

# State Substance Abuse and Mental Health Managed Care Evaluation Program

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## Abstract

*The articles in this special section of the Journal of Behavioral Health Services & Research (30:1) present results from evaluations of publicly funded managed care initiatives for substance abuse and mental health treatment in Arizona, Iowa, Maryland, and Nebraska. This overview outlines the four managed care programs and summarizes the results from the studies. The evaluations used administrative data and suggest a continuing challenge to structure plans so that undesired deleterious effects associated with adverse selection are minimized. Successful plans balanced risk with limited revenues so that they permitted greater access to less intensive services. Shifts from inpatient services to outpatient care were noted in most states. Future evaluations might conduct patient interviews to examine the effectiveness and quality of services for mental health and substance abuse problems more closely.*

## Introduction

Publicly funded substance abuse and mental health treatment systems are evolving as states contract with managed behavioral health care organizations and integrated health plans to manage Medicaid and non-Medicaid benefits. As a result, systems of care are modified, provider relationships are altered, workforce composition is changed, and both providers and policy makers invest in data systems.<sup>1-4</sup> State expectations of managed care vary but may include cost control, enhanced effectiveness, improved quality of care, and more integrated substance abuse and mental health treatment services. Adoption of managed care principles and practices, however, occurred relatively rapidly and, for the most part, without benefit of empirical evaluations to guide system design and implementation.

In order to address the lack of data on program effects, two components of the Substance Abuse and Mental Health Services Administration (SAMSHA), the Center for Substance Abuse Treatment

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*Journal of Behavioral Health Services & Research*, 2003, 30(1), 7–17. © 2003 National Council for Community Behavioral Healthcare.

and the Center for Mental Health Services, contracted with the Schneider Institute for Health Policy at Brandeis University and its partners (Johnson, Bassin & Shaw, Inc, Harvard Medical School's Department of Health Care Policy, the University of California at Los Angeles, Lewin Associates, and Denmead Consulting) to evaluate state substance abuse and mental health treatment managed care programs. A goal was to inform the development and implementation of managed care initiatives for mental health and drug and alcohol treatment services that were traditionally publicly funded. State managed care initiatives were reviewed and site visits were conducted to potential study states. Evaluation studies were completed in Arizona, Iowa, Maryland, and Nebraska.

States were chosen, in part, because their plans for publicly funded managed care for mental health and substance abuse services varied. Programs in Arizona and Iowa coordinated funding sources (Medicaid, block grant, and state appropriations) but varied in the use of regional (Arizona) versus statewide (Iowa) managed behavioral health care organizations. Nebraska, in contrast, did not include substance abuse services as a Medicaid benefit for adults and used two distinct managed behavioral health care models to control Medicaid (a full-risk contract) and non-Medicaid funds (an administrative services only contract) for behavioral health care. Finally, Maryland required qualified health plans to assume responsibility for the delivery and management of services for abuse and dependence on alcohol and other drugs. Substance abuse treatment is managed as a subset of community mental health services in Arizona and Nebraska. Maryland and Iowa, conversely, have relatively distinct service systems and management plans for mental health versus substance abuse treatment. Table 1 provides an overview of the major features of the managed behavioral health care systems in each state.

These system variations and differences in the administrative data available for analysis led to heterogeneity in the evaluation questions and designs. All evaluations, however, examined patient characteristics, service utilization, and associated expenditures. Service comparisons before and after managed care were conducted in Iowa, Maryland, and Nebraska. The Arizona analyses examined variations among regional behavioral health authorities. Additional details on selection of study sites and evaluation questions are provided elsewhere.<sup>2</sup> In general, the studies were limited to existing administrative data; patient satisfaction, outcomes after the end of treatment, and other important evaluation domains were not addressed.

The papers in this special section present results from the state evaluations. Iowa results are presented in two reports; one examines Medicaid services and the other analyzes services for the uninsured. One paper examines changes in access to mental health services for Medicaid recipients in Nebraska. Three papers assess aspects of the Maryland HealthChoice initiative. The analysis of variations in service delivery among the regional authorities in Arizona was still in preparation when this special section was finalized; it is expected to be included in a future issue of the *Journal*. To minimize redundancy among the papers, general descriptions of the managed care initiatives are provided in this overview paper. The introductory paper discusses the findings, articulates commonalities, and abstracts lessons that may generalize and inform efforts in other states to implement managed systems of care.

