

New Directions in Alcohol and Drug Treatment Under Managed Care

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Abstract

Objective: To examine the potential effects of the introduction and expansion of managed care on the financing and organization of public and private alcohol and drug abuse treatment systems by reviewing studies on managed care and substance abuse.

Study Design: Spending on treatment for alcohol and drug abuse, the organization of treatment, treatment workforce composition, provision of services, and their implications for access and treatment outcome were examined by review of the treatment literature.

Results: Managed care has had major effects on the organization of service delivery, the workforce, and the provision of services. Most of the changes have occurred without the benefit of clinical or policy research. Although managed care has the potential ability to address longstanding problems associated with alcohol and drug treatment, it also presents additional barriers to access and improving treatment outcome.

Conclusions: The review suggests that organizational approaches, particularly the settings in which treatment is placed, will differ in their impact on ties

between treatment agencies and the medical community, and ties with other health and social service agencies. Also of importance is a new emphasis on accountability of treatment through the mechanisms of outcomes monitoring and performance indicators. It remains to be seen whether these innovations will be meaningfully linked with outcomes research. It is incumbent on researchers and clinicians to explore these issues.

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Dynamic changes in the financing and delivery of healthcare over the past 15 years have taken the organization and delivery of alcohol and drug treatment in fundamentally new directions. Addiction treatment systems have shifted from a predominant emphasis on relatively long stays in inpatient or other residential facilities to a reliance on group-based outpatient counseling for time-limited periods. Other factors promoting this organizational evolution have included cost containment and a lack of outcomes research justifying inpatient treatment. Managed care exerts an increasing influence on the organization and content of substance abuse services in both public and private sectors.

Problems with the delivery of addiction treatment care are not unique to managed care.¹⁻⁴ Critiques of premanaged care treatment included the arguments that the level and modality of care were determined by the type of coverage rather than patient need, inpatient care was the standard and was not always warranted, and cost shifting from the private to the public sector when insurance benefits were depleted was rampant. Managed care has the potential to

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address many of the limitations that characterize current systems of care: fragmented services and funding, inconsistent and nonstandardized care, and poorly contained costs. Incentives and barriers to access unique to managed care, however, raise new concerns. Our review examines potential effects of the introduction and expansion of managed care on the financing and organization of public and private alcohol and drug abuse treatment systems. Specifically, we explore spending on treatment for alcohol and drug abuse, the organization of treatment, workforce composition, provision of services, and their implications for access and treatment outcome.

... FINANCIAL COSTS OF ADDICTION TREATMENT ...

Spending on substance abuse treatment (\$12.6 billion in 1996) accounts for a very small part of the total expenditures for personal healthcare (\$943 billion in 1996), as Figure 1 demonstrates.⁵ Patterns of spending across public and private sectors also dif-

fer substantially for substance abuse treatment compared with general healthcare spending.

Because spending on substance abuse treatment represents such a small fraction of overall healthcare costs, it can be overlooked in the world of cost management. Health plans tend to focus on controlling costs related to the delivery of primary and acute care because those expenditures account for more than 90% of total spending. Even when combined with treatment for mental illness, substance abuse treatment accounts for only a modest (16%) portion of the spending for behavioral healthcare (\$79.2 billion).⁵

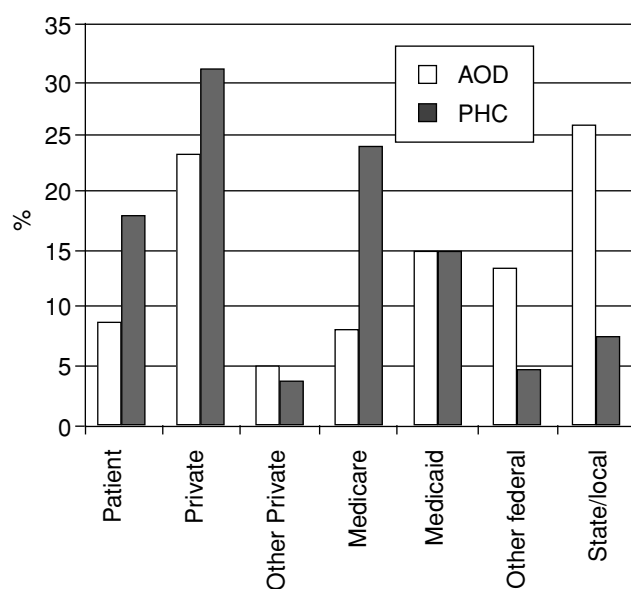
At the same time, in some payment systems, the costs of behavioral healthcare have risen by 20% or 30% annually.⁶ Thus, although services for alcohol and drug abuse are a small proportion of overall costs, they are often considered unnecessarily high and identified as services that can be reduced. In response, the market for managed behavioral healthcare has expanded rapidly. The most recent national figures, for 1996, suggest that managed care covers the mental health and substance abuse benefits of about 124 million individuals, that is, about 44% of the population or 60% of the employed population.⁷

Managed behavioral healthcare seeks not only to manage the cost of care but also to enhance the quality and effectiveness of services. To balance these often-conflicting goals, managed health plans alter the delivery of care to an unprecedented degree by introducing radically new organizational structures and financing arrangements.

... ORGANIZATION OF SERVICE DELIVERY ...

Contemporary alcohol and drug treatment systems emerged during the 1960s and 1970s.^{1,8} A distinctly two-tiered service system developed, wherein public systems supported by state and federal funds provided services to the indigent and uninsured, and private systems provided services to individuals with commercial health insurance.^{9,10} Today, public and private purchasers are dramatically changing the organization and delivery of substance abuse treatment through the introduction and extension of managed care.^{2,11} Health systems are using related but distinctive models of managed care to deliver a full range of primary care services. Increasingly, purchasers and health-

Figure 1. Expenditures for Alcohol and Other Drug (AOD) Treatment Services Versus Expenditures for Personal Health Care (PHC) by Type of Insurance, as a Percentage of Total Expenditures, 1996



Adapted from reference 5.

care organizations are opting to manage behavioral healthcare as a separate benefit by carving out the financing, management, and delivery of substance abuse and mental health services from acute and primary care.

