



Managed Mental Health Care:

Findings from
the Literature,
1990–2005



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Substance Abuse and Mental Health Services Administration
Center for Mental Health Services
www.samhsa.gov

Managed Mental Health Care: Findings from the Literature, 1990–2005

D. Richard Mauery
Lissette Vaquerano
Rachel Sethi
Joanne Jee
Lisa Chimento

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Substance Abuse and Mental Health Services Administration
Center for Mental Health Services
www.samhsa.gov

Acknowledgments

The authors of this report are D. Richard Mauery and Lissette Vaquerano of the Department of Health Policy at The George Washington University School of Public Health and Health Services; and Rachel Sethi, Joanne Jee, and Lisa Chimento of The Lewin Group. The authors would like to acknowledge the contributions of Shelagh Smith, government project officer, and Jeffrey A. Buck, Associate Director of Organization and Financing, Center for Mental Health Services, as well as Karen Linkins of The Lewin Group. The authors also would like to acknowledge the valuable direction and guidance provided by the panel of expert Project Advisors (listed in the Appendix).

Disclaimer

Material for this report was prepared by The Lewin Group for the Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services (DHHS), under Task Order Number 280-03-2701. The content of this publication does not necessarily reflect the views or policies of the Center for Mental Health Services (CMHS), SAMHSA, or DHHS.

Public Domain Notice

All material appearing in this report is in the public domain and may be reproduced or copied without permission from SAMHSA or CMHS. Citation of the source is appreciated. However, this publication may not be reproduced or distributed for a fee without the specific, written authorization of the Office of Communications, SAMHSA, DHHS.

Electronic Access and Copies of Publication

This publication can be accessed electronically through the following Internet connection: www.samhsa.gov. For additional free copies of this document, please call SAMHSA's Mental Health Information Clearinghouse at 1-800-789-2647.

Recommended Citation

Mauery, D. R., Vaquerano, L., Sethi, R., Jee, J., & Chimento, L. (2006). *Managed mental health care: Findings from the literature, 1990–2005* (DHHS Pub. No. SMA-06-4178). Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.

Originating Office

Office of the Associate Director for Organization and Financing, Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, One Choke Cherry Road, Rockville, MD 20857.

DHHS Publication No. SMA-06-4178

Printed 2006

Table of Contents

Acknowledgments.....	iii
Executive Summary	1
I. Introduction	7
II. Organization of Report.....	9
III. Research Methods.....	11
A. Issues and Domains	11
B. Research Questions.....	11
C. Literature Retrieval Strategies.....	11
IV. Rationales for Use of Managed Mental Health Care	15
A. Potential for Cost Savings and Cost Effectiveness	15
1. Achieving Savings by Controlling Costs Using Managed Care Techniques.....	15
2. Medical Cost Offsets and Cost Effectiveness of Managed Mental Health Services.....	16
B. Access to Services	17
1. How Managed Care Affects Access to Mental Health Care Services	18
2. Efforts to Measure Access to Managed Mental Health Services.....	19
3. Racial and Ethnic Disparities in Access to Mental Health Services.....	22
C. Managed Mental Health Care and Potential for Harm	23
1. What Is “Harm”?.....	23
2. Quantitative Measures of Harmful Effects of Managed Mental Health Care.....	24
V. Service Delivery.....	25
A. Use of Carve-Ins Versus Carve-Outs for Managed Mental Health Care Services.....	25
1. Advantages and Disadvantages of Mental Health Carve-Outs.....	25

2.	Private Sector Experience With Mental Health Carve-Outs	26
3.	Public Sector Experience With Mental Health Carve-Outs	28
B.	Coordination of Primary Care and Mental Health Care Services in Managed Care Settings	30
1.	Barriers to Care Coordination	30
2.	Overcoming Barriers to Coordination of Physical and Mental Health Care Services	31
C.	Coordination of Mental Health and Substance Abuse (MH/SA) Care in Managed Care Settings	33
1.	Co-Occurring MH/SA Disorders Are Prevalent Though Undertreated	33
2.	Private Sector Managed Care Programs for Persons With Co-Occurring MH/SA Disorders	34
3.	Scarcity of Literature Related to Standards of Care for Persons With Co-Occurring MH/SA Disorders in Managed Care Settings.	34
4.	Recommendations for Coordinating Mental Health and Substance Abuse Treatments for Persons With Co-Occurring MH/SA Disorders in Managed Care Settings.	35
D.	Financing and Delivery of Preventive Mental Health Services in Managed Mental Health Care	36
1.	Estimates of Private and Public Sector Delivery of Preventive Mental Health Services	37
2.	Barriers to Delivery of Preventive Mental Health Services in Managed Care Settings.	38
3.	Overcoming Barriers to Increased Provision of Preventive Mental Health Services in Managed Care	38
VI.	Quality of Care	43
A.	Incorporating Evidence-Based Standards in Managed Mental Health Care Services.	43
1.	Brief Summary of Debates About the Use of Evidence- Based Standards in Mental Health Care Services.	43
2.	Benefit Design, Medical Necessity, and Clinical Practice Guidelines	43
3.	Dissemination of Evidence-Based Standards and Treatment Guidelines	45

B.	Incorporating Consumer-Directed Care Principles in Managed Mental Health Care Services.	46
1.	Guiding Principles for Consumer-Directed Managed Mental Health Care	47
2.	Public Sector Examples of Incorporation of Principles of Consumer-Directed Managed Mental Health Care	47
3.	Private Sector Managed Mental Health Considerations for Consumer-Directed Care	50
VII.	Financing.	53
A.	Financial Risk Sharing in Managed Mental Health Care Services.	53
1.	Overview of Risk-Sharing Approaches in Managed Mental Health Care	53
2.	Effects of Risk-Sharing Arrangements in Private Sector Managed Mental Health Care	54
3.	Effects of Risk-Sharing Arrangements in Public Sector Managed Mental Health Care	57
B.	Blending and Braiding Funding Streams in Managed Mental Health Care.	58
1.	Definitions of “Blending” and “Braiding” Funding Streams.	58
2.	Rationales for Blending or Braiding Funding Streams	58
3.	Considerations Regarding Whether to Blend or Braid Funding Streams.	59
4.	Blending or Braiding Funding Streams: Key Elements for Success	60
VIII.	Conclusions.	63
IX.	Research Gaps.	65
X.	Appendix.	67
	Experts Interviewed	67
	Glossary	67
	References	76
	Notes.	90

List of Tables

- 1. Literature Review Framework and Questions. 12
- 2. List of Keywords Used in Combination With “Managed Mental Health Care” in Literature Searches 13
- 3. Advantages of Managed Mental Health Carve-Outs 26
- 4. Disadvantages of Managed Mental Health Carve-Outs 27
- 5. Results of Testing Theories About Carve-Outs With a Large Employer Survey 28
- 6. Frequent Reasons Identified as Barriers to Delivery of Preventive Mental Health Services in Managed Care 39
- 7. Risk-Sharing Approaches for Managed Mental Health Care: Contracts Between Purchasers and MBHOs 54
- 8. Risk-Sharing Approaches for Managed Mental Health Care: Contracts Between MBHOs and Providers 54
- 9. Potential Issues and Effects of Various Risk-Sharing Approaches: Contracts Between Purchasers and MBHOs. 55
- 10. Potential Issues and Effects of Various Risk-Sharing Approaches: Contracts Between MBHOs and Providers. 56

List of Figures

1. Care Coordination Features	31
2. NCQA Accreditation Standards for MBHOs and MCOs: Quality Management and Improvement in the Area of Continuity and Care Coordination.	32
3. Sample Purchasing Specifications for Care Coordination and Physical and Behavioral Service Integration in Managed Care Contracts (excerpt)	32
4. Guidelines for Continuity of Care for Integrated Treatment of Persons with Co-Occurring MH/SA Disorders in Managed Care Settings.	36
5. Recommended Strategies for Employer Purchasers to Increase Coverage and Use of Mental Health and Other Health Preventive Services.	42
6. Hawaii’s Medical Necessity Definition in State Independent Review Statute.	44
7. Goals and Principles for Consumer Participation in Managed Mental Health Care.	48
8. Summary of Key Elements and Recommendations for Blending and Braiding Funding Streams for Comprehensive Mental Health Care Services	61

Acronyms

AHRQ	Agency for Healthcare Research and Quality
ASO	Administrative Services Organization
CAHPS	Consumer Assessment of Health Plans Survey
CCRWF	California Center for Research on Women & Families
CMHS	Center for Mental Health Services
CMS	Centers for Medicare and Medicaid Services
DHHS	Department of Health and Human Services
EAP	Employee Assistance Program
ECHO	Experience of Care and Health Outcomes
HEDIS®	Health Plan Employer Data and Information Set
HCC	Healthcare for Communities
HMO	Health Maintenance Organization
MBHO	Managed Behavioral Health Organization
MCO	Managed Care Organization
MH/SA	Mental Health/Substance Abuse
NBGH	National Business Group on Health
NCQA	National Committee for Quality Assurance
OIG	Office of Inspector General
PCP	Primary Care Provider
PFP	Partnership for Prevention
PMPM	Per Member Per Month
RFP	Request for Proposals
SAMHSA	Substance Abuse and Mental Health Services Administration
SCHIP	State Children's Health Insurance Program
SED	Serious Emotional Disturbance
SMI	Serious Mental Illness
SPMI	Severe and Persistent Mental Illness
SSI	Supplemental Security Income
TANF	Temporary Assistance for Needy Families
USPSTF	U.S. Preventive Services Task Force

Executive Summary

The goals of this report are as follows:

- To provide public and private sector stakeholders in managed mental health care with reliable information derived from the literature regarding the organization, design, delivery, and financing of managed mental health benefits; and
- To guide stakeholders on the best ways to apply managed care techniques.

Based on recommendations by a panel of experts on managed mental health care that guided selection of 11 targeted research questions, the authors conducted a focused review of the literature related to managed mental health care for the period 1990–2005. The review included articles appearing in peer-reviewed journals, as well as reports and studies available on Web sites maintained by relevant government and professional organizations.

The following lists the findings of the targeted research questions. These 11 questions are organized into four general domains: rationales, service delivery, quality of care, and financing.

Eleven Targeted Questions and Findings

Rationales for Use of Managed Mental Health Care

1. Question: Does the use of managed care techniques in mental health care save

money? For whom? How are these savings best measured?

Answer: Yes. Many analyses of large databases of mental health insurance claims have shown that managed mental health care saves money, as measured in reductions in absolute costs for employer and state agency purchasers. Although there appears to be no consensus in the literature on the best way to measure savings, they have most often been documented in the form of reduced expenditures for persons with mild to moderate mental conditions such as dysthymia or unipolar depression by maximizing the use of outpatient and psychopharmaceutical treatments.

2. Question: Does managed mental health care improve access to services? If so, for whom, with which diagnoses, and for what services?

Answer: Yes. Although much of the literature is anecdotal and large quantitative studies are lacking, it appears that managed mental health care improves access to care overall, primarily for persons whose mental health conditions are typically treated in ambulatory outpatient settings (e.g., mild to moderate depression or anxiety). However, a few small studies have found that utilization management techniques and reimbursement arrangements may restrict access to higher intensity services, particularly inpatient services needed by persons with severe and persistent mental illnesses.

3. Question: Are there particular groups or subgroups of patients with particular diagnoses who are harmed by being treated in managed mental health care systems? If so, for what reasons and in what ways?

Answer: Inconclusive. Only a few quantitative studies in the literature report findings identifying which patients in which managed care settings have experienced actual harm as a result of benefit design limits or utilization techniques. Numerous sources discuss how managed mental health plans may have the potential to harm persons with severe mental illnesses; however, documentation of actual harm is lacking in the literature.

Service Delivery

4. Question: Should managed mental health care services be carved in or carved out? What are the pros and cons of doing so in private and public sector payor settings?

Answer: Numerous sources in the literature indicate that carve-outs are preferred by purchasers, with certain safeguards regarding care coordination. Managed mental health carve-outs are preferable to carve-ins for persons with milder mental health conditions, when care coordination requirements between physical and mental health are less crucial, than for adults with severe and persistent mental illnesses (SPMIs) or children with serious emotional disturbances (SEDs). Adults with SPMI may fare less well in managed mental health carve-outs than persons with milder mental health conditions, largely due to a lack of continuity of care and potential inability to obtain more intensive services such as inpatient or residential treatment. The main advantages of carving out include better accountability of mental health expenditures, expanded treatment services, and ability to control claims costs. The main disadvantages

include higher administrative costs, potential for fragmentation of physical and mental health services, and potential consumer confusion regarding how to access services.

5. Question: What is the best way to coordinate primary care and mental health care services in managed care settings? What characterizes success?

Answer: Unclear. Several sources in the literature recommend that purchasers should contractually require coordination of primary care and mental health care services, with financial or other incentives tied to performance measurement. Success is demonstrated in the form of ease of referrals between primary care and mental health care sectors, better management of illnesses and conditions, and improved provider and patient satisfaction. No studies to date, however, have quantitatively demonstrated that such contractual requirements result in improved care coordination as compared to not requiring them.

6. Question: What is the best way to coordinate mental health and substance abuse care in managed care settings for persons with co-occurring disorders? What characterizes success?

Answer: Unclear. A few sources in the literature have recommended that purchasers of managed care arrangements contractually require coordination of mental health and substance abuse services. These sources also recommend that contracts include financial or other incentives tied to performance measurement. Quantitative measures of the success or effects of these recommended contractual requirements have not been published.

7. Question: What are the most effective and efficient ways of financing and delivering

preventive mental health services in managed mental health care systems?

Answer: Results of surveys, interviews, and consensus groups provide recommendations that purchasers should (1) conduct assessments of enrollee health needs to find out which conditions are most prevalent and could benefit from preventive interventions; (2) develop high-quality contractual terms for delivery of and payment for preventive mental health services; (3) communicate availability of these services to enrollees; and (4) implement ongoing monitoring systems to measure availability, utilization, and payment for preventive mental health services.

Quality of Care

8. Question: What is the best way to incorporate evidence-based standards in the purchase and delivery of managed mental health care services?

Answer: Unclear. The literature regarding incorporation of evidence-based standards has only recently begun to emerge, as research continues to evolve on how to define the evidence base for mental health care services. A few sources have recommended increased centralized dissemination of evidence-based standards, and revision of medical necessity definitions and utilization management to reflect them. Studies documenting the effects of implementing evidence-based standards for mental health care services are lacking.

9. Question: What is the best way to incorporate consumer-directed care principles in managed mental health, including special considerations for persons with mental health illnesses?

Answer: Unclear. The literature primarily reflects recommendations based on efforts in the public sector to incorporate consumer-directed care principles in managed mental health care. Public sector mental health systems, such as Medicaid managed care for mental health services, have largely achieved this by involving consumers throughout the planning, design, and implementation of mental health care systems. The literature regarding private sector efforts to incorporate consumer-directed principles in managed mental health care services is sparse and focuses primarily on the use of consumer satisfaction surveys, and grievances and appeals systems.

Financing

10. Question: Should financial risk sharing be used in managed mental health care? If so, what is the best way to effectively manage financial risk in managed mental health care, and under what circumstances and in which settings are various techniques most appropriate and efficient?

Answer: Unclear. The literature on public sector systems, though limited to individual case studies, indicates that risk sharing with providers in the form of case-mix adjusted case rates or “soft” capitation should be used to encourage appropriate, safe, and clinically effective use of managed mental health services. The quantitative literature for the private sector on this topic is extremely limited.

11. Question: Should funding streams from multiple public and private sector payors of managed mental health care services be combined? If so, is blending or braiding a better way to combine these funding streams, and what are the requirements for their long-term success?

Answer: Yes. Blended funding combines funds at the “front end” by first combining funds from multiple sources into a single pooled account. With braided funding streams, the funds from various sources are not pooled into a single account; rather, a separate administrative entity such as a fiscal agent monitors and tracks the relative distribution of the levels of each participating agency’s responsibility for treatment service delivery and then authorizes payment to providers. Thus, braided funding combines funds at the “back end,” when payments to providers are made. Several evaluations (largely based on expert opinion) of systems that use multiple funding sources have found that respondents believe that combining multiple funding streams across service sectors using blended or braided techniques is a desirable way to overcome fragmented multiple mental health treatment systems. Further, respondents believe that braiding funds, rather than blending them, allows better tracking and accountability for each agency’s financial and programmatic contributions. Successful approaches are characterized by involving stakeholders early in the planning process, obtaining leadership commitment, and implementing ongoing monitoring systems for financial and outcomes accountability.

Conclusions

Many studies published over the last 15 years have demonstrated how the use of managed care techniques for mental health service delivery improves access to services and saves money for private and public sector purchasers. Improved access and cost savings are typically associated with providing treatment to persons with mild to moderate mental health conditions, such as

depression or anxiety, who can be successfully treated on an outpatient basis, both with and without use of psychopharmaceuticals. The few studies identified that involved children with SEDs and adults with SPMIs and the effects of managed mental health on racial and ethnic minorities indicate that they have experienced problems accessing mental health treatments, particularly in inpatient and residential settings.

A variety of studies have documented that the carve-out model is presently the predominant form of mental health services organization in managed care settings. These studies have also noted the importance of implementing and monitoring care coordination standards to ensure comprehensive care, particularly for persons with severe mental illnesses. Many evaluations of carve-out designs for children with SEDs have also documented the desirability of braiding, rather than blending, funding streams from multiple agencies as a way of improving resource allocation, streamlining costs, and ensuring accountability for expenditures.

