Substance Abuse and Mental Health Services Administration

Center for Substance Abuse Treatment

Comprehensive Case Management for Substance Abuse Treatment

Treatment Improvement Protocol (TIP) Series

27

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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
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4 Evaluation and Quality Assurance of Case Management Services

Substance abuse treatment programs, including those that receive public assistance, are increasingly operating in a managed care environment. Policymaking and clinical decisionmaking in a managed care environment depend on outcome data that have traditionally described the impact of case management and substance abuse treatment interventions in terms of services used and money spent. (See Chapter 6 for more on implementing case management in a managed care setting.) An additional demand for data comes from public and private payers who want services linked to specific outcomes.

In the past, public sector substance abuse programs were not paid to collect such data and were discouraged from using funds designated for service delivery to conduct evaluations. Consequently, evaluation services often were available only through demonstration grants or through the efforts of university-based evaluators. Today, however, many providers plan, fund, and perform their own evaluations. This reflects both the mandates of funding organizations and agencies' desire to refine or improve their services. To prepare treatment programs to get involved in these efforts, this chapter first presents findings from previous evaluation efforts and then proposes a framework for facilitating quality improvement and other evaluative efforts that consider multiple stakeholders and focus on myriad outcomes and data sources.

A Brief Overview of the Research Literature

Researchers only recently have begun to assess the effectiveness of case management. Studies conducted thus far have suffered from significant methodological problems that include small sample sizes, poorly defined or implemented case management interventions, problems in evaluation design and measurement, lack of distinction between case management and comparison interventions, poor timing, and unaccounted-for contextual factors in communities where case management was studied (Orwin et al., 1994). Problems in research design are more than an academic concern—they render results that may be misleading, difficult to interpret, and unreliable for use in developing case management programs or policy.

Although problems in research design affect other kinds of addiction treatment research, case management is especially difficult to evaluate because contextual factors play a critical role in program operations. Case management programs do not function in isolation. A key

component of a successful case management intervention is the establishment of linkages to other agencies in a service network. Some researchers have suggested that the effectiveness of case management may have more to do with the environment in which it functions than with the functions of the program per se (Ridgely and Willenbring, 1992; Morlock et al., 1988). However, in spite of these difficulties, some useful findings have emerged from work in the mental health and substance abuse fields.

Much of the research on case management has been conducted in the mental health field. Reviews of its effectiveness are mixed (Bond et al., 1995; Chamberlain and Rapp, 1991; Rubin, 1992; Soloman, 1995), revealing the need to identify specific program models and expectations about which type of case management works for particular populations and at what cost (Bond et al., 1995). The Assertive Community Treatment (ACT) model currently appears to have the strongest research base for persons with initially high rates of psychiatric hospitalization, both in terms of increased retention in community based treatment programs and in reduced psychiatric in-patient days (Stein and Test, 1980). This model includes a team of case managers who work with clients in an intensive manner to address problems of daily living and who have a long-term commitment to providing services to clients as long as their needs exist (McGrew and Bond, 1995). While the model appears to be effective in reducing psychiatric hospitalization, there is little evidence that the approach results in improved quality of life or level of functioning for the client (Bond et al., 1995; McGrew and Bond, 1995; Olfson, 1990; Soloman, 1992; Test, 1992).

Evaluation of so-called administrative models in which case managers coordinate services but provide little specific clinical care is inconclusive. Some of these programs improved clients' quality of life but did not interrupt patterns of rehospitalization. However, at least one study revealed that administrative case management both increased the use of services and increased costs for clients without a concomitant measure of improvement in clients' lives (Willenbring et al., 1991).

Few studies have been undertaken on case management in the substance abuse field, and it is difficult to generalize the findings of those studies that have. One study in Canada found results similar to those in mental health studies: There are positive, measurable effects of case management, especially for clients with poor prognostic indicators at admission (such as heavy consumption of alcohol and other drugs, previous treatment failures, and lack of social support) (Lightfoot et al., 1982).

Other studies of case management in the substance abuse field have reported few or no differences for case managed clients compared to those in treatment who do not receive case management services (Inciardi et al., 1994; Falck et al., 1994; Hasson et al., 1994). The authors of those studies, however, speculate that implementation and population issues may have affected outcome. Other studies attribute some of these negative findings not to poor case management interventions, but rather to methodological problems in the evaluations (Orwin et al., 1994).

Even in light of the implementation and methodological concerns about case management research, all the studies together with the findings of other addiction research suggest that case management can be an effective enhancement to intervention in and treatment of substance abuse. This is especially true for clients with other disorders, who may not benefit from traditional substance abuse treatments, who require multiple services over extended periods of time, and who face difficulty gaining access to those services.

In addition, research suggests two reasons why case management may be effective as an

adjunct to substance abuse treatment. First, treatment may be more likely to succeed when "drug use is treated as a complex of symptom patterns involving various dimensions of the individual's life" (Inciardi et al., 1994, p. 146). Case management focuses on the whole individual and stresses comprehensive assessment, service planning, and service coordination to address multiple aspects of a client's life. Second, retention in treatment is associated with better outcomes, and a principal goal of case management is to keep clients engaged in treatment and moving toward recovery and independence (Institute of Medicine, 1990). Studies looking at treatment retention and case management posit a positive relationship between the two (Siegal, 1997; Rapp et al., in press).

Case management's ambitious scope is one of the reasons its effectiveness is difficult to measure. Ashery and others have recommended that practitioners in the field maintain reasonable expectations for case management, pay attention to the implementation of programs, and understand the enhancing or limiting factors of the particular service context in which the case management programs are implemented (Ashery, 1994). The field should consider not only how to best research case management but what to expect from it.

Evaluating Case Management Programs

In order for substance abuse programs to ascertain if case management works, the program and its various stakeholders (including funding and regulatory agencies) must specify and measure outcomes they regard as indicators of success.

This section presents options for basic evaluative methods, including documentation of the case management program's progress and measurement of system and individual client outcomes. It concludes by identifying the data needs of various stakeholders. Whether an evaluation is conducted internally by agency personnel, or by experts hired from outside, front-line case managers are the key source of information.

In documenting a case management effort, it is important to start with *benchmarks*—expectations that are made concrete as measurable statements (e.g., "case managers spend 60 percent of their time in face-to-face contact with their clients"). Some of the sources that programs can use to establish benchmarks include

- Policy and procedure manuals
- Federal, State, and local case management standards
- Agency case management program descriptions and mission statements
- Literature on program models (if the program under evaluation is a replication)
- Consultants

If no written manuals or protocols are available, or if it is clear that the program has drifted from its original design, the program managers and staff may use a consensus-development process to arrive at benchmarks.

Measuring Practice

Once the process benchmarks are defined in measurable terms, the next step is to develop and implement a method for measuring practice—to answer the question, "What are case managers doing and how does their practice conform to the benchmarks?" One approach is to maintain a simple staff log that measures case managers' activities by contact. The information should be comparable to the benchmarks and brief enough to ensure compliance and quality of data. Staff log instruments such as the one used by John Brekke and his colleagues (Brekke, 1987) have

been widely adapted and used in the mental health field. They usually record the client's name, location of the contact, duration of the contact, activity, and whether other individuals participated (e.g., staff of other agencies or family members). The brevity and frequency of case managers' contacts with clients makes this measure extremely burdensome, and as a result many programs use time-limited or sampling measures (for example, over a two-week period) to get a "snapshot" of activities.

If time and resources permit, it may be valuable to use several methods of documentation to compare their usefulness and sensitivity. Other methods and purposes include

- Reviews of case manager client records (to evaluate how service planning and referrals adhere to protocols and procedural expectations)
- Interviews or surveys of case managers or clients and their family members (to collect information on activities in which case managers engage, to gauge how clients' and case managers' views of those activities differ)
- Analysis of data from the agency's management information system (to examine patterns on type, number, and duration of case manager contacts with different target populations)

In addition to using multiple methods of documentation, it is important to review case manager activities over time because programs may drift from innovative to familiar patterns of service delivery. In addition, the timing of data collection is crucial. New programs need time to stabilize, and new staff members need a period of orientation before a true picture of program activities can be established.

The key informant survey

Evaluators can use a key informant survey to examine the operations of a program's case management activities. The survey is a fixed series of questions about the functioning of both the case management program and the system of care and is administered to a variety of stakeholders in the community. Different stakeholders are identified by each agency, depending on its particular case management model and the system of care within which it works. Appropriate stakeholders may include, but are certainly not limited to

- Agency staff
- Staff from other substance abuse and human service agencies, homeless shelters, and hospital emergency rooms
- Clients and their family members
- Criminal justice and law enforcement personnel

Survey participants might be asked about their awareness of case management services, their use of these services, types of ongoing contact with the case management program, and their perception of the impact of these services on the community. To ensure a cross section of informed opinion at various points in time, all stakeholders are asked the same questions, and the survey is repeated at several intervals. Such surveys have been used to evaluate systems change in the mental health field (Morrisey et al., 1994) and could be adapted for use in case management programs.

Client satisfaction

Knowing how clients perceive the services they receive is essential to evaluative activities. One can argue that satisfaction with service is related to treatment retention. It is also important to know whether the service provider—in this instance the case manager—and client share a common view of the services being offered and their benefits. For example, did the client feel that the case management services actually led to needed resources? Other questions might focus on client perceptions about those providing the service: Did the case manager

understand their needs and have the skills and experience necessary to help them accomplish their goals?

Such process data have direct utility for program management and development. They may help programs with defining staff training needs and assuring that the needs of the population they are working with are being addressed. Such data are also quite useful for those who have the responsibility for funding programs.

Measuring System Outcomes

Many programs in the managed care environment control access to services through what is called "case management," in which gatekeeping procedures are used to limit clients' use of expensive services such as hospitalization and residential treatment. These programs may be particularly interested in measuring *system-level* outcomes to see whether case management has a systemic effect on the delivery of substance abuse and allied services (e.g., change in patterns of service utilization or costs). Thus, a net reduction in the number of inpatient admissions for substance abuse treatment would, by itself, be defined as a positive outcome. This, of course, may not reflect the needs of all clients.

