

# Public Sector Managed Care for Substance Abuse Treatment: Opportunities for Health Services Research

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## Abstract

*Observations of reduced utilization of alcohol and drug abuse treatment following the introduction of managed behavioral health care suggest that substance abuse services may be especially responsive to managed care restrictions and limits. In publicly funded treatment systems, patient attributes, system and provider characteristics, and financing mechanisms may heighten susceptibility to unintended effects. The State Substance Abuse and Mental Health Treatment Managed Care Evaluation Program reviewed state managed care programs for publicly funded alcohol and drug treatment services and is evaluating programs in Arizona, Iowa, Maryland, and Nebraska. The article describes initiatives and outlines evaluation activities. It discusses the opportunities and challenges of assessing public managed care plans.*

Application of managed behavioral health care to publicly funded services for alcohol and drug abuse is changing models of care, shifting utilization patterns, and altering the financing for state substance abuse treatment systems. The rapid and sometimes chaotic evolution of services for alcohol and drug dependence provides ample opportunities for health services researchers to contribute to the redesign and evaluation of these public policy initiatives. Available studies of managed behavioral health care, however, provide limited information for policy makers, providers, and patients about impacts on substance abuse treatment services. There is great need, therefore, for health services research that specifically assesses change in access, quality, and treatment outcomes associated with the introduction of managed behavioral health care and modifications in the organization, financing, and delivery of treatments for abuse and dependence of alcohol and other drugs. Evaluations of these relationships are urgently needed to guide the design and implementation of public systems of care. In the absence of data and systematic analysis, policy makers must learn through trial and error.

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To illustrate the opportunities and challenges for health services research, this article briefly reviews studies of managed behavioral health care that suggest reductions in service utilization, examines attributes that may contribute to heightened vulnerability, and describes a series of evaluations being conducted with publicly funded substance abuse treatment systems. The article presents the implications for behavioral health care to encourage continued health services research on managed behavioral health care and treatment for alcohol and drug abuse.

## **Managed Care and Substance Abuse Treatment**

Studies of carve-outs for behavioral health care in commercial health plans,<sup>1</sup> health plans for state employees,<sup>2,3</sup> and Medicaid plans<sup>4-6</sup> support their capacity to achieve both increased utilization and reduced expenditures. Savings are typically achieved through a combination of reduced rates for providers and a shifting of service delivery from relatively expensive inpatient to less costly ambulatory settings.

The analyses of behavioral health care costs and utilization, however, rarely separate costs and utilization for substance abuse treatment and mental health services.<sup>7</sup> The limited reports currently available suggest declines in utilization of alcohol and drug abuse treatments not only for the use of inpatient services but also for outpatient treatment. Moreover, the declines appear to be greater for substance abuse treatment than for mental health services.<sup>7</sup>

Changes in a behavioral health care carve-out, for example, were associated with a 40% reduction in the number of individuals receiving substance abuse services even though there was a 71% increase in the individuals receiving behavioral health care.<sup>8,9</sup> Similarly, declines in utilization of substance abuse inpatient (5% decrease) and outpatient (33% decrease) services were greater than for mental health—inpatient (10% increase) and outpatient (25% decrease)—when Massachusetts implemented a behavioral health carve-out for state employees.<sup>2</sup> Substance abuse services to Medicaid recipients also declined. In the first year following the introduction of a behavioral health carve-out for Medicaid recipients in Massachusetts, there was a 4% increase in the number of enrollees receiving behavioral health care, but inpatient substance abuse treatment declined 5% and utilization of outpatient substance abuse treatment dropped 4%.<sup>4</sup> The study also reported increased utilization of methadone treatment and acute residential services. A longer-term analysis suggested a slight rise in the use of outpatient services in the second year of the Massachusetts carve-out among Medicaid recipients without disabilities and declining utilization among recipients with disabilities.<sup>5</sup>

A study of an employer-sponsored health plan also observed utilization declines. Utilization of substance abuse services declined from 64 to 41.3 users per 1,000 per year in the second year of a carve-out (a 35% decline) when an employer shifted from 23 separate health maintenance organization (HMO) plans to one managed behavioral health plan.<sup>10</sup> Despite increased use of intermediate care (7.7 to 26.7 users per 1,000 per year), substantial declines in both inpatient (10.6 to 2.5 users per 1,000 per year) and outpatient services (45.7 to 12.1 users per 1,000 per year) led to the reduction in total utilization.<sup>10</sup> Data were not provided on the use of mental health services.