By now, managed care approaches have substantially penetrated both the private- and public-sector treatment systems nationally. In public funding streams, this began in the mid 1980s with prospective payment in Medicare.¹² Between 1987 and 1992, the number of managed care programs in Medicaid doubled; by 1994, the number had doubled again.¹³ A number of states have now begun to consolidate their Medicaid programs with state block grant funds into a single stream organized under a managed care program.¹⁴ Many states are pursuing contracts with private behavioral managed care firms.² Private insurers began experimenting with a wide variety of managed care approaches, which were facilitated in some states by new “bare-bones” insurance laws allowing for minimum behavioral health benefits.¹⁵ These approaches have included prospective payment and capitation, as well as utilization review, selective contracting, and other financing mechanisms.¹⁶⁻¹⁸ Currently, the private managed behavioral healthcare industry collects about \$2.1 billion in yearly revenues. However, given that about \$9.5 billion is spent annually on Medicaid behavioral health benefits,¹⁹ obtaining Medicaid contracts with states that are developing managed care initiatives is clearly of considerable interest to entrepreneurs.

Types of Managed Care

Managed care seems here to stay for the foreseeable future, and debate centers on the form it will take. The different mechanisms used to ration and manage services probably do not have the same effects on access or outcomes, and the future will call for assessment of different types of managed care, particularly in terms of the approaches each uses to ration services. Managed care is common in commercial health plans and has a growing influence on state Medicaid plans. The 34 states with waivers from the Healthcare Financing Administration to incorporate mental health and/or substance abuse services in a managed Medicaid benefit²⁰ include 19 states that provide a continuum of inpatient and outpatient addiction treatment services for adults in a managed benefit (McCarty D, Frank R, Denmead G, Methadone maintenance and state Medicaid managed care programs, submitted for publication). A recent study of the 1992 Uniform Facility Data Survey collected by the Substance

Abuse and Mental Health Administration found that facilities with managed care affiliations were more prevalent in private, for-profit programs than in public or nonprofit programs, but they represented a small segment of the overall treatment system.²¹ However, across both public and private treatment sectors, units describing themselves as having managed care ties received a higher proportion of their income from private fees and insurance than through grants from federal, state, and local governments.²¹

An Institute of Medicine review of managed behavioral healthcare identified 6 types of managed care structures that have been introduced in response to consumer demands, market niches, and economic incentives²:

- Health maintenance organizations (HMOs)
- Preferred provider organizations
- Point of service
- Management services organizations
- Employee assistance programs
- Managed behavioral healthcare organizations

Distinctions among these models are fading,²² and managed care organizations often market multiple products. Each structure for managing and delivering care, however, may have different implications for access and utilization of services, and very little is known about the prevalence of each type or how each affects service delivery. The future calls for assessing the mechanisms each uses to ration services. Moreover, the issue of whether services for the treatment of alcohol and drug dependence and abuse are carved out or embedded within the healthcare organization is common to many of these organizational forms.

Behavioral Health Carve Outs

Little is yet known about how different managed care arrangements affect access or treatment outcome. Treatment for mental illness and substance abuse may be carved out or managed and delivered within the organization providing physical healthcare. Although no research evidence exists, these mechanisms obviously have different implications for the integration of substance abuse and healthcare.² The appeal of carved-out care is its purported flexibility in providing a larger range of specialty services to patients and purchasers. On the other hand, programs embedded within the organization providing healthcare have the potential to provide greater continuity between primary and specialty care.

Staff and group model HMOs have traditionally provided specialty treatment for addiction within their own healthcare systems. This approach has a great deal of face-value appeal, given its potential to promote coordination between medical and substance abuse services. It is unclear, however, whether such integration in fact occurs. Although HMOs represent the largest category of carved-in care, the substance abuse field has had longstanding concerns about the small budgets designated for behavioral healthcare within these systems and about their tendency to provide a narrower range of treatment modalities.⁷ This situation is changing as HMOs increasingly adapt placement criteria (such as those from the American Society of Addiction Medicine²³) to a range of services from inpatient detoxification, ambulatory detoxification, residential care, day hospital care, and more traditional outpatient care. In general, however, only the largest systems can provide a full continuum of services. Traditional HMOs also have been characterized as having problems with adverse selection (ie, limiting membership to “good risks”).²⁴

It is clear that the use of behavioral health carve outs, in which employers and health plans contract separately for mental health and substance abuse services, is the predominant organizational structure now and will be increasing. At this point, more than 80% of beneficiaries with third-party coverage have carved-out coverage for behavioral health services.²⁵ Those in favor of carve outs argue that effective care management requires special expertise that is better provided by programs that focus specifically on that service.²⁶ Carve outs also may reduce problems associated with adverse selection: Because individuals with mental health and substance abuse problems tend to require higher levels of healthcare spending overall, health plans may have an incentive to discourage their enrollment.²⁷

Effects of Managed Care Carve Outs

Most investigations of behavioral health carve outs have compared utilization and cost before and after the introduction of a carve out. Typically, the comparison is between a premanaged care system (which in most cases was unmanaged fee for service or utilization review combined with fee for service) and a managed care carve out. A few studies, however, have examined changes occurring between 2 types of managed care carve outs.²⁸ Studies of behavioral health carve outs in both public and private systems of care document their potential to sub-

stantially reduce the cost of care, but both increases and decreases in access have been reported.

The Massachusetts Medicaid experience has been examined closely because Massachusetts implemented the nation's first statewide managed care carve out for mental health and substance abuse treatment in January 1992. Before implementation of the carve out, Medicaid used fee-for-service reimbursement and could not restrict the use of high-cost acute care hospitals. A “freedom of choice” waiver allowed the managed care organization to limit the provider panel to licensed substance abuse treatment programs and to direct individuals seeking detoxification away from hospitals and toward lower cost community detoxification centers. In the first year of operation, expenditures for substance abuse treatment declined 45% compared with the projected expenditures by the system if managed care had not been implemented.²⁹ Meanwhile, utilization of addiction treatment services increased 10%. Savings were achieved through lower prices, reductions in lengths of stay, and fewer acute care hospital admissions.²⁹ For example, freestanding detoxification centers replaced expensive detoxification admissions to acute care hospitals. Subsequent analyses suggest that savings were maintained throughout the duration of the contract.²⁶ Because Massachusetts Medicaid benefits are more generous than those found in most states, it may have been easier to identify inefficiencies and achieve savings.²⁶