## Arizona

The Arizona Health Care Cost Containment System (AHCCCS) began in 1982. It is a statewide capitated managed care program for both Medicaid and low-income uninsured individuals not eligible for Medicaid (non-Medicaid). (Arizona is unique—its Medicaid program has always operated under managed care.) Participating health plans are selected through competitive bidding. Services for alcohol, drug, and mental health treatment were carved out in 1990 under a separate 1115 waiver, and phase-in was complete in 1995. Five private, for-profit, and not-for-profit Regional Behavioral Health Authorities (RBHAs) serve six geographic areas. RBHAs receive capitated rate payments for Medicaid recipients and budget allocations for services for non-Medicaid patients (based on

**Table 1**  
Overview of study states, plan characteristics, and study measures

State characteristic	Study state			
	Arizona	Iowa	Maryland	Nebraska
Behavioral health coverage				
Mental health and substance abuse separate		X	X	
Mental health and substance abuse integrated	X			X*
MBHCO structure				
Profit	X	X	X	X
Not-for-profit	X	X		
Primary care linkage				
Carve-in			X	
Carve-out	X	X		X
Funding streams				
Integrated Medicaid and uninsured	X			
Medicaid		X	X	X
Uninsured		X	X	X
Geographic coverage	Regional	Statewide	Health plans	Statewide
Study population	Adults	Adults and adolescents	Adults	Adults and adolescents
Services examined	Mental health and substance abuse	Substance abuse	Substance abuse	Mental health
Study outcomes				
Access	X	X	X	X
Utilization	X	X	X	X
Cost	X	X	X	X
Plan switching			X	

MBHCO, managed behavioral health care organization.

\*Nebraska Medicaid carve-out does not include substance abuse treatment benefits for adults.

historical service utilization). They are required to assure a full range of behavioral health services for substance abuse, general mental health disorders, serious mental illness, children with serious emotional disturbances, and children who are not seriously emotionally disturbed. Requirements are uniform across RBHAs but, because the markets vary (eg, urban versus rural) and funding levels vary, RBHAs differ in the organization of services and financial relationships. Three RBHAs use prospective payment arrangements that include financial risk for the provider agencies.

The financial insolvency several years ago of the largest regional entity, Community Partnership for Behavioral Health Care of Maricopa County (commonly known as ComCare), disrupted the public behavioral health care system. Commercial for-profit managed care organizations were allowed to compete for the regional contracts beginning in 1998. In addition, accountability and financial oversight requirements were elaborated and substantially increased.

## Arizona evaluation

The AHCCCS analyses draw on a rich administrative database that included information on level of functioning as well as demographic variables and claims for payment.<sup>5</sup> Comparisons between RBHAs permitted assessments of variation in service mix and cost and inferences about the influence of practitioner and system variables on variations in the delivery of care for both mental and substance use disorders.

## Findings

The RBHAs differed substantially in the capitation rates they received from Medicaid and in the level of risk shared with treatment providers. The evaluation found evidence that the different rates impacted service delivery for alcohol- and drug-dependent individuals as well as those with general mental health problems and those with serious and persistent mental illness. The study used a relatively rich client-level database to explain differences in spending per client. Compared with persons with general mental health problems and persons with alcohol and drug disorders, clients with serious mental illness were the most expensive and had the longest treatment episodes. Only modest percentages of the variation in dollars spent per individual client, however, were explained using demographic information, functional scores, and selected diagnosis categories. The RBHA serving a client contributed more to explaining the spending per client than did the combination of demographics and clinical indicators. This implies that the revenues per client paid varied more across the RBHAs in relation to unobserved case-mix factors, or to factors not related to client needs, than in relation to observed client characteristics. Given that the differential capitation rates were largely established by “experience rating” the RBHA territories prior to implementing prospective payments, it is likely that the rates continue to reflect supply-side factors like relative capacity and practice style.

There also were significant differences among the RBHAs in their financial arrangements with providers, and more generally, their organizational structures and management control systems. Each devised a unique set of strategies and procedures for prioritizing clients and services and allocating resources to local populations. These allocations and priorities led to substantial variation among the RBHAs in the services provided and the patients treated.