Together, the investigations begin to suggest that managed behavioral health care can have a differential and more severe impact on substance abuse treatment than on other behavioral health services. Health services research studies can identify factors contributing to the apparent heightened vulnerability and investigate program design variables that can offset undesired negative impacts.

## **Why Would Substance Abuse Treatment Be More Vulnerable to Managed Care?**

Health services research can begin to assess the attributes of substance abuse services that enhance the potential vulnerability to deleterious effects from managed care. Patient attributes, system

characteristics, and financing issues may contribute to and enhance the likelihood of reductions in utilization under managed behavioral health care, especially in public systems of care.

### **Patient attributes**

Patient characteristics (including high levels of social complications, strong potentials for relapse, and the effects of persistent stigma and denial) contribute to the difficulty of providing behavioral health services of appropriate intensity and duration for both mental health and substance abuse treatments<sup>11</sup> and may increase the potential negative impacts of managed behavioral health care. For substance abuse, social complications (eg, homelessness, pregnancy, and court orders), combined with medical need and comorbid medical conditions, can affect utilization management and determination of level of care. The needs and desires of family members also may affect level-of-care decisions. Thus, assessments of medical necessity become more ambiguous and differences of opinion are likely.

The chronic relapsing nature of mental illness and alcohol and drug dependence also may contribute to frequent and intermittent utilization of expensive services. Further, stigma and denial often inhibit treatment seeking and the identification of treatment needs. Because alcohol- and drug-dependent individuals may fail to seek care and because health care providers may fail to screen for and refer individuals in need of alcohol and drug treatment, special efforts to promote identification and facilitate access to care may be required in managed care organizations.

The application of managed care is especially challenging in publicly funded systems of alcohol and drug dependence intervention and treatment services. The men, women, and children served in public systems typically have greater levels of impairment due to alcohol and drug dependence and a greater range of clinical and social needs than observed among populations insured through employer-sponsored health plans.<sup>12,13</sup> Medicaid recipients and uninsured individuals tend to have long histories of use and abuse, abuse multiple substances, report substantial health and social debilitation, and be involved with the criminal justice system.<sup>13</sup>

### **Systems of care**

Because patient needs are often complex, public treatment systems typically offer a wider range of services than those found in most commercial health plans. Continua of care include detoxification, long-term residential care (in non-hospital settings), methadone services, and intensive and traditional outpatient services. Ancillary and support services also are available (ie, child care, transportation, vocational rehabilitation, and assistance with housing and legal problems). Commercial managed behavioral health organizations may have little experience with these ancillary services, specialized substance abuse treatments, and community-based substance abuse treatment agencies. Public sector service providers often are small, not-for-profit organizations with relatively unsophisticated management systems. The programs often are staffed or structured in ways that are inconsistent with the expectations of medically oriented certification and accreditation agencies. Therefore, managed care companies need to develop capacities for managing medical and support services and for selecting, supporting, and managing a broad range of community providers. Simultaneously, autonomous agencies that specialize in the treatment of alcohol and drug abuse and dependence need to build the management and service skills required for survival in a changing environment.

Unfortunately, the 16,000 specialized facilities that provide treatment for alcohol and drug abuse have relatively limited experience with managed care. In 1995 and 1996, about 60% of the specialty programs reported that they did not have a formal arrangement with a managed care plan.<sup>14,15</sup> The proportion was 50% in 1997.<sup>16</sup> A study of outpatient substance abuse treatment programs in New England found that managed care organizations were more likely to contract with mental health

centers than freestanding substance abuse clinics.<sup>17</sup> In short, publicly funded systems of care that specialize in treating substance abuse are less likely to have experience working with managed behavioral health care organizations and managed health plans. As a result, providers may struggle with managed care mechanisms including preauthorization and utilization review, and services for patients may be affected by the lack of experience. Health services research can investigate how treatment program experience with managed behavioral health care is related to the quality and quantity of care.