If the goal is preventing clients from "falling through the cracks" between discharge from detoxification and entry into outpatient substance abuse treatment, a system-level outcome might be measured by continuity of care. Greater continuity could be defined as fewer clients with no outpatient treatment episode after a detoxification discharge, patterns showing shorter periods of time between detoxification discharge and outpatient treatment admission, and fewer people with "revolving door" detoxification admissions. Another case management program may aim for increased access to care for certain target populations (for example, cocaine-abusing pregnant women). In this instance, it would be useful to compare the number of admissions in the target population to all admissions during a specified time period.

In order to measure most system outcomes, it is necessary to track clients within a comprehensive service agency and, if a program's mandate includes managing care across a network of agencies, to gather data on encounters and costs and analyze them. Access to a computerized management information system (MIS) is essential for complete analyses. Although these systems vary widely in their level of sophistication, for this purpose, one must be able to document more than units of service information and should be able to link encounter, claims, and cost data and produce information quickly and easily. Over a period of time, a comprehensive MIS tracks changes in patterns of service utilization and changes in costs, which gives the agency information crucial to management and planning. For example, an MIS that combines utilization and cost data could help identify high utilizers for a program that focuses on clients who use numerous or expensive services. A later section in this chapter describes how a program can evaluate and enhance its MIS system.

Measuring Client Outcomes

While most would agree that "evaluation" is generally worthwhile, there is considerably less agreement about the measurement and documentation of specific outcomes for individual clients. When trying to evaluate case management in an ongoing service agency setting, additional challenges—conceptual, methodological, and ethical—are posed. The field has seen a long-standing and often strident debate about what kinds of outcomes should be measured. Some claim a single measure such as sobriety or complete abstinence from any drug use is the only meaningful measure of treatment success. Others assert that treatment success is

most appropriately measured by a constellation of factors, including diminished alcohol and/or other drug use, improved family functioning, improved occupational functioning, less deviant and/or criminal activity, fewer contacts with the criminal justice system, and improvement on a range of psychological variables. The debate will continue. In the meantime, programs should carefully consider treatment objectives to articulate and then operationalize those outcome variables they want to measure.

Another significant complication arises when trying to evaluate case management activities and client outcomes. A program must be able to articulate the role of case management and how it meshes with other program activities. However, when "standard" client outcomes—such as reduced substance use or fewer contacts with the criminal justice system—are measured, it is very difficult to separate the effects of substance abuse treatment activities from the effects of case management activities.

Finally, conducting research in community-based treatment/service organizations presents significant challenges. Experimentation, that is, comparison and control, is at the heart of any scientific research study. One group—typically defined as the "experimental group"—receives one kind of treatment and the control group does not. The two groups are then compared, and conclusions can be reached about the efficacy of the treatment. However, in the context of community-based treatment, a potentially beneficial service like case management cannot be withheld from some clients. This makes it extremely difficult to definitively attribute specific client outcomes to case management or some other service.

Anticipating Quality Assurance Data Needs

The types of data required for an evaluation of case management, how the data are collected, and the manner in which data are put to use vary among different stakeholders. It is important to understand the types of data that various stakeholders need to evaluate the program. Structured feedback loops should be established to ensure that the data gathered are returned to various stakeholders in some meaningful way so that they have an impact on shaping future program development (and future data needs). One of the benefits of the case management approach is that it can be adapted to meet the sometimes contradictory needs of the various stakeholders.

Data needs of case managers

Although the data needs of case managers may vary from agency to agency, rapid access to data in three particular areas is critical:

- Information about clients currently on the caseload (roster management), including outcome data so case managers have feedback on their performance
- Data that allow case managers to track clients through various services
- Data that produce "flags" for follow-up letters, aftercare, and other time-sensitive functions

In addition to these elements, case managers with gatekeeping or budgeting responsibility need overall service utilization and cost figures by client in order to manage services within a budget. To evaluate process, case managers need access (preferably computerized) to referral networks, bed allocation systems, progress notes, and data related to the daily conduct of their jobs. In terms of outcome data, case managers may want rapid access to client status, especially if it would prompt additional efforts.

Data needs of program managers

Program managers must ensure that the data collected reflect the program mission and facilitate the program's management. While the case manager focuses on individual clients, the

program manager analyzes data elements to see patterns and to flag and investigate "outliers"—those who deviate drastically from the statistical norms of the population.

The initial data needs of program managers reflect concerns with concrete aspects of program operation. To program managers, case management essentially begins when the phone rings, and therefore, their data needs are filled by asking the following basic questions:

- How many inquiries are we getting about services?
- Are we getting clients?
- From what area are our clients?
- Are clients entering care once they make contact?
- Are we responsive to clients' needs from first contact forward?
- Is the type of client changing?

In addition to collecting these initial data, program managers must be able to track clients through their services so they can decide how to alter service provision. Important questions include

- Who is in what level of care at what time?
- How does the service fit with their treatment plans?
- Is the program meeting clients' different cultural needs?
- Who is dropping out, and why?
- What service not currently provided is requested most frequently?
- How much money is being spent on a particular service?

Other questions relate to the program manager's administrative functions, including

- What are the case managers doing? What are their caseloads?
- What are the results of internal monitoring?
- Are we reaching the target populations?
- Are clients retained at the appropriate level of care?

Data needs of community policymakers

Community policymakers may be local government officials, members of community coalitions, representatives of local law enforcement agencies, school board members, or other interested community-based stakeholders. Since they are not often directly associated with treatment programs, they may not have a very sophisticated understanding of program goals and may think of outcomes in terms of questions like "Is the client sober or not?" or "Is there less crime?" They tend to be less interested in improved scores on standardized measures of client functioning than in easily defined and observable outcomes that affect the community, principally

- Taxes—Reducing costs to taxpayers in the areas of incarceration, unemployment, and welfare enrollment and reducing costs of case management and substance abuse treatment by substituting a costly treatment with a less expensive one
- Safety—Reducing neighborhood crime and the number of homeless persons loitering in business districts
- Social costs—Increasing the number of substance abusers who are working and improving care for children of substance abusers

Data needs of directors of State alcohol and drug abuse agencies

Directors of State substance abuse agencies value data elements that describe the overall accessibility, quality, and cost of the substance abuse treatment system. In addition, these directors require data to track and contain the growth of Medicaid and public sector behavioral health care expenditures, to put managed care systems in place, and to evaluate the effect of managed care (including the provision of case management) on the delivery of behavioral health care services.

Key data elements that State directors often want to see in evaluation efforts include

- Patterns of service utilization and costs, including the use of public hospital and residential treatment centers
- Numbers of clients working and withdrawing from welfare and Medicaid
- Numbers of clients avoiding prison, reducing child welfare cases and costs, and reducing food stamp usage
- Numbers of appeals and grievances by clients
- Number and characteristics of substance abuse patients accessing other publicly funded social services

Increasingly, State directors of substance abuse agencies are becoming less isolated and are beginning to look for opportunities to exchange data among previously independent departments (e.g., mental health departments, Medicaid offices, and criminal justice offices). Some State agencies share access to statewide data sets. In addition, the movement toward managed behavioral health care has prompted more integration of data between State Medicaid offices and State substance abuse and mental health authorities.

Data needs of third party payers

Third party payers such as insurance companies need data that justify case management as a cost above and beyond the direct costs of treatment services (see Chapter 6). In addition, when case management is used to coordinate care, third party payers want to know whether clients are receiving the right services, at the right level of care, and in the right sequence, and to ensure that clients who are no longer in need are no longer receiving services. To that end, important data elements include

- The severity of the client's illness
- Assignment to levels of care
- Patterns of service utilization
- Use of free self-help or volunteer organization services
- Urinalysis results, use of other drugs, and scores on standardized outcome indicators
- Discharge determinations

Data needs of clients and family members

Clients and family members may serve on advisory or governing boards of local programs or may be involved in family or peer support groups within the community. They may use outcome data, especially results of client satisfaction surveys, to change programs and policies or to choose services and providers. They may be less interested in patterns of service utilization or standardized scores on outcome evaluations than in how the system functions from the user's perspective. In fact, clients might consider a program successful if it is supportive, reliable, and easily accessible, as opposed to "efficient."

Data elements important to clients and family members include

- The availability and accessibility of services
- The freedom of choice (of services and providers) that the system allows
- The use and effectiveness of the appeals and grievance process
- The influence of input from consumers and family members
- Effectiveness of treatment
- Acceptability of treatment among the targeted populations

Specifically, clients seek answers to the questions

- Am I getting the right services, in the right setting?
- Are there systems I can access myself?
- How appropriate is my care?

Management Information Systems

The management information system contains all this information and allows stakeholders to use it. Managed care has provided the behavioral health care field with an example of how to manage far-flung data on clients.

One evaluation task for local programs is determining how to use data already routinely collected by a statewide MIS or managed care company-based MIS, saving the program from duplicating primary data collection. Another important task is to develop or enhance program-level MIS that track data the program needs locally, integrate with other computer-based or paper-based systems, and supply data required by third party payer and governmental bodies. All staff members of a specific program should be stakeholders in the MIS, which increases both system accuracy and the likelihood that a broad array of staff members will use it. If an agency does not have the resources to develop a sophisticated system, it should be able to automate at least a minimum amount of client information through commercially available software.

Local programs that are part of a managed care network undoubtedly will be included in a larger MIS sponsored by the umbrella provider. Providers who are not part of these networks may need to assess their readiness to take on managed care activities by evaluating their current MIS capabilities. Today, it is critical that an MIS be designed with the data requirements of managed care organizations in mind. The following guidelines, adapted from a Federal technical assistance publication, may help a program determine whether its existing MIS is sophisticated enough to support managed care operations. A program's MIS will suffice if it does each of the following:

- Retrieves patient information online or in less than an hour
- Cross-matches client records, use of services, and financial and insurance information
- Permits individual inquiries from managed care organizations
- Produces information that is used by clinicians, supervisors, and managers
- Integrates information from other programs and sites
- Allows client and service information to be reported to all major payers
- Generates patient invoices (CSAT, 1995d)

An existing MIS that can perform all of the above functions will likely support managed care and program demands; if it cannot, the program needs to strengthen deficient areas. Changes and advancements in data collection and access to patient information must be accompanied by appropriate protections for client confidentiality.