The introduction of a managed behavioral health carve out for Massachusetts state employees also led to a reduction in costs—a 30% to 40% decline—compared with the prior indemnity fee-for-service health plan that included preadmission certification, utilization review, and discharge planning.³⁰ Savings were achieved despite a substantial enhancement in the behavioral health benefit package. The primary source of savings was lower prices for inpatient care. For substance abuse treatment, utilization of inpatient services declined 5%, and there was a 33% reduction in utilization of outpatient services.³⁰ Similar declines were observed in the costs of care for a private employer. Mental health costs increased 30% per year before the introduction of a behavioral health carve out; in the first year, the carve out achieved a 40% reduction.³¹ Cost reductions were due to reduced utilization of outpatient and inpatient services, a decline in inpatient length of stay, and lower prices per unit of care.³¹

Similarly, an analysis of a change in carve-out vendors for a large HMO found substantial reductions in

cost. Although utilization of care remained constant at about 3.5 users per 1000 members per month, total substance abuse spending dropped from \$4.97 per member per month to \$1.44, and spending for outpatient treatment declined from \$2.50 per member per month to \$0.75.²⁸ It is not clear whether adequate care can be delivered at such low levels of spending. Treatment outcome was not compared with outcomes under other funding mechanisms.

To date, most assessments of behavioral health carve outs have centered on cost and utilization rather than treatment outcome. Analysis of administrative and claims data provides much useful information about the functioning of a health plan but reveals little about the effectiveness of the services utilized. The next generation of studies must follow health plan members longitudinally to describe the short-term and long-term effects of care. Until data are available from these investigations, the question of how managed care carve outs affect treatment outcomes remains unanswered.

Carve-Out versus Integrated Care

There may be different issues at stake in assessing the role of independent behavioral health services for public, as compared with private, managed care. As states and counties move to develop managed care arrangements in the public sector, important issues arise as to what mechanisms they are using to contain costs. There are some tough questions to be answered about carved-in services that attempt to integrate substance abuse services and primary care. If carved-in private programs do provide more access and outcome rates compare favorably with those achieved by carved-out programs, will that also be true for the public sector? In the public sector, offering wraparound services directed to housing, employment, and legal problems seems crucial for the population in treatment.

Many states have formed their own substance abuse treatment carve-outs programs for Medicaid programs and sometimes the indigent as well, and have contracted with behavioral health organizations for their administration. In these cases, the existing block grant-funded public programs are often included in their provider networks. Recipients of publicly funded services may have more severe problems and elevated rates of comorbid health conditions; thus, carve outs may complicate healthcare integration.² At the same time, carve outs may enhance the likelihood that clients can access nonhealth oriented wraparound services, such as vocational, welfare, and housing services,

which have long been included within the mandate of public programs. Here again, there is little research evidence to document that these services are actually provided. Much needs to be learned about integrated service delivery under both carved-in and carved-out approaches. It is notable that a recent study of national facilities data found little indication that substance abuse treatment programs within managed care networks were any less likely than other comparable programs to provide social, vocational, welfare, and housing services.²¹

In sum, integration of substance abuse services with healthcare services theoretically occurs more easily and fully within staff model or group model HMOs. On the other hand, integration with criminal justice, welfare, or employment agencies may occur more easily in a carved-out program. Public and private programs may have different sets of issues, and contracts will play a crucial role in ensuring integrated services.

... TREATMENT WORKFORCE ...

Managed care may produce staffing changes in substance abuse treatment services. Staffing changes are common adaptations to evolving regulatory and purchasing environments in the healthcare market.³² Increases in administrative staff, for example, have been linked to the expansion of managed care because of increased requirements for record keeping and service authorization.³³

Historically, the alcohol and drug abuse treatment workforce has been made up of a variety of degreed and nondegreed workers. One of the unique features of the field is the presence of many workers who have been dependent on alcohol or other drugs themselves, are now in recovery, and draw on their own recovery experience in their clinical work. A workforce census of public and private substance abuse treatment programs in Massachusetts found that almost half (46%) of the 1328 counselors indicated that they were recovering from alcohol or drug problems.³⁴ The potential impact of managed care on the use of experiential counselors is uncertain. If managed care entities require the use of licensed practitioners, consumer access to counselors who are in recovery may be reduced. However, in an effort to reduce costs, there is also the potential for increased reliance on certified counselors as a less expensive source of labor than degreed professionals.

Managed care organizations also may be selective in their use of various licensed professionals in sub-

stance abuse treatment. Thus, the editorial sections of professional journals have raised concerns about the tendency of managed care firms to hire more psychiatrists than psychologists.^{35,36} For their part, psychiatrists have raised their own concerns about the role of physicians in payment systems that encourage the use of alternative providers as a way of lowering costs.^{37,38} One survey of these issues suggested that managed care organizations differ widely in their hiring policies. Whereas some emphasize medications management without counseling and psychotherapy, others rely on nonphysician practitioners and use psychiatrists only when prescription medications or hospitalization are needed.³⁹

Another workforce issue has to do with the medicalization of treatment under managed care. Achieving the goal of increased integration with medical care will likely result in more medicalized treatment. During the earlier years of managed care, one study of trends in inclusion of medical staff in substance abuse facilities found rather stable overall rates of physicians across freestanding community-

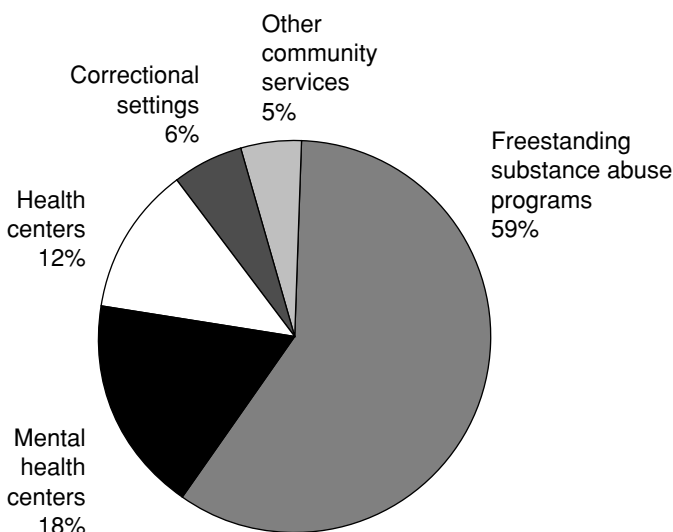
based and correctional programs between 1982 and 1992, although there was an apparent increase in physicians employed in specialty hospitals.²¹ However, after controlling for setting, patient load, and public versus private ownership of programs, the higher the proportion of agency funding coming from insurance reimbursement, the higher the likelihood of having a physician on staff. Moreover, the study found that independent of the source of funding, public or private ownership, size of the unit, the setting, and caseload characteristics, treatment facilities with a managed care affiliation were more likely to hire physicians as well as other medical staff.²¹ Managed care has become much more entrenched since these initial studies, and it is unknown whether this trend has persisted. Even though manpower changes could alter longstanding characteristics of the treatment system, these changes have not, to our knowledge, been examined extensively in either the public or the private sector.