There is general agreement in the literature of the importance and clinical desirability of coordinating primary care and mental health services and coordinating mental health and substance abuse services. However, very little has been published that quantitatively documents effective ways to do so, specifically in managed mental health care settings. In addition, an increasing number of studies regarding the use of evidence-based standards and the provision of preventive mental health services have documented their financial and clinical desirability.

The literature presents mixed results on the effects of various risk-sharing arrangements for both providers and consumers of managed mental health care. While some

authors recommend the use of soft capitation or risk-adjusted case rates using withholds, others caution that risk sharing may provide financial incentives to inappropriately restrict access to high-cost intensive services needed by persons with SPMIs.

The literature regarding pooling of funding streams across multiple systems serving the mental health, physical health, social, and educational needs of children and their families indicates that such pooling is a desirable way to improve flexibility of both funding and service delivery. The choice of whether to blend or braid these funds at the system level is influenced by many factors, including willingness to collaborate, and ability to track accountability for appropriate expenditures of funds and tie them to achievement of desirable outcomes. It should be noted that almost all of these reports are based on quali-

tative analyses of interviews and site visits with key stakeholder experts.

Finally, this focused review of the literature regarding managed mental health care indicates that several topic areas would benefit from additional research. In particular, rigorous quantitative studies in various areas utilizing longitudinal designs involving diverse patient demographics, mental health conditions, and treatment settings would provide vitally needed information for consumers, purchasers, providers, and policymakers. The use of formal program evaluation methods is needed to supplement qualitative evaluations based on key stakeholder expert opinion and would serve to further inform programmatic issues, such as pooling of funding streams, intended to enhance financing and service delivery flexibility.



Introduction

The need for a focused review of the literature on mental health insurance and mental health treatment was established as a result of the rapid evolution of the science of mental health services and the managed care market changes in how those services are financed, organized, and delivered. The goals of this report are to provide public and private sector stakeholders in managed mental health care with the best research available in the literature regarding the organization, design, delivery, and financing of managed mental health benefits that are simultaneously cost effective and “health effective,” and to guide stakeholders in the best ways to apply managed care techniques.

The ways mental health care services are organized, financed, and delivered in both the private and public sectors have been dramatically transformed over the last 15 years. Managed care has had profound effects on the use and amount of both preventive and therapeutic mental health services delivered to consumers, the selection of professionals, and the settings in which they are provided. Managed care techniques include the definition and interpretation of medical necessity, utilization management, and prospective payment methods. Continuing cost pressures on both private employers and public sector health insurance purchasers (e.g., Medicaid, State Children’s Health Insurance Program (SCHIP), Medicare, Department of Veterans Affairs, State child welfare agencies, State departments of corrections, State mental health agencies) have increased the need for clinical evidence that these services are cost effective and are achieving clinically desired outcomes in a timely manner.

The aims of managed care include ensuring accountability for health care resources and reducing costs by implementing utilization controls and payment mechanisms intended to reduce inappropriate, ineffective, or unnecessary care. These cost reductions are also designed to be achieved by promoting the use of safely delivered, lower intensity services that achieve desirable health outcomes. Managed care has affected the scope and nature of the delivery of services, as seen by increased use of outpatient treatments provided over shorter duration with an emphasis on focused cognitive and behavioral therapies. Expensive inpatient and residential mental health treatments today are typically reserved for only the most severely ill patients who cannot otherwise be safely treated in outpatient settings.

While the comprehensive managed care market generally has evolved into looser network models over the last 15 years (e.g., increased use of preferred provider

organizations and point-of-service arrangements), largely driven by consumer and purchaser demand, the managed behavioral health market has retained many stricter access and utilization controls. These include requirements for prior authorization of services, predefined levels of care placements and discharge criteria, and annual and lifetime limits on mental health services and expenditures. For example, advances in the science of psychopharmacology have provided consumers with many new drugs that have fewer side effects than older drugs. These new drugs, however, are usually very expen-

sive when they enter the market, and both comprehensive managed care organizations (MCOs) and specialty managed behavioral health organizations (MBHOs) often tightly control access to them. Many States and the Federal Government have passed mental health parity legislation intended to “level the playing field” between physical and mental health care coverage. In reality, however, the marketplace has continued to exert more stringent demands on the mental health care sector—more so than the overall medical care sector—to contain costs in the face of health care cost inflation.

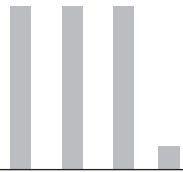


Organization of Report

The report is organized as follows:

- Section III of this report describes the research methods used in the analysis.
- Section IV summarizes the rationales for use of managed mental health.
- Section V describes issues related to service delivery, including the use of carve-in and carve-out models, care coordination, and the financing and delivery of preventive mental health services.
- Section VI describes quality of care of managed mental health services.
- Section VII presents findings related to financing of managed mental health care.
- Section VIII presents conclusions regarding the nature of the literature on managed mental health care from 1990 to 2005.
- Section IX describes gaps in the literature that merit further research.

The Appendix contains a list of experts interviewed, a glossary of terms, literature references, and notes.



Research Methods

A. Issues and Domains

To provide a logical and orderly approach to both the retrieval of literature citations and the analysis, the following four domains were used to organize the literature review:

1. Rationales for Use of Managed Mental Health Care
2. Service Delivery
3. Quality of Care
4. Financing

The research was guided by semistructured telephone interviews during the period July–September 2004 with 12 experts in managed mental health care issues from a variety of backgrounds. (See the Appendix for a full list of the experts interviewed.) The goal of the interviews was to learn from these experts what pressing issues and questions in managed mental health care to include in a focused review of the literature. The 11 issues most frequently cited by the experts were—

1. Demonstration of cost effectiveness and cost savings of managed mental health care;
2. Effects of managed mental health care on access to services;
3. Identification of groups and subgroups of particular patients who may be harmed by managed mental health care;
4. Carve-in and carve-out models for managed mental health care;
5. Care coordination strategies between mental health and primary care services;

6. Care coordination strategies between mental health and substance abuse services;
7. Financing and delivery of preventive mental health services;
8. Use and coverage of evidence-based standards in mental health therapies;
9. Role of consumer-directed care in managed mental health care;
10. Use of capitation, rate-setting, and other risk-management techniques for managed mental health care; and
11. Blending and braiding of funding streams for delivery of mental health services, particularly for children and adolescents.

B. Research Questions

To reflect the 11 issue areas cited by the experts interviewed, a set of 11 targeted questions was developed, which were then organized within the four domains of the conceptual framework.

C. Literature Retrieval Strategies

Targeted keyword searches were conducted on a variety of electronic databases and other online resources. All searches contained the term “managed mental health care” combined with keywords related to each of the questions in table 1. (See table 2 for a list of keywords.) The time period covered was 1990–mid-2005. Electronic databases searched included MedLine, PsycINFO, HealthSTAR, and the Cochrane Library for evidence-based practices. In addition,

Domain	Issue	Questions
1. Rationales for Use of Managed Mental Health Care	Demonstration of cost effectiveness and cost savings of managed mental health care.	Does the use of managed care techniques in mental health care save money? For whom? How are these savings best measured?
	Effects of managed mental health care on access to services.	Does managed mental health care improve access to services? If so, for whom, with which diagnoses, and for what services?
	Identification of groups and subgroups of particular patients who may be harmed by managed mental health care.	Are there particular groups or subgroups of patients with particular diagnoses who are harmed by being treated in managed mental health care systems? If so, for what reasons and in what ways?
2. Service Delivery	Carve-in and carve-out models for managed mental health care.	Should managed mental health care services be carved in or carved out? What are the pros and cons of doing so in private versus public sector payor settings?
	Care coordination strategies between mental health and primary care services.	What is the best way to coordinate primary care and mental health care services in managed care settings? What characterizes success?
	Care coordination strategies between mental health and substance abuse services.	What is the best way to coordinate mental health and substance abuse care in managed care settings for persons with co-occurring disorders? What characterizes success?
	Financing and delivery of preventive mental health services.	What are the most effective and efficient ways of financing and delivering preventive mental health services in managed mental health care systems?
3. Quality of Care	Use and coverage of evidence-based standards in mental health therapies.	What is the best way to incorporate evidence-based standards in the purchase and delivery of managed mental health care services?
	Role of consumer-directed care in managed mental health care.	What is the best way to incorporate consumer-directed care principles in managed mental health, including special considerations for persons with mental health illnesses?
4. Financing	Use of capitation, rate-setting, and other risk-management techniques for managed mental health care.	Should financial risk sharing be used in managed mental health care? If so, what is the best way to effectively manage financial risk in managed mental health care, and under what circumstances and in which settings are various techniques most appropriate and efficient?
	Blending and braiding of funding streams for delivery of mental health services, particularly for children and adolescents.	Should funding streams from multiple public and private sector payors of managed mental health care services be combined? If so, is blending or braiding a better way to combine these funding streams, and what are the requirements for their long-term success?

searches were conducted on both Google and Google Scholar to obtain access to references available in the “gray” literature (i.e., reports and news sources not catalogued in electronic peer-reviewed literature databases but available online). A review of sources cited in the

literature footnotes (“snowball referencing”) was also included as a way to add resources. Finally, Web sites of government and professional organizations were accessed directly, and searches were conducted to find content related to the research issues.

Table 2. List of Keywords Used in Combination With “Managed Mental Health Care” in Literature Searches	
Questions	Keywords
Does the use of managed care techniques in mental health care save money? For whom? How are these savings best measured?	costs, cost effectiveness, cost savings, cost analysis, expenditures, cost containment
Does managed mental health care improve access to services? If so, for whom, with which diagnoses, and for what services?	access to care, outcomes, health care utilization, diagnosis, utilization
Are there particular groups or subgroups of patients with particular diagnoses who are harmed by being treated in managed mental health care systems? If so, for what reasons and in what ways?	harm, access, outcomes, adverse effects, diagnosis, organization, treatment setting
Should managed mental health care services be carved in or carved out? What are the pros and cons of doing so in private versus public sector payor settings?	organization, carve-in, carve-out, private sector, public sector, Medicaid, employer-sponsored
What is the best way to coordinate primary care and mental health care services in managed care settings? What characterizes success?	care coordination, primary care, quality of care, treatment outcomes, case management
What is the best way to coordinate mental health and substance abuse care in managed care settings for persons with co-occurring disorders? What characterizes success?	care coordination, substance abuse, co-occurring, quality of care, treatment outcomes, case management
What are the most effective and efficient ways of financing and delivering preventive mental health services in managed mental health care systems?	prevention, preventive services, financing, organization, outcomes
What is the best way to incorporate evidence-based standards in the purchase and delivery of managed mental health care services?	evidence-based standards, clinical guidelines, treatment protocols, quality, outcomes
What is the best way to incorporate consumer-directed care principles in managed mental health, including special considerations for persons with mental health illnesses?	consumer, consumer-driven, consumer-directed, client satisfaction, family, quality
Should financial risk sharing be used in managed mental health care? If so, what is the best way to effectively manage financial risk in managed mental health care, and under what circumstances and in which settings are various techniques most appropriate and efficient?	financing, risk sharing, risk arrangements, risk management, providers, capitation, reimbursement, fee-for-service
Should funding streams from multiple public and private sector payors of managed mental health care services be blended or braided? If so, what is the best way to blend or braid these funding streams, and what are the requirements for their long-term success?	financing, funding, blending, braiding, children, performance measurement, family, outcomes, system of care

All references were abstracted and electronically entered into 11 customized EndNote® (version 8.0.2) databases that were tailored to reflect each of the research questions. EndNote® is a reference manager software package that permits retrieval and organization of a variety of literature sources by author, year, publication, and keyword categories.¹ Across the 11 databases, 529

literature sources—including articles in the peer-reviewed literature and reports from researchers, government agencies, and advocacy and other organizations—were identified as being potentially relevant to address the research questions at hand. Of these, 209 references are cited in this report and are listed by author in the “References” section in the Appendix.

The level of rigor of study determined inclusion in the literature review. We included studies that reported statistics regarding study design (e.g., case control, random clinical trial, prospective or retrospective cohort, meta-analyses, insurance claims analyses), and that also reported analyses of statistical power, significance, and reliability. We included editorials, opinion pieces, and policy analyses only if they were based on and reported study results. In the case of litera-

ture related to use of treatment guidelines, evidence-based medicine, care coordination, and financing, we included citations if information was presented indicating that they had been developed and tested in the field to determine effects on outcomes related to access, quality, treatment, patient and provider satisfaction, and costs. Literature citations were catalogued in more than one EndNote® database, first by category of main topic and then by subtopics.

IV.

Rationales for Use of Managed Mental Health Care

The literature searches for this domain were designed to address three pivotal questions about the use of managed care techniques for mental health services. First, does the use of managed care techniques in mental health care save money? If so, for whom, and how are these savings best measured? Second, does managed mental health care improve access to services? If so, for whom, with which diagnoses, and for what services? And third, are there particular groups or subgroups of patients with particular diagnoses who are harmed by being treated in managed mental health care systems? If so, for what reasons and in what ways?

A. Potential for Cost Savings and Cost Effectiveness

Question: Does the use of managed care techniques in mental health care save money? For whom? How are these savings best measured?

Answer: Yes. Many analyses of large databases of mental health insurance claims have shown that managed mental health care saves money, as measured in reductions in absolute costs for employer and State agency purchasers. Although there appears to be no consensus in the literature on the best way to measure savings, they have most often been documented in the form of reduced expenditures for persons with mild to moderate mental conditions, such as dysthymia or unipolar depression, by maximizing the use of outpatient and psychopharmaceutical treatments.

1. Achieving Savings by Controlling Costs Using Managed Care Techniques

Managed care cost-containment techniques seek to control both the demand and the supply sides of mental health care services delivery. Benefit design features include—

- Limits on the number of inpatient hospital days and number of outpatient visits;
- Coinsurance requirements such as deductibles and copayments; and
- Annual and lifetime dollar and day limits on services.

Managed care cost-containment techniques encompass utilization management functions such as—

- Requirements that prior authorization be obtained for services;
- Requirements that services meet defined medical necessity criteria;

- Restrictions on who can join a provider network;
- Transfer of financial risk to providers via capitation; and
- Pharmacy benefit management (Frank & Lave, 1992).

Compared to costs in fee-for-service mental health care, the use of managed care techniques has been shown to achieve substantial cost savings, as much as a 40-percent reduction in the first year in one study. The cost reductions are demonstrated in four areas:

1. Fewer outpatient sessions per user;
2. Reduced probability of an inpatient admission;
3. Reduced lengths of stay for inpatient treatment; and
4. Substantially lower costs per unit of service (Goldman, McCulloch, & Sturm, 1998).

Cost savings typically occur with patients who have mild to moderate conditions, such as dysthymia or lower levels of clinical depression, by increasing their use of outpatient treatment combined with prescription drug treatment. Cost savings may be difficult to achieve, however, for persons with severe mental illnesses, such as schizophrenia or bipolar disorders, whose treatment regimens often require use of inpatient hospitalizations (Leslie & Rosenheck, 1999; Olfson et al. 2002; Peele, Xu, & Kupfer, 2003).

2. Medical Cost Offsets and Cost Effectiveness of Managed Mental Health Services

Patients with mental health care needs may seek treatment in medical care settings. They may have physical symptoms that do not respond to medical treatment since their underlying causes may be undiagnosed mental health conditions. Appropriately providing mental health treatment will

lead to declines in medical costs once these patients are in care. These declines in medical costs have been documented for elderly medical inpatients, some patients as they develop major medical illnesses, primary care outpatients with multiple unexplained physical illnesses, and adults with alcoholism. The potential for achieving medical cost offsets via provision of mental health services typically is limited, however, to persons with milder forms of mental health conditions. The likelihood of maximizing the medical cost offset occurs in plans that integrate both physical and mental health treatment (a carve-in) (Olfson, Sing, & Schlesinger, 1999).

Von Korff et al. (1998) described two small randomized controlled trials conducted to estimate the treatment costs and cost effectiveness² of an enhanced intervention for patients with depressive illness receiving care in primary care settings. Although the small size of the studies' samples limits the generalizability of their findings, total treatment costs in both controlled trials increased due to the increased number of visits needed to conduct the interventions. However, the cost per patient successfully treated was lower in the intervention groups than in the control groups. A modest increase in cost effectiveness was found among patients with major depression; however, for patients with minor depression, the intervention was more costly and not more cost effective than usual care. Researchers in this area caution that analyses of cost-effectiveness studies have been complicated by a variety of issues, including difficulties measuring unit and total costs, differences in intended effects, and the differences in study designs (Wolff, Helminiak, & Tebes, 1997).

In the view of one mental health policy expert, a narrow focus on measures of man-

aged mental health care's absolute costs (i.e., costs measured in dollars rather than as a percentage reduction or in relation to the benefits of care) has diverted attention away from more important arguments regarding the cost effectiveness of mental health treatment. In his words,

For a health plan or an employer, the value of care or its cost effectiveness should be as important as absolute costs. There is little point in spending money on something that is cheap if it provides no benefits. ... Cost-effectiveness arguments may not have the same immediate policy appeal as promises to save money—but broken promises do not further the cause of behavioral health care in the long run. (Sturm, 2001, p. 740)

Tracking expenditures is a particular challenge to measuring cost savings and cost effectiveness when encounter data, rather than full claims data, are collected. This is especially the case for managed mental health systems that use fixed monthly capitation amounts to pay MBHOs and providers. A 6-year evaluation of five State Medicaid managed care programs found that the five States faced limitations in accurately measuring expenditures by service use and by type of mental health consumer. These limitations were attributed in part to the difficulties States experienced in developing and implementing management information systems to track expenditures. Encounter data systems often limit the number of diagnosis or treatment codes present on the record and typically do not include financial cost data (since the MBHOs or providers are not paid on a per-service basis) (Wooldridge & Hoag, 2001).