Future Research

Research focused on case management in the substance abuse field is limited and offers many opportunities for local substance abuse programs to make significant contributions to the field. Suggested directions for future research include the following:

- Key ingredients of successful programs, especially for hard-to-reach populations
- Relative cost-effectiveness of particular case management models, including cost outcome results within systems incorporating full parity of substance abuse with other health care, outcome results when a full continuum of care is available to patients, and outcome results associated with use of standardized guidelines for placement, continued stay, and discharge for substance abuse patients
- Improved methodology to investigate research questions in "real world" settings
- Development of brief versions of valid and reliable research outcome instrumentation
- The effect of particular forms of case management on societal costs of substance abuse and its treatment

- Cost shifting among health, behavioral health, criminal justice, and other systems that can be accessed by the target population
- Creative ways to use secondary data sets (such as Medicaid and Medicare) to determine trends and patterns of care
- Research questions from broader sociological or multi-disciplinary perspectives

6 Funding Case Management in a Managed Care Environment

Managed care is "an organized system of care which attempts to balance access, quality, and cost effectively by using utilization management, intensive case management, provider selection, and cost-containment methods" (CSAT, 1995d). Despite the antipathy that many public sector health care providers feel toward managed care, those providers are actually striving toward the same ends using similar means as managed care organizations (MCOs). Many substance abuse treatment providers have been working within a managed care framework for decades, that is, looking at utilization data and developing a continuum of care. Substance abuse treatment providers, particularly those who use case management, have historically recognized the importance of connecting disparate services to meet the needs of clients.

Whatever treatment providers' attitudes toward managed care, they will have to learn to operate within its bounds. More than half the States are currently in the process of adopting some form of managed care to provide behavioral health care services, and more than one-third have received Federal waivers to implement Medicaid managed behavioral health programs, with other waivers planned or pending. Some experts predict that many substance abuse programs, already accustomed to scarcity of resources, will make a smooth transition to a managed care environment. However, many programs, particularly those that operate the least like businesses, may find this an extremely challenging time. The need to be accountable for outcomes, particularly in the face of a tax-conscious public, will undoubtedly increase in the managed care era.

To adapt to the world of managed care, treatment programs must assess how their services are currently delivered and identify which elements should be preserved and which should be modified. They also must have a firm grasp on how changes in Federal and State reforms will affect their current and future funding mechanisms.

Funding Case Management in a Managed Care World

Despite the promise of case management as an important adjunct to substance abuse services, it will not survive without empirical data that support its efficacy. Key decisionmakers must believe that case management is an integral component of treatment service before they will incorporate it into the funding structure. This is especially true of States choosing to offer services through managed Medicaid HMOs. It is also true for people who receive services through Medicare HMOs. (See Chapter 4 for a discussion of program evaluation and measuring outcomes.)

Controlling costs while providing care offers program administrators and case managers an opportunity to demonstrate case management's utility to a newly engaged managed care company. For example, clients with long-term or chronic conditions may be required to move from residential facilities to the community before some treatment providers believe they are ready. In this scenario, case management can prove its value by providing the clients with wraparound or supportive services to aid in a successful transition. As another example, outreach case management can help in the area of relapse prevention and aftercare and thus avert the need for high-cost services like inpatient treatment.

Managed care tools—clinical pathways, standardized assessments, and treatment protocols—can work well in a case management context. The challenge then lies in tailoring services to the unique needs of each consumer and avoiding "cookie cutter" services. Use of these tools can increase case management's attractiveness to program administrators who operate in capitated or other forms of shared-risk environments.

The true test is to develop a comprehensive case management system within a managed care framework with the inherent flexibility and resources necessary to eventually show tangible savings. Only then will an MCO be able to clearly justify case management as a reimbursable service.

Who Decides?

The decision to include case management in the array of treatment services usually rests with a primary funding source or at the program level. As many traditional public sector providers overhaul their delivery systems to participate in managed care, they must recognize the importance of case management as a key element of effective treatment and communicate that to the funding source. If the primary source of funding (usually a State agency) expects or requires specific outcomes that go beyond sobriety or cost containment, then a program administrator must develop ways to measure those outcomes.

To undertake scientifically valid outcomes studies is beyond the reach of most treatment programs. Providers can, however, increase the chances of having case management activities reimbursed if they measure everything that helps the client, such as consumer-run support groups, drop-in centers, or "Compeer" programs, in which volunteers help clients maintain sobriety and manage other aspects of their lives. Keeping good records will allow managed care companies to determine exactly what's being provided—and what constitutes case management.

Funding Models

The multiple players involved in funding public substance abuse treatment have posed complex and ongoing problems for program administrators. Each funding stream has its own eligibility rules, service conditions, and reporting requirements, which frequently differ from those of other agencies supporting a program's operations. Case management services are no exception and have traditionally been funded through a variety of sources as well. These include

- Block grants from Federal agencies
- Medicaid, which included options that allow for non-medical services (e.g., the Medicaid Rehabilitation Option)
- Medicare and Supplemental Security Income (SSI) for disabled clients
- Migrant health funds
- Private foundations and funds, such as United Way
- State and/or local tax dollars
- Private insurance

Far too often, the disparate mandates of these funders have exacerbated system and service fragmentation. Integration of funding streams has emerged as a strategy to meld services and provide continuity of care. Some States, in fact, have used Medicaid managed care initiatives as the catalyst for blending funding streams, particularly in full capitation models.

As States gain more freedom to allocate Medicaid dollars as they see fit, the prospect of increased flexibility in services offered at the program level improves. Programs that can account for funds received in terms of positive client outcomes will be better able to structure their service mix in response to clients' specific needs rather than to the dictates of funding agencies removed from the service delivery level.

Managed care is frequently used as a vehicle for integrating funding streams and for fostering collaboration among health care providers. For example, many managed care organizations establish (or will only contract with) integrated provider networks that

- Offer a full range of services
- Extend coverage over a wider geographical or population area (thus increasing the number of potential enrollees and sharing the financial risk among more providers)
- Maximize efficiencies in areas like management information systems

When providers are organized in such a manner, administrative service organizations are engaged to handle a wide range of business duties for the network.

Blended funding approaches, especially those that give providers the necessary freedom to make clinical decisions while still holding them fiscally accountable, can preserve and support the case management function as an integral facet of modern substance abuse treatment. Capitation or enrollment rates based on genuine costs associated with providing treatment and "stop-loss" clauses that cover such contingencies as reimbursement for longer or more intensive treatment than anticipated may help satisfy the providers' desire for flexibility and the payer's demand for fiscal responsibility.

Substance abuse treatment services are treated in different ways depending on which overarching health care delivery model is implemented by the State or by the managed care organization(s) contracted to provide behavioral healthcare. The two models currently prevailing are the *carve-in* model and the *carve-out* model.

Carve-in models

The *carve-in* model integrates physical (e.g., traditional medical services) and behavioral (e.g., mental health and substance abuse services) health care and is often the model chosen to manage a State's Medicaid population. Although the purchaser of services may elect a carve-in approach, frequently the MCO may elect to carve out behavioral health care by contracts with managed care organizations. This is because behavioral health care tends to be the most expensive cost center of treatment within an integrated, managed care model of treatment. The carve-in model generally appeals to providers because many individuals with mental illness and substance abuse problems also have serious physical health problems. Integrating the two also underscores the notion that since body and brain are part of the same system, mental illness and substance abuse are bona fide health problems.

However, in such a model, case management is often administrative in nature and involves clinical oversight and activities such as utilization review and prior authorization procedures. The primary care physician functions as the case manager or gatekeeper who assesses the range of services the client needs and, ideally, refers him to network providers who offer specialty services. This

happens when the physician is ill-equipped to provide the often labor-intensive, client-specific case management functions needed to successfully manage the client/member.

This model for behavioral health care has two major drawbacks. First, primary care physicians may underdiagnose substance abuse problems, especially in populations such as women (in whom depression is often diagnosed but seldom tied to substance abuse) and the elderly. Lack of knowledge or the desire to hold down costs also may lead to underutilization of services, with consumers denied access to needed care.

Second, since the course and overall treatment costs of behavioral health problems are less predictable than many physical health problems, the ability to establish firm enrollment or capitated rates is difficult. If rates are too low, the problem of inadequately treating or excluding those most in need of costly or long-term care (e.g., clients needing residential treatment) becomes a legitimate concern. When services are subcontracted, *skimming* may become a problem. In this situation, the opportunity exists to cost-shift "difficult" clients to subcontractors who receive only a percentage of the capitated rate. Not only are funds insufficient to provide proper treatment when this happens, but the subcontracting provider's resources are strained to the maximum.

Carve-out models

In *carve-out* arrangements, behavioral health care is considered distinct from other physical problems and is handled either as a separate contract or is intentionally excluded from a managed care plan. If behavioral health care is carved out and handled as a separate managed care account, it is possible to develop capitation or enrollment fees specifically tailored to this population. Carve-outs also provide States with a mechanism to monitor and control the use of substance abuse or mental health funds and some assurance that those problems are being addressed. Ideally, carve-out managed care organizations will have expertise in substance abuse services or will work jointly with providers who possess that expertise. In all cases, State officials must develop specific contract language to carefully define their responsibilities (CSAT's Technical Assistance Publication *Purchasing Managed Care Services for Alcohol and Other Drug Treatment* offers suggestions for assessing managed care approaches and structuring effective contracts for managed care services.)

Case management in a carve-out model is likely to remain a service function, particularly if the responsibility for behavioral health care is delegated to the public sector. Given the trends in behavioral health care, the public sector might be advised to learn from the example of the proprietary, more precise matching of clients and service packages through management information capabilities, some aspects of utilization review procedures, and the development of clinical pathways. These efforts also help providers use their resources wisely and ensure that appropriate and cost-effective services are available to individual consumers. Unfortunately, this method lacks integration with the physical medicine side of treatment, which can lead to ineffective case management and duplication of services by the behavioral health provider and the primary care physician.