## **Financing**

Substance abuse treatment accounts for a relatively small proportion of the national expenditures for behavioral health care (about 16% in 1996, or \$12.6 billion of \$79.3 billion) and spending on personal health care (about 1% of \$943 billion).<sup>18</sup> Managed care and managed behavioral health care organizations, therefore, may focus management attention on the larger sums spent for mental health services and be less attentive to impacts on substance abuse treatment because they optimize systems of care to address the most prevalent problems. Management systems may track the large expenditures and provide little feedback on the use of substance abuse services.

Moreover, compared with mental health services, substance abuse services are used by fewer individuals. An analysis of 1995 claims data from 93 behavioral health care plans found that less than 1% (0.3%) of the members received any treatment for disorders related to alcohol and drug dependence and abuse while 5.2% accessed mental health services.<sup>19</sup> The cost of substance abuse treatment (\$2,188 per user), however, was more than double the per-user expense of mental health treatment (\$979 per user). The combination of low incidence and high per-user cost may encourage health plans to manage access to substance abuse treatment more aggressively. Health services research can study the utilization and expenditure patterns for alcohol and drug abuse treatment, assess variations across types of managed care plans, and relate differences in management strategies.

Determination of eligibility for services also can be challenging. Eligibility for publicly funded services may not be specified. Some states use income eligibility standards (which may incorporate sliding fee scales). Many states, however, apply a public health perspective and cover services for individuals without insurance, individuals who have exhausted their commercial insurance benefits, and individuals who are unwilling to use their insurance coverage because they do not want their health plan or employer to know they are being treated. Because eligibility is not clearly delimited, it may be more difficult to determine the potential number of eligible beneficiaries and to calculate appropriate capitation rates. Thus, there are opportunities to investigate the feasibility and effects of different payment and financing arrangements.

## **Summary**

In summary, substance abuse treatment services and the men and women seeking treatment for alcohol and drug abuse have idiosyncrasies that may complicate the management of services. Failure to address these unique aspects in the design and implementation of systems of care might contribute to the apparent sensitivity to the introduction of managed behavioral health care. Health services research on managed care and substance abuse treatment can examine a variety of models for managed behavioral health care to identify factors that contribute to and mitigate the desired and undesired effects of changes in the organization and financing of care. An analysis of managed behavioral health programs for publicly funded substance abuse and mental health care in four states illustrates the challenges for health services research.

## **State Substance Abuse and Mental Health Treatment Managed Care Evaluation Program**

The State Substance Abuse and Mental Health Treatment Managed Care Evaluation Program was designed to review state managed care programs for publicly funded alcohol and drug abuse treatment services, assess integration with mental health managed care initiatives, analyze and evaluate program implementation in selected states, and disseminate results to policy makers. The Center for Substance Abuse Treatment (with support from the Center for Mental Health Services) within the Substance Abuse and Mental Health Services Administration contracted with Brandeis University's Schneider Institute for Health Policy and its partners Johnson, Bassin & Shaw, Inc and the Department of Health Care Policy at Harvard Medical School to design and conduct the study. During year 1, the evaluation team completed a description of state managed care programs and an analysis of the operational context in each state for its managed behavioral health care initiative. Based on this review, four states agreed to participate in a collaborative evaluation: Arizona, Iowa, Maryland, and Nebraska. The states were selected because they had comprehensive data systems, were willing to collaborate, and varied on four dimensions: the integration of mental health and substance abuse services, the inclusion of funds for non-Medicaid services, models of managed care, and statewide versus regional structures. Three of the states implemented behavioral health carve-outs for mental health and substance abuse treatment (Arizona, Iowa, and Nebraska), and one state included substance abuse treatment in the capitation for general health care (Maryland). Arizona and Iowa also expanded eligibility and services as part of their initiatives while Maryland and Nebraska did not change. State-specific evaluations were designed and implemented for each state.