## Iowa

Behavioral health managed care began in March 1994 with the implementation of a statewide carve-out, the Iowa Mental Health Access Plan (MHAP)—Merit Behavioral Care of Iowa was responsible for benefit management. A parallel substance abuse managed care initiative, the Iowa Managed Substance Abuse Care Plan (IMSACP), began in September 1995 to administer substance abuse treatment services for Medicaid recipients and uninsured individuals (persons not eligible for Medicaid). IMSACP was designed to broaden access to substance abuse treatment, use standardized clinical criteria to facilitate individualized care, provide flexible services for recipients moving across systems of care, and control Medicaid and total expenditures for substance abuse treatment. A major innovation was incorporation of funding for the uninsured individuals who were not eligible for Medicaid reimbursement. The prime contract to manage IMSACP was awarded to Employee and Family Relations (EFR), a local nonprofit substance abuse treatment service that subcontracted with Merit Behavioral Care of Iowa.

Funding for Medicaid and non-Medicaid populations was separate with different methods of payment to managed care organizations and to service providers. For the Medicaid population, EFR was at full risk and received a capitation rate based on 84.5% of the base year (1994) fee-for-service cost. EFR was responsible for network development, service delivery (through negotiated contracts with providers or networks including but not limited to hospitals), and services not previously covered by Medicaid. Providers were paid on a fee-for-service basis, and service authorization was required.

For the non-Medicaid population, EFR received a fixed amount (less an administrative fee) that was passed through to providers on a monthly basis. Providers received a “case rate” multiplied by a minimum client service requirement. Providers remained responsible for control of network development, service delivery, and their own utilization management, as long as the services were in accord with patient placement standards and the minimum client service requirement was met. Prevention, methadone, and women’s services were excluded from managed care, and the state maintained direct contracts for those services.

The contract with EFR prohibited disenrollment for cause; required coordination of care within the health system; and promoted services for the disabled, emergency care, court-ordered treatment, and children in the care of the state. Continuing care and relationships with other public health agencies were specified. The contract broadened the definition of medical necessity to include psychosocial necessity, included 20 performance indicators, and incorporated the Iowa Client Placement Criteria and the Iowa Juvenile Placement Criteria (later replaced with the American Society of Addiction Medicine Patient Placement Criteria) as the definitions of appropriate care. The contract also communicated a philosophy of care: (1) provide appropriate placement of clients at all levels of care, and at the least intensive level appropriate, and (2) enhance treatment planning with more individualized programming and lengths of stay reflecting client needs rather than a standard program.

In 1998, IMSACP and MHAP were merged into the Iowa Plan. Merit Behavioral Care of Iowa was awarded the prime contract and directly managed both mental health and substance abuse benefits.

### **Iowa evaluation**

Two sets of Iowa analyses are reported. The first examines Medicaid claims and encounter data to assess change in access, cost, and utilization of services.<sup>6</sup> A comparison of 2 years of fiscal year (FY) data prior to IMSACP (FYs 1994 and 1995) with 3 years of data after IMSACP implementation (FYs 1996, 1997, and 1998) found substantial increases in access to substance abuse treatment, enhanced utilization of care, and marked reductions in Medicaid expenditures for alcohol and drug abuse treatment services. Medicaid patients had reduced access to inpatient hospital services for alcohol and drug treatment, but access was enhanced to residential alternatives and outpatient care. The second analysis focuses on substance abuse treatment services for uninsured men and women using admission and discharge data from the Iowa Department of Public Health’s Substance Abuse Reporting System (SARS).<sup>7</sup> Uninsured patients who entered care in FY 1994 (prior to IMSACP) were compared with patients treated in FY 1997 (1 year after IMSACP). After adjustments for increases in measures of patient severity, changes were observed in the patterns of care provided to uninsured patients. In the IMSACP period, days of hospital care and residential care declined but detoxification days increased and intensive outpatient services increased.

### **Findings**

Combined, the analyses of services delivered to Medicaid recipients and to uninsured patients suggest that Iowa implemented a managed care initiative (IMSACP) that generally improved access to care and reduced the cost of care. Moreover, financing for the uninsured was successfully integrated into the managed care program.