Preparing a Program for Managed Care

To adjust their current operations to meet new demands, programs need to assess their systems, appraise their readiness to operate in a managed care environment, and position themselves and their case management services in a competitive market by identifying market niches and preparing for increased staff licensing and accreditation.

Systems Assessment

As discussed in Chapter 1, case management assumes different forms depending on its setting and organizational context. Before integrating with managed care, program directors and administrators need to understand how case management is practiced in their program. Administrators must identify potential buyers of case management services and must stay abreast of plans to integrate Medicaid with public funds and efforts to secure private vendors to manage public behavioral health care services.

Administrators also need to ascertain exactly who their program is serving, the nature and the range of clients' problems, and the gaps between what the program offers and what clients need. They must be able to articulate how these gaps are hindering the successful execution of their programs' mission.

With the blending of systems via managed Medicaid and Medicare, providers are now forced to compete directly with each other. Eventually, all services now delivered by traditional community providers will be delivered within a managed care framework. Currently, many public sector providers of services to people under Medicaid managed care guidelines (for managed care companies) are providing administrative and clinical case management services for a "fixed," "blended," or "bundled" rate. That rate is a small piece of the pie that comprises the total per-member capitation payment the provider receives and usually is not assigned a specific dollar value.

What is the program doing?

As a first step in organizational assessment, administrators must clearly define the case management model(s) being used in the program. At the agency level, community needs and available resources must be reviewed. Often case management services are subsumed under the general category of "the costs of doing business." Under managed care, it is important to know precisely what services are being offered, what they cost, and what outcomes can reasonably be expected. Case management must be scrutinized both as a stand-alone activity and as part of a total package of services potentially available to consumers. The importance of auditing the costs and revenues associated with various services cannot be over-emphasized, particularly if a system is moving toward a capitated or shared-risk paradigm. Case management, whether a direct service or administrative function, must add value and provide cost benefit to justify its inclusion in the total array of services.

Clinical case management must demonstrate direct or indirect benefits above those that consumers can expect from traditional services. The gatekeeping function in administrative-level case management limits the discretion and treatment planning authority of a substance abuse professional. Offsetting this disadvantage, ideally, are two systemwide advantages: reduced costs by denying unnecessary services and by providing support for people in the community so that they do not need more expensive residential or inpatient care, and better clinical decisionmaking. The gatekeepers' decisions are based on established clinical pathways and protocols—the goals of this standardization being improved care as well as lowered costs.

Who is paying for case management?

Reimbursement for the case management aspects of treatment may come from one or all of the following sources:

- Private managed-care organizations (MCOs)
- Fee-for-service clients
- Private payers such as corporate employee assistance programs, foundations, and grant funding
- Volunteer and local sources
- Courts and criminal justice funding
- Social service providers (e.g., child welfare)

- User taxes and State and federally appropriated funds

Providers should understand exactly how these funding streams are integrated or separated, as well as the inherent flexibility in their use. Such knowledge will help design a case management program and will also help in advocacy efforts to shape State policy on funding streams.

How does the program model fit within the system?

It is equally important for providers to understand how case management is defined in their State's managed care contract, if at all. What specific activities are considered case management and are they reimbursable? If they are reimbursable, are there limits on the number of billable units per consumer? Is there a finite pool of funds available on a fee-for-service basis? Given the melding of clinical and fiscal functions at the provider level, it is also critical to consider who benefits from case management and who does not. What is a reasonable length of time to offer services to a consumer? It is imperative that program staff grapple with these questions to best allocate available resources.

Readiness Review

In some cases, conversion to managed care must be accomplished in as little as six months after the enactment of legislation or by corporate decree, so providers must assess their readiness to make this transition rapidly and effectively.

Tools and surveys can help administrators do a readiness review by providing a clear picture of what models they are using and how they fit in the changing environment. One such tool is the *Managed Healthcare Organizational Readiness Guide and Checklist* reproduced in Appendix C. This and similar tools can help agencies evaluate their current operations within each of the following areas

- Program services and structure
- MIS capacities
- Fiscal/financial structures
- Utilization review capabilities
- Program evaluation and quality management
- Staff development and training needs
- Board and management structure
- Marketing
- Licensure and accreditation (CSAT, 1995d)

Identifying Market Niches

In the managed care environment, programs will have to function as businesses and therefore must position themselves and their case management services in a competitive market (Brokowski and Eaddy, 1994). By focusing on the establishment of a market niche like the treatment of special populations (e.g., drug users, criminal justice clients, older adults, clients with HIV and AIDS), an agency can be a player in the transition to managed care. In addition, issues such as staffing, pricing, and salaries can be revisited within the market framework.

Despite its inefficiencies, the public system of behavioral health has more experience and expertise than private programs do in caring for the most seriously disabled populations and in providing services that focus on their everyday life problems, such as employment and housing. Since this chronically needy clientele is least likely to be covered by private employer health plans, it offers a natural market niche for public-sector service providers.

Providers who serve Medicaid and Medicare recipients will see an increase in commercial business as a result of managed care contracts but will primarily be paid indirectly. MCOs will become the main source of revenue for the providers, as opposed to the local or state government. Medicaid and Medicare revenues will flow from the government to the managed care company to the service provider. High-volume providers, who are successful at delivering high-quality, cost-effective services

may even find themselves acquired by the managed care company.

State and Federal governments, in anticipation of the changing public sector system, have been disseminating resources to help publicly funded treatment providers survive and compete in a marketplace dominated by managed care organizations. The Federal Government is also currently designing programs and projects via the Center for Substance Abuse Treatment (CSAT) and the Center for Substance Abuse Prevention (CSAP). The National Leadership Institute Coordinating Center (NLICC) will provide resources, technical assistance, and materials to assist public sector providers in making the internal changes necessary to compete.

Licensing and Accreditation

One of the most controversial aspects of case management is the issue of licensing. Many believe that case managers should have earned at least a master's degree. Others argue that some of the best addictions counselors have received their education through overcoming their own substance abuse.

While both viewpoints—and the many in between—are valid, managed care will increasingly require higher levels of education as case management becomes a common ingredient in its mix of services. Case management functions were performed by paraprofessionals in the 1980s and early 1990s. Today, however, credentialing standards of managed care organizations and other providers require that case management be performed by people with master's degrees in social work or education. All case managers may need to earn advanced degrees to perform reimbursable case management in the near future.

Provider profiling and performance reviews of individual practitioners are commonplace in managed care systems. Because data drive so many managed care decisions, any outlier, whether the cost of one consumer's care or the performance level of an organization or professional, is likely to prompt a closer look. It seems likely that, as managed care organizations gain greater influence in the substance abuse world, there will be an increased demand for more professionally trained treatment personnel and for provider organizations to gain accreditation from national organizations such as the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), the Rehabilitation Accreditation Commission (CARF), Community Mental Health Services (CMHS), SAMHSA, or the National Committee for Quality Assurance (NCQA).

Future Directions

The profound changes in reimbursement patterns have sent shock waves through the substance abuse treatment field. And change clearly will persist. Payers and those who allocate resources will continue to demand that the efficacy of services be demonstrated. On the programmatic level this will necessitate evaluating each service component and determining how it contributes to overall objectives. Programs must articulate their service expectations and decide what kinds of training and experience a practitioner must have to successfully deliver them.

What is needed now is more research on case management. Several promising lines of research, presented in Chapter 4, suggest that certain forms of case management activities improved client outcomes, resulting in fewer employment problems, increased income, longer treatment retention, and diminished drug use. Other studies focusing on a criminal justice population suggest far-ranging benefits. However, the applicability of those studies to the population outside prison and jail has yet to be established.

This research should be undertaken in a variety of settings and should address issues that demonstrate the efficacy of case management activities. What approaches work best for what populations in which kind of setting? While such questions are typically investigated by university researchers through demonstration projects, the research community must work with community-based programs in this case. It will require hands-on experience to fully understand how case management functions, what benefits it achieves for program clients, and how much it costs to provide this service. Case managers must be able to follow their clients from pretreatment to aftercare to determine if treatment and services have succeeded. Quantifying its benefits is the most compelling argument for case management.

Appendix A Bibliography

Alemi, F.; Stephens, R.C.; and Butts, J. Case management: A telecommunications practice model. In: Ashery, R.S., ed. *Progress and Issues in Case Management*. Rockville, MD: National Institute on Drug Abuse, 1992. pp. 261–273.

Alter, C., and Hage, J. *Organizing Working Together*. Newbury Park, CA: Sage, 1993.

Alterman, A.I.; Bedrick, J.; Howden, D.; and Maany, I. Reducing waiting time for substance abuse treatment does not reduce attrition. *Journal of Substance Abuse* 6(3):325–332, 1994.

American Hospital Association. Case management: An aid to quality and continuity of care. In: Rose, S.R., ed. *Case Management and Social Work.* New York: Longman, 1992. pp. 149–159.

American Society of Addiction Medicine. *Patient Placement Criteria for the Treatment of Substance-Related Disorders.* 2nd *edition*. Chevy Chase, MD: American Society of Addiction Medicine, 1997

Anthony, W.A., and Farkas, M. A client outcome planning model for assessing psychiatric rehabilitation interventions. *Schizophrenic Bulletin* 8(1):13-38, 1982.

Ashery, R.S. Case management for substance abusers: More issues than answers. *Journal of Case Management* 3(4):179–183, 1994.

Ashery, R.S., ed. *Progress and Issues in Case Management*. NIDA Research Monograph, Number 127. HHS Pub. No. (ADM) 92-1946. Rockville, MD: National Institute on Drug Abuse, 1992.

Ashery, R.S.; Carlson, R.G.; Falck, R.S.; and Siegal, H.A. Injection drug users, crack-cocaine users, and human service utilization: An exploratory study. *Social Work* 40(1):75–82, 1995.

Ballew, J.R., and Mink, G. *Case Management in Social Work: Developing the Professional Skills Needed for Work With Multiproblem Clients.* Springfield, IL: Charles C. Thomas, 1996.

