Madison, Wisconsin, during the early 1970s (Test, Knoedler, & Allness, 1985). Often referred to as "assertive case management," the program's focus is proactive—to go out to help the client reenter the community by providing "in vivo treatment" in small client to staff ratios (Bond, Witheridge, Dincin, & Wasmer, 1991). Treatment goes beyond counseling to include material, interpersonal, and moral support in the areas of education, vocational training, use of leisure time, and self-care in dealing with the stresses and pressures of interpersonal living. Basic components of the approach (Anthony & Margules, 1974; Butler, Terwillinger, Faulkner, Field, & bray, 1984; Thompson, Griffith, & Leaf, 1990) include the following:

- a. counselors actively keeping track of their clients with numerous face-toface contacts, rather than waiting for problems to arise
- b. staff being available to clients at all times
- c. staff treating clients normatively
- d. counselors having access to instrumental support for clients (e.g., job training, rent and food money, tools for work, transportation, child care)
- e. providing the more traditional forms of treatment, rehabilitation, and support group services.

Although evaluations of case management approaches with the mentally ill are limited (Fisher, Landis, & Clark, 1988), the results are generally positive (Bond, Miller, Krumwied, & Ward, 1988; Goering, Farkas, Wasylenkl, Lancee, & Ballantyne, 1988; Olfson, 1990; Rapp & Chamberlain, 1985; Stein & Test, 1989; Test, 1981).

CASE MANAGEMENT AND DRUG-INVOLVED TREATMENT CLIENTS

Similarities between the chronic mentally ill and chronic drug users suggest the potential value of assertive case management in the drug abuse field. Both populations require treatment and a comprehensive network of continuing support to interrupt the relapse cycle and allow the client to remain stabilized in the community. The prevention of relapse has challenged the addiction treatment field despite several decades of research (Marlatt & Gordon, 1985; Vaillant, 1988).

Mental health clients and substance abusers in treatment both may require a variety of rehabilitative services to "treat" the multiple areas of their lives affected by their disorders. Both groups are likely to have problems accessing and negotiating on their own to get the services they need. It seems natural, therefore, to apply to both types of clients an approach that stresses multimodal and holistic methods of assessment, managerial, and treatment services. The assertive framework of the continuity-of-care model may be particularly appropriate for substance abusers who are not likely to be self-starters in seeking treatment.

Until recently, however, there was little attempt to exploit the similarities by applying case management directly to substance abusers. A decade ago, Ogborne and Rush (1983) discussed the potential for case management linkages in providing treatment and related social services for problem drinkers. Within the last few years, Graham and Birchmore-Timney (1990) advocated for the application of case management techniques in substance abuse treatment. Currently, studies are being carried out, under sponsorship from the National Institute on Drug Abuse, looking at applying case management strategies with different populations of drug users (Mejta et al., in press).

Despite the promise of case management applied to drug users, there are also major differences in translating the case management model from the mental health field and applying it to treating chronic drug abusers. Most obvious is the expectation that, although drug use may be considered a chronic relapsing syndrome, drug users can and should improve. Eventually,

they should cease to need case management assistance. As such, with the exception of programs for the dually diagnosed, most existing case management applications in the drug field have time limits and success goals rather than the continuous availability of help envisioned for the mentally ill.

A second major difference is the difficulty of getting treatment staff to expand the concept of treatment beyond the confines of their offices and clinics. The more traditional, passive convention of waiting for compliant clients to visit counselors in treatment programs is in sharp contrast to the more proactive and even assertive procedures of delivering treatment and support to clients directly in the community. This was a difficult barrier to overcome in the mental health field. It is potentially even more difficult in dealing with drug users where counselors may feel the clients are more responsible for the situation they are in. And if clients are not willing to seek out treatment, they are unlikely to be ready or good candidates for treatment. Unfortunately, there is some evidence that substance abusers are less likely to receive the array of rehabilitative services available to the chronically mentally ill person (Solomon 1986).