### **Arizona**

The Arizona Health Care Cost Containment System (AHCCCS) has been operating as a statewide, capitated, managed care Medicaid program under Section 1115 waivers for 18 years. Alcohol, drug, and mental health services were added as a benefit in 1990 and included in a behavioral health program serving both Medicaid and non-Medicaid clients. Five private Regional Behavioral Health Authorities (RBHAs) contract with the Division of Behavioral Health Services in the Arizona Department of Health Services to serve six geographic areas. The RBHAs have considerable latitude in the delivery of care and may provide care directly or contract with community-based organizations using fee-for-service or at-risk contracts. The Division of Behavioral Health Services receives a specified number of Medicaid dollars per enrollee to provide behavioral health services to the Medicaid-eligible population. Federal, state, and county dollars also are used to fund services for indigent individuals who are not Medicaid eligible. RBHAs receive two types of payment: capitated rate payments for Medicaid enrollees and allocations for services for non-Medicaid enrollees. RBHAs deliver a full range of behavioral health services for adults with substance abuse, general mental health disorders, serious mental illness, children with serious emotional disturbances, and children with mental health problems who do not suffer from serious emotional disturbances. RBHAs also provide prevention programs for adults and children and case management/case coordination and treatment planning services to all eligible individuals. RBHAs either deliver case management and other services directly or contract with a network of providers for these services.

The Arizona evaluation builds on the presence of the different RBHAs to assess the influence of variations in provider structures and risk-sharing arrangements. Analyses assess utilization and outcomes by client characteristics, Medicaid eligibility, and RBHA. The study also examines the development of provider networks, the use of level-of-care criteria, and the introduction of innovative services for mental health and substance abuse treatment. Arizona provides access to four databases: Title XIX enrollment data, client information system data, Medicaid claims, and Medicaid encounters. A relational database links clients across systems. Data for the period October 1, 1995, to

June 30, 1998, are used to examine treatment processes over time. October 1, 1995, was the first day substance abuse treatment services were covered under Medicaid. Individuals enrolled between October 1, 1995, and September 30, 1997, constitute the universe of clients from which target subgroups are selected and studied.

## **Iowa**

Iowa initiated managed health care for Medicaid recipients in 1986 with voluntary enrollment in HMOs, and a mandatory primary care case management (PCCM) program began in 1990. In most areas of the state beneficiaries choose an HMO or specify a PCCM. Implementation of the Mental Health Access Program (MHAP) in March 1995 extended managed care to mental health services for almost all categories of Medicaid recipients. MHAP included contributions from county governments to cover county residents who are not Medicaid eligible.

A separate managed care initiative for substance abuse treatment began in September 1995—the Iowa Managed Substance Abuse Care Plan (IMSACP). The Iowa Department of Public Health and the Iowa Department of Human Services jointly funded and administered the contract. The contract covered substance abuse services to Medicaid and non-Medicaid clients, but specified different roles, responsibilities, and benefits for the Medicaid and non-Medicaid beneficiaries. The IMSACP Medicaid contract was a capitated, at-risk, carve-out plan to provide managed substance abuse treatment under a Section 1915(b) waiver for Medicaid recipients enrolled with the plan. For non-Medicaid services, the treatment programs delivered at-risk, provider-managed services using standardized clinical criteria. Iowa was the first state to include substance abuse services for non-Medicaid beneficiaries under managed care. An initial analysis of IMSACP found increased access and no change in client satisfaction.<sup>20</sup>

The managed care functions were rebid in 1998, and a single management contract was awarded to Merit Behavioral Care. Treatment services for substance abuse and mental health were integrated under the Iowa plan in January 1999. Mental health and substance abuse services, however, retain distinct benefit structures and provider networks. Moreover, substance abuse benefits for Medicaid and non-Medicaid recipients continue to be administered independently.

In Iowa, the evaluation design assesses utilization of substance abuse treatment before (fiscal years 1994 and 1995) and after the introduction of managed care (fiscal years 1996, 1997, 1998) for individuals with and without Medicaid coverage. (The 1999 changes are not included within the scope of the evaluation analyses.) The evaluation also addresses change in the characteristics of the individuals admitted to care and variation in the intensity and type of care provided. The study database includes substance abuse treatment files, Medicaid claims and encounters, and Medicaid eligibility data for the period July 1, 1993, through June 30, 1998.

## **Maryland**

Maryland's HealthChoice program is a Section 1115 waiver for reform in the Medicaid program for health care. Most of the state's 330,000 Medicaid recipients are required to enroll in an approved managed health care plan. Substance abuse services are included in the primary care capitation and are managed by the approved health plans. Mental health services are carved out and managed separately.