## **Maryland**

Maryland began Medicaid reform in December 1994 and sought to use mandatory managed care to control Medicaid costs. Five goals were emphasized in design of the HealthChoice initiative: (1) provide a patient-focused system with a medical home for all recipients; (2) build on the strengths of the Maryland health care system; (3) provide comprehensive, prevention-oriented systems of care; (4) hold managed care organizations accountable for high-quality care; and (5) achieve better value

and predictability for state expenditures. The initiative received federal approval in October 1996. Maryland contracts with qualified organizations that accept the established capitation rates. Initially, nine health plans agreed to participate. Phased implementation of HealthChoice began in July 1997.

HealthChoice includes the majority of Medicaid beneficiaries: Temporary Cash Assistance (TCA) recipients, TCA related, Supplemental Security Income (SSI) recipients, SSI related, and Medically needy with no spend down. Exclusions include persons with both Medicaid and Medicare coverage; medically needy with spend down; qualified Medicare beneficiaries; and those living in intermediate care facilities, nursing facilities, and state mental health institutions.

Specialty mental health services were carved out, but substance abuse treatment services were included in the capitation provided to health plans. HealthChoice health plans must provide the full array of Medicaid services including substance abuse treatment. HealthChoice did not alter existing Medicaid benefits for substance abuse treatment: outpatient substance abuse treatment (including methadone), detoxification (either outpatient or inpatient if medically necessary), and residential addiction programs for children under age 21.

A health risk assessment that includes screening for substance abuse is supposed to be conducted at enrollment in HealthChoice. Screening also is required when behavior or physical status indicates possible substance abuse. Although health plans were required to screen for substance abuse at enrollment to HealthChoice and when behavior or physical status indicated possible drug or alcohol problems, anecdotal reports indicated that meeting this requirement was a more complex undertaking than anticipated.

Individuals with a need for substance abuse treatment were identified as one of seven special-needs populations, and service standards were set in regulation. Plans must provide access to substance abuse treatment within 24 hours of request for pregnant women and persons with human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS). Finally, HealthChoice requires standard substance abuse assessments and the use of patient placement criteria.<sup>8</sup>

Implementation of the substance abuse benefit appears to have been difficult. A review of Baltimore's drug treatment services and needs expressed concern that HealthChoice reduced treatment revenues and created barriers to entering drug treatment.<sup>9</sup> Similarly, advocates for the homeless claimed a decrease in utilization of treatment services for alcohol and drug dependence following the introduction of HealthChoice.<sup>10</sup> Maryland has been conducting an extensive review of treatment services for alcohol and drug abuse and the relationship with HealthChoice. The assessment began with legislation passed in the 1998 General Assembly that established a task force to study increasing the availability of substance abuse programs with two primary goals: (1) expand access to drug treatment and (2) increase treatment effectiveness.<sup>11</sup> The task force examined reductions in the utilization of drug and alcohol treatment and provider concerns about slow authorization and payment for services. The task force's recommendations to improve access to alcohol and drug treatment services call for two changes.<sup>11</sup> First, permit self-referrals, improve treatment authorization and reauthorization processes, reimburse non-network providers, make timely payments to all providers, and help drug treatment programs become network members. The second recommendation is to prepare a Medicaid carve-out design for implementation if access to drug treatment does not improve.

## **Maryland evaluation**

Three facets of HealthChoices were examined as part of the state managed care evaluation. The first analysis linked Medicaid eligibility files with data from the Maryland Substance Abuse Management Information System (SAMIS) to describe Medicaid recipients and services delivered and to compare the services delivered to uninsured individuals and individuals covered by commercial managed care.<sup>12</sup>

Maryland (like many other jurisdictions) uses adjusted clinical groups to establish capitation rates. The second study explored potential economic incentives within the capitation groups and

noted higher costs associated with serving recipients with current alcohol and drug problems.<sup>13</sup> Claims data were used to estimate the costs of caring for individuals with and without diagnoses of alcohol and drug dependence.

The final paper analyzed plan switching among individuals treated for alcohol and drug problems.<sup>14</sup>

## **Findings**

A shift in the delivery of care was observed; HealthChoice recipients were more likely to receive only outpatient care and less likely to receive residential and detoxification services. It is noteworthy that patients who were in treatment partly under the old system and partly under HealthChoice received longer treatment and had better outcomes. Apparently, the patients received the appropriate HealthChoice benefit plus the additional benefit of the services provided prior to HealthChoice. This finding may reassure policy makers implementing changes that negative effects on persons in treatment at the time of the change can be minimized.