CASE MANAGEMENT AND DRUG-INVOLVED PRISON RELEASEES

Given the special needs of prison releasees and the correctional mandate to monitor and supervise many of them in community settings, the use of case management in drug treatment would appear to have great promise. Case management is a process designed to advocate for clients, to deliver needed treatment and social services in a coordinated and efficient manner (Dybal, 1980). The human service delivery network has long since recognized the need to incorporate nontreatment services into community-based initiatives for drug-involved offenders. This is related, furthermore, to the more general movement in corrections toward community-oriented programs (Chavaria, 1992). The most visible and enduring of these efforts is the Treatment Alternatives to Street Crime (TASC) program. Under TASC, community-based supervision is made available to drug-involved individuals who would otherwise burden the system with repeated drug-associated criminality (Inciardi & McBride, 1991). Although the TASC model incorporates elements of assessment, planning, linking, and monitoring, in most instances it does not directly provide treatment, nor does it highlight the advocacy function of case management.

By contrast, the assertive/advocacy capacities of case management initiatives were explicitly incorporated into a treatment research demonstration project funded by the National Institute on Drug Abuse that targeted prison releasees. This effort applied an assertive community treatment (ACT) model for parolees released from the Delaware prison system (Inciardi, Isenberg, Lockwood, Martin, & Scarpitti, 1992). Clients must have a previous history of chronic drug use that placed them at increased risk for HIV infection. The program was developed by NorthEast Treatment Centers (NET) and the University of Delaware, with service delivery provided by NET. The treatment regimen integrated an intensive outpatient biopsychosocial model of drug treatment with the community support system approach to assertive case management.

The Delaware program provided drug treatment and case management in five stages, with the fifth and final stage occurring after approximately 6 months. The first stage involved intake evaluation and assessment; the second stage provided intensive drug treatment, including group counseling, drug and AIDS education and discussion groups, individual counseling, and family assessment therapy; the third included group counseling and life skills planning, with an emphasis on educational and vocational training; the fourth focused all facets of the program on the prevention of relapse; and the fifth, case management, was designed to support the client's transition into normal community life with instrumental support from case managers. More details on the stages of the program are available elsewhere (Martin, Isenberg, & Inciardi, 1993).

The ACT project with Delaware parolees is a research-driven initiative, structured to assess clinical efficacy and relative effectiveness in addressing the problems of clients with drug use and HIV risk behaviors. The original plan called for selecting parolees with histories of injecting drugs or other drug-related HIV risk factors. At the time of release from prison, the parolees were randomly assigned to either the ACT project or conventional parole. Data from a variety of assessments and from HIV and urine tests were and are being used to determine outcome. If the program fails to produce discernible improvements in reducing relapse and recidivism, it will suggest looking elsewhere for more promising treatment alternatives. Currently, there are 456 subjects who have completed the baseline interview and 258 subjects who have completed both the baseline and 6-month follow-up interviews. The follow-up cases consist of 114 releasees who were assigned to the ACT program and 144 others who have been followed as a comparison group.

Preliminary analyses from the 6-month follow-up data find limited support for the effectiveness of the ACT program. Some of these results were reported earlier (Martin & Scarpitti, 1993). In a more recent series of logistic

TABLE 1: Significant Predictors of Logistic Regression Outcomes for ACT Clients and Comparison Group

| Independent Variables | Outcome Variables | | | |
|------------------------|-------------------|--------------------|--------------------|----------|
| | Relapse | Injection Drugs | Unprotected Sex | Rearrest |
| ACT group | | | n.s. | + |
| African American | n.s. | n.s. | _ | + |
| Female | n.s. | + | n.s. | n.s. |
| Age | | + | n.s. | _ |
| Previous arrests | + | + | n.s. | + |
| Drug use before prison | + | + | n.s. | + |
| Past drug treatment | n.s. | n.s. | n.s. | n.s. |
| Treatment since prison | _ | n.s. | n.s. | n.s. |

NOTE: A minus (-) indicates a significant negative effect, a plus (+) indicates a significant positive effect, and n.s. indicates that the effect is not significant (p < .10).

regression analyses, effects of the ACT program were examined for the following four dichotomous outcomes: RELAPSE to drug use, relapse to INJECTION DRUGS, significant involvement in UNPROTECTED SEX, and REARREST. A dummy variable for selection into the ACT program was first entered into the model, then the analyses controlled for other putative variables: age, gender, ethnicity, previous drug use, previous treatment history, previous arrest record, and length of time in treatment between baseline and the 6-month follow-up. A summary of these analyses is presented in Table 1.