... SERVICE PROVISION AND PLACEMENT ...

Specialty treatment services for alcohol and drug dependence are provided primarily through more than 12,000 organizations that deliver residential and outpatient care.⁴⁰ As Figure 2 shows, the majority of substance abuse treatment programs are in freestanding treatment settings, but many are also located in mental health settings.⁴⁰ Nearly all (88%) individuals in treatment receive ambulatory care. In sum, the current substance abuse treatment system primarily consists of small, freestanding independent services that provide outpatient services.

Accompanying cost containment has been the trend from inpatient to outpatient services.^{8,41,42} Figure 3 shows that clients are primarily receiving services in outpatient, combined outpatient, residential, or detoxification settings. Treatment programs typically provide one form of care, and the system had long been criticized for not using level-of-care criteria to match clients with services that specifically meet their individual treatment needs.¹ This is an area in which managed care may impact treatment. Increased standardization within managed care organizations may result in greater use of assessments and patient placement criteria to guide treatment planning. Managed care may facilitate more

Figure 2. Settings of Substance Abuse Treatment Programs in the United States



Data are from a census of US specialty treatment programs (n = 10,641; relative risk = 86%). Source: Reference 40.

consistent application of placement standards, thus reducing the variability and inefficiency of substance abuse services.

A 1995 analysis found that treatment units with established managed care contracts were more likely than others to provide high-intensity services, such as inpatient and other residential care. Further, they offered a wider range of services, including inpatient and outpatient care. Importantly, they also included vocational services, housing, employment, general support services, and combinations of these services.²¹ It is not clear, however, whether these differences reflect the particular kinds of units that have so far begun to contract with managed care or real differences in service mix. Also, data were not available as to whether the units were located in carved-out or carved-in delivery systems.

Other data also suggest that many substance abuse treatment programs still do not have formal relationships with managed care organizations.⁴⁰ Thus, managed care's effects on community-based alcohol and drug abuse treatment programs may just be beginning to become apparent.

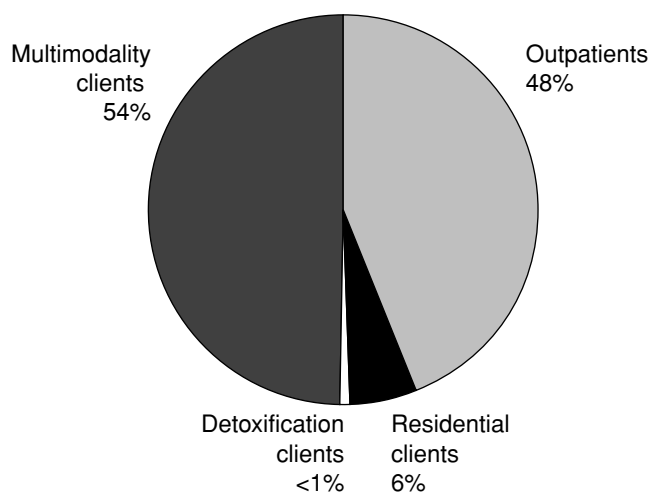
Treatment Consolidation

The 12,000 independent specialty substance abuse treatment programs in the United States are likely to consolidate into larger corporate entities through mergers, alliances, and networks.^{40,43} Managed care fosters reorganization and consolidation among treatment providers because of pressures to constrain costs, its emphasis on integrated services, intense competition for contracts, and a need for larger financial reserves in order to assume financial risk and enter into capitated contracts. Murphy⁴³ anticipates that competition among providers for limited contracts will stimulate agencies to form horizontal and vertical networks. Horizontal networks are composed of similar providers (eg, outpatient programs) that affiliate to reduce redundancy and costs, broaden geographic access, and enhance their ability to negotiate with managed care entities. Vertical networks integrate different types of providers (eg, hospitals, mental health centers, substance abuse programs) to increase the coordination of care and to improve the potential access to comprehensive capitated contracts for healthcare services. Both strategies spread financial risk over more programs and service recipients. Networks also permit more efficient billing,

clinical record keeping, internal utilization review, purchasing, marketing, and administration.^{40,43} This may have implications for the feasibility of carved-out systems, as multiple levels would be involved in integration. For example, it is not known whether staff in these networks define themselves as working in the same organization and as part of a continuum of care.

The implications of consolidation are uncertain. Fewer, but financially stronger, treatment programs may improve the stability and quality of treatment. Clinical processes will likely become more standardized, and programs will invest more heavily in information systems. At the same time, however, a reduction in the number of treatment programs could reduce access to care, especially in rural areas. Access to gender- and minority-specific services also may decline. Although research evidence is lacking, consolidation is not assumed to be always desirable, and purchasers of care and managed care organizations must strive to ensure continued access to appropriate services.

Figure 3. Distribution of Clients Across Treatment Modalities in the United States



Data are from a census of all individuals receiving care on a single day when the census was taken. *Source:* Reference 40.

... ACCESS AND UTILIZATION ...

Access is the issue that perhaps raises the most concern about managed care. Structural and financial barriers have always affected access to substance abuse treatment services, and access has to do not only with the availability of services in general, but also with the accessibility of appropriate services for specific population groups, such as women and ethnic minorities.² The availability of particular kinds of services also differs across the public and private sectors. Several studies in the 1970s and early 1980s showed major differences between the 2 sectors in the types of services available.^{8,9,41} More medical and residential services were available for those eligible for treatment in the private system than for those in the public one. There also have been serious problems with patient dumping and the resulting cost shifting. Public caseloads have included many individuals who had used up their private insurance benefits in costly inpatient programs.