Bander, K.W.; Goldman, D.S.; Schwartz, M.A.; Rabinowitz, E.; and English, J.T. Survey of attitudes among three specialties in a teaching hospital toward alcoholics. *Journal of Medical Education* 62(1):17-24, 1987.

Beckman, L., and Amaro, H. Personal and social difficulties faced by women and men entering alcoholism treatment. *Journal of Studies on Alcohol* 47:135–145, 1986.

Appendix A Bibliography

Alemi, F.; Stephens, R.C.; and Butts, J. Case management: A telecommunications practice model. In: Ashery, R.S., ed. *Progress and Issues in Case Management*. Rockville, MD: National Institute on Drug Abuse, 1992. pp. 261–273.

Alter, C., and Hage, J. *Organizing Working Together*. Newbury Park, CA: Sage, 1993.

Alterman, A.I.; Bedrick, J.; Howden, D.; and Maany, I. Reducing waiting time for substance abuse treatment does not reduce attrition. *Journal of Substance Abuse* 6(3):325–332, 1994.

American Hospital Association. Case management: An aid to quality and continuity of care. In: Rose, S.R., ed. *Case Management and Social Work.* New York: Longman, 1992. pp. 149–159.

American Society of Addiction Medicine. *Patient Placement Criteria for the Treatment of Substance-Related Disorders.* 2nd *edition*. Chevy Chase, MD: American Society of Addiction Medicine, 1997

Anthony, W.A., and Farkas, M. A client outcome planning model for assessing psychiatric rehabilitation interventions. *Schizophrenic Bulletin* 8(1):13-38, 1982.

Ashery, R.S. Case management for substance abusers: More issues than answers. *Journal of Case Management* 3(4):179–183, 1994.

Ashery, R.S., ed. *Progress and Issues in Case Management*. NIDA Research Monograph, Number 127. HHS Pub. No. (ADM) 92-1946. Rockville, MD: National Institute on Drug Abuse, 1992.

Ashery, R.S.; Carlson, R.G.; Falck, R.S.; and Siegal, H.A. Injection drug users, crack-cocaine users, and human service utilization: An exploratory study. *Social Work* 40(1):75–82, 1995.

Ballew, J.R., and Mink, G. *Case Management in Social Work: Developing the Professional Skills Needed for Work With Multiproblem Clients.* Springfield, IL: Charles C. Thomas, 1996.

Bander, K.W.; Goldman, D.S.; Schwartz, M.A.; Rabinowitz, E.; and English, J.T. Survey of attitudes among three specialties in a teaching hospital toward alcoholics. *Journal of Medical Education* 62(1):17-24, 1987.

Beckman, L., and Amaro, H. Personal and social difficulties faced by women and men entering alcoholism treatment. *Journal of Studies on Alcohol* 47:135–145, 1986.

Bellack, A.S.; Mueser, K.T.; Gingerich, S.; and Agresta, J. *Social Skills Training for Schizophrenia: A Step-by-Step Guide*. New York: Guilford Press, 1997.

Bokos, P.; Mejta, C.; Monks, R.; and Mickenberg, J. Case management program: A case management model for intravenous drug users. In: Inciardi, J.A., ed. *Innovative Approaches to the Treatment of Drug Abuse: Program Models and Strategies.* Westport, CT: Greenwood, 1993. pp. 87–96.

Bond, G.R.; McGrew, J.H.; and Fekete, D.M. Assertive outreach for frequent users of psychiatric hospitals: A meta-analysis. *Journal of Mental Health Administration* 22: 4-16, 1995.

Bonham, G.S.; Hague, D.E.; Abel, M.H.; Cummings, P.; and Deutsch, R.S. Louisville's Project Connect for the homeless alcohol and drug abuser. In: Stahler, G.J., and Stimmel, B., eds. *Alcoholism and Drug Abuse Among Homeless Men and Women.* New York: Haworth Press, 1990. pp. 57–78.

Braucht, N.G.; Reichardt, C.S.; Geissler, L.J.; Bormann, C.A.; Kwiatkowski, C.F.; and Kirby, M.W. Effective services for homeless substance abusers. In: Stahler, G.J., and Stimmel, B., eds. *The Effectiveness of Social Interventions for Homeless Substance Abusers.* New York: Haworth Medical Press, 1995. pp. 87–109.

Brekke, J. The model-guided method of monitoring program implementation. *Evaluation Review* 11(3):281–299, 1987.

Brindis, C.; Pfeffer, R.; and Wolf, A. A case management program for chemically dependent clients with multiple needs. *Journal of Case Management* 4(l):22–28, 1995.

Brindis, C.D., and Theidon, K.S. The role of case management in substance abuse treatment services for women and children. *Journal of Psychoactive Drugs* 29(1): 79-88, 1997.

Broskowski, A., and Eaddy, M. Community mental health in a managed care environment. *Administration and Policy in Mental Health* 27:335–352, 1994.

Brown, J.D. Preprofessional socialization and identity transformation: The case of the professional ex-. *Journal of Contemporary Ethnography* 20(2):157–178, 1991.

Brown, S.A.; Vik, P.W.; and Creamer, V.A. Characteristics of relapse following adolescent substance abuse treatment. *Addictive Behaviors* 14:291-300, 1989.

Bureau of Justice. *Treatment Alternatives to Street Crime*. 2nd ed. Administration Program Brief. Washington, DC: U.S. Department of Justice, April 1992.

Bureau of Justice Assistance. *Guidelines for Implementing and Operating TASC Programs.* Washington, DC: U.S. Department of Justice, 1988.

Case Management Standards Work Group. *NASW Standards for Social Work Case Management*. Washington, DC: National Association of Social Workers Press, 1992.

Center for Substance Abuse Treatment. *Pregnant, Substance-Using Women.* Treatment Improvement Protocol (TIP) Series, Number 2. HHS Pub. No. (SMA) 93-1998. Washington, DC: U.S. Government Printing Office, 1993a.

Center for Substance Abuse Treatment. *Guidelines for the Treatment of Alcohol and Other Drug Abusing Adolescents.* Treatment Improvement Protocol (TIP) Series, Number 4. HHS Pub. No. (SMA) 93-2010. Washington, DC: U.S. Government Printing Office, 1993b.

Center for Substance Abuse Treatment. *Screening and Assessment for Alcohol and Other Drug Abuse Among Adults in the Criminal Justice System.* Treatment Improvement Protocol (TIP) Series, Number 7. HHS Pub. No. (SMA) 94-2076. Washington, DC: U.S. Government Printing Office, 1994a.

Center for Substance Abuse Treatment. *Assessment and Treatment of Patients with Coexisting Mental Illness and Alcohol and Other Drug Abuse.* Treatment Improvement Protocol (TIP) Series, Number 9. HHS Pub. No. (SMA) 94-2078. Washington, DC: U.S. Government Printing Office, 1994b.

Center for Substance Abuse Treatment. *Combining Substance Abuse Treatment With Intermediate Sanctions for Adults in the Criminal Justice System.* Treatment Improvement Protocol (TIP) Series, Number 12. HHS Pub. No. (SMA) 94-3004. Washington, DC: U.S. Government Printing Office, 1994c.

Center for Substance Abuse Treatment. *The Role and Current Status of Patient Placement Criteria in the Treatment of Substance Use Disorders.* Treatment Improvement Protocol (TIP) Series, Number 13. HHS Pub. No. (SMA) 95-3021. Washington, DC: U.S. Government Printing Office, 1995a.

Center for Substance Abuse Treatment. *Planning for Alcohol and Other Drug Abuse Treatment for Adults in the Criminal Justice System.* Treatment Improvement Protocol (TIP) Series, Number 17. HHS Pub. No. (SMA) 95-3039. Washington, DC: U.S. Government Printing Office, 1995b.

Center for Substance Abuse Treatment. *Combining Alcohol and Other Drug Abuse Treatment With Diversion for Juveniles in the Justice System.* Treatment Improvement Protocol (TIP) Series, Number 21. HHS Pub. No. (SMA) 95-3051. Washington, DC: U.S. Government Printing Office, 1995c.

Center for Substance Abuse Treatment. *Purchasing Managed Care Services for Alcohol and Other Drug Treatment: Essential Elements and Policy Issues*. Technical Assistance Publication (TAP) Series, Number 16. HHS Pub. No. (SMA) 95-3040. Washington, DC: U.S. Government Printing Office, 1995d.

Center for Substance Abuse Treatment. *Treatment Drug Courts: Integrating Substance Abuse Treatment With Legal Case Processing .* Treatment Improvement Protocol (TIP) Series, Number 23. DHS Pub. No. (SMA) 96-3113. Washington, DC: U.S. Government Printing Office, 1996a.

Center for Substance Abuse Treatment. *Addiction Counseling Competencies: The Knowledge, Skills, and Attitudes of Professional Practice*. Technical Assistance Protocol (TAP) Series, Number 21. HHS Pub. No. (SMA) 98-3171. Washington, DC: U.S. Government Printing Office, 1998.

Chamberlain, R. and Rapp, C.A. A decade of case management: A methodological review of outcome research. *Community Mental Health Journal* 27:171-188, 1991.

Conrad, K.J.; Hultman, C.I.; and Lyons, J.S. Treatment of the chemically dependent homeless: A synthesis. *Alcoholism Treatment Quarterly* 10(3–4):235–246, 1993.

Cook, F. TASC: Case management models linking criminal justice and treatment. In: Ashery, R.S., ed. *Progress and Issues in Case Management.* NIDA Research Monograph Series, Number 127. HHS Pub. No. (ADM) 92-1946. Rockville, MD: National Institute on Drug Abuse, 1992. pp. 368–382.

Cook, F. "Client Management: Fundamental Issues." Presentation to Criminal Justice Treatment Network Grantee Meeting, Center for Substance Abuse Treatment, Washington, DC: April 28, 1997.

Cook, K. Exchange and power in networks of interorganizational relations. *The Sociological Quarterly* 18(1):62–82, 1977.