Without going into the analysis in detail, the general finding was that ACT assignees did not differ appreciably from the comparison group in predicting relapse to illegal drug use or likelihood of being rearrested. None of the independent variables appears to be a very powerful predictor of UNPRO-TECTED SEX. Three of the independent variables were strong and consistent predictors of likelihood of relapse (both general and to injection drugs): frequency of drug use in the 6 months prior to prison, number of previous arrests, and age. Being female was significantly related to relapse to INJEC-TION DRUG USE. Being Black was significantly related to likelihood of REARREST. As for assignment to the ACT program, there were modest reductions in the likelihood of relapsing to illegal drugs or injection drugs among the ACT assignees when contrasted with the comparison group, but a *positive* relationship with likelihood of rearrest among the ACT assignees, relative to the comparison group. An examination of the relative risk ratios suggest that none of the effects of the ACT assignment are very large.

DISCUSSION

These analyses are still very much preliminary, and results may change with the completion of the 6-month follow-up database and the examination of longer-term effects in the 18-month follow-up interview. However, there are some obvious problems with the project that limited the potential for successful outcomes. Some consideration of these may be instructive to other projects. Although the project put into place all of the necessary components of an assertive case management initiative, subsequent process evaluation has identified some significant shortcomings that have likely affected success rates in the preliminary data.

Because the project was funded under a federal research demonstration effort, special protections for prisoners as research subjects were mandated. Among these was the requirement that participation in treatment be voluntary. As such, clients could not be offered treatment as either a means for early parole or as a *condition* of parole. This inability to require participation in treatment severely affected retention (Martin & Scarpitti, 1993). ACT clients were free to leave the program at any time; no form of coercion and only the benefit of treatment could be offered to induce prolonged participation.

In fact, some of the clients assigned to the program never made contact with it, others failed to fully connect and engage with it, and many others dropped out prematurely. And the data indicate that voluntary participation did lead to differences between the ACT assignees and the comparison group. Comparing baseline data on the ACT assignees and the comparison group, those who did agree to participate in ACT were more likely to be African American, more likely to be male, more likely to have been heavy drug users in the 6 months prior to prison, less likely to have a high school education, and less likely to have had prior treatment. To some extent, these differences can be statistically controlled in the multivariate analyses, but they do point out the difficulty of establishing equivalent comparison groups in such naturalistic experiments.

Second, there is the matter of the random assignment itself (see Inciardi et al., 1992; Scarpitti, Inciardi, & Martin, 1993). A major difficulty involves the use of random assignment in drug treatment research, particularly in environments where releasing high-risk people from prison is unpopular. Moreover, there are a variety of ethical and practical considerations. For example, some inmates wishing to be in the ACT program were assigned to the control group; some inmates assigned to the ACT intervention were not those whom clinical personnel would normally classify as ready for treatment; some of those assigned to the control group sought treatment on their

own or were referred to separate programs by correctional officials and parole officers.

Taking this one step further, it can be argued that random assignment can compromise the treatment evaluation initiative. In the real world of drug abuse treatment, program staff members choose the clients they feel are ready for treatment and are appropriate for their particular modality. Random assignment does not allow for client selection. As a result, inappropriate clients are assigned to treatment groups, often undermining the effects of treatment and contaminating the treatment environment. Consequently, conclusions made about treatment conducted with the context of research may not necessarily apply to treatment conducted apart from a research design.

A final problem was the fact that the intervention was less "assertive" than planned. At the outset, ACT counselors and case managers were less willing to reach out to clients who, because of the random selection, were not actively seeking treatment (Scarpitti & Pan, 1992). Moreover, treatment and managerial personnel often experience more difficulty in dealing with drug users compared to the mentally ill or the homeless. It proved even more problematic for case managers to work with prison releasees because of their fears of greater physical risk and, at times, their pronounced feelings that the clients were in great part responsible for their precarious situations.

CONCLUSION

Despite the limitations of being unable to mandate or encourage participation by clients in the full program, the Delaware ACT project has helped to reduce client injection drug use and HIV risk behaviors within a particularly difficult treatment population—criminal justice clients under parole supervision (Martin & Gossweiler, 1993; Martin & Scarpitti, 1993). However, these analyses do suggest that, as Simpson, Savage, and Lloyd (1979) suggested some years ago, outpatient case management is not the best alternative for the primary treatment of prison releasees with extensive histories of substance abuse. Data from this and other projects suggest that drug-involved offenders are a highly troubled population (Inciardi & Martin, 1993; Leukefeld & Tims, 1992). There is evidence that many of the drug offenders seen in America's jails and prisons are victims of child physical and sexual abuse (Glantz & Pickins, 1992; Levy & Rutter, 1992; Roth, 1991; Wallace, 1991, 1992). In the vast majority of drug offenders, there are cognitive problems; psychological dysfunction is common; thinking may be unrealistic or disorganized; values are misshapen; and, frequently, there are deficits in educational and employment skills (Blume, 1989; Christie et al., 1988; Clark & Zwerben, 1989; Cloninger & Guze, 1970).