A marked divergence of findings appears to exist among study results observed in the literature regarding the cost effectiveness of managed mental health care. Additional stud-

ies are needed that document cost effectiveness across different mental health delivery systems and for persons with a wider variety of mental health conditions and treatment needs.

Summary of the Literature: While many studies have demonstrated that the use of managed mental health care results in reductions in costs for purchasers, several authors note that total cost savings are only one component of a more important measure of managed mental health care: cost effectiveness. A truer picture of the value of managed mental health care includes not only how much it reduces health care costs, but also whether it leads to better outcomes. These desirable outcomes traditionally have included expanded access to care, increased quality of care, increased consumer and provider satisfaction, and ultimately, improvements in mental health status and functioning. Analyses of cost-effectiveness studies, however, have been complicated by a variety of issues, including difficulties measuring unit and total costs, differences in intended effects, and differences in study designs.

B. Access to Services

Question: Does managed mental health care improve access to services? If so, for whom, with which diagnoses, and for what services?

Answer: Yes. Although much of the literature is anecdotal and large quantitative studies are lacking, it appears that managed mental health care improves access to care overall, primarily for persons whose mental health conditions are typically treated in ambulatory outpatient settings (e.g., mild to moderate depression or anxiety). However, a few small studies have found that utilization management techniques and reimbursement arrangements may restrict access to higher intensity

services, particularly inpatient services needed by persons with severe and persistent mental illnesses.

1. How Managed Care Affects Access to Mental Health Care Services

Managed care affects patients' access to mental health services in a variety of ways that can be grouped into two broad categories: structural and procedural.

Structural elements include—

- How a mental health benefit is designed (e.g., what services are covered at which levels of care);
- Pricing design (e.g., premium levels, risk sharing, annual and lifetime limits on both numbers of visits and total plan outlays, and requirements for patient cost sharing via deductibles and copayments);
- Managed care requirements regarding provider network composition (e.g., provider credentialing requirements for participation, numbers of specialty providers in the network such as child psychiatrists and clinical social workers); and
- Use of a “closed panel” of network providers (i.e., beneficiaries can see only the providers contracted by the plan) or an “open panel” (i.e., beneficiaries are provided incentives to see contracted providers but are also allowed to see out-of-network providers).³

These structural elements, then, set the limits on the sharing of health care costs, which services are reimbursable, and which providers are entitled to reimbursement by virtue of participating in a managed care plan's network. Thus, how broadly or narrowly the mental health benefit is defined has enormous effects on patients' ability to access care (Forums Institute for Public Policy [FIPP], 1997; Horgan et al., 2003).

Another access issue related to coverage of services is that of the association between patient cost sharing and choice of providers. One of the driving forces of the managed care “backlash” that began in the mid-1990s was consumer dissatisfaction with restrictions placed on their choices of providers within tightly controlled provider networks. As managed care companies began to loosen these restrictions while simultaneously increasing insurance premiums, employer purchasers began to raise the levels of employee cost sharing (deductibles, copayments, and coinsurance) (Gabel, 2003). People living with chronic mental health conditions who require ongoing medical care and access to specialty inpatient and outpatient mental health providers pay higher out-of-pocket costs as a result of their higher utilization of specialty services, compared to people without such conditions (Tu, 2004).

Procedural elements that affect access to care include—

- How managed care companies define, interpret, and review the need for mental health services defined in the benefit plan;
- Use and application of various medical necessity definitions (Rosenbaum, Kamoie, Mauery, & Walitt, 2003); and
- Retrospective, concurrent, and prospective utilization reviews, and requirements for prior authorization for certain services.

How strictly these techniques are used relates to how tightly managed a plan is. Closed panel health maintenance organizations (HMOs) are more likely, for example, to require prior authorization for outpatient counseling as compared to few such requirements among more loosely structured preferred provider organizations and point-of-service plans (which are more common

in today's managed care market) (Horgan et al., 2003).

Given these structural and procedural elements to control access—benefit design and utilization management—there are fundamentally two ways a managed mental health plan can expand access to services: (1) increase the numbers and types of services covered, and (2) relax requirements for prior authorization of services and utilization management both in and out of network. The focus in this report is on how utilization management controls in managed mental health contracts may affect access to care.

2. Efforts to Measure Access to Managed Mental Health Services

Much of the literature regarding managed care's effects on access to mental health care is anecdotal (Koike, Klap, & Unützer, 2000; Sturm & Sherbourne, 2000). Only a few quantitative studies have been conducted to measure the effects of utilization management techniques on access to services. Concern has been raised that measures such as level-of-care criteria for admission and level-of-care criteria for continued stay adversely affect persons with severe and/or chronic mental illnesses such as schizophrenia or bipolar disorders. "Level-of-care criteria for admission" refers to plan authorization for payment of services depending on whether plan-defined clinical guidelines are met for initial provision of services in outpatient or inpatient settings. "Level-of-care criteria for continued stay" refers to whether additional inpatient days beyond those contractually authorized are based on plan-defined clinical guidelines.⁴ Such requirements are among the primary ways managed care plans control access to expensive treatment such as inpatient care and psychopharmaceuticals (Dana, Conner, & Allen, 1996; McClellan, 1998).

A 1997 survey of State Medicaid directors in seven States on the topic of Medicaid managed care conducted by the DHHS Office of Inspector General (OIG) found that access to care was improved as a result of State Medicaid agencies' decisions to enroll Medicaid eligibles in carve-out managed mental health plans (OIG, 2000). This was achieved by providing a "home" for these persons, who previously encountered difficulties in finding fee-for-service Medicaid mental health services. Lack of access to mental health providers willing to accept prevailing Medicaid rates was cited as a major obstacle in the fee-for-service system. The survey also found that cost increases resulting from increased enrollment are not within plan control; however, once enrolled, access controls aimed at cost containment of mental health expenditures (e.g., capitated reimbursements for providers) may hamper enrollees' ability to obtain needed services.

A qualitative study of Medicaid managed care, published as part of a series of reports related to an evaluation of four State Medicaid reform demonstrations for 1994–99, described several factors that affected access to mental health treatment services among children with SED and adults with serious mental illness (SMI) (Vogel, 2001). The study was based on site visits and interviews with stakeholders in Hawaii, Oklahoma, Rhode Island, and Tennessee. The author found that neither carve-in nor carve-out designs had measurable effects (either positive or negative) on access to mental health treatment among Medicaid beneficiaries enrolled in a managed mental health program. The author identified several factors (although not quantified) that impeded Medicaid enrollees' access to mental health services. These factors included restrictive

eligibility criteria (e.g., how narrowly States defined clinical criteria for SMI or SED), lengthy application forms, provider network adequacy, and provider credentialing requirements that restricted the availability of specialty mental health providers such as child psychiatrists. The author also found that access to care and care coordination were problematic for children with SED and for persons with co-occurring mental health/substance abuse (MH/SA) disorders. However, the study stated that it appeared that some of these problems were “carried over” from the fee-for-service Medicaid program and were not specific to the managed care demonstration program.

Access to care has been measured in terms of unmet need, typically described as no care received, less care received than needed, or delays in receiving care. In addition, comparisons of studies measuring access to care can be problematic without an understanding of whether study authors measured the unmet needs as reported by patients, providers, or by quantitative analyses of medical and insurance databases.

Two quantitative studies found mixed results in measuring unmet need that may arise depending on the stringency of plan management and rates of utilization review denials. In the first study, Sturm and Sherbourne (2000) analyzed data from the 1998 Healthcare for Communities (HCC) survey⁵ and defined access-to-care terms of unmet need, described in the study as “no care” or “less care or delayed care.” (These terms were derived from self-reported answers to the HCC survey, and the authors did not distinguish between a patient’s self-perceived need for care and care prescribed by a clinician that was either unavailable or difficult to access.) This study found higher rates of “no care” in unmanaged fee-for-

service plans and higher rates of “less care or delayed care” in highly managed care plans. The authors speculated that one way to interpret these results would be that managed care expands access to mental health services through increased access to previously unavailable providers (compared to fee-for-service). Once enrolled in the managed care plan, however, utilization controls may lead to receipt of fewer services or delays in receiving services within the managed care plan’s contracted provider network.

In the second quantitative study, Koike et al. (2000) compared the rate of claims denials among loosely managed private sector mental health plans, such as open-panel preferred provider and point-of-service arrangements, with the rate of claims denials among closed-panel managed care plans. The authors found that access to care was unaffected, regardless of plan type: utilization management reviews rarely resulted in a denial of claims. This was especially true for requests for additional outpatient visits. Given the time and opportunity costs incurred by both providers and health plan employees for the submission and review of the claims, the authors noted that the costs of the review processes exceeded the potential cost savings of utilization management.

The findings from the preceding study were likely influenced by the predominance of less-managed point-of-service plans in the study group and the fact that the plans served healthier private sector employees. A later study of the effect of type of risk arrangement on access involved analysis of survey responses of 9,449 Medicaid managed care enrollees with Supplemental Security Income (SSI) disability determinations enrolled in plans that assumed financial risk, compared to those that did not assume financial risk in Tampa and Jacksonville, Florida. The study

found that access to mental health services (measured as utilization rates) was lower for the persons in the plans that assumed financial risk compared to the persons in plans that did not (Boothroyd, Shern, & Bell, 2002). Medicaid enrollees with SSI disability determinations, as a result of the complexity of their conditions, may have higher mental health service needs than a general Medicaid population.

Various studies of Tennessee's Medicaid managed care program (TennCare) and its capitated behavioral health carve-out (TennCare Partners) have found mixed results regarding the effects of managed mental health care on access to care. Two studies published in 2001 as part of the previously mentioned 1994–99 evaluation of State Medicaid managed care programs focused on the experiences of TennCare enrollees who had SSI disability determinations. TennCare Partners was designed to serve the needs of Tennessee Medicaid SSI recipients who were considered disabled by virtue of meeting the criteria for SPMI for adults and SED for children. Both studies were based on the results of the 1998 TennCare Disability Survey, which conducted interviews with these enrollees and/or their family members. The survey was designed to assess their perceptions of access and quality of care. In the first study (Hill et al., 2001), the authors found that two-thirds of adults with SPMI reported having regular access to care. Half of children with SED appeared to have access problems, having no regular source of mental health care, fewer mental health visits, and fewer psychiatric inpatient hospital stays.

The second TennCare study published in 2001, also based on the 1998 TennCare Disability Survey, included case studies of a subsample of these interviewees (Draper, CyBulski, & Ciemnecki, 2001). The authors

stated that TennCare “performed better” in meeting the needs of adults with SPMI and children with SED, compared to SSI adults without SPMI and children without SED. The authors noted that this was likely due to the fact that TennCare Partners manages the care specifically for the SPMI and SED populations; other SSI disabled enrollees with mental health treatment needs are served by TennCare's general Medicaid managed care program.

Two quantitative studies of TennCare published in 2003 examined mental health access issues for children and adults. In the first study, Saunders and Heflinger (2003) analyzed claims, encounter, and enrollment data for the period 1995–2000. They found that while TennCare increased the number of youths ages 4–17 receiving behavioral health services by 50 percent, this expansion was accomplished in part by reducing the number of treatment services for children and substituting more supportive services such as case management and medication monitoring.

The second study related to access evaluated the effects on continuity of antipsychotic therapy for adults with schizophrenia by using enrollment and encounter data to compare two large cohorts of patients before and after the 1996 transition to TennCare Partners (Ray, Daugherty, & Meador, 2003). The authors found that, compared to the pretransition cohort, the posttransition cohort was more likely to experience a loss of continuity of care, as evidenced by shorter duration of antipsychotic therapy and more frequent interruptions in adherence to therapy (especially among the most severely ill). The authors attributed this in part to the fact that TennCare Partners bears full financial risk for its enrollees with no case-mix adjustment for severity of illness, thus providing a

“powerful incentive” to reduce costs by cur-tailing services (e.g., the types of supportive services such as regular reminders designed to enhance patients’ ability to adhere to their treatment regimens).

How much a managed care plan pays in the form of per-member-per-month (PMPM) outlays for outpatient mental health treatment affects access to outpatient care. Studies have found that if the PMPM rate is below a range of \$4.00 to \$6.00, health plan enrollees may experience difficulties accessing needed outpatient mental health treatment (Cuffel & Regier, 2001; Weissman, Pettigrew, Sotsky, & Regier, 2000).

The extent to which persons with mental health conditions in managed care plans are able to maintain continuity of care with their primary and specialty care providers is another important aspect of access to care. The development of a “therapeutic alliance” (the collaborative relationship a particular provider is able to form with a particular patient) is particularly important, especially since the needed levels of trust can take significant time to develop. Since 50 percent or more of patients with depression are treated in primary care settings (Docherty, 1997), ongoing access to care with their primary care providers (PCPs) takes on special importance. In a 2-year study that analyzed the experiences of 1,204 managed care patients with current depression treated in primary care settings, it was found that stronger cost containment techniques did not lead to shorter durations of care (Meredith, Sturm, Camp, & Wells, 2001). Greater patient satisfaction with the provider has been shown to be strong enough to overcome any restrictions in provider choice and prior authorization requirements that could affect access to care.

3. Racial and Ethnic Disparities in Access to Mental Health Services

Our review found only a few studies that specifically measured racial/ethnic disparities in access within managed mental health care plans. Two studies were related to Medicaid and one to Medicare+Choice. No quantitative studies that measured racial/ethnic disparities in access within managed mental health care plans in the private sector, employer-sponsored market were identified.

Evidence from Medicaid managed care studies indicates that the primary difference in managed mental health care for adults from racial and ethnic minority backgrounds is that they are more likely to be admitted to public sector psychiatric hospitals (Crawford, Fisher, & McDermeit, 1998). Ethnic minority children involved in child welfare systems, particularly African Americans and Hispanics, have historically had higher mental health service needs than non-Hispanic white children in similar circumstances. They are also more likely to be treated in group residential treatment centers rather than more individualized community-based settings such as therapeutic foster care (Snowden, Cuellar, & Libby, 2003).

An extensive analysis of 1999 Health Plan Employer Data and Information Set (HEDIS®) data to evaluate the experience of racial and ethnic minorities’ access to mental health care services in Medicare+Choice plans found significant access problems for racial and ethnic minority Medicare beneficiaries. Minorities received substantially less follow-up after hospitalization for mental illness, lower rates of antidepressant medication management for newly diagnosed episodes of depression, slightly lower rates of optimal practitioner contacts, and significantly lower rates of effective continuation-phase treat-

ment (Virnig et al., 2004). General health care access difficulties experienced by minorities (independent of managed care enrollment status) have been well-documented (Institute of Medicine [IOM], 2003). The authors noted that further research is needed to identify the reasons for these different rates of access to better understand their underlying causes and solutions (Virnig et al., 2004).

Summary of the Literature: A consensus exists in the literature (primarily anecdotal) that managed mental health care generally improves access to care overall, to the extent that it affords enrollees access to a regular source of care and access to outpatient services that previously were difficult to achieve in a fee-for-service market. A few studies regarding access-to-care effects of managed mental health on racial, ethnic, and other minorities indicate that minorities have experienced problems accessing mental health treatments in managed care settings. Further research focused on managed mental health care in these populations is needed.

C. Managed Mental Health Care and Potential for Harm

Question: Are there particular groups or subgroups of patients with particular diagnoses who are harmed by being treated in managed mental health care systems? If so, for what reasons and in what ways?

Answer: Inconclusive. Only a few quantitative studies in the literature report findings identifying which patients in which managed care settings have experienced actual harm as a result of benefit design limits or utilization techniques. Numerous sources discuss how managed mental health plans may have the potential to harm persons with severe mental illnesses; however, documentation of actual harm is lacking in the literature.

The “managed care backlash” began in the United States in the mid-1990s amidst consumer concerns that aggressive cost containment efforts could result in managed care plan denials of care, particularly for expensive inpatient treatment in hospitals. These concerns, quite often shared by providers, led to a period of intense regulation of health plans (e.g., development of health care consumer bills of rights, State and Federal mandates for mental health parity, and requirements for more accessible and accountable patient grievance and appeals systems in managed care).

1. What Is “Harm”?

The populations most often discussed in the managed mental health care literature as being at risk for harm are adults with severe mental illnesses such as schizophrenia or bipolar disorders, and children with SEDs who require access to outpatient mental health treatments, more expensive inpatient and residential settings, and a variety of supportive social assistance programs (Mechanic, 1998; Mowbray, Grazier, & Holter, 2002; VanLeit, 1996; Wells, Astrachan, Tischler, & Unützer, 1995). Private sector managed mental health plans may engage in “cherry-picking” healthier individuals for enrollment and may deny claims for high service users such as persons with SPMI. The result often seen is the “dumping” of these persons onto public sector safety net providers, requiring them to step in to provide care and assume the costs of doing so (Goldman, 1999; Miller, 1996; Minkoff & Pollack, 1997).