Relative to the second study, health plans may have economic incentives to avoid selecting individuals with alcohol and drug dependence as members. The study was unable to evaluate if health plans acted on such incentives, however.

The third study found that HealthChoice participants with histories of alcohol and drug diagnoses were more likely to switch health plans. Changes were most likely when recipients were randomly assigned to a health plan. The study raises important questions about selection incentives and biases that may be at work and suggests that persons with alcohol and drug problems may be generally less satisfied with their health care.

## **Nebraska**

Nebraska has a relatively unique approach to managing its system of care for behavioral health—Medicaid has a behavioral health carve-out and there is a separate administrative services arrangement (with a different vendor) to authorize services not covered by Medicaid and services for uninsured individuals not eligible for Medicaid. The Nebraska Medicaid Managed Care Plan/Mental Health and Substance Abuse Services (MHSAS) is a statewide, capitated, at-risk, carve-out program. Beginning in 1995, FHC Options was awarded a contract to manage the carve-out and, for the most part, the carve-out is restricted to mental health services. Adult substance abuse treatment services (other than inpatient detoxification services covered under the primary care benefit) are not a Medicaid benefit and to a large extent were not the focus of this study.

A separate system manages services for individuals not eligible for Medicaid and benefits not included in Medicaid. The non-Medicaid system has a statewide, non-risk-based utilization management contract that began in 1995 for mental health inpatient care and was extended in 1997 to all levels of care. The Nebraska Department of Public Institutions (DPI) began a contractual arrangement in 1995 with CMG Health, Inc for assistance in designing and implementing a managed care system for publicly funded substance abuse and mental health services for adults. This contract was amended in 1997 to provide administrative services only (ASO; eg, preauthorization, data processing, process, and pay invoices) for non-Medicaid behavioral health care. Funds for substance abuse and mental health treatment are allocated through governing boards in six regions. The regional boards contract with providers for substance abuse and mental health services. The Nebraska Health and Human Services System is moving toward risk-based managed care and integrated community-based services across all populations.

## **Nebraska evaluation**

The Nebraska evaluation included an examination of Medicaid mental health services and a separate but related assessment of non-Medicaid substance abuse and mental health treatment services.

The studies were descriptive and sought to assess the impact of the Medicaid behavioral health managed care initiative on Medicaid and non-Medicaid client characteristics and service utilization, access, cost, and quality. A description of impacts within Medicaid is included in this collection.<sup>15</sup> Claims and encounter data from 2 years prior to implementation of the carve-out (FYs 1994 and 1995) were compared with 3 years of data following the initiative (FYs 1996, 1997, and 1998).

## **Findings**

The analyses suggested that access to outpatient mental health services declined following the introduction of the carve-out, but access returned to levels similar to prior to the carve-out period by the third year after implementation. Hospital inpatient admissions declined and stayed lower. Medicaid expenditures for mental health services dropped dramatically. Analyses of readmission rates found no substantial change in the rate of readmissions before and after the carve-out and suggested that quality of care (as measured by readmissions) did not change.

## **Conclusion**

Overall, the findings reported in this special section from studies in Arizona, Iowa, Maryland, and Nebraska provide assurance that managed care processes can be used effectively with publicly funded services for mental illness and substance abuse. Iowa and Nebraska were able to limit increases in Medicaid expenditures for mental health and addiction treatments. Reductions in the use of inpatient services were usually offset with increased use of outpatient and residential treatments. Thoughtfully developed managed systems of care can implement services that are effective and not harmful. Public systems of care can effectively manage the organization and delivery of services and fully benefit from the use of managed care strategies. Accountability for such public systems of care also requires improved data so that the effects of such systems can be evaluated. The studies reported here are not without limitations. They are based on four states and treatment systems at one moment in time. Medicaid policies vary substantially between states. Arizona, Iowa, and Nebraska include large rural areas and relatively isolated urban centers. Maryland is much more urbanized, and its greater population makes use of health plans more feasible. Larger, urbanized states such as New York and California may learn little from these less complex environments. Nonetheless, the evaluations illustrate the potential for administrative data to provide insight into the development and implementation of publicly funded managed behavioral health care systems. The studies also document that there is no single best approach to the introduction of managed care for publicly funded services—carefully designed and implemented initiatives can take many forms and still demonstrate cost management and maintained and improved access to care.