Cox, G.B.; Meijer, L.; Carr, D.I.; and Freng, S.A. Systems Alliance and Support (SAS): A program of intensive case management for chronic public inebriates: Seattle. In: Conrad, K.J.; Hultman, C.I.; and Lyons, J.S., eds. *Treatment of the Chemically Dependent Homeless: Theory and Implementation in Fourteen American Projects.* New York: Haworth Press, 1993. pp. 125–138.

Cross, T.; Bazron, B.; Dennis, K.; and Isaacs, M. *Towards a Culturally Competent System of Care: A Monograph on Effective Services for Minority Children Who Are Severely Emotionally Disturbed.* Washington, DC: Georgetown University Child Development Center, 1989.

Crystal, S. *Chronic and Situational Dependency: Long Term Residents in a Shelter for Men.* New York: Human Resources Administration, 1982.

DeLeon, G. Legal pressure in therapeutic communities. *Journal of Drug Issues* 18:625-640, 1988.

DiMaggio, P. Structural analysis of organizational fields: A block model approach. *Research in Organizational Behavior* 8:335–370, 1986.

Drake, R.E.; Bebout, R.R.; and Roach, J.P. A research evaluation of social network case management for homeless persons with dual disorders. In: Harris, M., and Bergman, H.C., eds. *Case Management for Mentally Ill Patients: Theory and Practice.* Vol. 1., *Chronic Mental Illness.* Langhorne, PA: Harwood Academic Publishers, 1993. pp. 83-98.

Drake, R. and Noordsey, D. Case management for people with coexisting severe mental disorder and substance abuse disorder. *Psychiatric Annals* 24(8): 427-431, 1994.

Falck, R.; Carlson, R.G.; Price, S.K.; and Turner, J.A. Case management to enhance HIV risk reduction among users of injection drugs and crack cocaine. *Journal of Case Management* 3(4):162–166, 1994.

Falck, R.; Siegal, H.A.; and Carlson, R.G. Case management to enhance AIDS risk reduction for injection drug users and crack users: Theoretical and practical considerations. In: Ashery, R.S., ed. *Progress and Issues in Case Management.* NIDA Research Monograph Series, Number 127. HHS Pub. No. (ADM) 92-1946. Rockville, MD: National Institute on Drug Abuse, 1992. pp. 167–180.

Fletcher, B.W.; Inciardi, J.A.; and Horton, A.M., eds. *Drug Abuse Treatment: The Implementation of Innovative Approaches to Drug Abuse Treatment.* Westport, CT: Greenwood Press, 1994.

Freeman, Michael A., MD. General Editor. *How to Respond to Managed Behavioral Health Care—A Workbook Guide to Your Organization's Success.* Tiburon, CA: CentraLink Publications, 1995.

Gilbert, F.S. The effect of type of aftercare follow-up on treatment outcome among alcoholics. *Journal of Studies on Alcohol* 49(2):149–159, 1988.

Gillespie, D.F., and Murty, S.A. Cracks in a postdisaster service delivery network. *American Journal of Community Psychology* 22(5):639–660, 1994.

Gilson, S.F.; Chilcoat, H.D.; and Stapleton, J.M. Illicit drug use by persons with disabilities: Insights from the National Household Survey on Drug Abuse. *American Journal of Public Health* 86(11):1613–1615, 1996.

Godley, S.H.; Godley, M.D.; Pratt, A.; and Wallace, J.L. Case management services for adolescent substance abusers: A program description. *Journal of Substance Abuse Treatment* 11:309-317, 1994.

Graham, K., and Birchmore-Timney, C. Case management in addictions treatment. *Journal of Substance Abuse Treatment* 7:181–188, 1990.

Harris, M., and Bergman, H. Case management with the chronically mentally ill: a clinical perspective. *American Journal of Orthopsychiatry* 57(2): 296-302, April 1987.

Harvey, P.D.; Davidson, M.; Mueser, K.T.; Parella, M.; White, L.; and Powchik, P. The social-adaptive functioning evaluation (safe): A rating scale for geriatric psychiatric patients. *Schizophrenia Bulletin* 23:131-145, 1997.

Hasson, A.L.; Grella, C.E.; Rawson, R.; and Anglin, M.D. Case management within a methadone maintenance program. A research demonstration project for HIV risk reduction. *Journal of Case Management* 3(4):167–172, 1994.

Hepburn, M. Social problems. *Baillieres Clinical Obstet. Gynaecol*. 4(1): 149-168, 1990.

Hoffman, N.G.; Halikas, J.A.; Mee-Lee, D.; and Weedman, R.D. *Patient Placement Criteria for the Treatment of Psychoactive Substance Use Disorders.* Chevy Chase, MD: American Society of Addiction Medicine, 1991.

Hubbard, R.L.; Collins, J.J.; Rachel, J.V.; and Cavanaugh, E.R. The criminal justice client in drug abuse treatment. In: Leukenfeld, C.J., and Tims, F.M., eds. *Compulsory Treatment of Drug Abuse: Research and Clinical Practice*. Rockville, MD: National Institute on Drug Abuse, 1988. pp. 57-80.

Inciardi, J.A.; Martin, S.S.; and Scarpitti, F.R. Appropriateness of assertive case management for drug-involved prison releases. *Journal of Case Management* 3(4):145–149, 1994.

Inciardi, J.A., and McBride, D. *Treatment Alternatives to Street Crime: History, Experience, and Issues*. U.S. Department of Health and Human Services, Public Health Services. HHS Pub. No. (ADM) 91-1749. Washington, DC: U.S. Government Printing Office, 1991.

Inciardi, J.A.; Tims, F.M.; and Fletcher, B.W., eds. *Innovative Approaches in the Treatment of Drug Abuse: Program Models and Strategies.* Westport, CN: Greenwood Press, 1993.

Institute of Medicine. *Broadening the Base of Treatment for Alcohol Problems*. Washington, DC: National Academy Press, 1990.

Institute of Medicine. *Treating Drug Problems*. Vol. 1. Washington, DC: National Academy Press, 1990.

Intagliata, J. Improving the quality of community care for the chronically mentally disabled: The role of case management. *Schizophrenia Bulletin* 8(4):655–674, 1982.

Intagliata, J. Operationalizing a case management system: A multilevel approach. *National Conference on Social Welfare: Case Management: State of the Art*. Washington, DC: U.S. Department of Health and Human Services, 1981.

Joint Commission on Accreditation of Healthcare Organizations. *Principles of Accreditation of Community Mental Health Service Programs*. Oakbrook Terrace, IL: Joint Commission on Accreditation of Hospitals, 1979.

Joint Commission on Accreditation of Healthcare Organizations. *Accreditation Manual for Mental Health, Chemical Dependency, and Mental Retardation/Developmental Disabilities Services. Vol. 1, Standards*. Oakbrook Terrace, IL: Joint Commission on Accreditation of Healthcare Organizations, 1995.

Kanter, J.S. Case management of the young adult chronic patient: A clinical perspective. In: Kanter, J.S., ed. *Clinical Issues in Treating the Chronic Mentally Ill: New Directions for Mental Health Services.* No. 27. San Francisco: Jossey-Bass, 1985. pp. 77–92.

Kanter, J. Case management with long-term patients: A comprehensive approach. In: Soreff, S., ed. *Handbook for the Treatment of the Seriously Mentally Ill*. Seattle: Hogrefe and Huber, 1996. pp. 171-189.

Kanter, J. Clinical issues in the case management relationship. In: Harris, M., and Bachrach, L., eds. *Clinical Case Management New Directions for Mental Health Services.* No 40. San Francisco: Jossey-Bass, Winter 1988.

Kennedy, B.P., and Minami, M. The Beech Hill Hospital/Outward Bound adolescent chemical dependency treatment program. *Journal of Substance Abuse Treatment* 10:395-406, 1993.

Khantzian, E., and Treece, C. Psychiatric diagnosis of narcotic addicts: Recent findings. *Archives of General Psychiatry* 42:1067–1071, 1985.

Kosten, T.R., and Kleber, H.D. Differential diagnosis of psychiatric comorbidity in substance abusers. *Journal of Substance Abuse Treatment* 5:201–206, 1988.

Lehman, A.F.; Herron, J.D.; Schwartz, R.P.; and Myers, C.P. Rehabilitation for adults with severe mental illness and substance use disorders: A clinical trial. *Journal of Nervous and Mental Disease* 181(2): 86-90, February, 1993.

Levy, J.A.; Gallmeier, C.P.; Weddington, W.W.; and Wiebel, W.W. Delivering case management using a community-based service model of drug intervention. In: Ashery, R.S., ed. *Progress and Issues in Case Management*. NIDA Research Monograph Series, Number 127. HHS Pub. No. (ADM) 92-1946. Rockville, MD: National Institute on Drug Abuse, 1992. pp. 145–166.

Levy, J.A.; Strenski, T.; and Amick, D.J. Community-based case management for active injecting drug users. In: Albrecht, G.L., ed. *Advances in Medical Sociology.* Vol. 6, *Case and Care Management.* Greenwich, CT: JAI Press, 1995. pp. 183–206.

Lidz, V.; Bux, D.A.; Platt, J.J.; and Iguchi, M.Y. Transitional case management: A service model for AIDS outreach projects. In: Ashery, R.S., ed. *Progress and Issues in Case Management.* NIDA Research Monograph Series, Number 127. HHS Pub. No. (ADM) 92-1946. Rockville, MD: National Institute on Drug Abuse, 1992. pp. 112–144.

Lightfoot, L.; Rosenbaum, P.; Ogurzsoff, S.; Laverty, G.; Kusiar, S.; Barry, K.; and Reynolds, W. *Final Report of the Kingston Treatment Programme Development Research Project*. Ottawa: Department of Health, Health Promotion Directorate, 1982.

Luborsky, L; McLellan, A.T.; Woody, G.E.; O'Brien, C.P.; and Auerbauch, A. Therapist success and its determinants. *Archives of General Psychiatry* 42: 602-611, 1985.

Manoleas, P., ed. The Cross Cultural Practice of Clinical Case Management in Mental Health. New York: Haworth Press, 1997.

Markoff, L.S., and Cawley, P.A. Retaining your clients and your sanity: Using a relational model of multi-systems case management. *Journal of Chemical Dependency Treatment* 6(1-2): 45-65, 1996.