From a clinical perspective, the term “harm” refers to undesirable effects experienced as a result of inappropriately providing a health intervention or by delaying or withholding a health intervention when needed

by a patient. As related to clinical outcomes, harm can range from deterioration of a mental illness to death. For the purposes of this report, the definition of “harm” includes whether managed mental health plan enrollees with high needs encounter obstacles to obtaining access to all levels of care needed to improve or stabilize their mental health conditions. This definition was selected because only a few quantitative studies have measured mental health outcomes across different delivery systems, whether fee-for-service or managed care. This lack of outcomes research is due to difficulties in defining appropriate end-points to reliably measure outcomes, as well as difficulties inherent in conducting long-term studies with enough follow-up data to track patients over time (Boyle & Callahan, 1995; Mechanic, 2003a; Sperry, Grissom, Brill, & Marion, 1997). Certain populations, such as elderly persons with SPMI, have been identified as particularly in need of outcome studies (Bartels, Levine, & Shea, 1999).

2. Quantitative Measures of Harmful Effects of Managed Mental Health Care

A few quantitative studies have measured the use of mental health care treatments among persons with severe mental illness enrolled in managed mental health plans. Two of the studies measured health and functional outcomes (e.g., effects on a patient’s ability to engage in activities of daily living), and a third study measured differences in service utilization rates (e.g., frequency of use of treatment services) by type of plan enrollment (public versus private sector).

Earlier small studies of mental health outcomes among Medicaid managed care enrollees with chronic mental illnesses showed that the use of managed care techniques resulted in no demonstrable harmful effects (i.e., limitations in access to care by persons with

high needs), at least in the short run. This is partly due to the fact that such persons typically were not required to enroll in Medicaid managed mental health care programs, and follow-up periods in the studies were short (Dorwart & Epstein, 1992; Leff, Lieberman, Mulkern, & Raab, 1996; Lurie, Moscovice, Finch, Christianson, & Popkin, 1992).

Later studies have shown that States’ experiences with mental health carve-outs have had mixed results as greater numbers of persons with chronic mental illnesses are enrolled in Medicaid managed care (Mechanic, 2003b). These studies indicate that persons with SMIs may experience limitations in access to care in a carve-out, compared to persons with mild to moderate mental health conditions (Huskamp, 1998). These adverse effects include disruptions in continuity of care that affect these patients’ ability to adhere to recommended medication schedules and receive outpatient visits following hospital discharge, documented in studies in Tennessee, Utah, and Virginia (Chang et al., 1998; Manning, Liu, Stoner, Gray, & Popkin, 1999; Morrissey, Stroup, Ellis, & Merwin, 2002; Ray, Daugherty, & Meador, 2003).

Summary of the Literature: Sources that address the topic of managed mental health care and harm typically include caveats that real effects cannot be measured until (1) consensus is achieved as to selection of appropriate mental health outcome measures, and (2) reliable quantitative measures can be developed to conduct longitudinal studies over greater lengths of time. The paucity of such studies in the literature continues to restrict our ability to report on, or predict, which patients in which managed care settings may be harmed by benefit design limits or utilization techniques aimed at containing costs and improving appropriate use of the full spectrum of mental health and support services.

A. Use of Carve-Ins Versus Carve-Outs for Managed Mental Health Care Services

Question: Should managed mental health care services be carved in or carved out? What are the pros and cons of doing so in private and public sector payor settings?

Answer: Numerous sources in the literature indicate that carve-outs are preferred by purchasers, with certain safeguards regarding care coordination. Managed mental health carve-outs are preferable to carve-ins for persons with milder mental health conditions, when care coordination requirements between physical and mental health are less crucial than for adults with SPMI or children with SED. Adults with SPMI may fare less well in managed mental health carve-outs than persons with milder mental health conditions, largely due to a lack of continuity of care and potential inability to obtain more intensive services such as inpatient or residential treatment. The main advantages of carving out include better accountability of mental health expenditures, expanded treatment services, and ability to control claims costs. The main disadvantages include higher administrative costs, potential for fragmentation of physical and mental health services, and potential consumer confusion regarding how to access services. Employer purchasers also report that enrollees benefit from having greater access to a wider range of specialty mental health providers in the carve-out

network. The literature on carve-outs in the public sector identifies several benefits of using a managed mental health carve-out. Experts in child mental health services agree that mental health carve-out designs are preferred for systems that serve children with SEDs who have needs that span multiple health and social service sectors (e.g., child welfare, Medicaid, and juvenile justice).

Mental health carve-out companies are today the most frequent form of managed mental health organization in both the private and public sectors (Grazier & Eselius, 1999). The use of carve-outs has grown rapidly since the mid-1990s, following publication of research that showed mental health carve-outs achieve significant cost savings compared to fee-for-service or carve-in HMO plans (Salkever & Shinogle, 2000). Cost savings occur most often when carve-out companies shift care to lower cost outpatient settings whenever possible and appropriate. Carve-out MBHOs also appear to be better able to implement utilization management controls such as prior authorization and the use of prescription formularies to manage mental health service use (Feldman, 1998; Grazier & Eselius, 1999; Holahan, Rangarajan, & Schirmer, 1999; Huskamp, 1998; Ridgely, Giard, & Shern, 1999; Vogelsang, 1999).

1. Advantages and Disadvantages of Mental Health Carve-Outs

Tables 3 and 4 summarize the advantages and disadvantages of using managed mental

Table 3. Advantages of Managed Mental Health Carve-Outs

<p>Service Cost Reductions</p> <ol style="list-style-type: none"> 1. Elimination or reduction of adverse selection (e.g., by offering only one managed mental health carve-out plan and/or specific use incentives) 2. Changing the cost-sharing structure to shift from more expensive to less expensive services 3. Negotiation of discounted fees for network providers 4. More appropriate selection and efficient management of services 5. Increased risk sharing with vendors and providers 6. Improved coordination and administration of services 7. Potential economies of scale due to increased volume of services provided
<p>Improving Processes and Outcomes of Care</p> <ol style="list-style-type: none"> 1. Developing a larger and more specialized network of MH/SA providers 2. Channeling patients to providers with records of providing high-quality services 3. Increasing the volume of services provided by any one provider 4. Expanding MH/SA benefits to include coverage for a wider array and continuum of services 5. Customizing benefit packages 6. Increasing consistency or uniformity of benefits across subgroups for the enrolled population 7. Reducing unnecessary use of services 8. Increasing patient satisfaction 9. Conducting more targeted evaluations based on specific mental health care criteria 10. Maintaining an extensive range of data on service operations, providers, and patients 11. Increasing access to care for covered populations
<p>Political Advantages</p> <ol style="list-style-type: none"> 1. Increase the numbers of people covered for MH/SA services 2. Ensure that equivalent resources are used for MH/SA services in comparison to general health services 3. Enable a vendor to do something the sponsor may not want to do directly because of political pressures (e.g., exclude certain providers from the network)
<p>Source: Grazier & Eselius, 1999.</p>

health carve-outs identified in a published review of the literature (Grazier & Eselius, 1999). Among the advantages are carve-outs' ability to reduce service costs, improve processes and outcomes of care, and provide the opportunity to maximize political advantages. Potential disadvantages of managed mental health carve-outs are related

to financial and administrative issues and quality-of-care issues.

2. Private Sector Experience With Mental Health Carve-Outs

Survey research conducted with 338 Fortune 500 firms tested six theoretical conditions under which large employer purchasers are

Table 4. Disadvantages of Managed Mental Health Carve-Outs	
Financial and Administrative Issues	
<ol style="list-style-type: none"> 1. High administrative costs for contracting with a specialty vendor. 2. Short-term savings realized since vendors may have little incentive to provide preventive care and detect mental health needs early. 3. Specialty vendors may have less direct control over contracted network providers and weaker incentives to reduce costs compared to carve-in plans, particularly if managed care penetration in specialists' practices is small. 4. Sponsors may have to maintain two separate internal data systems. 5. Two administratively separate systems with separate budgets may restrict the flexibility of sponsors to apply cost savings in one area to offset costs in another. 	
Quality-of-Care Issues	
<ol style="list-style-type: none"> 1. May exacerbate a fragmented, uncoordinated system of health care services (also, Teitelbaum, Rosenbaum, Burgess, & DeCourcy, 1999). 2. May inhibit the creation of a fully integrated system of services intended to holistically address the general and mental health needs of enrollees. 3. As a result of 2. above, may not properly sensitize primary care providers to mental health issues of their patients. 4. May introduce confusion for enrollees and providers if effective care coordination mechanisms are not in place. 5. Single specialty vendors may be less adept at coordinating with out-of-network providers. 	
Source: Grazier & Eselius, 1999, except where noted.	

more likely to choose a mental health carve-out plan. The larger the size of the firm, the more likely it is to carve out mental health benefits (Hodgkin et al., 2000). As shown in table 5, three of the theoretical conditions were confirmed and three were not.

Reducing costs is a major factor in employers' decisions to carve out mental health benefits, particularly in the early years of a shift to a carve-out. Employer purchasers report that enrollees benefit from having greater access to a wider range of specialty mental health providers in the carve-out network (Hodgkin et al., 2000). Managed mental health carve-outs offer enrollees a wider array of outpatient mental health services while also containing costs in two ways: (1) reducing unnecessary inpatient care, and (2) reducing medical costs. The

reduction in medical costs occurs by better serving the mental health needs of patients who previously used medical services to meet their needs and are now more appropriately treated in the mental health sector (Cuffel, Goldman, & Schlesinger, 1999; Olfson, Sing, & Schlesinger, 1999).

A study of the effects of implementing a managed mental health carve-out by a large industrial manufacturing company confirmed the findings of previous studies. Use of an expanded managed mental health benefit resulted in a 2.9 percent reduction in general medical costs for users of behavioral health services without a reduction in rates of treatment for mental health conditions (primarily outpatient care for persons with depression) (Cuffel, Goldman, & Schlesinger, 1999).

Table 5. Results of Testing Theories About Carve-Outs With a Large Employer Survey	
Theories From the Literature	Survey Results
Theory 1. The need to ensure consistency across multiple geographic regions where the company has employees is an important factor in a company's decision to carve out mental health benefits.	Confirmed. Larger employers that carve out mental health benefits were more likely to use a national rather than multiple regional managed mental health organizations.
Theory 2. For companies with multistate operations, the need to manage risk-selection behavior by offering multiple health plan choices to employees in different States is an important factor in a company's decision to carve out mental health benefits.	Not confirmed. The analysis of the ratio of number of plans offered to number of States found that it was not a predictor of carving out.
Theory 3. Concern about potential low quality of mental health services in carve-in plans is an important factor in a company's decision to carve out mental health benefits.	Not confirmed. Concerns about quality were mentioned by all firms; however, it was not possible to distinguish differences in relative weighting of this issue between firms that carve in or carve out. Until widely accepted quality measures for mental health services are developed, cost concerns will likely outweigh quality concerns in decisionmaking about carving in or carving out.
Theory 4. Preference for development of specialized mental health treatment expertise over coordination with medical care is an important factor in a company's decision to carve out mental health benefits.	Confirmed. Employers that valued development of specialized mental health expertise over care coordination were more likely to carve out.
Theory 5. Added administrative burdens of a mental health carve-out are not a compelling concern in a company's decision to carve out mental health benefits.	Confirmed. Employers that carve out were more likely to report being less concerned about the added administrative burden of carving out.
Theory 6. The desire to financially track mental health service utilization using a separate budget is an important factor in a company's decision to carve out mental health benefits.	Not confirmed. Employers did not assign high importance scores to the separate budget issue.
Source: Hodgkin et al., 2000.	

Large companies using managed mental health carve-outs most often contract with administrative services organizations (ASOs) and prefer paying providers on a discounted fee-for-service basis rather than capitation. (ASOs are third party companies hired by purchasers to deliver administrative services such as claims processing and billing to the purchaser; the purchaser bears all the risk for claims costs.)⁶

The lack of accountability for mental health service use in carve-in plans combined with a comparative lower access to mental health services in carve-in plans are deciding factors in large companies' choice to instead

carve out their mental health benefits (Apgar, 2001).

3. Public Sector Experience With Mental Health Carve-Outs

In 2000, the DHHS OIG published results of interviews with State Medicaid and mental health staff, managed care officials, mental health providers, and other stakeholders in seven States. These States were using Medicaid managed mental health care programs at the time. The interviews revealed the following benefits of using a managed mental health carve-out:

- Ability to expand new services (e.g., residential, vocational, respite, in-home, clubhouse,⁷ day treatment, personal care and assistance with daily living, and evaluation and treatment centers);
- Increased flexibility to provide innovative interventions (e.g., residential phone service for mental health consumers located in isolated rural areas, building a fence around the home of a patient with severe mental illness to alleviate paranoia episodes and increase sense of personal security);
- Overall increase in utilization of mental health services, primarily in the use of community-based outpatient treatment while inpatient utilization declined;
- Decreased wait times for beneficiaries to access care; and
- Overall reduction in costs of mental health care, largely achieved by shifting to outpatient care while reducing numbers of inpatient admissions and lengths of stay (OIG, 2000).

Repeated surveys of State child mental health directors in more than 30 States have consistently found that carve-outs are advantageous to children with serious emotional disturbances and their families, largely due to these children's multisystemic health and social needs. As compared to carve-in models, mental health carve-outs' desirable features for such children include the following:

- Coverage of an expanded array of mental health services;
- Increased case management or care coordination;
- Support for the provision of individualized, flexible care;
- Incorporation of broad, psychosocial medical necessity criteria;

- Involvement of families in planning and implementation in meaningful ways;
- Inclusion of specialized mental health services for culturally diverse populations; and
- Provision of training to MCOs on treatment needs of children (Pires, 2002).

Rather than relying solely on the Medicaid agency for funding, carve-out designs used for children and families frequently use multiple funding streams from different sources. Many of these children are served by multiple systems (e.g., mental health, Medicaid, child welfare, juvenile justice, and schools) (Coleman et al., 2005; Mauery, Collins, McCarthy, McCullough, & Pires, 2003). Compared to carve-ins, carve-outs have shown better success in coordinating physical and mental health services with social service delivery needs such as child welfare and education. In addition, carve-outs are typically the result of collaborative design efforts of both State mental health and Medicaid agencies, thus enhancing more comprehensive and integrated care across multiple child- and family-serving systems (Pires, 2002).

Summary of the Literature: Managed mental health carve-outs are preferable to carve-ins for persons with milder mental health conditions, when care coordination requirements between physical and mental health are less crucial, than for adults with SPMI or children with SED. Compared to persons with milder forms of mental illness, adults with SPMI may fare less well in managed mental health carve-outs, largely due to a lack of continuity of care and potential inability to obtain more intensive services such as inpatient or residential treatment. Carve-outs are preferred for children with multisystem health and social services needs.

B. Coordination of Primary Care and Mental Health Care Services in Managed Care Settings

Question: What is the best way to coordinate primary care and mental health care services in managed care settings? What characterizes success?

Answer: Unclear. Several sources in the literature recommend that purchasers should contractually require coordination of primary care and mental health care services, with financial or other incentives tied to performance measurement. Success is demonstrated in the form of ease of referrals between primary care and mental health care sectors, better management of illnesses and conditions, and improved provider and patient satisfaction. No studies to date, however, have quantitatively demonstrated that such contractual requirements result in improved care coordination as compared to not requiring them.

1. Barriers to Care Coordination

Barriers to care coordination include—

- Issues about clinical practice, managed care design, and entrenched stigma associated with mental illnesses that influence both providers and patients (Pincus, 2003);
- Professional disagreements about clinical “turf” issues;
- Inability or failure to reward providers for exemplary care coordination;
- The fragmented and disorganized health insurance framework in the United States (Mechanic, 2003c; Meredith, Sturm, Camp, & Wells, 2001; Gallo et al., 2002; Frank, Huskamp, McGuire, & Newhouse, 1996); and
- An underlying lack of accessible specialty mental health providers within a net-

work or in a geographic area (Trude & Stoddard, 2003).

Proponents of carve-in models often cite the potential for better coordination of physical and mental health care within an integrated system (Feldman, 1998; Horgan et al., 2003). This means, however, that primary care providers within such systems must have the ability and resources needed to make referrals to a mental health treatment specialist within the contracted network of providers. In addition, providers should have mutual access to information about care being provided by both the primary care provider and the mental health specialist (Shuchman & St. Peter, 1997; Trude & Stoddard, 2003).

As noted in table 4 above, the use of carve-out models for managed mental health care may inhibit effective care coordination to the extent that carve-outs may exacerbate a fragmented, uncoordinated system of health care services. This fragmentation may occur as a result of separating the financing and organization of medical and mental health service delivery between an MCO and an MBHO (Grazier & Eselius, 1999). Requirements and specifications in carve-out arrangements governing the delivery of managed mental health services may not always be consistent throughout contracts between a purchaser and an MBHO, and in turn between an MBHO and its network providers (Rosenbaum, Markus, & Teitelbaum, 2001).

One of the nation’s largest MBHOs reported in 1998 that its experience with coordinating medical and mental health services within its carve-out plan products had “not been encouraging,” achieving only “modest results” (Feldman, 1998). Two factors were noted: (1) lack of time and interest on the part of primary care physicians, and (2) patients’ fears of being stigmatized by

primary care physicians if they revealed their mental health conditions to them.

2. *Overcoming Barriers to Coordination of Physical and Mental Health Care Services*

As noted by Rosenbach and Young (2000), there is no universally accepted standard definition of care coordination. A list of 10 care coordination features identified in Medicaid managed care and shown in figure 1 also can be used in private sector managed care settings.