Men and women with substance abuse problems are one of seven legislatively identified special needs populations. The health plan must provide a continuum of substance abuse treatment services that include assessment, outpatient services, inpatient or ambulatory detoxification, up to 30 days of residential services for children under 21 and adults eligible for Transitional Assistance to Needy Families (TANF), and up to 30 days of services in halfway houses and therapeutic communities. Access to services must be provided within 24 hours for individuals with human immunodeficiency

virus/acquired immune deficiency syndrome (HIV/AIDS) and for pregnant women. Pregnant, substance-abusing women also must be given case management services and have access to intensive outpatient programs that permit children to be with their mother.

The Maryland HealthChoices Program began in July 1997. Oliver<sup>21</sup> provides an informative discussion of the development of the Maryland Medicaid managed care initiative. More recently, advocates for the homeless claimed a decrease in utilization of treatment services for alcohol and drug dependence following the introduction of HealthChoices.<sup>22</sup> Four factors contributed to the apparent decline in access to care: (1) community-based treatment providers have had difficulty contracting with the health plans, (2) health plans have not made referrals to community treatment programs, (3) health plans are slow or fail to authorize needed services, and (4) a lack of payment for services that were provided. The assertions are based on admissions data from Baltimore County and a perception that a reduction in services to Medicaid recipients weakened the service providers and reduced their ability to serve non-Medicaid individuals who were poor and homeless. Clearly, these data are somewhat anecdotal, but the serious assertions reflect the need for a careful analysis.

Analysis of the Maryland HealthChoices program investigates change in the referral and treatment of Medicaid recipients following the implementation of the carve-in arrangement. Maryland also may provide an opportunity to examine how substance abuse affects selection into health plans and switching among plans. Maryland data consist of Substance Abuse Management Information System (SAMIS) data and Medicaid claims and enrollment data. The time span and databases vary for the different studies. An analysis of trends in referral and treatment patterns uses SAMIS data from fiscal years 1995 through 1999. Medicaid claims data and Medicaid enrollment data provide the information for the assessment of selection into health plans following the introduction of HealthChoices—1 year prior to implementation and the first year of implementation.

## **Nebraska**

Nebraska has two distinct managed behavioral health care initiatives: one for Medicaid benefits and one for non-Medicaid benefits. Medicaid beneficiaries in the urbanized areas in eastern Nebraska were enrolled in a mandatory primary care case management program in 1995. At the same time, Medicaid mental health services and substance abuse services for children and adolescents were carved out statewide to FHC Options, Inc (now Value Options) on a prepaid, capitated basis with full financial risk. The behavioral health organization is responsible for utilization management, claims processing, and network development for Medicaid benefits. For non-Medicaid services and eligibility groups, CMG Health, Inc (now Magellan Behavioral Health) received a fee-based contract for administrative services. The managed care organization approves clinical eligibility for outpatient substance abuse and mental health services from community-based providers and inpatient services provided by the state in the three state regional centers (state hospitals). It also manages services provided under the Medicaid Rehab option. Moreover, the managed care organization builds and manages a client data system and provides technical assistance on network management. Contracts with both managed care organizations were renewed during 1999.

The Medicaid benefits do not cover substance abuse services or inpatient services provided in the regional centers. Consequently, both managed care companies may authorize and approve different services provided to an individual depending on the service needed and the benefits available. The two managed care arrangements have unique financial structures, different provider networks, different eligibility criteria, and different benefits. Although each works with a distinct set of beneficiaries and services, there is substantial overlap in the participating populations. For policy makers, the management challenges associated with structuring two relatively independent managed care plans are intriguing. Services researchers working closely with policy makers and managed care organizations can generate data that inform implementation decisions and evaluate policy.

The Nebraska evaluation assesses the impact of managed care on the number of providers, expansion of the continuum of care, and increased eligibility. Utilization will be examined to assess the units of service provided and impacts on services typically provided in inpatient settings for both mental health and substance abuse problems. Nebraska policy makers are particularly interested in impacts on services for children and adolescents. Data for the Nebraska study include substance abuse treatment information (client data system), Medicaid claims and eligibility files, and the automated information management system for the three regional hospitals. The studies will compare 2 years of data prior to program implementation (1993 and 1994) with 2 years of data (1995 and 1996) after implementation.