As such, drug abuse may be a response to a series of social and psychological disturbances. Treatment that does not address the root causes may be ineffective. Long-term residential treatment, rather than case management, would appear to be the more appropriate approach for these clients. Assertive case management holds better promise as an aftercare approach for drug-involved offenders following more intensive and extensive primary treatment.

In any case, the practical limitations of the inability to require participation precluded an ideal test of the ACT intervention. The possibility of treatment (with appointments, obligations, and regulations), all voluntary, and with no effective carrot or stick to encourage participation, simply did not appeal to most parolees after release from prison. From both a research and a treatment perspective, this points to the need to devise means to retain criminal justice clients in treatment. One consensual finding from treatment research is that the longer a client stays in treatment, the better the outcome in terms of decline in drug use and criminality (Anglin & Hser, 1990). One of the few advantages of dealing with criminal justice clients is the potential to coerce treatment. Studies consistently demonstrate that success in treatment is a function of length of stay (Collins & Allison, 1983) and that those coerced into treatment do at least as well as voluntary commitments (Hubbard et al., 1989; Leukefeld & Tims, 1990).

As a final point, case management can encourage substance abusers to stay in treatment and to reach treatment goals (Kofoed, Tolson, Atkinson, Toth, & Turner, 1986). If case management is combined with legal sanctions to enforce participation and monitoring (parole and probation stipulations), the potential to retain prison releasees in treatment and to get them services will be greatly increased.

AUTHORS: PLEASE PROVIDE SHORT BIOS.

NOTES

- 1. NorthEast Treatment Centers (NET) is a nonprofit social service organization headquartered in Philadelphia, and operates over 25 programs in the Delaware Valley. NET provides a continuum of care for both substance abusers and troubled adolescents, including short- and long-term residential treatment, outpatient and intensive inpatient treatment, case management services, group homes, foster care, and in-home detention. NET also offers a variety of specialized programming for women, adult, and juvenile criminal justice clients and other high-risk populations.
- 2. For details on the theoretical rationale and practical potential for applying an assertive case management program to parolee clients, see Martin, Isenberg, and Inciardi (1993).