## **Implications for Behavioral Health Services**

Collaboration with policy makers and managed care organizations in Arizona, Iowa, Maryland, and Nebraska led to evaluations that examined facets of publicly funded managed care programs in each state. Although model variations make it difficult to make comparisons and to generalize specific conclusions across the participating states, findings consistently address aspects of the efforts to manage and finance publicly funded treatments for substance use disorders and mental health problems. Five overarching issues emerged from the evaluations: rate construction and variations in service delivery, adverse selection, linkages with primary care, reductions in the use of inpatient care, and quality and outcomes.

### **Rate construction and service variations**

Rate adjustment technologies calculate rates based on the mean costs of serving large groups. As a result, financing incentives generally do not encourage health plans to serve men and women



with current alcohol and drug problems (because they are more expensive to serve) and could potentially stimulate efforts to deny and restrict access to care. Similar incentives exist for any group of individuals with predictably high medical costs—adverse selection. It is in the economic interest of health plans to heighten their profitability by attracting good risks (individuals with lower health care costs) and discouraging poorer risks (higher cost individuals) from membership.<sup>16</sup>

Because women and men with current alcohol and drug abuse tend to have higher medical costs, few plans seek to be recognized as offering excellent treatment for alcohol and drug dependence. To control adverse risks, health plans sometimes offer required benefits (ie, substance abuse treatment) but manage utilization of the services in order to control costs and reduce the attractiveness of the plan to individuals in need. The challenge for policy makers is to structure the plans they purchase to minimize undesired deleterious effects associated with adverse selection.

There was no evidence that the health plans in Maryland actively discouraged enrollment or inhibited access to addiction treatment services. At the same time, however, an analysis found that individuals who received alcohol and drug treatments were more likely to change their health plan. While plan changing among individuals with other chronic disorders was not examined, the observation of an increased likelihood of changing plans among individuals with alcohol and drug disorders suggests these individuals may have been dissatisfied with the treatment services provided. Therefore, policy makers constructing publicly funded managed care initiatives may find it beneficial to monitor rates and enrollment data in order to promote appropriate care for individuals with alcohol and drug problems.

In Arizona, capitation rates varied between RHBAAs because the state used historical data to set rates. The evaluation suggests that planners and policy makers need to evaluate existing system biases carefully including financial inequities prior to implementing health reform. Historical influences and discrepancies are likely to be incorporated in reforms, and “managed care” by itself will not be powerful enough to eliminate the influence. The Arizona data also reflected tensions around allocation of risk and resources. This is a hallmark expectation underlying managed care and capitation—confer responsibility onto organizations that can measure and internalize population-level trade-offs regarding resource allocation and system-level improvements. The success of managed care depends in large part on the willingness of providers to participate in the rationing process. The transformation has been difficult for some providers. There is persistent concern about the potential for RBHAs and providers to allocate or ration to an unacceptable degree. Opposition could reach a critical mass, and the various “formulas” used to manage within the limits of the capitation rates may cease to function. Policy makers and practitioners, therefore, must struggle to find and preserve an appropriate balance.

### **Adverse selection**

Managed care heightens the potential problems associated with adverse selection related to mental illness and substance abuse. Solutions, however, are limited. A review<sup>16</sup> of risk-adjustment studies concluded that it was difficult to improve current risk classification schemes substantially and that it was unlikely that changes in risk adjusters would eliminate incentives for adverse selection. A comparison of different risk adjustment models, for example, found that none explained more than 10% of the variance in costs and failed to alter selection biases.<sup>17</sup> Carve-out arrangements can reduce selection biases. In behavioral health carve-outs, management of treatment for mental illness and substance abuse is separated from the rest of the health plan. Shifting behavioral health services to a specialty managed care organization consolidates the risks associated with mental health and substance abuse services. Specialty behavioral health plans also may have more experience and skill managing the mental health and substance abuse treatment services. Risk-sharing arrangements can further inhibit incentives to undertreat specific medical needs like mental health and substance abuse.<sup>16</sup>