Other problems (e.g., urban and rural differences in availability of treatment, services for women with children) cut across both the public and private sectors. Criticism has centered on the lack of downstream case finding and early intervention and on the limited access for individuals with combined mental health and substance abuse diagnoses. Across states, there have been large differences in the overall treatment capacity related to population size, and these differences have persisted even when treatment capacity was examined in terms of need, based on per capita alcohol consumption rates and other problem indicators.¹

Although managed care does not solve these problems, it has the potential to address some of the concerns about access. First, the health maintenance aspect of managed care tends to value, at least theoretically, the prevention of chronic, severe conditions that prove costly to third-party payers in the long run. This suggests a positive motivation for managed care to reduce the progression of problem drinking and drug addiction in covered populations through improved early case finding and access to intervention programs. The incentives to prevent chronic problems are likely to be reduced, however, if subscribers stay with their health plans for a minimal time and then move on to new plans. Also, under managed care, there exists the potential for better coordination and management of individual needs with appropriate care.

Concerns remain, however, about incentives that push managed care systems toward a demand-

based, rather than a needs-based, approach. Through various mechanisms, managed care restricts access to some services as it rations care or "fits" needs to services. Although the mechanisms may be intended to indeed fit the level of a client's need to the level and amount of care, it can be argued that the procedures used to manage costs can be barriers to access. Some of the barriers to access are copayments, which inhibit use by people with few resources, and capitation, which may encourage providers to restrain use of costly services or the overall amount of care used.² The mechanisms used include utilization management and review, precertification, selective reimbursement, prospective payment systems, incentives to use plan providers, cost sharing (deductibles and copayments), and capitation. Little research evidence exists regarding how these mechanisms differentially affect access.

Some attempts have been made to examine national access by using a population-based approach.⁴⁴⁻⁴⁶ More recently, some states have done needs assessments sponsored by the Center for Substance Abuse Treatment. The field to date has not taken a needs-based approach to examining access within health plans, particularly in the private sector. Because substance abuse clients typically do not enter treatment voluntarily, it is especially important to examine need as well as demand within health plans and how these factors relate to service access and utilization.⁴⁷ From a public health perspective, need and access should be viewed in the context of interacting community service systems. This means taking a broad view of the substance abuse system that includes not only specialty programs, but also general health and social service agencies, such as primary health clinics, prisons, and welfare programs.

... TREATMENT OUTCOMES ...

In addition to controlling access, managed care controls the process of care through selective contracting, preauthorization, and utilization review. Standardization, control, and accountability are imposed to balance utilization and costs while maintaining quality.^{2,18,48} In addition, treatment processes may be standardized and reliance on automation increased.⁴⁹ The major gap in our understanding of managed care and substance abuse treatment has to do with how these different mechanisms come together to affect treatment outcome—how success-

ful treatment is in addressing the range of problems individuals present to treatment.

A broad range of factors are important in considering treatment outcome. Most are relevant to alcohol treatment in general, rather than to managed care specifically. The broadest issues related to treatment include definitions of outcome and factors related to assessing outcome. Issues specific to managed care are more related to how outcome is measured.

Factors Related to Assessing Outcome

The stakeholders in health plans and treatment services have a significant impact on how treatment effectiveness is defined. With managed care, both public and private, the stakeholders include purchasers, managed care companies, accreditation organizations, practitioners, and consumers.² Under managed care, treatment programs may be less able to provide treatment in isolation from the outcome expectations of these stakeholders, particularly purchasers and accreditation agencies.

Abuse of alcohol and drugs is associated with problems in many areas of life, including health, employment, family, and the law,⁵⁰ indicating that the goals of treatment should be equally wide-ranging. The reasons that individuals are referred to or otherwise enter treatment often reflect the interests of the referring agencies, such as criminal justice, welfare, and the workplace, as well as the expectations that institutions, family members, and consumers have about treatment.^{47,51} A unique feature of substance abuse treatment is that people often come to treatment from the criminal justice system or the workplace with some degree of coercion. These referral sources have strong expectations for the intensity and level of care that may conflict with managed care guidelines based on apparent medical necessity. Moreover, their goals for treatment may emphasize reductions in problematic behavior (eg, criminality, absenteeism) rather than abstinence. Thus, managed care organizations may have a complex relationship with coercion and outcome, and traditional fee-for-service models of care may be more responsive to coerced patients. These features related to treatment entry impact treatment outcome, just as they do the measurement of access.

Another longstanding issue with which the treatment system has not fully grappled, but which may impact outcome in managed care programs, has to do with evidence-based medicine and treatment ideologies. Treatment strategies often are based on nonmedical approaches and emphasize treatments

solely based on abstinence. Conflicts in the field, such as those having to do with abstinence versus harm reduction strategies or with pharmacotherapies versus self-help, are not always consistent with evidence-based medicine. For example, many chemical dependency programs do not consider the use of medications that have proven efficacy. These approaches may become a larger issue for managed care treatment services.

Finally, research reviews have shown that compliance rates for addiction treatment are similar to those for other chronic diseases such as diabetes and asthma and are consistent with defining substance abuse as a chronic, relapsing condition.⁵¹ However, treatment agencies have been expected to promote "cure." Treatment programs, particularly those in medical clinics, have not developed services geared toward a chronic condition model, and on the whole, insurance patterns are not consistent with such an approach. This situation has long-term implications for the acceptance and role of substance abuse treatment as a part of healthcare, and it clearly speaks to the issue of integrated care.

No studies have compared outcomes in managed care with similar treatment regimens in nonmanaged care substance abuse treatment programs. However, the broader outcomes literature speaks to some of the potential ramifications. Many excellent reviews of this literature exist.^{1,10,52,53} A recent Institute of Medicine study² recommended distinct outcome measures for the different stages of treatment (here conceptualized as detoxification, rehabilitation, and aftercare). Patient indicators, such as employment, education, and level of severity, have been the most robust predictors of treatment outcome. In recent years, motivation has been identified as an important individual factor related to outcome, and motivation may be confounded with other factors such as choice of care. This may have implications for outcome within managed care settings, where individuals have less overall choice than they did in the past about where they go for treatment and what kinds of services they receive.