REFERENCES

- Anglin, M. D., & Hser, Y. (1990). Treatment of drug abuse. In M. Tonry & J. Q. Wilson (Eds.), Drugs and crime (pp. 393-460). Chicago: University of Chicago Press.
- Anthony, W., & Margules, A. (1974). Toward improving the efficacy of psychiatric rehabilitation: A skills training approach. Rehabilitation Psychology, 21, 101-105.
- Bagarozzi, D. A., & Pollane, L. P. (1984). Case management in mental health. Health and Social Work, 9, 201-211.
- Blume, S. (1989). Dual diagnosis: Psychoactive substance abuse and personality disorders. Journal of Psychoactive Drugs, 21(2), 139-144.
- Boñd, G. R., Miller, L. D., Krumwied, R. D., & Ward, R. S. (1988). Assertive case management in three CMCHs: A controlled study. Hospital and Community Psychiatry, 39, 411-418.
- Bond, G. R., Witheridge, T. F., Dincin, J., & Wasmer, D. (1991). Assertive community treatment: Correcting some misconceptions. American Journal of Community Psychology, 19, 41-51.
- Chavaria, F. R. (1992, March). Successful drug treatment in a criminal justice setting: A case study. Federal Probation Quarterly, pp. 48-52.
- Christie, K. A., Burke, J. D., Regier, D. A., Rae, D. S., Boyd, J. H., & Locke, B. Z. (1988). Epidemiologic evidence for early onset of mental disorders and higher risk of drug abuse in young adults. *American Journal of Psychiatry*, 145, 971-975.
- Clark, H. W., & Zwerben, J. E. (1989). Legal vulnerabilities in the treatment of chemically dependent dual diagnosis patients. *Journal of Psychoactive Drugs*, 21(2), 251-258.
- Cloninger, R., & Guze, S. B. (1979). Psychiatric illness and female criminality: The role of sociopathy and hysteria in antisocial women. American Journal of Psychiatry, 127, 79-87.
- Cohen, M. R., Nimec, P. B., Cohen, B. F., & Farkas, M. (1988). Psychiatric rehabilitation trainer package: Case management. Boston: Boston University Center for Psychiatric Rehabilitation.
- Collins, J. J., & Allison, M. (1983). Legal coercion and retention in drug abuse treatment. Hospital and Community Psychiatry, 34, 1145-1149.
- Cutler, D. L., Terwillinger, W., Faulkner, L., Field, G., & Bray, D. (1984). Disseminating the principles of a community support program. Hospital and Community Psychiatry, 35, 51-55.
- Dybal, L. (1980). Case management in selected Wisconsin counties. (Human Services Development Series). Madison, WI: Department of Health and Human Services.
- Fisher, G., Landis, D., & Clark, K. (1988). Case management service provision and client change. Community Mental Health Journal, 24, 134-142.
- Glantz, M., & Pickins, R. (Eds.). (1992). Vulnerability to drug abuse. Washington, DC: American Psychological Association.
- Goering, P. N., Farkas, M., Wasylenkl, D. A., Lancee, W. J., & Ballantyne, P. (1988). Improved functioning for case management clients. Psychological Rehabilitation Journal, 12, 3-17.
- Graham, K., & Birchmore-Timney, C. (1990). Case management in addictions treatment. Journal of Substance Abuse Treatment, 7, 181-188.
- Hubbard, R. L., Collins, J. J., Rachal, J. V., & Cavanaugh, E. R. (1988). The criminal justice client in drug abuse treatment. In C. G. Leukefeld & F. M. Tims (Eds.), Compulsory treatment of drug abuse: Research and clinical practice (National Institute on Drug Abuse Research Monograph No. 86, pp. 57-81). Rockville, MD: National Institute on Drug Abuse.
- Hubbard, R. L., Marsden, M. E., Rachal, J. V., Harwood, H. J., Cavanaugh, E. R., & Ginzburg, H. M. (1989). Drug abuse treatment: A national study of effectiveness. Chapel Hill: University of North Carolina Press.
- Inciardi, J. A., Isenberg, H., Lockwood, D., Martin, S. S., & Scarpitti, F. R. (1992). Assertive community treatment with a parolee population: An extension of case management. In R.