### **Evaluation questions**

Key research questions were framed using a conceptual framework with four sets of stakeholders<sup>23</sup> (patients, providers, purchasers, and health plans or managed care organizations) and four sets of programmatic goals (access, utilization, quality of care, and cost management). The project goals were abstracted from the statement of work for the evaluation project. Crossing stakeholders and goals created a four-by-four matrix and highlighted variation in perspectives among stakeholders. The framework helped organize inquiries and guide evaluation designs. Although separate evaluations were constructed for each state to capitalize on available data systems and system design, the types of evaluation questions were similar. Thus, utilization and patterns of care are examined in each of the states and quality and cost of care are addressed in three states. Table 1 summarizes the evaluation questions for each state.

### **Implications for Behavioral Health Services**

The changes associated with publicly funded managed care initiatives provide opportunities to study the impacts of change in organization and financing on the delivery of substance abuse and mental health services. Health services investigations of these system interventions may contribute to enhancements in the delivery of public sector services for alcohol and drug abuse and mental health treatment. In the last 6 years, managed care enrollment in Medicaid has more than tripled and, by 1998, involved 54% of Medicaid enrollees. Moreover, provisions in the Balanced Budget Act reduce federal barriers to the use of managed care for state Medicaid programs and may encourage continued introduction and expansion of managed care in public systems of care. Federal regulations will shape the ultimate response of states to the Balanced Budget Act.

States need empirical information to help guide the implementation and adaptation of managed care technologies for public mental health and substance abuse services. Currently, policy makers have little systematically conducted evaluation results to guide system design. Anecdotal reports on problems and failures in other states provide little systematic guidance on how to improve implementation. Health services researchers can work closely with policy makers, managed care organizations, providers, and consumers to evaluate and modify the multiple models of managed care and to craft programs to fit the unique environment and needs in each state. Relationships between Medicaid and non-Medicaid systems of care can be examined carefully to assess and monitor the potential for cross-subsidization and cost shifting. Studies of managed care can help articulate and define promising approaches to the organization, financing, utilization, and delivery of prevention and treatment services for abuse and dependence on alcohol and other drugs. Collaboration with policy makers, providers, and consumers is required to support systematic collection and analysis of data that informs policy and improves treatment delivery.

At the same time, however, health services research on public sector managed care, like the implementation of managed care itself, can be challenging. These challenges can take a variety of forms and may operate to impede research.<sup>24</sup> Investigators must recognize the need to rely on



**Table 1**  
Research questions by study site

	Arizona	Iowa	Maryland	Nebraska
<b>Clients</b>				
Characteristics/case mix	X	X	X	X
Medicaid/Non-Medicaid	X	X	X	X
Have Medicaid and non-Medicaid client characteristics changed over time?		O		O
<b>Access</b>				
How does service access vary between Medicaid and non-Medicaid groups?		O		
Has service access been altered by utilization review requirements?		O		
What has been the impact of managed care on service access?				O
<b>Utilization</b>				
How does utilization differ according to client characteristics and clinical severity?	O			
How does utilization vary within/between Medicaid and non-Medicaid clients?	O	O		O
Has utilization been altered by utilization review requirements?		O		
Did patterns of utilization of non-Medicaid services shift?			O	
<b>Outcomes</b>				
How do outcomes (ALFA) differ according to client characteristics and clinical severity?	O			
How are outcomes associated with the process of care?	O			O
To what degree do outcomes vary across RBHAs?	O			
Have outcomes of care changed over time?		O		
<b>Process of care (eg, LOS, provider types, modality, setting, service intensity, etc)</b>				
Have the intensity, types, and number of services changed over time?		O		O
What variations are apparent in LOS, completion rates, client mix, etc across providers?		O		
Have patterns of care/treatment/referral changed over time?		O	O	
Do Medicaid patients self-select into health plans based on SA problems and past utilization?			O	
Are substance abusers more likely to switch plans?			O	

*(continued)*

**Table 1**  
(continued)

	Arizona	Iowa	Maryland	Nebraska
<b>Costs</b>				
Do service costs vary over time within and across Medicaid and non-Medicaid groups?		O		
Does the ACG risk adjustment methodology work for MCOs in the case of substance abusers?			O	
Do costs vary among Medicaid managed, Medicaid non-managed, and non-Medicaid groups?				O
<b>Providers</b>				
Have providers constructed vertically or horizontally integrated networks?			Context	
Has competition increased among provider agencies?			Context	
Have providers expanded or contracted operations?			Context	