Whether the managed mental health care model is carved in or out, the need to coordinate care is critical to achieving successful outcomes across both the physical and mental health treatment domains (Alfano, 2004; Drainoni, 1999; Rosenbaum, Mauery, & Kamoie, 2001; Sabin, 1998). For persons with mental health conditions being treated with psychopharmaceuticals, care coordination in the form of medication management is essential to monitor the physical effects of such drugs, including potential interactions with other medications. Recent changes in managed primary and mental health insurance designs have moved toward less use of prior authorization requirements for referrals to specialists (Horgan et al., 2003). This may result in patients being under the care of a mental health treatment specialist without the knowledge of their primary care physicians, unless patients disclose that information or there are contractual requirements that mandate clinical communications between primary and mental health specialty care practices (with consent of the patient).

As previously discussed, the potential for lack of communication between primary care and mental health specialty care may exist in carve-out arrangements. This may also occur when a purchaser has contracted for both physical and mental health care services

Figure 1. Care Coordination Features

- Is designed to increase access to care and the quality of care
- Extends access assistance to community services and beyond contract services
- Operates as an independent, identifiable function in managed care
- Is supported by an information system dedicated to care coordination and linked to other managed care information systems
- Contains policies and procedures describing the relationships between care coordinators and health care providers
- Contains a specification for written plans of care
- Includes ongoing monitoring and modification of care plans when needed
- Is readily accessible
- Is furnished by individuals with appropriate training, in accordance with formal standards

Source: Rosenbach & Young, 2000.

with an MCO (a carve-in) and when the MCO then subcontracts mental health services delivery with an MBHO (Alfano, 2005; Drainoni, 1999).

Many people receive mental health treatments in primary care settings, particularly for depression (Meredith & Mazel, 2000). There is also growing professional agreement that care coordination should be considered the standard of care in both primary and mental health care service delivery (Alfano, 2005; Frank et al., 2003; Rosenbaum, Mauery, & Kamoie, 2001; Rubenstein et al., 2002; Sherbourne et al., 2001). The National Committee for Quality Assurance (NCQA) has established health plan accreditation

criteria for care coordination for both general service MCOs and specialty MBHOs, as shown in figure 2.

The George Washington University Center for Health Services Research and Policy

Figure 2. NCQA Accreditation Standards for MBHOs and MCOs: Quality Management and Improvement in the Area of Continuity and Care Coordination

MBHOs

- Coordination of care among MBHO network providers
- Monitoring the medical appropriateness of behavioral services in primary care (diagnosis, treatment, referral, prescribing practices)
- Coordination of care for persons with coexisting medical and behavioral disorders
- Implementation of preventive guidelines and programs
- Collection and analysis of data relevant to continuity and coordination
- Collaboration with medical systems
- Continuity of care for persons whose practitioners leave the MBHO

MCOs

- Provision for the exchange of information between medical and behavioral health practitioners
- Assessment of appropriateness of diagnosis, treatment, and referral of behavioral disorders commonly seen in primary care
- Evaluation of psychopharmacological medication appropriateness
- Coordination of timely access for appropriate treatment for individuals with co-occurring medical and behavioral disorders
- Analysis of data related to continuity and care coordination
- Implementation of interventions to improve continuity and coordination
- Timely notification of provider terminations and continuity of care for persons whose practitioners leave the network in cases of persons with chronic or acute conditions or members in the third trimester of pregnancy

Source: NCQA, 2004.

developed “sample purchasing specifications” that purchasers may adapt to their own needs in drafting requests for proposals (RFPs) to contract with both general and specialty mental health MCOs (Rosenbaum, Mauery, & Kamoie, 2001).⁸ In particular, these sample specifications, as shown in figure 3, offer the following language that encourages rewarding care coordination activities, with incentives tied to performance measurement.

A number of sources have emphasized the importance of including explicit care coordination requirements in contracts that govern

Figure 3. Sample Purchasing Specifications for Care Coordination and Physical and Behavioral Service Integration in Managed Care Contracts (excerpt)

§203. Quality Performance Measurement and Improvement

- (a) Written protocols—Contractor shall submit the protocols it uses to measure the quality of its care coordination activities.
- (b) Minimum elements—At a minimum, quality improvement protocols shall include the following:
 - (1) performance benchmarks in the following areas:
 - (i) identification of members who need care coordination;
 - (ii) timelines for the provision of assessment and care coordination plan development and provision of care coordination assistance;
 - (iii) handling of requests for services from providers and agencies; and
 - (iv) resolution of disputes regarding treatment under this Agreement;
 - (2) procedures used to evaluate care coordination performance by care coordinators and network providers; and
 - (3) the use of incentives to achieve care coordination improvement.

Source: Rosenbaum, Mauery, & Kamoie, 2001.

the delivery of managed mental health care (Alfano, 2005; OIG, 2000; Ridgely, Mulkern, Giard, & Shern, 2002; Rosenbach & Young, 2000; Rosenbaum, Mauery, & Kamoie, 2001; Center for Mental Health Services [CMHS], 1996; Teitelbaum, Rosenbaum, Burgess, & DeCourcy, 1999). Quantitative studies that demonstrate such requirements' effects on patient outcomes do not exist in the literature.

Summary of the Literature: Ample anecdotal evidence exists of a clinical and professional consensus about the desirability and success of conducting care coordination between the mental and physical domains of health care in managed care settings. Studies designed to demonstrate just how such efforts can help to achieve positive health outcomes within managed care environments have not yet been successfully translated into wide-scale implementation, and quantitative measures of the actual effects of care coordination requirements have not been published.

C. Coordination of Mental Health and Substance Abuse (MH/SA) Care in Managed Care Settings

Question: What is the best way to coordinate mental health and substance abuse (MH/SA) care in managed care settings for persons with co-occurring disorders? What characterizes success?

Answer: Unclear. Similar to the topic of coordination of physical and mental health care, a few sources in the literature have recommended that purchasers of managed care arrangements contractually require coordination of mental health and substance abuse services. These sources also recommend that requirements include financial or other incentives tied to performance measurement. Quantitative measures of the success

or effects of these recommended contractual requirements have not been published.

1. Co-Occurring MH/SA Disorders Are Prevalent Though Undertreated

One analysis of data in the 1997–98 Health Care for Communities survey found that approximately 3 percent of the adult U.S. population had a co-occurring MH/SA disorder (Watkins, Burnam, Kung, & Paddock, 2001). More recent analyses of data from the Comorbidity Survey⁹ revealed that the annual prevalence of co-occurring disorders among adults is 2.2 percent. The lifetime prevalence (i.e., the percentage of adults estimated to experience a co-occurring MH/SA disorder at some point in their lives) is 10.5 percent, or nearly 22 million U.S. adults (R. Kessler, personal communication, August 1, 2005).

Having a mental illness puts a person more at risk for developing a substance abuse problem and vice versa: 42.7 percent of individuals with a 12-month addictive disorder have at least one 12-month mental disorder, and 14.7 percent of individuals with a 12-month mental disorder have at least one 12-month addictive disorder. Risks are estimated to be even higher for persons with severe mental illness: 47 percent of individuals with schizophrenia also have a substance abuse disorder (more than four times as likely as the general population), and 61 percent of individuals with bipolar disorder also have a substance abuse disorder (more than five times as likely as the general population) (SAMHSA, 2002).

Data from the National Comorbidity Survey reveal that the probability for a person diagnosed with a substance abuse condition to have any co-occurring mental illness is 71.5 percent (R. Kessler, personal communication, August 1, 2005). A report on co-occurring MH/SA disorders published

by SAMHSA in 2004 (Epstein, Barker, Vorburger, & Murtha, 2004) found that in 2002, there were 33.2 million adults age 18 or older with a serious mental illness (SMI) or a substance use disorder. Of these adults, 13.4 million (40.4 percent) had only SMI, 15.7 million (47.4 percent) had only a substance use disorder, and 4.0 million (12.2 percent) had SMI and a substance use disorder.

While the risks for development of co-occurring MH/SA disorders are high among persons who have either a mental illness or a substance abuse condition, there is also evidence of a lack of treatment (Epstein, Barker, Vorburger, & Murtha, 2004; SAMHSA, 2002; Watkins, Burnam, Kung, & Paddock, 2001; Watkins et al., 2004). In a 2001 survey, 72 percent of persons with co-occurring MH/SA disorders did not receive any specialty mental health or substance abuse treatment in the previous 12 months (Watkins, Burnam, Kung, & Paddock, 2001). Despite the recommendation that individuals who have co-occurring MH/SA disorders receive treatment for both their mental health and substance use problems (Drake, Essock, et al., 2001; Drake, McLaughlin, Pepper, & Minkoff, 1991; Minkoff, 1989; SAMHSA, Barker, 2002; Watkins et al., 2004), only 8 percent received either integrated or parallel treatment. Only 23 percent received appropriate mental health care, and 9 percent received supplemental substance abuse treatment (Watkins, Burnam, Kung, & Paddock, 2001).

2. Private Sector Managed Care Programs for Persons With Co-Occurring MH/SA Disorders

Survey results have found that a majority of MCOs have specialized providers or treatment programs available for persons with co-occurring MH/SA disorders. Specific

treatment guidelines, however, have been established in only 16 percent of the MCOs, and only 25 percent report having special criteria and/or prior authorization requirements in place for these persons (Horgan et al., 2003).

Clinical and professional consensus is building, as more evidence-based studies are conducted, that the preferred approach for persons with co-occurring MH/SA disorders is comprehensive “integrated treatment,” broadly defined as “any mechanism by which treatment interventions for co-occurring disorders are combined within the context of a primary treatment relationship or service setting” (Minkoff, 2001b; Ries, 1994; SAMHSA, 2002). Integrated treatment may range from cross-referral and linkage; through cooperation, consultation, and collaboration; to integration in a single setting or treatment model. Large MBHOs that have a wide variety of primary, mental health, and substance abuse providers in their networks—along with generous benefits, clearly articulated standards of care, clinical guidelines, and coordination protocols—should be able to provide high-quality levels of care. This may be particularly true when an MBHO carves out and consolidates both mental health and substance abuse benefits into a single behavioral health benefit (Feldman, 1998).

3. Scarcity of Literature Related to Standards of Care for Persons With Co-Occurring MH/SA Disorders in Managed Care Settings

Only four sources in the literature mentioned persons with co-occurring MH/SA disorders in any managed care context. One article is a review of a small prospective cohort study that found that persons with co-occurring MH/SA disorders experienced shorter hospi-

tal stays but higher rates of hospital readmission (characterized as a typical “revolving-door pattern of service utilization”) (Lyons, Lyons, Christopher, & Miller, 1998). The second source was the only report that focused entirely on the standards of care, coordination, and care management needs of persons with co-occurring MH/SA disorders in managed care settings (Minkoff, 2001b). The third source, a 1997 SAMHSA conference report, included a section of recommendations on treatment of persons with co-occurring MH/SA disorders in managed care settings. The conference participants recommended that purchasers include requirements for care coordination, integrated treatment, and explicit outcome measures tied to performance in the contracts with MCOs and MBHOs (SAMHSA, 1997). Finally, similar contract specifications are discussed in SAMHSA’s 1998 technical assistance publication, *Contracting for Managed Substance Abuse and Mental Health Services: A Guide for Public Purchasers* (Moss, 1998).

4. Recommendations for Coordinating Mental Health and Substance Abuse Treatments for Persons With Co-Occurring MH/SA Disorders in Managed Care Settings

One peer-reviewed source, Kenneth Minkoff’s 2001 *Psychiatric Services* article, “Best Practices: Developing Standards of Care for Individuals with Co-Occurring Psychiatric and Substance Use Disorders” (Minkoff, 2001a), summarizes a much larger 66-page SAMHSA report published in 1998, “Co-Occurring Psychiatric and Substance Disorders in Managed Care Systems: Standards of Care, Practice Guidelines, Workforce Competencies, and Training Curricula”¹⁰ (Minkoff, 1998). The author found that there were no existing standards of care for treating persons with co-

occurring MH/SA disorders specifically tailored for managed care settings (Minkoff, 2001a). Other than the standards developed by the panel convened for the 1998 SAMHSA report prepared by Minkoff, this lack of standards of care for treating persons with co-occurring MH/SA disorders specifically tailored for managed care settings remains true in 2005.

The 1998 SAMHSA report prepared by Minkoff, primarily geared toward public sector managed care systems such as Medicaid managed care, provides detailed objectives and guidelines for the delivery of integrated treatment in the following topic areas:

- Consumer/Family Oriented Standards for Dual Diagnosis Treatment in Managed Care Systems;
- Standards for Managed Care Systems Regarding Development of Comprehensive Dual Diagnosis Treatment;
- Practice Guidelines for Dual Diagnosis Treatment in Managed Care Systems;
- Provider Competencies for Dual Diagnosis Treatment in Managed Care Systems; and
- Training Curricula to Enhance Provider Competencies in Delivery of Dual Diagnosis Treatment in Managed Care Settings.

Figure 4 shows an extract from Minkoff’s 1998 SAMHSA report that illustrates the defined objective and guidelines recommended to enhance continuity of care.

This report’s recommendations have been successfully adapted and applied in several States—such as Massachusetts, Pennsylvania, New Mexico, Arizona, and Louisiana—in the development of public sector collaborative programs with MCOs to enhance the provision of integrated treatment for persons with co-occurring MH/SA disorders in managed care settings (Minkoff, 2001a).

Figure 4. Guidelines for Continuity of Care for Integrated Treatment of Persons with Co-Occurring MH/SA Disorders in Managed Care Settings

Objective

Clinical outcome is enhanced for consumers who can develop ongoing, caring therapeutic relationships with dual competency clinicians and/or integrated programs. Unfortunately, such relationships are difficult to initiate and are frequently disrupted as a result of changes (by the consumer) in program affiliation. To correct this, managed care entities need to create system structures that promote the initiation and maintenance of continuity of clinical responsibility, regardless of point of entry.

Guidelines

- As early in the therapeutic process as possible, dual diagnosed consumers are connected to a clinician or team of clinicians who will maintain a long-term continuous therapeutic relationship.
- Such a relationship does not depend on the consumer's continued abstinence or treatment compliance, on participation in any particular program, or ideally, on maintaining a particular residence.
- Such a relationship is initiated at the consumer's point of readiness, and permits progress at the consumer's pace through incremental increases in motivation and functioning, without imposition of arbitrary outcome criteria that may jeopardize the relationship (e.g., treatment benefits terminated if no abstinence within a certain time frame).
- Integrated continuous treatment teams with mobile outreach capacity are established for consumers with the most difficult and complex problems.
- Similar continuous relationships are established with significant family members, ideally by members of the consumer's primary integrated treatment team.
- Within acute episodes, continuity of clinical responsibility is maintained throughout the episode, even if the consumer moves between levels of acute care (e.g., hospital, crisis bed, day hospital).
- Continuity principles extend to participation in peer recovery supports (e.g., clubhouses, dual diagnosis groups) and residential supports, so that consumers do not need to change supports or housing as a result of arbitrary time limits.

Source: Minkoff, 1998.

Summary of the Literature: While the literature demonstrates that co-occurring MH/SA disorders are prevalent, there is little information published about standards of care for persons with co-occurring disorders specifically in managed mental health settings. Only one published source of standards-of-care coordination for persons with co-occurring MH/SA disorders in managed care settings was identified, which was developed for use by public sector purchasers of managed care services for their clients. It is estimated that just over 50 percent of private sector managed care companies report having specialized providers, treatment programs, and practice guidelines tailored for this population; however, it is unknown whether they meet the levels of standards of care for integrated treatment. Whether purchasers and insurers can customize these standards to serve clients enrolled in private sector employer-sponsored managed mental health care plans has, to date, not been documented.

D. Financing and Delivery of Preventive Mental Health Services in Managed Mental Health Care

Question: What are the most effective and efficient ways of financing and delivering preventive mental health services in managed mental health care systems?

Answer: Results of surveys, interviews, and consensus groups provide recommendations that purchasers should (1) conduct assessments of enrollee health needs to find out which conditions are most prevalent and could benefit from preventive interventions; (2) develop high-quality contractual terms for delivery of and payment for preventive mental health services; (3) communicate availability of these services to enrollees; and (4) implement ongoing monitoring systems

to measure availability, utilization, and payment for preventive mental health services.

1. Estimates of Private and Public Sector Delivery of Preventive Mental Health Services

Preventing the onset or worsening of a mental health disorder is the goal of preventive mental health services. As with classic public health prevention interventions, they are designed to be delivered at three possible levels:

1. Universal interventions, recommended for the entire population because their benefits outweigh their costs and associated risks;
2. Selective interventions, recommended only for groups at increased risk because their moderate cost is justified by the increased chance that illness will occur; and
3. Indicated interventions, recommended only for high-risk individuals and persons experiencing early symptoms of a disorder, for the purpose of preventing further development of a problem or to reduce its duration or severity (Dorfman & Smith, 2002; Mrazek & Haggerty, 1994).

Preventive mental health services also include mental health promotion, comorbidity prevention, disability prevention, and relapse prevention (Dorfman & Smith, 2002). An example of a preventive mental health service is routine screening for depression and alcohol misuse among adults, which is recommended by the U.S. Preventive Services Task Force (USPSTF, 2005). With the use of standardized screening instruments, persons who have, or who may be at risk of having, depression or alcohol dependence can be identified early and referred for treatment. The goal is to get people into treatment early, before a mental health or

substance abuse disorder can progress and cause undue morbidity and mortality.