Martin, S.S.; Isenberg, H.; and Inciardi, J.A. Assertive community treatment: Integrating intensive drug treatment with aggressive case management for hard-to-reach populations. In: Inciardi, J.A.; Tims, F.M.; and Fletcher, B.W., eds. *Innovative Approaches in the Treatment of Drug Abuse: Program Models and Strategies.* Westport, CN: Greenwood Press, 1993. pp. 97–108.

Martin, S., and Scarpitti, F. An intensive case management approach for paroled IV drug users. *Journal of Drug Issues* 23(1):81–96, 1993.

McCarthy, E.P.; Feldman, Z.T.; and Lewis, B.F. Development and implementation of an interorganizational case management model for substance users. In: Ashery, R.S., ed. *Progress and Issues in Case Management.* NIDA Research Monograph Series, Number 127. HHS Pub. No. (ADM) 92-1946. Rockville, MD: National Institute on Drug Abuse, 1992. pp. 331–349.

McGrew, J.H., and Bond, G.R. Critical ingredients of assertive community treatment: Judgments of the experts. *Journal of Mental Health Administration* 22:113-125, 1995.

McKirnan, D.J., and Peterson, P.L. Alcohol and drug use among homosexual men and women: Epidemiology and population characteristics. *Addictive Behaviors* 14(5):545–553, 1989.

McLellan, A.T.; Arndt, I.; Metzger, D.S.; Woody, G.E.; and O'Brien, C.P. The effects of psychosocial services in substance abuse treatment. *Journal of the American Medical Association* 269:1953-1959; 1993.

McLellan, A.T.; Luborsky, L.; O'Brien, C.P.; Woody, G.E.; and Druley, K.A. Is treatment for substance abuse effective? *Journal of the American Medical Association* 247:1423-1428, 1982.

Mechanic, D.; Schlesinger, M.; and McAlpine, D.D. Management of mental health and substance abuse services: State of the art early results. *Milbank Quarterly* 73:19-55, 1995.

Mejta, C.L.; Bokos, P.J.; Mickenberg, J.H.; Maslar, E.M.; Hasson, A.L.; Gil, V.; O'Keefe, Z.; Martin, S.S.; Isenberg, H.; Inciardi, J.A.; Lockwood, D.; Rapp, R.C.; Siegal, H.A.; Fisher, J.H.; and Wagner, J.H. Approaches to case management with substance abusing populations. In Lewis, J., ed. *Addictions: Concepts and Strategies for Treatment*. Gaithersburg, MD: Aspen, 1994.

Miles, M., and Huberman, A. *Qualitative Data Analysis*. Newbury Park, CA: Sage, 1997.

Miller, W.R. and Rollnick, S. *Motivational Interviewing: Preparing People to Change Addictive Behavior*. New York: Guilford Press, 1991.

Mirin, S.M.; Weiss, R.D.; and Michael, J. Psychopathology in substance abusers: Diagnosis and treatment. *American Journal of Drug and Alcohol Abuse* 14(2):139-157, 1988.

Modrcin, M.; Rapp, C.; and Chamberlain, R. *Case Management With Physically Disabled Individuals: Curriculum and Training Program.* Lawrence, KS: University of Kansas School of Social Welfare, 1985.

Mondanaro, J.E.; Wedenoja, M.; Densen-Gerber, J.; Elahi, J.; Mason, M.; and Redmond, A.C. Sexuality and fear of intimacy as barriers to recovery for drug dependent women. In: Beschner, G.M.; Reed, B.D.; and Mondanaro, J., eds. *Treatment Services for Drug Dependent Women*, Vol. 2. NIDA Treatment Monograph Series. Washington, DC: National Institute on Drug Abuse, 1982.

Monti, P.M.; Abrams, D.B.; Kadden, R.M.; and Cooney, N.L. *Treating Alcohol Dependence*. New York: Guilford Press, 1989.

Moore, D., and Polsgrove, L. Disabilities, developmental handicaps, and substance misuse: A review. *International Journal of the Addictions* 26(1): 65-90, 1991.

Moore, S.T. A social work practice model of case management: The case management grid. *Social Work* 35(5):444–448, 1990.

Moos, R.H.; Finney, J.W.; and Cronkite, R.C. *Alcoholism Treatment: Context, Process, and Outcome*. New York: Oxford University Press, 1990. pp. 220-248.

Morlock, L.; Taube, C.; and Ross, A. *Alternatives for Case Management of the CMI in Baltimore City: Implications for Cost and Impact*. Unpublished report. Baltimore, MD: The Johns Hopkins University, Center on Organization and Financing of Care for the Severely Mentally Ill, 1988.

Morrissey, J.P.; Ridgely, M.S.; Goldman, H.H.; and Bartko, W.T. Assessments of community mental health support systems: A key informant approach. *Community Mental Health Journal* 30(6): 565-579, 1994.

Mumm, A.M.; Olsen, L.; and Allen, D. "Families Affected by Substance Abuse: Implications for Generalist Practice." Submitted for publication, 1997.

National Association of Alcoholism and Drug Abuse Counselors. *Certification Commission Oral Exam Guidelines*. Arlington, VA: National Association of Alcoholism and Drug Abuse Counselors, 1986.

National Association of Social Workers. Case management's cost, benefits eyed. *National Association of Social Workers News*. Washington, DC: NASW Press, 1992. p. 12.

National Certification Reciprocity Consortium/Alcohol and Other Drug Abuse. *Standards for Certification.* Atkinson, NH: National Certification Reciprocity Consortium/Alcohol and Other Drug Abuse, 1993.

National Institute on Alcohol Abuse and Alcoholism. *Homelessness, Alcohol and Other Drugs.* HHS Pub. No. (ADM) 89-1614. Rockville, MD: National Institute on Alcohol Abuse and Alcoholism, 1989.

Ogborne, A.C., and Rush, B.R. The coordination of treatment services for problem drinkers: Problems and prospects. *British Journal of Addiction* 78:131–138, 1983.

Ohio Credentialing Board for Chemical Dependency Professionals. *Standards and Procedures of the Ohio Certification Program*. Columbus, OH: Ohio Credentialing Board for Chemical Dependency Professionals, 1995.

Olfson, M. Assertive community treatment: An evaluation of experimental evidence. *Hospital and Community Psychiatry* 41:534-641, 1990.

Oppenheimer, E.; Sheehan, M.; and Taylor, C. Letting the client speak: Drug misusers and the process of help seeking. *British Journal of Addiction* 83:635–647, 1988.

Orwin, R.G.; Sonnefeld, L.J.; Garrison-Mogren, R.; and Smith, N.G. Pitfalls in evaluating the effectiveness of case management programs for homeless persons. *Evaluation Review* 18(2):153–207, 1994.

Ouellet, L.; Kelly, M.; Coward, A.; and Wiebel, W.W. Developing community resources for a stigmatized population. In: Albrecht, G.L., ed. *Advances in Medical Sociology.* Vol. 6, *Case and Care Management.* Greenwich, CT: JAI Press, 1995. pp. 207–230.

Perl, H.I. and Jacobs, M.L. Case management models for homeless persons with alcohol and other drug problems: An overview of the NIAAA research demonstration program. In: Ashery, R.S., ed. *Progress and Issues in Case Management*, NIDA Research Monograph Series. Number 127. HHS Pub. No. (ADM) 92-1946. Rockville, MD: National Institute on Drug Abuse, 1992. pp. 208-222.

Platt, J.J.; Buhringer, G.; Kaplan, C.D.; Brown, B.B.; and Taube, D.O. The prospects and limitations of compulsory treatment for drug addiction. *Journal of Drug Issues* 18: 505-525, 1988.

Prochaska, J.O., and DiClemente, C.C. Self-change and therapy change of smoking behavior: A comparison of processes of change in cessation and maintenance. *Addictive Behaviors* 7(2):133-142, 1982.

Raiff, N.R., and Shore, B.K. *Advanced Case Management: New Strategies for the Nineties.* Newbury Park, CA: Sage, 1993.

Rapp, C.A., and Chamberlain, R. Case management services for the chronically mentally ill. *Social Work* 30(5): 417–422, 1985.

Rapp, R.C. The strengths perspective and persons with substance abuse problems. In: Saleebey, D., ed. *The Strengths Perspective in Social Work Practice*, 2nd ed. New York: Longman Press, 1997.

Rapp, R.C.; Kelliher, C.W.; Fisher, J.H.; and Hall, F.J. Strengths-based case management: A role in addressing denial in substance abuse treatment. *Journal of Case Management* 3(4):139–144, 1994.

Rapp, R.C.; Siegal, H.A.; and Fisher, J.H. A strengths-based model of case management/advocacy: Adapting a mental health model to practice work with persons who have substance abuse problems. In: Ashery, R.S., ed. *Progress and Issues in Case Management.* NIDA Research Monograph Series, Number 127. HHS Pub. No. (ADM) 92-1946. Rockville, MD: National Institute on Drug Abuse, 1992. pp. 79–91.

Rapp, R.C.; Siegal, H.A.; Li, L.; and Saha, P. Predicting post-primary treatment services and drug use outcome: A multivariate analysis. *American Journal of Drug and Alcohol Abuse*, in press.

Regier, D.A.; Farmer, M.E.; Rae, D.S.; Locke, B Z.; Keith, S.J.; Judd, L.L.; and Goodwin, F.K. Comorbidity of mental disorders with alcohol and other drug abuse: Results from the epidemiologic catchment area (ECA) study. *Journal of the American Medical Association* 264(19):2511–2518, 1990.

Rehabilitation Research and Training Center on Drugs and Disability. *Substance Abuse, Disability and Vocational Rehabilitation*. Dayton, OH: Rehabilitation Research and Training Center on Drugs and Disability, 1996.

Richmond, M. *What Is Social Casework?* New York: Russell Sage Foundation, 1922.