Context, addressed in contextual analysis; X, used as independent variable; O, used as dependent variable; ALFA, Arizona Level of Functioning Assessment; RBHAs, regional behavioral health authorities; LOS, length of stay; SA, substance abuse; ACG, adjusted clinical groups; MCOs, managed care organizations

administrative data in the absence of primary data; be prepared to grapple with data access issues; and be able to address massive, incomplete, and sometimes inaccurate data sets. Rapid change in state managed care initiatives and the lack of a single resource for specific details of the plans complicate the challenge of finding reliable information about each plan. Finally, investigators conducting health service research work within the idiosyncrasies of the political and economic contexts for each initiative.

### Use of administrative data

Much of the current research involves the secondary analysis of data designed and validated for administrative rather than research purposes and standards.<sup>25</sup> Medicaid claims, encounter, and eligibility files, for example, are central to the analysis of managed care implementation and impact. These data sets, however, are large, complex files with coding protocols and documentation that vary among states and even within states over time. Claims files were intended to document services and associated costs and do not contain the richness of demographic and psychosocial detail that is more often found in state substance abuse and mental health treatment management information systems.<sup>26</sup> Further, prepaid health plans do not generate bills for individual services. Encounter data systems report services but are not linked to payments, and the quality, completeness, and timeliness of the data sometimes suffer. Substance abuse and mental health databases carry their own liabilities not the least of which involve the quality of the data and the lack of comparability of data across states and over time. The lack of a common identifier across databases within states often precludes the linking of client files and the investigation of services, costs, client characteristics, and treatment outcomes.

### Data access

Accessing Medicaid and other state data files can be time consuming and costly. Concerns over client confidentiality and misuse of the data may necessitate the development of elaborate data use

agreements requiring state attorney general approval. As a result, research efforts can be delayed and sometimes precluded. Abstracting the data sets is time consuming and can be expensive.

Accessing Medicaid data files from the Health Care Financing Administration also has become more difficult. Access to the State Medicaid Research Files (SMRF) derived from the Medicaid Statistical Information System (MSIS) is costly, involves a fairly complex and restrictive data use agreement, and suffers from substantial data lags that impact the timeliness and usefulness of analyses. Moreover, the SMRF files currently contain only fee-for-service claims files. Encounter data from states with capitated Medicaid programs are currently not available. Given the nature of the data, analysis can prove difficult. Treatment service definitions, service unit measurement, covered services, and eligible populations vary across states. For example, variation in the operational definition of a treatment episode can lead to different conclusions. State differences in covered populations can complicate comparisons.

### **Sources of information**

State Medicaid initiatives evolve. Researchers who do not have close contact with state Medicaid authorities may find it difficult to remain current on technical details of the health plans. While some states have well-developed Web sites where requests for proposals, contracts, and evaluation reports are posted as public documents, the material is difficult to locate in many states and is often not available via the Internet. The Substance Abuse and Mental Health Administration has been monitoring behavioral health services within state Medicaid plans and has posted information on its Web page ([www.samhsa.gov/mc/State%20Monitoring%20of%20Managed%20Care/statemon.htm](http://www.samhsa.gov/mc/State%20Monitoring%20of%20Managed%20Care/statemon.htm)). This information is updated annually and is the single source for information on behavioral health initiatives across states. The rapid changes, however, that characterize the move to managed care continue and the information for each state can become dated. Additional technical analysis (although also dated—1997 and 1998 material) is posted on the Center for Health Care Strategies Web page under “Contract Study” ([www.chcs.org](http://www.chcs.org)). Copies of the state contracts with managed care organizations are included on this site. Ultimately, personal relationships with policy makers and their staff may be the most effective method of maintaining current information about Medicaid managed care plans in specific states.

### **Political and economic context**

Health services researchers need not only data analysis skills but also political skills to negotiate access and detective skills to interview informants and uncover clues to the mysteries of the data. The complexities of Medicaid data files are not easily solved. Ultimately, the challenges of the investigation increase the value of the analysis and the research products if the study is successfully designed and completed. Health services research on public models for managed behavioral health care can enrich behavioral health care and enhance policy formation and service delivery. These studies are critically needed to monitor the impacts of managed care on the delivery and effectiveness of alcohol and drug abuse treatment services in the public sector.

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