In addition to patient characteristics, outcome studies have revealed an important new interest in program-level indicators that may have implications for treatment under managed care. To date, these "process" measures emphasize length of treatment and setting. Ideally, these measures also include more detailed indicators reflecting the content of services provided. One set of studies examined how alcohol- and drug-related services impact other

realms of the patient's life such as job productivity and criminal behaviors. Evidence suggests that these services may be related to reduced alcohol and drug use, as well as to personal health and social functioning^{54, 55} and to longer term improvement in alcohol and drug use.⁵³

Measurement of Outcomes

A significant consequence of managed care for the substance abuse treatment field is the new interest in outcomes monitoring. Outcomes monitoring may include conducting clinical outcome studies and evaluations of recovery rates within programs. In an unprecedented move, several states are working with the Center for Substance Abuse Treatment to monitor treatment outcomes. Many private programs also are contracting with outcomes-monitoring firms or are tracking clinical outcomes on their own. One large employer has disseminated performance standards to challenge its contractor health plans to adopt best practices, develop benchmarks for excellence, promote consistent performance among health plans located in different communities, guide quality improvement efforts, and contribute to purchasing decisions.⁵⁶

As part of a beginning assessment of intermediate (process) measures, however, the main "contributions" of managed care have been in the area of monitoring performance indicators, the development of accreditation of treatment agencies, and the credentialing of staff. Several new types of organizations have come on the scene. Accreditation organizations include the American Managed Behavioral Healthcare Association, which addresses carve-out behavioral healthcare organizations; the Rehabilitation Accreditation Commission, for behavioral healthcare programs and community providers; the Council on Accreditation of Services for Families and Children, for behavioral healthcare and social service programs; the Joint Commission on Accreditation of Healthcare Organizations, for healthcare networks; the National Committee for Quality Assurance, for HMOs, point of service, and preferred provider organizations with defined populations; and the Utilization Review Accreditation Commission, for HMOs, preferred provider organizations, physician/hospital organizations, independent practice associations, point of service, single specialty networks, other managed care systems, and provider networks providing services for Medicare, Medicaid, and Workers Compensation. The accreditation process is complex and costly, and this plethora of organizations raises problems

for programs and health plans that fall under more than one jurisdiction and are required to have multiple accreditations.

Public and private purchasers also are requiring health plans to report on specific measures of plan performance. The Health Plan Employer Data and Information Set (HEDIS) is the most widely adopted set of performance measures, and we thus use it to illustrate the expectations about performance indicators. HEDIS is supported by the National Committee for Quality Assurance, which requires health plans to report standardized measures reflecting aspects of healthcare delivery in order to facilitate reliable comparisons among managed healthcare plans.⁵⁷ HEDIS sets performance standards for the effectiveness of care, access to care, satisfaction with care, cost of care, health plan stability, consumer information, and use of services, and it includes descriptive information on health plans.⁵⁷ Measures are selected to ensure relevance, scientific soundness, and feasibility. Health plans report the data annually and produce separate reports for 3 populations of members: commercial, Medicaid, and Medicare.⁵⁷ Purchasers and the public may purchase data and reports from the National Committee for Quality Assurance.

Only 4 HEDIS performance measures address substance abuse services.⁵⁷ Access to care is assessed by the number of chemical dependency providers who serve plan participants, who accept new patients with and without restriction, or who do not accept new patients. Three measures monitor use of services. First, plans describe utilization of inpatient services for alcohol and drug treatment. They report discharges categorized by age and gender from inpatient chemical dependency services, discharges per 1000 members per year, total days of inpatient care per year, and average length of stay. A second measure assesses the extensiveness of services available in health plans. The measure records the number and percentage of members receiving any chemical dependency services, inpatient services, day/night services, and ambulatory services by age and gender. Finally, rehospitalization after treatment is monitored. Plans report the number and percentage of members by age and gender who were rehospitalized for chemical dependency treatment within 90 and 365 days of discharge after inpatient chemical dependency treatment. This kind of indicator, however, depends on plans not having limits on treatment benefits and thus has been critiqued because it is confounded by treatment availability and access.

The HEDIS measures tend to reflect the most expensive level of care (inpatient hospitalization) and provide only an indirect measure of access (the number of practitioners accepting new patients). Purchasers and consumers concerned with the adequacy and quality of services for alcohol and drug problems may expect more details on the scope and intensity of services. HEDIS measures, for example, do not encourage health plans to screen members for alcohol and drug problems or to provide early intervention and prevention services. The Foundation for Accountability recommends these activities and emphasizes quality measures that reflect a health plan's capacity to educate, intervene, and treat alcohol abuse and dependence.⁵⁸ It also is critical to observe and measure continuity of care from inpatient to outpatient and engagement in multiple sessions of outpatient services. Consumer groups also may advocate for more attention to grievances and complaints related to access and utilization of services. Finally, health plans do not typically monitor member functioning after treatment for alcohol and drug abuse. Measures of outcome could include the use of alcohol and other drugs, as well as other health and social functioning. Health plans must be encouraged to continue to improve the quality and effectiveness of their services related to treatment for alcohol and drug dependence and abuse.

New approaches to linking outcomes measurement to process measures focus on intermediate indicators of outcome—process indicators linked to the outcomes literature.² A prominent example has to do with measuring the services (medical, psychiatric, family, legal, employment) provided. Reporting the type and amount of services provided could be used as an effective performance indicator if research evidence continues to show this relationship,⁵³ and if results are replicated in managed care samples. The most precise approach would match the problem and severity level at intake to the delivery of services. This approach would require assessments at admission to identify the type and amount of services required for each program. This is not as difficult an undertaking as it might seem because most clinical guidelines require such assessments, and there are several relatively brief instruments for doing so.

... IMPLICATIONS OF MANAGED CARE FOR
SUBSTANCE ABUSE TREATMENT ...