Much of the available literature that describes MCO and MBHO mental health benefit design and coverage focuses on the delivery of outpatient, inpatient, and prescription drug services for persons who have diagnosed mental illnesses (see, for example, Buck, Teich, Umland, & Stein, 1999; Buck & Umland, 1997; Lave & Peele, 2000; Mark & Coffey, 2003). One of the primary goals of using managed mental health care is to contain costs. Delivery of low-cost preventive mental health services represents an ideal opportunity for purchasers, insurers, and consumers alike to save money. These cost savings (measured as avoided costs) occur when people use preventive mental health services early, thus decreasing the likelihood that they will develop mental illnesses that are expensive to treat.

Survey and interview data are the primary sources of estimates of how MCOs and MBHOs include coverage for and deliver specific preventive mental health services. The most extensive survey conducted to date found that only 14.9 percent of plans required any type of screening for alcohol, drug, or mental health problems in primary care settings. Mental health screening was required by 8.1 percent of plans, 9.1 percent of plans required alcohol abuse screening, 2.0 percent of plans required drug abuse screening, and 2.3 percent of plans required both mental health and alcohol/drug abuse screening. Of the few that required mental health screening, 93 percent allowed primary care physicians to determine which patients to screen. About 63 percent required mental health screening of all new patients, and 67 percent reported relying on the presence of specific conditions to trigger the need for

screening. The most commonly cited trigger conditions were chronic pain, presence of a substance abuse problem, and sleep problems. Only 28 percent required mental health screening of patients on a periodic basis. Health plan officials who were interviewed attributed these low rates of screening requirements to difficulties finding a screening instrument that is brief, easy to score, and easy to interpret. They also reported that it is difficult to monitor whether screening is done in primary care and that primary care physicians may not feel competent to address mental health issues once those issues are detected (Garnick et al., 2002; Horgan et al., 2003).

Employers often use employee assistance programs (EAPs) to provide access to preventive mental health services for their employees. The use of EAPs varies greatly by company size, with nearly all large companies with 20,000 or more employees having an EAP, to fewer than 10 percent of small companies with 50 or fewer employees. EAPs typically provide work or family counseling as well as screening and brief therapy for mental health and substance abuse problems. EAPs typically do not act as “gatekeepers” for restricting access to mental health treatment services covered in an employer’s health benefit plan. Further research is needed to develop national estimates of the scope and utilization of EAP services to better understand their role in the mental health service delivery system (Teich & Buck, 2003).

2. *Barriers to Delivery of Preventive Mental Health Services in Managed Care Settings*

Table 6 summarizes from the literature the most common reasons cited to explain the low rate of delivery of preventive mental health treatments in managed care settings.

The reasons are organized within five conceptual categories.

3. *Overcoming Barriers to Increased Provision of Preventive Mental Health Services in Managed Care*

One study estimated that it would take 1,773 hours annually, or 7.4 hours per working day, to deliver all preventive services of the type and frequency recommended by the U.S. Preventive Services Task Force (USPSTF) (Yarnall et al., 2003). In reality, physicians are faced with many choices about which preventive services they will provide to which patients and how often. They have to balance this with the time needed to provide treatment services to persons already diagnosed with a mental health condition. Several factors drive which choices physicians make about preventive services. These factors include the ability to demonstrate scientific soundness and clinical appropriateness, administrative feasibility, and short- and long-term financial desirability.

a. *Demonstrating the Science Base of Preventive Mental Health Services in Managed Care and Documenting Their Costs and Cost Effectiveness*

The USPSTF recommends routine screening for depression and alcohol misuse for adults (USPSTF, 2005). SAMHSA maintains the National Registry of Evidence-Based Programs and Practices, “a voluntary rating and classification system for mental health and substance abuse prevention and treatment interventions. The system is designed to identify, review, categorize, and disseminate information about programs and practices that meet established evidence rating.”¹¹ A rigorous review of the scientific literature in 2000 identified six preventive services that are appropriate for delivery in managed care settings:

Table 6. Frequent Reasons Identified as Barriers to Delivery of Preventive Mental Health Services in Managed Care

Category	Identified Reasons
Knowledge, Beliefs, and Attitudes	<ul style="list-style-type: none"> • Doubts that preventive mental health services are effective/efficacious • Belief that mental health care in general is less rigorously measurable than medical care • Lack of awareness and knowledge among MCO officials and providers about availability and coverage of preventive services in their plans • Stigma associated with mental conditions, causing provider reluctance to broach the topic with patients • Concern that targeted preventive services delivered only to “at risk” individuals may be unethical and discriminatory since all enrollees are paying the same premium • Assumption that plan members do not want preventive services • Provider disappointment with perceived low adherence rate of patients to recommendations for change following delivery of preventive services • Belief that preventive services are needed only when patient presents with another symptom (e.g., unexplained pain, presence of a substance use disorder, sleep disruption) • Lack of awareness of the “spillover” benefits of preventive mental health services (e.g., increased productivity, improved physical health, reductions in domestic and other violence)
Availability of Information	<ul style="list-style-type: none"> • Gaps in demonstration of cost effectiveness of preventive services • Lack of consensus recommendations regarding preventive services • Insufficient information about preventive services tailored for MCO settings • Difficulties locating mental health screening instruments that are brief, easy to score, and easy to interpret • Limited access to clinical practice guidelines for delivery of preventive services
Skills and Training	<ul style="list-style-type: none"> • Limited training available to enhance clinicians’ abilities to administer and interpret screening instruments and conduct interventions • Provider uncertainty about how to treat a mental health condition detected after a preventive service is delivered
Health System Design and Organization	<ul style="list-style-type: none"> • Uncertainties about the relative roles of primary care and managed mental health carve-outs for responsibility for preventive services • Continued orientation of health system to delivery of acute care • Limited time available for providers to conduct preventive services • Lack of coverage because medical necessity definitions often do not include preventive services • Limited plan outreach to members to inform them of availability of preventive services • Limited link between preventive interventions and quality measures • Diffused responsibility for leadership in health plans regarding preventive interventions and leadership turnover
Financing	<ul style="list-style-type: none"> • Concerns about cost of providing preventive services in a cost-containment environment • Difficulties identifying reimbursement methods that document payment for the separate delivery of preventive services, particularly in capitation models • Difficulties documenting the longer-term savings resulting from delivery of preventive interventions and short-term results • Uncertainties about the cost and utility of developing supplemental data tracking systems to document outcomes and savings generated by preventive services • Few incentives provided to health plan members and providers to utilize preventive services • Inability to connect cost of preventive service with long-term savings in individual patients due to frequent changes in plan enrollments
<p>Sources: Center for the Advancement of Health, 2000; Centers for Disease Control and Prevention, 1995; Dorfman & Smith, 2002; Drissel, 2005; Garnick et al., 2002; Giloth & Pritchett, 2000; Horgan et al., 2003; National Mental Health Association, 2002; Nitzkin & Smith, 2004; Partnership for Prevention [PPP], 2002; Robinson, Haaz, Petrica, Hillsberg, & Kennedy, 2004; Rosenbaum, Kamoie, Mauery, & Walitt, 2003; Stepnick, 2002; Yarnall, Pollak, Ostbye, Krause, & Michener, 2003.</p>	

-
1. Prenatal and infancy home visits;
 2. Targeted cessation education and counseling for smokers, especially pregnant smokers;
 3. Targeted short-term mental health therapy;
 4. Self-care education for adults;
 5. Presurgical educational intervention with adults; and
 6. Brief counseling and advice to reduce alcohol use (Dorfman, 2000; Broskowski & Smith, 2001; Dorfman & Smith, 2002).

This list of six preventive services was updated and expanded in a broader review of the scientific literature in 2004. The following services were determined to have “the greatest promise, based on the research reviewed, to diminish or prevent the development of a mental or substance use disorder”:

1. Universal screening of pregnant women for use of tobacco, alcohol, and illicit drugs;
2. Home visitation for selected pregnant women and some children up to age 5;
3. Supplemental educational services for vulnerable infants from disadvantaged families;
4. Screening children and adolescents for behavioral disorders;
5. Screening adolescents for tobacco, alcohol, depression, and anxiety;
6. Screening adults for depression and anxiety, and use of tobacco and/or alcohol; and
7. Psychoeducation to increase early ambulation of surgical patients, adherence to prescribed regimens of care for patients with chronic diseases, and to decrease somatization of other patients (Nitzkin & Smith, 2004).

Overall, the six services in the 2000 report, which result in demonstrated positive outcomes, were estimated to add less than

1 percent to the average monthly premium of an MCO (Broskowski & Smith, 2001). In light of these promising results, in addition to a strong recommendation that purchasers and health plans consider use of the services above, there are several recommendations to encourage further research for other preventive mental health services (Dorfman & Smith, 2002). These recommendations include expansion of research resources to measure the costs and cost effectiveness of preventive mental health services, replication of studies with preliminary positive results for adaptation to different populations and settings, establishment of research partnerships with managed care organizations, and increased financial support of graduate and postgraduate students to increase the number of new investigators in this field.

b. Leveraging Employer Purchaser and Consumer Demand for Preventive Mental Health Services

Based on various survey results, private sector employer purchasers of health insurance are very aware of the importance of providing their employees with a continuum of mental health benefits that includes the provision of early intervention and preventive mental health services (Robinson, Chimento, Bush, & Papay, 2001). The ability of employees to have early access to preventive and other mental health services leads to improved health, thus helping to increase their workplace productivity by reducing absenteeism and “presenteeism” (losses in productivity incurred when employees are present at work, even though they are not feeling well). Employer purchasers also are aware of how costs are saved when high-cost mental health conditions are avoided by providing effective early preventive mental health services (National Business Group on Health

[NBGH], 2005; Robinson, Chimento, Bush, & Papay, 2001; Stepnick, 2002).

Employer purchasers are most interested in showing a return on investment when deciding to cover mental and other health prevention services (Dorfman & Smith, 2002; Nitzkin & Smith, 2004; PFP, 2002; Robinson, Chimento, Bush, & Papay, 2001; Stepnick, 2002). Consequently, employer purchasers need reliable information about which services are needed, strategies to develop effective managed care agreements, effective and efficient communication methods with covered employees about these services, and ongoing measurement and monitoring of performance standards for preventive mental health services.

Figure 5 summarizes recommendations from a recent NBGH report entitled “Improving Health, Improving Business: A 4-Part Guide to Implementing Employee Health Improvement and Services”¹² (NBGH, 2005). The report contains specific examples of potential recommended practices, also identified in other sources (Robinson, Chimento, Bush, & Papay, 2001; Stepnick, 2002).

c. Improving Managed Care Financing and Delivery of Preventive Mental Health Services

There are four main areas in which health plans need enhanced support to improve the types and levels of preventive mental health services in their benefit plans:

1. Medical leadership, including experience in epidemiology and population-health management;
2. Effective management information support services to monitor program management and evaluation systems;
3. Adequate staff capacity dedicated to quality assurance; and

4. Financial support and staffing for screening and survey work, provider and patient health education, prevention-oriented case management, and prevention-oriented outreach and home visitation (Nitzkin & Smith, 2004).

Specific preventive mental health services covered in a benefit plan should explicitly state whether they are recommended for everyone or are recommended to be targeted to persons identified “at risk” for a particular mental health disorder. Distinguishing between universal versus targeted recommendations helps to ensure that particular services are not over- or underutilized by beneficiaries and helps providers to make informed choices about use of their time and resources (NBGH, 2005; Nitzkin & Smith, 2004; PFP, 2002; Stepnick, 2002).

The ability of managed care plans to pay for the delivery of preventive mental health services depends largely on how they pay providers generally. In cases in which providers submit claims with multiple procedure codes (typically fee-for-service or discounted fee-for-service arrangements), various codes can be used to obtain payment for different types of services (Nitzkin & Smith, 2004). In capitation arrangements, where providers are paid a single PMPM rate, health plans could adjust their PMPM rates up by a certain percentage to reflect the small added costs incurred for providing these services. These enhanced rates can be adjusted over time as more information is disseminated from the research community documenting the costs of each service, and as individual plans measure the costs and outcomes of their preventive mental health service benefits (Giloith & Pritchett, 2000; NBGH, 2005).

Summary of the Literature: The delivery of preventive mental health is clinically desirable

Figure 5. Recommended Strategies for Employer Purchasers to Increase Coverage and Use of Mental Health and Other Health Preventive Services

Assessing Preventive Care Needs and Selecting Services

1. Determine prevention interest and need.
2. Consult established prevention recommendations.
3. Assess coverable preventive services through review of clinical resource information.
4. Evaluate the costs and benefits of select services to show possible cost savings and outcomes.
5. Communicate the results to all decisionmakers.

Developing/Purchasing High-Quality Preventive Care Services

1. Set overall objectives.
2. Determine whether to purchase or create.
3. Establish utilization goals.
4. Define parameters for preventive care in order to ensure quality service.
5. Request quality assessment measures of health plans offering preventive services.
6. Develop protocols for access and claims.
7. Develop education and training programs.

Communicating Preventive Care Services to Corporate Management, Employees, and Health Plans

1. Conduct research to fully assess the attitudes and preferences of target audiences.
2. Establish communication objectives.
3. Identify target audiences and how they prefer to communicate.
4. Involve key people in developing the preventive care program.
5. Implement and evaluate the communications program.

Measuring the Success of Preventive Care Programs

1. Assess program effectiveness to determine satisfaction with the services provided and the people providing these services.
2. Evaluate program outcomes (improved health, behavior change, risk reduction, and financial impact in the form of reduced health care costs, lower absenteeism, and increased on-the-job productivity).
3. Engage in ongoing evaluations of benefit plan programs, clinical preventive services, and health promotion and disease prevention programs.

Source: NBGH, 2005.

and saves costs by preventing the onset of mental disorders that are expensive to treat. However, an analysis of a large database containing health plan benefit designs revealed that plans typically do not require preventive services such as screening for mental health disorders in primary care settings. The presence of an EAP within a company can increase employees' ability to access preventive mental health services; however, EAPs are typically found only in medium to large companies, and the actual utilization of such services is unclear. Various studies of the coverage of preventive mental health services by employer purchasers have indicated that access to such services can increase

employee productivity and corporate return on investment. The clinical evidence bases for several preventive mental health services have been established, and research is being conducted and expanded on many others. Finally, employer purchasers and health plans can greatly increase both the availability and use of preventive mental health services by (1) assessing which preventive services are most likely to be needed by covered employees; (2) incorporating utilization goals and quality measures related to preventive services in their managed care contracts; and (3) communicating the value of preventive mental health services to corporate management, employees, and the health plans with which they contract.

VI. Quality of Care

A. Incorporating Evidence-Based Standards in Managed Mental Health Care Services

Question: What is the best way to incorporate evidence-based standards in the purchase and delivery of managed mental health care services?

Answer: Unclear. The literature regarding incorporation of evidence-based standards has only recently begun to emerge, as research continues to evolve on how to define the evidence base for mental health care services. A few sources have recommended increased centralized dissemination of evidence-based standards, and revision of medical necessity definitions and utilization management to reflect them. Studies documenting the effects of implementing evidence-based standards for mental health care services are lacking.

1. Brief Summary of Debates About the Use of Evidence-Based Standards in Mental Health Care Services

Much of the literature focuses on debates about the advantages and disadvantages of using evidence-based standards in the field of mental health care services. They are largely centered around two issues: (1) defining what is “evidence based” in mental health care, noting difficulties associated with establishing the scientific criteria for conducting research on evidence-based standards in the field of mental health care treatments; and (2) the potential effects the use of evidence-based

standards for mental health care might have on a mental health care provider’s ability to have flexibility in treatment decisionmaking tailored to the needs of an individual client (Clancy & Cronin, 2005; Drake, Goldman, et al., 2001; Fox, 2005; Green & Bloch, 2001; Helfand, 2005; Lehman, Goldman, Dixon, & Churchill, 2004; Levine, 2003; Margison, 2003; Miller, 1996; Norquist & Hyman, 1999; Pallak & Cummings, 1994; Sanchez & Turner, 2003; Seligman & Levant, 1998; Steinberg & Luce, 2005; Tanenbaum, 2005).

There is an emerging body of literature that addresses some of the practical issues that may arise when trying to incorporate and disseminate evidence-based standards in managed mental health care. As previously noted, the USPSTF has determined the strength of the evidence for recommending routine screening of depression and alcohol misuse among adults. SAMHSA’s ongoing work documenting the evidence bases for both preventive and mental health treatment services is progressing through its National Registry of Evidence-Based Programs and Practices. Thus, it is fairly certain that increasing numbers of evidence-based mental health care services and practices will be recommended for inclusion in managed mental health care benefit packages.

2. Benefit Design, Medical Necessity, and Clinical Practice Guidelines

There are basically two ways to influence the provision of health care services in managed

care: (1) add a specific service to the benefit, and/or (2) specify the standards for how such services will be provided. Many of the same barriers and recommendations related to including preventive mental health services in managed mental health care benefit plans also apply to adding specific evidence-based mental health treatment services to the scope of benefit coverage. Thus, the focus in this section is on incorporating evidence-based standards that influence how a particular mental health care treatment service is provided.