Ridgely, M.S., and Willenbring, M.L. Application of case management to drug abuse treatment: Overview of models and research issues. In: Ashery, R., ed. *Progress and Issues in Case Management*. NIDA Research Monograph Series, Number 127. HHS Pub. No. (ADM) 92-1946. Rockville, MD: National Institute on Drug Abuse, 1992. pp. 12–33.

Rife, J.C.; First, R.J.; Greenlee, R.W.; Miller, L.D.; and Feichter, M.A. Case management with homeless mentally ill people. *Health and Social Work* 16(1):58–67, 1991.

Roberts-DeGennaro, M. Generalist model of case management practice. *Journal of Case Management* 2(3):106–111, 1993.

Robinson, R., and Bergman, G. *Choices in Case Management: A Review of Current Knowledge and Practice for Mental Health Programs*. Washington, DC: Policy Resources, Inc., 1989.

Rogers, G. Educating case managers for culturally competent practice. *Journal of Case Management* 4(2):60–65, 1995.

Ross, H. *Proceedings of the Conference on the Evaluation of Case Management Programs.* Los Angeles: Volunteers for Services to Older Persons, 1980.

Ross, H.E.; Glasser, F.B.; Germanson, T. The prevalence of psychiatric disorders in patients with alcohol and other drug problems. *Archives of General Psychiatry* 45:1023–1031, 1988.

Ross, M.W., and Darke, S. Mad, bad, and dangerous to know: Dimensions and measurements of attitudes toward injecting drug users. *Drug and Alcohol Dependence* 30(1):71-74, 1992.

Rothman, J. *Guidelines for Case Management*. Itasca, IL: F.E. Peacock Publishers, 1992.

Rothman, J. *Practice With Highly Vulnerable Clients.* Englewood Cliffs, NJ: Prentice Hall, 1994.

Rubin, A. Is case management effective for people with serious mental illness? A research review. *Health and Social Work* 17:138-150, 1992.

Rush, B., and Ekdahl, A. Recent trends in the development of alcohol and drug treatment services in Ontario. *Journal of Studies on Alcohol* 51(6): 514-522, 1990.

Saleebey, D., ed. *The Strengths Perspective in Social Work Practice,* 2nd ed. New York: Longman Press, 1997.

Schlenger, W.E.; Kroutil, L.A.; and Roland, E. J. Case management as a mechanism for linking drug abuse treatment and primary care: Preliminary evidence from the ADAMHA/HRSA linkage demonstration. In: Ashery, R.S., ed. *Progress and Issues in Case Management.* NIDA Research Monograph Series, Number 127. HHS Pub. No. (ADM) 92-1946. Rockville, MD: National Institute on Drug Abuse, 1992. pp. 316–330.

Schwartz, B.; Dilley, J.; and Sorensen, J.L. Case management of substance abusers with HIV disease. In: Siegal, H., and Rapp, R.C., eds. *Case Management and Substance Abuse Treatment: Practice and Experience.* New York: Springer, 1996. pp. 123–140.

Shernoff, M., and Springer, E. Substance abuse and AIDS: Report from the front lines (The impact on professionals). *Journal of Chemical Dependency Treatment* 5(1):35–48, 1992.

Shilony, E.; Lacey, D.; O'Hagan, P.; and Curto, M. All in one neighborhood: A community-based rehabilitation treatment program for homeless adults with mental illness and alcohol/substance abuse disorders. *Psychosocial Rehabilitation Journal* 16(4):103-116, April, 1993.

Shwartz, M.; Baker, G.; Mulvey, K.P. and Plough, A. Improving publicly funded substance abuse treatment: The value of case management. *American Journal of Public Health* 87(10):1659-1664, 1997.

Siegal, H.A.; Fisher, J.A.; Rapp, R.C.; Kelliher, C.W.; Wagner, J.H.; O'Brien, W.F.; and Cole, P.A. Enhancing substance abuse treatment with case management: Its impact on employment. *Journal of Substance Abuse Treatment* 13(2):93–98, 1996.

Siegal, H.A.; Rapp, R.C.; Kelliher, C.W.; Fisher, J.H.; Wagner, J.H.; and Cole, P.A. The strengths perspective of case management: A promising inpatient substance abuse treatment enhancement. *Journal of Psychoactive Drugs* 27(1):67–72, 1995.

Siegal, H.A.; Rapp, R.C.; Li, L.; Saha, P.; and Kirk, K. The role of case management in retaining clients in substance abuse treatment: An exploratory analysis. *Journal of Drug Issues* 27(4):821-831, 1997.

Skinner, W.F. The prevalence and demographic predictors of illicit and licit drug use among lesbians and gay men. *American Journal of Public Health* 84(8):1307–1310, 1994.

Soloman, P. The efficacy of case management services for severely mentally disabled clients. *Community Mental Health Journal* 28:163-180, 1992.

Soloman, P., and Draine, J. Consumer case management and attitudes concerning family relations among persons with mental illness. *Psychiatric Quarterly* 66(3):249-261, 1995.

Sonsel, G.E.; Paradise, F.; and Stroup, S. Case management practice in an AIDS service organization. *Social Casework: The Journal of Contemporary Social Work* 69(6):388–392, 1988.

Sosin, M.R.; Bruni, M.; and Mairead, R. Paths and impacts in the progressive independence model: A homelessness and substance abuse intervention in Chicago. In: Stahler, G.J., and Stimmel, B., eds. *The Effectiveness of Social Interventions for Homeless Substance Abusers.* New York: Haworth Medical Press, 1995. pp. 1–20.

Sosin, M.R.; Yamaguchi, J.; Bruni, M.; Grossman, S.; Leonelli, B.; and Reidy, M. *Treating Homelessness and Substance Abuse in Community Context: A Case Management and Supported Housing Demonstration.* Chicago, IL: The University of Chicago, 1994.

Stahler, G.J.; Shipley, T.F.; Bartlet, D.; DuCette, J.P.; and Shandler, I.W. Evaluating alternative treatments for homeless substance abusing men: Outcomes and predictors of success. In: Stahler, G.J., and Stimmel, B., eds. *The Effectiveness of Social Interventions for Homeless Substance Abusers.* New York: Haworth Medical Press, 1995. pp. 151–167.

Stark, M.J., and Kane, B.J. General and specific psychotherapy role induction with substance abusing clients. *International Journal of the Addictions* 20(8):1135–1141, 1985.

Steadman, H.J. Boundary spanners: A key component for the effective interactions of the justice and mental health systems. *Law and Human Behavior* 16(1):75-87, 1992.

Stein, L., and Test, M. Alternatives to mental hospital treatment. I. Conceptual model, treatment program, and clinical evaluation. *Archives of General Psychiatry* 37:392–397, 1980.

Sullivan, W. Technical assistance consultation: A new model for social work practice [Diss.] *Dissertation Abstracts International* 50:4106, 1990.

Sullivan, W.P. *Case Management in Alcohol and Drug Treatment: Conceptual Issues and Practical Applications.* Springfield, MO: Center for Social Research, Southwest Missouri State University, 1991.

Sullivan, W.P.; Wolk, J.L.; and Hartmann, D.J. Case management in alcohol and drug treatment: Improving client outcomes. *Families in Society: The Journal of Contemporary Human Service* 73:195–201, 1992.

Tausig, M. Detecting "cracks" in mental health service systems: Application of network analytic techniques. *American Journal of Community Psychology* 15:337–351, 1987.

Teague, G.B.; Schwab, B.; and Drake, R.E. *Evaluation of Services for Young Adults With Severe Mental Illness and Substance Use Disorders.* Alexandria, VA: National Association of State Mental Health Program Directors, 1990.

Test, M.A. Effective community treatment of the chronically mentally ill: What is necessary? *Journal of Social Issues* 37(3):71–86, 1981.

Test, M.A. Training in community living. In: Libermann, R.P., ed. *Handbook of Psychiatric Rehabilitation.* New York: MacMillan, 1992. pp. 153-170.

Toborg, M.A.; Levin, D.R.; Milkman, R.H.; and Center, L.J. *Treatment Alternatives to Street Crime: (TASC) Projects: National Evaluation Program, Phase I Summary Report*. Washington, DC: National Institute of Law Enforcement and Criminal Justice, 1976.

Turner, J., and TenHoor, W. The NIMH community support program: Pilot approach to a needed social reform. *Schizophrenia Bulletin* 4(3):319–348, 1978.

U.S. General Accounting Office. *Management Practices: U.S. Companies Improve Performance Through Quality Efforts*. Pub. No. GAO/NSLAD-91-190. Washington, DC: U.S. Government Printing Office, 1991.

Van de Ven, A.H., and Ferry, D.L. *Measuring and Assessing Organizations*. New York: Wiley, 1980.

Wallace, J. The new disease model of alcoholism. *Western Journal of Medicine* 152:502–505, 1990.

Weil, M.; Karls, J.M.; and Associates. *Case Management in Human Service Practice. A Systematic Approach to Mobilizing Resources for Clients.* San Francisco: Jossey-Bass, 1989.

Westermeyer, J. Cross-cultural studies on alcoholism. In: Goedde, H.W., and Agarwal, D.P., eds. *Alcoholism: Biomedical and Genetic Aspects.* Elmsford, NY: Pergamon Press, 1989. pp. 305–311.

Wholey, J.; Hatry, H.; and Newcomer, K.M., eds. *Handbook of Practical Program Evaluation*. San Francisco: Jossey-Bass, 1994.

Wildwind, L. When women resist treatment: Approaches for counselors. *Journal of Substance Abuse Treatment* 1:47-54, 1984.

Willenbring, M.; Ridgely, M.S.; Stinchfield, R.; and Rose, M. *Application of Case Management in Alcohol and Drug Dependence: Matching Techniques and Populations*. Rockville, MD: National Institute on Alcohol Abuse and Alcoholism, 1991.

Willenbring, M.L.; Whelan, J.A.; Dahlquist, J.S.; and O'Neal, M.E. Community treatment of the chronic public inebriate. I: Implementation. *Alcoholism Treatment Quarterly* 7(2):79–97, 1990.

Zweben, A. The efficacy of role induction in preventing early dropout from outpatient treatment of drug dependency. *American Journal of Drug and Alcohol Abuse* 8(2):171–183, 1981.