Treatment for alcohol and drug problems continues to change within the dynamic context of man-

aged care. Not only is it expected that increasing numbers of public and private patients will receive treatment under managed care arrangements, but it also is clear that organizational and financing approaches will continue to evolve. Different organizational contexts, particularly with respect to the settings in which treatment is placed, will have different impacts on ties between substance abuse treatment and the medical community, criminal justice, and welfare agencies. Ties with each of these entities are important to address the health, mental health, and social functioning problems related to alcohol and drug problems, as well as their resolution. If the traditional settings become replaced by medical settings, it will be more difficult to provide the nonmedical services related to positive outcomes for clients with multiple problems. The system's balance across institutional settings also may have important long-term ramifications for how problems are seen—as medical problems, public health problems, or problems of social order—and the ways they are treated. How these are defined also may affect the overall orientation of health plans with respect to a chronic disease model that is cure oriented, as opposed to a model that emphasizes prevention and early intervention. There are also complex issues relating to service integration with mental health treatment providers. More integration may mean creating a continuum of substance abuse and mental health services from what were once independent systems, by classifying all of them under the common rubric of “behavioral healthcare” for the purposes of managing care.

We need to see whether characteristics of the treatment workforce, as well as the types of services provided, are affected by the organization and financing of services under managed care. Concerns have been raised by providers and consumers that these changes may affect the availability of services, access to them, and the results of treatment.² As has been the case for substance abuse treatment systems historically,¹ these changes often take place without the benefit of thorough evaluation or even careful planning. Rather, they are responses to sudden shifts in the marketplace and to political exigencies. The irony is that although managed care is critiqued heavily for its emphasis on a minimalist approach to substance abuse treatment, it has also spawned a much greater emphasis on accountability than the substance abuse field has experienced in the past. The crucial factor is whether that accountability will be manifested as reliance on not-so-meaningful indicators of performance, or whether

regularized outcomes monitoring and meaningful performance indicators linked to outcome will become standard procedures. Much of the responsibility for this meaningful evolution rests with treatment programs participating in such efforts but also, importantly, with outcomes researchers turning their attention to linking their work with these applied issues and process measures. Here, it will be important to integrate knowledge about social policy, organizational, and individual factors more deeply with research on access and outcome.

... REFERENCES ...

1. Institute of Medicine. *Broadening the Base of Treatment for Alcohol Problems*. Washington, DC: National Academy Press; 1990.
2. Edmunds M, Frank R, Hogan M, et al. *Managing Managed Care: Quality Improvement in Behavioral Health*. Washington, DC: National Academy Press; 1997.
3. Mechanic D. *Mental Health and Social Policy: The Emergence of Managed Care*. 4th ed. Boston, MA: Allyn and Bacon; 1998.
4. Mechanic D. Managed care as a target of distrust. *JAMA* 1997;277:1810-1811.
5. McKusick D, Mark TL, King E, et al. Spending for mental health and substance abuse treatment. *Health Aff* 1998;17(5):147-157.
6. Frank RG, McGuire TG. Estimating costs of mental health and substance abuse coverage for public policy. *Health Aff* 1995;14(3):102-115.
7. Shore MF. An overview of managed behavioral health care. *New Dir Ment Health Serv* 1996;72:3-12.
8. Schmidt L, Weisner C. Developments in alcoholism treatment: A ten year review. In: Galanter M, ed. *Recent Developments in Alcoholism*. New York, NY: Plenum; 1993:369-396.
9. Yahr HT. A national comparison of public and private sector alcoholism treatment delivery system characteristics. *J Stud Alcohol* 1988;49:233-239.
10. Gerstein DR, Harwood HJ. *A Study of The Evolution, Effectiveness, And Financing Of Public And Private Drug Treatment Systems*. Washington, DC: National Academy Press; 1990. *Treating Drug Problems*; vol 1.
11. Dayhoff DA, Pope GC, Huber JH. State variations in public and private alcoholism treatment at specialty substance abuse treatment facilities. *J Stud Alcohol* 1994;55:549-560.
12. Freeman MA, Trabin T. Managed behavioral healthcare: History, models, key issues, and future course. Report prepared by Behavioral Health Alliance for the US Department of Health and Human Services. Substance Abuse and Mental Health Services Administration; 1994.
13. American Managed Behavioral Healthcare Association. Public mental health systems, Medicaid restructuring and managed behavioral healthcare. *Behav Healthc Tomorrow* September/October 1995:63-69.
14. Essock SM, Goldman HH. States' embrace of managed mental health care. *Health Aff* 1995;14(3):34-44.
15. Rochefort DA. Mental health reform and inclusion of the mentally ill: Dilemmas of US policy-making. *Int J Law Psychiatry* 1996;19:223-237.
16. Intagliata J. Improving the quality of community care for the chronically mentally disabled: The role of case management. *Schizophr Bull* 1982;8:655-674.
17. Levin BL, Glasser JH, Roberts RD. Changing patterns in mental health service coverage within health maintenance organizations. *Am J Public Health* 1984;74:453-458.
18. Mechanic D, Schlesinger M, McAlpine DD. Management of mental health and substance abuse services: State of the art and early results. *Milbank Q* 1995;73:19-56.
19. Frank RG, McGuire TG, Regier DA, et al. Paying for mental health and substance abuse care. *Health Aff* 1994;13(1):337-342.
20. The Lewin Group. SAMHSA managed care tracking system: Final report of a prototype system to monitor public sector managed behavioral healthcare activities in the states. Fairfax, VA: The Lewin Group; 1997.
21. Schmidt L, Piroth K, Weisner C. Substance abuse and mental health treatment systems: The changing organization of service delivery and its implications. Report prepared for the Substance Abuse and Mental Health Services Administration under the auspices of the National Archive and Analytic Center for Alcohol, Drug Abuse and Mental Health Data, National Opinion Research Center (NORC). Berkeley, CA: Alcohol Research Group; 1998.
22. Miller RH, Luft HS. Managed care performance since 1980: A literature analysis. *JAMA* 1994;271:1512-1519.
23. Hoffman NG, Halikas JA, Mee-Lee D, et al. *Patient Placement Criteria For the Treatment of Psychoactive Substance Use Disorders*. Washington, DC: American Society of Addiction Medicine; 1991.
24. Frank RG, McGuire TG, Newhouse JP. Risk contracts in managed mental health care. *Health Aff* 1995;14(3):50-64.
25. Hodgkin D, Horgan CM, Garnick DW. Make or buy: HMOs' contracting arrangements for mental health care. *Adm Policy Ment Health* 1997;24:359-376.
26. Frank RG, McGuire TG. Savings from a Medicaid carve-out for mental health and substance abuse services in Massachusetts. *Psychiatr Serv* 1997;48:1147-1152.
27. Frank R, McGuire TG, Bae JP, et al. Solutions for adverse selection in behavioral health care. *Health Care Financ Rev* 1997;18:109-122.
28. Brisson AE, Frank RG, Notman ES, et al. Impact of a managed behavioral health care carve-out: A case study of one HMO. [Report]. Boston, MA: Harvard Medical School, Department of Health Care Quality; 1997.
29. Callahan JJ, Shepard DS, Beinecke RH, et al. Mental health/substance abuse treatment in managed care: The Massachusetts Medicaid experience. *Health Aff* 1995;14(3):173-184.
30. Ma CA, McGuire TG. Costs and incentives in a behavioral health carve-out. *Health Aff* 1998;17(2):53-69.
31. Goldman W, McCulloch J, Sturm R. Costs and use of mental health services before and after managed care. *Health Aff* 1998;17(2):40-52.