The “bridge” between clinical practice guidelines and coverage is the definition and determination of medical necessity (Hermann & Rollins, 2003; Rosenbaum et al., 2003; Schwartz & Weiner, 2003). Briefly stated, medical necessity definitions are the written criteria that health insurance companies incorporate into their plans to determine whether a particular health service is medically needed by a patient in order to approve payment for that service. The definition of medical necessity and the process for determining whether a health service meets all the criteria in the definition are integral to health plans’ utilization management. A common medical necessity definition encompasses several criteria. Using this definition, a treatment must be—

1. Included in the plan’s scope of benefits;
2. Intended for the treatment of a diagnosed condition or to screen for a condition;
3. Consistent with professional standards of practice;
4. Delivered in the safest and least intrusive manner;
5. Not solely for the convenience of the patient, the patient’s family, or the provider; and

6. Performed in the least costly setting required by the patient’s condition (Rosenbaum et al., 2003).

Criterion one is the first that any treatment must satisfy. If a particular treatment is not included (or is specifically excluded) in a plan’s scope of benefits, the plan will not pay for it. If the treatment is a covered benefit, it will only be reimbursable when it meets all of the remaining criteria. Criterion three is the focus of this section of the literature review, i.e., the determination of what constitutes “professional standards of practice.”

The following medical necessity definition in figure 6 comes from Hawaii’s statutes

Figure 6. Hawaii’s Medical Necessity Definition in State Independent Review Statute

A health intervention is medically necessary if it is recommended by the treating physician or treating licensed health care provider, is approved by the health plan’s medical director or physician designee, and is:

- (1) For the purpose of treating a medical condition;
- (2) The most appropriate delivery or level of service, considering potential benefits and harms to the patient;
- (3) Known to be effective in improving health outcomes; provided that:**
 - (A) Effectiveness is determined first by scientific evidence;**
 - (B) If no scientific evidence exists, then by professional standards of care; and**
 - (C) If no professional standards of care exist or if they exist but are outdated or contradictory, then by expert opinion; and**
- (4) Cost-effective for the medical condition being treated compared to alternative health interventions, including no intervention. For the purposes of this paragraph, cost-effective shall not necessarily mean lowest price (HRS § 432E-1.4(2000) (IRO Statute)).

Source: Rosenbaum, Kamoie, Mauery, & Walitt, 2003. (emphasis added).

governing independent review organizations. The definition provides for a hierarchy of evidence that places scientific evidence first and then allows for providing treatments that have different degrees of strength of evidence.

The NCQA accreditation standards for MBHOs' utilization practices state, "To make utilization decisions, the managed healthcare organization uses written criteria based on sound clinical evidence and specifies procedures for applying those criteria in an appropriate manner" (NCQA, 2004). The ways that health plans define the standards of practice for delivery of mental health and other services in their medical necessity definitions vary. However, in general they allow varying degrees of latitude in health plan decisionmaking, relying primarily on prevailing "professional standards." This flexibility allows health plans to select from among a series of professionally accepted approaches and to choose the approach that also satisfies considerations such as cost, safety, and convenience. Experts in mental health who write about the topic of medical necessity most often advocate a definition that allows decisionmakers to select among competing approaches in accordance with numerous other factors (Rosenbaum, Kamoie, Mauery, & Walitt, 2003). One suggested standard for clinical evidence in medical necessity definitions is "consistent with generally accepted clinical practice for mental and substance use disorders" (Ford, 1998).

Including requirements for evidence-based standards in treatment guidelines for managed mental health care services may allow health plans potentially to exclude other services that are commonly used and needed in mental health care, but have not yet been subjected to the rigors of demonstrated sci-

entific evidence. Evidence-based standards that have been shown to be equally effective on average may not be equally effective for various subgroups of people (Drake et al., 2001; Lehman et al., 2004). One possible approach is to incorporate treatment algorithms into standards. Treatment algorithms are typically presented as decision trees to guide providers in a stepwise fashion to make treatment decisions based on evidence- and consensus-based standards. The algorithms are not intended to restrict provider judgment in individual cases, but to allow for flexibility of treatment with different populations who have different illnesses, e.g., persons with severe mental illness such as schizophrenia or bipolar disorders or children with SEDs (Kashner, Rush, & Altshuler, 1999; Mellman et al., 2001). In addition, incorporating an evidence-based standard presumes that the benefit package has been changed to allow for reimbursement of services delivered under that standard.

3. Dissemination of Evidence-Based Standards and Treatment Guidelines

A recent review of the mental health journal literature found that "data needed to inform and advance evidence-based practice does not have the prominent place it deserves in leading journals" (Shumway & Sentell, 2004). A highly relevant issue is the extent to which information is disseminated to the field of practitioners, as well as to managed care officials who are making decisions about evidence-based mental health treatment services and standards (Azocar, Cuffel, Goldman, & McCarter, 2003; Tanenbaum, 2005). Health plans frequently distribute treatment guidelines to their contracted providers. These treatment guidelines may include evidence-based standards indicating

when and how a particular treatment should be provided when medically necessary.

Mental health and other network providers may be overwhelmed by receiving a multitude of treatment guidelines from their MCOs and professional associations. Many providers belong to more than one MCO or MBHO, each of which may use the same guideline or different guidelines. One way to avoid this nonstandardization is for all managed care plans in a particular State or region to agree to a common set of treatment standards. Clinical practice is greatly affected when widely backed guidelines are disseminated. The following suggestions from Azocar et al. (2003) may serve to improve adherence to treatment guidelines among clinical professionals:

1. Marketing approaches to promote widely adopted guidelines endorsed by all stakeholder groups rather than guidelines adopted by a single MBHO;
2. Expert-opinion leaders to exert peer influence for acceptance of guidelines (e.g., having national professional organizations representing providers and others adopt guidelines);
3. Patient education to increase awareness and expectations of important clinical practices, and increase prevention and treatment compliance;
4. Immediate reminder and feedback systems to clinicians to help implement behavior changes after they are learned; and
5. Review processes such as clinician profiling and incentives for clinicians performing up to standards and engaging in desired practices.

Summary of the Literature: The scope of the professional literature related to implementation of evidence-based mental health treatment standards in managed care is gen-

erally lacking. Two issues that were identified (although in only a few published sources) are related to the connection between medical necessity definitions used by MCOs and the development of strategies for effective dissemination and adoption of evidence-based standards and treatment guidelines in clinical practice. Increased efforts are needed to develop effective ways to conduct research that documents the evidence base for growing numbers of mental health treatments and also ways in which they can be implemented in managed care settings.

B. Incorporating Consumer-Directed Care Principles in Managed Mental Health Care Services

Question: What is the best way to incorporate consumer-directed care principles in managed mental health, including special considerations for persons with mental health illnesses?

Answer: Unclear. The literature primarily reflects recommendations based on efforts in the public sector to incorporate consumer-directed care principles in managed mental health care. Public sector mental health systems, such as Medicaid managed care for mental health services, have largely achieved this by involving consumers throughout the planning, design, and implementation of mental health care systems. These efforts have included special input and feedback mechanisms that consider the unique needs of persons with mental illnesses and take into account issues such as stigma and empowerment. The literature regarding private sector efforts to incorporate consumer-directed principles in managed mental health care services is sparse and focuses primarily on the use of consumer satisfaction surveys and grievances and appeals systems.

1. Guiding Principles for Consumer-Directed Managed Mental Health Care

Guiding principles and recommendations about the role of consumers in health care have been articulated by a wide variety of organizations, ranging from Federal Government entities (e.g., the President's New Freedom Commission on Mental Health, SAMHSA) to professional provider associations (e.g., the National Association of State Mental Health Program Directors, the American Psychiatric Association) to consumer mental health advocacy groups (e.g., the National Mental Health Association, the National Alliance for the Mentally Ill). For example, figure 7 contains excerpts of the principles and recommendations embodied in the President's New Freedom Commission on Mental Health Report,¹³ SAMHSA's Principles for Systems of Managed Care,¹⁴ and SAMHSA's "Federal Mental Health Action Agenda."¹⁵

Translating these principles and recommendations into contractual performance standards that are meaningful for the stakeholders in mental health services delivery (e.g., consumers, purchasers, insurers, and providers) historically has occurred in the public sector rather than private sector (Rocheffort, n.d.; Sabin & Daniels, 2001). Public sector systems such as Medicaid, State mental health, child welfare, juvenile and adult corrections, schools, and other systems are statutorily mandated to serve populations who come under their care. Public agencies are legally responsible for ensuring delivery of needed medical and mental health services to these populations. Their contracts with managed care organizations typically include a variety of consumer-directed features aimed at ensuring that both health plans and providers are accountable for delivery of care that is responsive to consumer concerns.

Private sector employer-sponsored plans typically have used methods that are more reactive than proactive in nature, primarily consumer satisfaction surveys and use of grievances and appeals systems. As is discussed in section 3 below, however, increasing competition in the employer-sponsored insurance market may lead to more of these plans incorporating consumer-directed features similar to the public sector as a way of legitimizing their accountability to consumers (Sabin & Daniels, 2001).

2. Public Sector Examples of Incorporation of Principles of Consumer-Directed Managed Mental Health Care

According to various authors, there are two areas in which consumers can leverage resources to increase the likelihood that Medicaid managed mental health care services are consumer-directed: (1) involving consumers and consumer advocacy organizations in the crafting of State waiver applications to the Centers for Medicare and Medicaid Services (CMS) for the enrollment of Medicaid beneficiaries in managed mental health care plans, and (2) involving consumers in the crafting of State RFPs for managed care contracts to recommend including in the contracts the consumer-directed principles and recommendations described by SAMHSA above (Bluebird, 2000; CMS, 2002; Olson & Perkins, 1999; Sabin & Daniels, 1999; 2000; Vicchiullo, 2000).

Converting to managed mental health care for Medicaid populations requires approval of Medicaid State waiver applications or State plan amendments by CMS. In its June 14, 2002, publication of new rules¹⁶ amending the 1997 Balanced Budget Act, CMS stated, "We believe public input provides for the integration of various perspectives and priorities and will facilitate a more useful

Figure 7. Goals and Principles for Consumer Participation in Managed Mental Health Care

The President's New Freedom Commission: Goals and Recommendations for a Transformed Mental Health System

Goal 2: Mental health care is consumer and family driven

- Develop an individualized plan of care for every adult with a serious mental illness and child with a serious emotional disturbance;
- Involve consumers and families fully in orienting the system toward recovery;
- Align Federal programs to improve access and accountability;
- Create a comprehensive State mental health plan; and
- Protect and enhance the rights of people with mental illnesses.

SAMHSA's Principles for Systems of Managed Care Consumer Participation and Rights

Managed care systems should—

- Meaningfully involve consumers and family members in the planning, development, delivery, evaluation, research, and policy formation of managed care systems, including the determination of "medically necessary" services;
- Respect consumer choice of services, providers, and treatment and assure consumer-informed voluntary consent. Individual treatment plans should be based on the preferences and needs of consumers and families with children;
- Ensure that consumers receive necessary legal and ethical protections and services;
- Provide education to consumers and family members on their rights and responsibilities;
- Establish grievance, mediation, arbitration, and appeals procedures to resolve consumer disputes in a timely manner. Ombudsman services should be provided. Necessary services should continue pending dispute resolution;
- Support consumer rights and empowerment by providing education about, and access to, local self-help groups and protection and advocacy organizations; and
- Ensure that confidentiality and privacy of consumer health care information is protected at all times, particularly as electronic information systems develop and expand. Release of specific information should occur only with a signed release from either the recipient of services or their legal guardian/representative.

Transforming Mental Health Care in America

The Federal Action Agenda: First Steps

Action: Develop prototype individualized plans of care that promote resilience and recovery. Individualized plans of care must be developed in full partnership with consumers and family members, must include evidence-based and promising practices in prevention and treatment, and must promote resilience and recovery, including integrated employment that pays above minimum wage, includes benefits, and provides for career advancement. To this end, CMHS will design and initiate a project to—

- Convene a consensus development meeting to discuss the meaning and process of mental health recovery for children, adults, and older adults. Consumers and families will be actively involved in developing knowledge about recovery and in contributing to measurement development activities currently underway.
- Review current best practices in the field for individualized recovery plans that can be customized for children, adults, and older adults. Consensus panels will be used to assess evidence and recommend model plans.
- Design a prototype individualized recovery plan that includes evidence-based and promising practices, and that is flexible enough to change over time.
- Disseminate this prototype model through appropriate technical assistance.

Sources: CMHS, 1996; New Freedom Commission on Mental Health, 2003; SAMHSA, 2005.

end product.” States are expected to determine the best ways to structure the processes needed to incorporate consumer and stakeholder input into the waiver design (CMS, 2002).

In 1999, the National Health Law Program offered many recommendations designed to improve the use of consumer stakeholder input provided at public hearings that are conducted during the development and design of State Medicaid managed care programs and contract proposals (Olson & Perkins, 1999). For example,

- Consumers should be involved early on in the planning stages of hearings;
- Locations should be geographically convenient and accessible to persons with special needs; and
- Procedures should be implemented to incorporate consumer opinions and feedback throughout proposal development, including information on how consumer feedback was considered and incorporated in the final version of the contract proposals.

Consumers of mental health services face particular challenges in making their voices heard and respected in public hearings (Bazelon, 1998; Gruttadaro, Ross, & Honberg, 2001). As a result of discrimination and stigma that may be associated with mental health conditions experienced by consumers, officials may discount consumer views as being uninformed or of less importance than a provider’s clinical judgment. Consumers with mental health conditions may feel disempowered due to a lack of confidence, and for some, their cognitive and speaking abilities may be impaired (Sabin & Daniels, 2002). The successful provision of technical assistance to overcome these barriers has been demonstrated

in 17 States to date through the collaboration of the Leadership Academy program implemented by the Consumer Organization and Networking Technical Assistance Center, established by the West Virginia Mental Health Consumers Association. The Leadership Academy program conducts structured workshops using a practical, hands-on manual on effective strategies for mental health consumer advocacy in managed care. The program is led by consumers who have received training in adult education skills (Sabin & Daniels, 2002).

Other examples of consumer and family involvement in public sector managed mental health care include activities of consumers and their families documented in Systems of Care programs for children with mental health disorders and their families. MBHOs are more likely than general service MCOs to involve families in initial planning and implementation activities, to conduct ongoing activities to refine service delivery, and to provide training and orientation in managed care activities and service provision to families (Pires, Armstrong, & Stroul, 1999). Active consumer and family involvement in a spectrum of activities, ranging from system design to development of individualized treatment plans by care management teams, is highly valuable (Bazelon, 1998; Koyanagi & Carty, 1996; Mauery, Collins, McCarthy, McCullough, & Pires, 2003).

An extensive report published in 1998 by the National Panel on Managed Mental Health Services for Consumers of African Descent provides detailed information on standards and guidelines for consumer-directed managed mental health care for this population, which has historically encountered difficulties accessing adequate culturally competent care (Alegria, Perez, &

Williams, 2003; Davis, 1998). Standards and relevant guidelines are presented for 10 areas of managed mental health care: (1) prevention, education, and outreach; (2) comprehensive assessment and triage; (3) development of treatment plans; (4) implementation of treatment plans; (5) self-help opportunities; (6) access to services; (7) styles of communication; (8) ongoing program development; (9) outcome evaluation; and (10) discharge planning.

A SAMHSA-sponsored report that includes an analysis of interviews with managed behavioral health officials revealed that the officials highly valued consumer input, particularly as related to service delivery and quality-of-care issues. The authors noted, however, that the officials believed that RFPs for public sector managed mental health care may reflect an overly ambitious “wish list” of a variety of mental health and social services added as a result of stakeholder input. In addition, the officials believed that consumer involvement in health plan activities should be actively encouraged at a variety of levels, with the exception of membership on the plan governing board since consumers do not bear the same fiduciary duty as do other governing board members (Savelle, Robinson, & Crow, 2000).

3. Private Sector Managed Mental Health Considerations for Consumer-Directed Care

There is little published literature describing examples of private sector managed mental health insurance incorporating consumer-directed care principles similar to those in the public sector. The private sector has primarily focused on the use of consumer satisfaction surveys and establishment of grievances and appeals systems. Part of this lack of consumer involvement is due to the

fact that the private sector does not carry the public mandate that public sector purchasers do (Sabin & Daniels, 2001). In addition, the National Committee for Quality Assurance’s (NCQA) Health Plan Employer Data and Information Set (HEDIS®), which is used to compare quality measures across plans, includes a standardized survey of consumers’ experiences with plan performance, but not consumer involvement in plan design, administration, and service delivery.¹⁷ HEDIS® also has been characterized as “grossly inadequate” in its ability to measure performance of services for persons with severe mental illnesses, likely due to the fact that they are often unable to maintain employment in the private sector by virtue of the severity of their illness (Bazelon, 1997; Ross, 2000). The NCQA has completed development and field testing of the Experience of Care and Health Outcomes (ECHO) survey designed to collect information on patients’ experiences with managed behavioral health organizations. The ECHO survey is part of the Consumer Assessment of Health Plans Survey (CAHPS) and is developed and supported by a public-private consortium of researchers sponsored by the DHHS Agency for Healthcare Research and Quality (AHRQ). Survey results can be used to monitor consumer satisfaction and health care quality and for MBHOs to meet accreditation standards (Eisen et al., 1999).¹⁸

Fueling much of the managed care backlash that began in the mid-1990s was provider and consumer frustration related to the definition and application of medical-necessity criteria and reasons for denials of plan benefits. This frustration has been particularly true for consumers of managed mental health care services. There is a substantial body of case law illustrating

consumer and provider litigation involving managed mental health organizations around this issue of denials of plan benefits (Rosenbaum, Kamoie, Mauery, & Walitt, 2003). To alleviate this backlash, Sabin and Daniels (2001) suggest that private sector managed mental health plans should expand consumer-directed principles to the same level as public sector plans to increase the visibility of their accountability. This visibility will create a legitimacy that reflects the influence consumers have on the quality of managed care practices and policies. Due to increased Federal and State mental health parity legislation and managed care consumer protection regulations, the backlash may be (for the moment at least) quelled (Kremer & Gesten, 2003).