## **Linkages with primary care**

A limitation with carve-outs is the potential loss of integration with primary care. Alcohol and drug abuse contribute to many medical problems. Integration of primary care and substance abuse treatment can, in theory, improve identification of women and men with alcohol and drug problems and, because the addiction problems are recognized and treated, reduce total health care costs. Moreover, because large numbers of people are members of health plans, more individuals with alcohol and drug problems are found in health plans than in specialty substance abuse treatment programs and the criminal justice system.<sup>18</sup> Even if carve-out arrangements reduce adverse selection incentives and enhance the quality of treatment for alcohol and drug abuse, it is essential to continue to encourage health plans to screen, identify, and support treatment for members with substance use diagnoses. Maryland's struggle to ensure access to substance abuse treatment and to reap the benefits of integrating responsibility for primary care and addiction treatment suggests that both carve-out and carve-in strategies require well-developed state implementation strategies.

## **Reductions in inpatient services**

Managed behavioral health care plans usually reduce access to the most expensive and intensive levels of care—inpatient hospitalization. Iowa and Nebraska, for example, achieved reductions in expenditures through this strategy. The careful design and implementation of IMSACP resulted in an initiative that met its goals to control costs, increase access to care, and maintain quality of care. Services were relocated from relatively expensive inpatient hospital care to lower cost, less intensive settings. The introduction of residential alternatives to inpatient hospital care and increased use of outpatient services led to substantial reductions in the use of hospital care. As a result of the shift in settings and reductions in length of stay, the cost of Medicaid claims decreased 40% in Iowa. Moreover, more services were provided to more recipients at lower cost per recipient. The inclusiveness of IMSACP eligibility criteria, expansion of Medicaid benefits, and increase in Medicaid service providers combined to enhance access to care.

Similar reductions were observed in Nebraska. Inpatient mental health services continued to decline following the introduction of the Medicaid carve-out for mental health services. The managed behavioral health care organization may be improving patient outcomes by providing more consistent and effective services in residential and outpatient settings that are less costly and restrictive than inpatient treatment.

Nonetheless, not only in Nebraska and Iowa but also in any state that restricts use of inpatient care, it is critical to assess periodically the use of hospital services and to verify that care is not inappropriately diverted. In addition, as such reform has occurred across the country and now is routine operation in many locations, state officials and policy makers need to understand that savings from inpatient care have been maximized. Health planners, researchers, and clinicians need to identify other mechanisms for providing cost-effective and -efficient services. Greater use of evidence-based treatment protocols, greater standardization of assessment processes, and the application of quality improvement techniques could lead to cost savings and improved outcomes. At the same time, officials and policy makers recognize that the total cost of care is likely to increase in the long run.

## **Quality and outcomes**

Investments in outcome monitoring are critical for assessing the quality and value of mental health and substance abuse treatments. Moreover, outcomes monitoring may help reassure stakeholders that effectiveness and quality expectations have not been compromised and that sufficient resources are available for service delivery. Unknown effects on patient outcomes are a persistent uncertainty with the studies conducted in this evaluation and with many assessments of the impact of managed care.

There was no evidence of decrements in patient outcomes in the current investigations. It is important to remember that in the analyses of Iowa, Maryland, and Nebraska, the comparisons are between managed care and the previous fee-for-service system. Thus, quality and outcomes are assessed relative to the previous standard of care—not against an absolute standard, but on what existed prior to the reform. Moreover, these studies drew on Medicaid and non-Medicaid sources of administrative data and were not designed to monitor functioning and outcomes following treatment. States that implement managed care for publicly funded alcohol and drug abuse treatment services should anticipate needs to invest in the development of performance measures and outcome monitoring so they can assess quality of care as well as cost, access, and utilization. Data are most useful to the extent that they are timely and provide insights into current operations. Infrastructures, therefore, should stress the need for real-time access to data and the active application of the data to quality improvement activities.

## Acknowledgment

A contract from the Center for Substance Abuse Treatment and the Center for Mental Health Services (contract no. 270-96-0002) supported the preparation of this article and those in this special section. The content is solely the responsibility of the authors and does not necessarily reflect the official views of the Substance Abuse and Mental Health Services Administration or its components, the Center for Substance Abuse Treatment and the Center for Mental Health Services.

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