32. Osterweis M, McLaughlin CJ, Manasse HR, et al. *The US Health Workforce: Power, Politics and Policy*. Washington, DC: Association of Academic Health Centers; 1996.
33. Himmelstein DU, Lewontin JP, Woolhandler S. Who administers? Who cares? Medical administrative and clinical employment in the United States and Canada. *Am J Public Health* 1996;86:172-178.
34. Mulligan DH, McCarty D, Potter D, et al. Counselors in public and private alcoholism and drug abuse treatment programs. *Alcoholism Treatment Quarterly* 1989;6(3/4):75-89.
35. Shadle M, Christianson JB. National survey of mental health, alcohol, and drug abuse services in HMOs.[report]. Ann Arbor, MI: InterStudy: Center for Managed Care Research; 1988.
36. Cheifetz DI, Salloway JC. Patterns of mental health services provided in HMOs. *Am Psychol* 1984;39:495-502.
37. Altman LS, Frisman LK. Preferred provider organizations and mental health care. *Hosp Community Psychiatry* 1987;38:359-362.
38. Gurevitz H. Psychiatry and preferred provider organizations. *Psychiatric Annals* 1984;14:342-349.
39. Boyle P, Callahan D. Minds and hearts: Priorities in mental health services. *Hastings Cent Rep* 1993(suppl Sept/Oct):3-23.
40. Substance Abuse and Mental Health Services Administration. Uniform Facility Data Set (UFDS): Data for 1980-1996. Rockville, MD: Office of Applied Studies, Substance Abuse and Mental Health Services Administration; 1998. SMA 98-3176.
41. Weisner C, Morgan P. Rapid growth and bifurcation: Public and private alcohol treatment in the United States. In: Klingemann H, Takala J-P, Hunt G, eds. *Cure, Care or Control: Alcoholism Treatment in Sixteen Countries*. New York, NY: State University of New York; 1992:223-252.
42. National Institute on Alcohol Abuse and Alcoholism. *Alcohol and Health: Ninth Special Report to the US Congress*. Rockville, MD: US Dept of Health and Human Services; 1997. NIH Publication Number 97-4017.
43. Murphy AM. *Formation of Networks, Corporate Affiliations and Joint Ventures Among Mental Health and Substance Abuse Treatment Organizations*. Rockville, MD: Center for Mental Health Services; 1995.
44. Weisner C, Greenfield T, Room R. Trends in the treatment of alcohol problems in the US general population, 1979 through 1990. *Am J Public Health* 1995;85:55-60.
45. Schmidt L, Weisner C. Public health perspectives on access and need for substance abuse treatment. In: Tucker J, Donovan D, Marlatt G, eds. *Changing Addictive Behavior: Moving Beyond Therapy Assisted Change*. New York, NY: Guilford Press.; 1999.
46. Grant B. Toward an alcohol treatment model: A comparison of treated and untreated respondents with DSM-IV alcohol use disorders in the general population. *Alcohol Clin Exp Res* 1996;20:372-378.
47. Weisner C, Schmidt L. Access and need for alcohol treatment services. *Developing a Health Services Research Agenda for the Alcohol Field*. Rockville, MD: US Dept of Health and Human Services. NIAAA Monograph on Health Services Research. In press.
48. Institute of Medicine. *Controlling Costs and Changing Patient Care? The Role for Utilization Management*. Washington, DC: National Academy Press; 1989.
49. Kralewski JE, Wingert TE, Knutson DJ, et al. The effects of capitation payment on the organizational structure of medical group practices. *J Ambulatory Care Manage* 1996;19:1-16.
50. Midanik LT, Clark WB. Drinking-related problems in the US: Description and trends (1984-1990). *J Stud Alcohol* 1995;56:395-402.
51. McLellan AT, Metzger DS, Alterman AI, et al. Is treatment for substance abuse dependence "worth it"? Public health expectations, policy-based comparisons. In: Sirica C, ed. *Training About Alcohol and Substance Abuse for All Primary Care Physicians*. New York, NY: Josiah Macy Press; 1995:165-212.
52. Monahan SC, Finney JW. Explaining abstinence rates following treatment for alcohol abuse: A quantitative synthesis of patient, research design and treatment effects. *Addiction* 1996;91:787-805.
53. McLellan AT, Belding M, McKay JR, et al. Can the outcomes research literature inform the search for quality indicators in substance abuse treatment? In: Edmunds M, Frank R, Hogan M, et al, eds. *Managing Managed Care: Quality Improvement in Behavioral Health*. Washington, DC: National Academy Press; 1997:271-311.
54. McLellan AT, Alterman AI, Metzger DS, et al. Similarity of outcome predictors across opiate, cocaine and alcohol treatments: Role of treatment services. *J Consult Clin Psychol* 1994;62:1141-1158.
55. McLellan AT, Arndt IO, Metzger DS, et al. The effects of psychosocial services in substance abuse treatment. *JAMA* 1993;269:1953-1959.
56. Digital Equipment Corporation. HMO performance standards. [Report]. Maynard, MA: Digital Equipment Corporation; 1995.
57. National Committee for Quality Assurance. *HEDIS 3.0: Understanding and Enhancing Performance Measurement. NCQA Reference Set*. Washington, DC: National Committee for Quality Assurance; 1997.
58. The Foundation for Accountability. *FACCT Quality Measures Guide: Alcohol Misuse*. Portland, OR: The Foundation for Accountability; 1998.