- Ashery (Ed.), Case management in drug abuse treatment (National Institute on Drug Abuse Research Monograph No. 127, pp. 350-367). Rockville, MD: National Institute on Drug Abuse.
- Inciardi, J. A., & Martin, S. S. (1993). Drug abuse treatment in criminal justice settings. *Journal of Drug Issues*, 23(1), 1-6.
- Inciardi, J. A., & McBride, D. C. (1991). Treatment alternatives to street crime (TASC): History, experiences, and issues. Rockville, MD: National Institute on Drug Abuse.
- Kofoed, L., Tolson, R., Atkinson, R., Toth, R., & tumer, J. (1986). Outpatient treatment of patients with substance abuse and coexisting psychiatric disorders. American Journal of Psychiatry, 143, 867-872.
- Laukefeld, C. G., & Tims, F. M. (1990). Compulsory treatment for drug abuse. *International Journal of the Addictions*. 25, 621-640.
- Leukefeld, C. G., & Tims, F. M. (1992). The challenge of drug abuse treatment in prisons and jails. In C. G. Leukefeld & F. W. Tims (Eds.), Drug abuse treatment in prison and jails (National Institute on Drug Abuse Research Monograph No. 118, pp. 1-7). Rockville, MD: National Institute on Drug Abuse.
- Levy, S. J., & Rutter, E. (1992). Children of drug abusers. New York: Lexington Books.
- Lipton, D. S. (1989, October). The theory of rehabilitation as applied to addict offenders. Paper presented at the What Work's Conference, New York City.
- Marlatt, G. A., & Gordon, J. R. (Eds.). (1985). Relapse prevention: Maintenance strategies in addiction behavior change. New York: Guilford.
- Martin, S. S., & Gossweiler, R. S. (1993, March). Alcohol use and treatment success among injection drug users. Paper presented at annual meeting of the Eastern Sociological Society, Boston.
- Martin, S. S., Isenberg, H. & Inciardi, J. A. (1993). Assertive community treatment (ACT): Integrating intensive drug treatment with aggressive case management for hard to reach populations. In J. A. Inciardi, F. M. Tims, & B. W. Fletcher (Eds.), *Innovative approaches* in the treatment of drug abuse: Program models and strategies (pp. 97-108). Westport, CT: Greenwood.
- Martin, S. S., & Scarpitti, F. R. (1993). An intensive case management approach for paroled IV drug users. *Journal of Drug Issues*, 23(1), 43-59.
- McLellan, A. T., Luborsky, L., Woody, G. E., O'Brien, C. P., & Kron, R. (1981). Are the "addict-related" problems of substance abusers really related? *Journal of Nervous and Mental Disease*, 169, 232-239.
- Mejta, C. L., Bokos, P. J., Mickenberg, J. H., Maslar, E. M., Hasson, A. L., Gills, V., O'Keefe, Z., Martin, S. S., Isenberg, H., Inciardi, J. A., Lockwood, D., Rapp, R. C., Siegal, H. A., Fisher, J. H., & Wagner, J. H. (in press). Approaches to case management with substance abusing populations. In *The addictions looseleaf*.
- O'Brien, C. P. (1987). Treatment research, drug abuse and drug abuse research. In *The second triennial report to Congress from the secretary*, (DHHS Publication No. ADM 87-1195, pp. 59-75). Rockville, MD: National Institute on Drug Abuse.
- Ogborne, A. C., & Rush, B. R. (1983). The coordination of treatment services for problem drinkers: Problems and prospects. British Journal of the Addictions, 78, 131-138.
- Olfson, M. (1990). Assertive community treatment: An evaluation of the experimental evidence. Hospital and Community Psychiatry, 41, 634-641.
- Rapp, C. A., & Chamberlain, R. (1985). Case management services for the chronically mentally ill. Social Work, 30, 417-422.
- Roth, P. (Ed.). (1991). Alcohol and drugs are women's issues. Metuchen, NJ: Women's Action Alliance.

- Scarpitti, F. S., Inciardi, J. A., & Martin, S. S. (in press). Assertive community treatment: Obstacles to implementation. In J. A. Inciardi (Ed.), Innovative approaches to drug abuse treatment: Implementation issues and problems. Westport, CT: Greenwood.
- Scarpitti, F. S., & Pan, H. (1992). Preliminary report: Process evaluation of the ACT program. Unpublished manuscript.
- Simpson, D. D., Savage, J., & Lloyd, M. r. (1979). Follow-up evaluation of treatment of drug abuse during 1969 to 1972. Archives of General Psychiatry, 36, 772-780.
- Simpson, D. D., & Sells, S. B. (1982). Effectiveness of treatment for drug abuse: An overview of the DARP research program. Advances in Alcohol and Substance Abuse Treatment, 2, 7.79
- Solomon, P. (1986). Receipt of aftercare services by problem types: Psychiatric, psychiatric/ substance abuse and substance abuse. Psychiatric Quarterly, 58(3), 180-188.
- Stein, L. I., & Test, M. A. (1980). Alternative to mental hospital treatment. Archives of General Psychiatry, 37, 392-412.
- Test, M. A. (1981). Effective community treatment of the chronically mentally ill: What is necessary? *Journal of Social Issues*, 37, 71-86.
- Test, M. A., Knoedler, W. H., & Allness, D. J. (1985). The long-term treatment of young schizophrenics in a community support program. In L. I. Stein & M. A. Test (Eds.), Training in community living—Ten years later (pp. 17-27). San Francisco: Jossey-Bass.
- Thompson, K. S., Griffith, E. E., & Leaf, P. J. (1990). A historical review of the Madison Model of community care. Hospital and Community Psychiatry, 41, 625-634.
- Vaillant, G. E. (1988). What can long-term follow-up teach us about relapse and prevention of relapse in addiction? *British Journal of Addiction*, 83, 1147-1157.
- Wallace, B. C. (1991). Crack cocaine: A practical treatment approach for the chemically dependent. New York: Brunner/Mazel.
- Wallace, B. C. (Ed.). (1992). The chemically dependent: Phases of treatment and recovery. New York: Brunner/Mazel.