Summary of the Literature: Public sector managed mental health care systems represent the broadest and most diverse examples of incorporating consumer-directed principles in the development, implementation, and monitoring of benefit design and service delivery. The private sector primarily has focused on the use of consumer satisfaction surveys, and grievances and appeals systems to monitor and provide input of consumer feedback for corporate improvements. A few authors have noted that expanded use of consumer-directed principles in private sector plans that mirror the public sector could serve to increase consumer satisfaction.

VII. Financing

A. Financial Risk Sharing in Managed Mental Health Care Services

Question: Should financial risk sharing be used in managed mental health care? If so, what is the best way to effectively manage financial risk in managed mental health care, and under what circumstances and in which settings are various techniques most appropriate and efficient?

Answer: Unclear. The literature on public sector systems, though limited to individual case studies, indicates that risk sharing with providers in the form of case-mix adjusted case rates or soft capitation should be used to encourage appropriate, safe, and clinically effective use of managed mental health services. The quantitative literature for the private sector on this topic is extremely limited.

1. Overview of Risk-Sharing Approaches in Managed Mental Health Care

There are primarily two types of contracts in managed mental health care that can involve the sharing of risk for the costs of care for persons with mental health conditions:

1. Contracts between purchasers (e.g., a private sector corporation, a State Medicaid agency, or a general services MCO) and MBHOs; and
2. Contracts between MBHOs and their networks of mental health care providers, including individual and group practices.

Tables 7 and 8 provide an overview of the common terminology and features for each

of these two types of contracts. The types of approaches are shown by the level of risk the contracting parties assume or share in managing costs for providing mental health care services.

Each of these approaches potentially influences behaviors of MBHOs and providers. Tables 9 and 10 provide a general overview of the issues and effects of each type of risk-sharing approach identified in the literature.

In general, private sector companies (particularly those that self-insure) that contract directly with MBHOs (separately from their MCO contracts) in a carve-out arrangement more frequently use an administrative services only approach. MCOs that contract with MBHOs more frequently use a soft capitation approach (Feldman, 1998; Frank, Huskamp, McGuire, & Newhouse, 1996; Garnick et al., 2001; Horgan et al., 2003; Mihalik & Scherer, 1998). As of 2002, 18 State Medicaid agencies carved out mental health services from their general Medicaid managed care contracts and employed a variety of contracting arrangements with different organizations, including fee-for-service and various capitation arrangements (Frank, Conti, & Goldman, 2005). MBHOs use a variety of risk-sharing provider agreements across plans; however, negotiated fee-for-service agreements are much more commonly used than agreements that transfer more risk to the provider (Mihalik & Scherer, 1998; Schlesinger, Wynia, & Cummins, 2000; Sturm, 1999).

Table 7. Risk-Sharing Approaches for Managed Mental Health Care: Contracts Between Purchasers and MBHOs

Risk-Sharing Approach	Features
Capitation (MBHO assumes full risk)	MBHO agrees to cover all mental health services for a prepaid amount for an entire covered population and bears all financial risk.
Soft Capitation (MBHO assumes partial risk)	MBHO is contracted to manage benefits within an established profit-and-loss margin. If costs of claims exceed the contracted amount, the MBHO is responsible for losses only up to an established percentage amount. If costs of claims are below an established amount, MBHO retains profits for up to a predetermined percentage.
Administrative Services Only (MBHO assumes no actuarial risk)	MBHO provides utilization management and assumes no financial risk associated with claims costs. MBHO realizes profits when the differential between the contracted total ASO fees received is less than the cost of conducting utilization management overall.
ASO Plus Performance Bonus Arrangements (MBHO assumes no actuarial risk, but performance incentives are available)	MBHO provides utilization management and assumes no financial risk associated with claims costs. In addition to potential business profits possible as an ASO, MBHO can receive performance bonuses contingent upon meeting predetermined performance goals related to utilization management.
Sources: Frank, McGuire, & Newhouse, 1995; Mihalik & Scherer, 1998; Sturm, 1999.	

2. Effects of Risk-Sharing Arrangements in Private Sector Managed Mental Health Care

Only a few studies or reports quantitatively describe the types and effects of risk arrangements used in private sector managed mental health care. Results of a 1998 quantitative study of an ASO carve-out contracting arrangement with an MBHO to provide services to State employees found that the arrangement reduced costs much more than would have been expected when using an

ASO. This was due primarily to the “reputation effect.” The MBHO was a relatively new company that achieved better-than-expected results, which enhanced its ability to renew the contract and to bid on new contracts (Ma & McGuire, 1998). A related study of the same contracting arrangement found that decreases in spending were achieved by shifting facility-based care to outpatient settings; however, persons with severe illnesses, such as unipolar depression

Table 8. Risk-Sharing Approaches for Managed Mental Health Care: Contracts Between MBHOs and Providers

Risk-Sharing Approach	Features
Capitation (provider assumes full risk)	MBHO pays providers a fixed payment, typically “per member per month” (PMPM) for delivery of services to defined populations. Provider assumes risk for managing costs across his or her own patient population covered by the plan.
Case Rates (provider assumes partial risk)	MBHO pays providers fixed sums to provide care for individual patients for a specified treatment or period of time. May be adjusted for severity of illness. May include stop-loss provisions that limit providers’ losses.
Case Rate Withholds (provider assumes partial risk)	MBHO contracts with providers and withholds a percentage of a case-rate payment until aggregate utilization performance for members treated by the provider panel is determined for a given period of time.
Sources: Frank, McGuire, & Newhouse, 1995; Mihalik & Scherer, 1998; Sturm, 1999.	

Table 9. Potential Issues and Effects of Various Risk-Sharing Approaches: Contracts Between Purchasers and MBHOs	
<i>Risk-Sharing Approach</i>	<i>Potential Issues and Effects</i>
Capitation (MBHO assumes full risk)	<ul style="list-style-type: none"> • MBHO can maximize profits with aggressive utilization management or incur losses with inadequate utilization management. • There is a tension between MBHO's financial interest and ensuring access to care. • Overly aggressive MBHO utilization management may result in denial of services to patients who need them, particularly those with need for high-cost services. • MBHO market competition drives contract bid prices down—a low-bid MBHO that wins contract, in the face of inadequate risk models to accurately estimate capitation payment level, may not be able to provide services within negotiated capitation rate.
Soft Capitation (MBHO assumes partial risk)	<ul style="list-style-type: none"> • MBHO utilization management is tied to profits, although less so than with full-risk capitation. • Profit incentives are better aligned with utilization management—MBHO has less incentive to implement aggressive utilization controls. • Any savings from reduced utilization primarily benefit the purchaser. • A portion of the soft capitation amount can be tied to specific performance objectives related to accessibility and quality of care. • Purchasers can elicit bids from more MBHOs since risk is shared (depending on market presence). • Determination of the appropriate percentage margin above or below which MBHO may realize profits or losses may be difficult due to inadequate risk models upon which the margin can be based.
Administrative Services Only (ASO) (MBHO assumes no actuarial risk)	<ul style="list-style-type: none"> • Removes MBHO profit incentive tied to actuarial costs of utilization, thus reducing potential for inappropriate service denials.
ASO Plus Performance Bonus Arrangements (MBHO assumes no actuarial risk but ASO performance incentives are available)	<ul style="list-style-type: none"> • Removes MBHO profit incentive tied to actuarial costs of utilization, thus reducing potential for inappropriate service denials. • Removes potential for underutilization of services when MBHO receives bonuses in a stepwise fashion within performance brackets, which lead to better balance in utilization of services.
Sources: Ettner, Frank, Mark, & Smith, 2000; Frank, McGuire, & Newhouse, 1995; Mihalik & Scherer, 1998; Sturm, 1999.	

or substance abuse, were affected more negatively than others by restricting their access to facility-based care (Huskamp, 1998).

One of the potential effects of the MBHO passing financial risk to providers by using case-rate payments is that providers may seek to reduce costs by limiting visits. A study of one such arrangement found that, compared to patients enrolled in a fee-for-service plan, patients enrolled in an MBHO that used case-rate provider payments had fewer outpatient visits. The

case-rate patients were more likely to receive medications and to be referred to self-help groups or community mental health centers (Rosenthal, 1999).

A quantitative study published in 2000 analyzed 87 mental health carve-out plans offered by 49 employers, directly contracted with the same MBHO. Although one of the study limitations noted by the author was that it used only one MBHO, the first major finding was that the type of risk arrangement had no effect on access to care or probability

Table 10. Potential Issues and Effects of Various Risk-Sharing Approaches: Contracts Between MBHOs and Providers

<i>Risk-Sharing Approach</i>	<i>Potential Issues and Effects</i>
Capitation (provider assumes full risk)	<ul style="list-style-type: none"> • Provider's profit depends on expending less money on the capitated population than is received in the capitation fee. Provider must have a sufficient member volume to adequately manage costs of high and low service users within the assigned population. MBHOs employ restricted networks of providers to establish a fixed PMPM and guarantee a member volume to providers. • Provider may be motivated to overly restrict utilization of services. • Capitation rates are rarely adjusted for case-mix risk profile of provider's assigned panel of members. • Providers may be permitted to offer more creative services not otherwise covered in a fee-for-service system (e.g., telepsychiatry or substituting inpatient hospitalization with partial hospitalization or residential treatment).
Case Rates (provider assumes partial risk)	<ul style="list-style-type: none"> • Rates may vary by complexity of condition or exclude specific diagnoses. • Providers' and MBHOs' financial incentives are aligned. • Use of case-adjusted payment based on past utilization data, severity of illness, average treatment-seeking behavior, and treatment options permits calculation of model of average treatment expenses. • When tied to time period (e.g., 12 months), this approach removes motivation to undertreat for financial gain in the short-term by balancing current treatment with longer-term needs. • Provider profits are contingent on effective management of costs of treatment needs of those patients who require more care compared with those who require less. • This approach may include stop-loss provisions to limit provider's risk. • Lack of accurate available information needed to calculate a risk-adjusted case rate may inhibit ability to manage costs of persons with multiple and/or complex needs. • Rates typically are calculated with assumption that a team of professionals from different disciplines will provide treatment, and thus rates may be low when compared to fees paid to doctoral-level professionals. • Viability more likely in areas where there are sufficient numbers of patients to guarantee sufficient volume across which costs are managed.
Case Rate Withholds (provider assumes partial risk)	<ul style="list-style-type: none"> • Provider's receipt of withhold payment is tied to some measures of utilization, often in conjunction with meeting other performance measures. • This approach may be structured to compare a provider's performance with others in the provider panel, with a larger portion of the withhold awarded to "best" providers. • Fears of undertreatment of patients may be raised as MBHOs may not have adequate outcome assessment mechanisms to define performance improvement to include patient improvement.

Sources: Ettner, Frank, Mark, & Smith, 2000; Frank, McGuire, & Newhouse, 1995; Mihalik & Scherer, 1998; Sturm, 1999.

of any inpatient care, and mixed effects on outpatient care. The second major finding was that costs per user, particularly inpatient users, were significantly lower under risk arrangements, indicating that high-cost users

were likely experiencing stricter utilization controls (Sturm, 2000).

A study published in 2001 represents the first large-scale analysis of the frequency of the types of risk-sharing agreements

between MCOs and MBHOs, although it did not report on the effects of risk arrangements on health outcomes or financial distributions. This analysis of survey data obtained in 1999 of 434 MCOs in 60 market areas found that MCOs transferred risk to MBHOs to varying degrees, primarily in the form of partial risk as found in a soft capitation arrangement. With the exception of MBHOs organized as preferred provider organizations, most of the contracts included many performance standards, although they were rarely tied to specific financial incentives (Garnick et al., 2001).

3. Effects of Risk-Sharing Arrangements in Public Sector Managed Mental Health Care

The body of literature that describes risk-sharing arrangements in the public sector, focused on State Medicaid managed care programs that carve out mental health services from their general Medicaid fee-for-service or managed care programs, is more extensive than that described above for the private sector. State Medicaid managed care programs that have been studied include Florida, Massachusetts, Oregon, and Tennessee. It is often difficult to differentiate between effects caused by the carve-out design approach itself and the different risk-sharing techniques utilized in them (Coleman et al., 2005). The information available is derived from qualitative case studies of individual State-managed Medicaid mental health programs.

Despite the limitations that arise when conducting large-scale analyses of risk arrangements for many highly variable State programs, the following are common themes related to risk sharing:

1. Setting capitation rates is a difficult task due to the frequent unavailability or lack of appropriate information in State utiliza-

tion data collection systems that allow for reliable calculations of past utilization by severity of illness. In light of the significant and sometimes unpredictable costs incurred with coverage of pharmaceuticals, pharmacy benefits should be excluded from the capitation rate and managed separately (Chang et al., 1998; Hoag, Wooldridge, & Thornton, 2000; Holahan, Rangarajan, & Schirmer, 1999; Leslie, Rosenheck, & White, 2000; Okunade & Chang, 1998; Ridgely, Mulkern, Giard, & Shern, 2002; Ross, 2000; Stroup, 1997; Young, Sullivan, Murata, Sturm, & Koegel, 1998);

2. States vary in whether they include existing providers such as community mental health centers. The ability of safety net providers to manage financial risk can result in contract difficulties (Okunade & Chang, 1998; Ridgely, Giard, & Shern, 1999; Ridgely, Mulkern, Giard, & Shern, 2002); and
3. Full capitation with no shared risk or soft capitation with inappropriate shared risk appears to increase the potential for persons with severe mental illnesses to have problems accessing higher intensity treatment services such as inpatient or residential care (Hutchinson & Foster, 2003; Kapur, Young, Murata, Sullivan, & Koegel, 1999; Manning, Liu, Stoner, Gray, & Popkin, 1999; Morrissey, Stroup, Ellis, & Merwin, 2002; Samuels, 1997).

Summary of the Literature: The potential issues and effects that may be encountered when designing various risk-sharing arrangements for managed mental health care have been discussed generally in the literature. For public sector managed mental health systems, the existing literature that examines the actual effects on persons with mental health

treatment needs, providers, and State public mental health system design and financing has focused on experiences in a small number of States. Given the inherent differences of State Medicaid and mental health delivery systems, the findings of these studies are not easily generalizable. Additional research in both the private and public sectors is needed to better inform purchasers about the relative effects of different risk-sharing approaches to make choices about system design and purchasing decisions.

B. Blending and Braiding Funding Streams in Managed Mental Health Care

Question: Should funding streams from multiple public and private sector payors of managed mental health care services be combined? If so, is blending or braiding a better way to combine these funding streams, and what are the requirements for their long-term success?

Answer: Yes. Several evaluations (largely based on expert opinion) of systems that use multiple funding sources have found that respondents believe that combining multiple funding streams across service sectors using blending or braiding techniques is a desirable way to overcome fragmented multiple mental health treatment systems. Further, respondents believe that braiding funds, rather than blending them, allows better tracking and accountability for each agency's financial and programmatic contributions. Combining funding in these ways enhances flexibility to provide access to a coordinated array of mental health, medical, and social services that result in better outcomes. Successful approaches are characterized by involving stakeholders early in the planning process, obtaining leadership commitment, and imple-

menting ongoing monitoring systems for financial and outcomes accountability.

1. Definitions of "Blending" and "Braiding" Funding Streams

Although the goals of both blending and braiding funding streams are essentially the same, the two are different in the manner in which they are structured and managed.

With blended funding streams, funds from multiple sources (e.g., Medicaid, mental health, child welfare, and education) are combined into a single pool that is used to pay providers. Essentially, blended funding combines funds at the "front end" by first combining funds from multiple sources into a single pool. An often-cited example of a blended funding approach is Wraparound Milwaukee in Milwaukee County, Wisconsin.¹⁹

With braided funding streams, the funds from various sources are not pooled into a single account; rather, a separate administrative entity such as a fiscal agent monitors and tracks the relative distribution of the levels of each participating agency's responsibility for treatment service delivery and then authorizes payment to providers. Thus, braided funding combines funds at the "back end," when payments to providers are made (Flynn & Hayes, 2003; Koyanagi, 2003a; Koyanagi, 2003b). An often-cited example of a braided funding approach is the Dawn Project in Marion County, Indiana²⁰ (Koyanagi, 2003a; Pires, 2002).

2. Rationales for Blending or Braiding Funding Streams

There are many Federal, State, local, and private sector funding streams that have been developed over the years that include resources for paying for mental health treatment services. Each funding source has its

own requirements for which services are provided and who is eligible to provide and receive them. In addition to private sector health insurance, public sector examples include Medicaid, SCHIP, Temporary Assistance for Needy Families (TANF), child welfare, juvenile justice, education, social services, maternal and child health, and State and local mental health programs, each of which is governed by different statutory and regulatory requirements (Burns, Costello, Angold, & Tweed, 1995; Hodges, Nesman, & Hernandez, 1998; Koyanagi, 2003b; Pires, 2002).

One of the effects of these multiple sources of funding has been the development of a generally fragmented service delivery system. This system is often confusing and difficult to navigate for children with mental health care needs and their families. There is widespread recognition that the successful treatment of SEDs among children and adolescents requires access to comprehensive, integrated, and coordinated community-based services that include not only mental health care services, but also medical and social support services (Hanson, Deere, Lee, Lewin, & Seval, 2001; Koppelman, 2004; Seltzer, 2003; Stroul, Pires, Armstrong, & Zaro, 2002).

Beginning in the late 1980s, States and localities developed holistic approaches to creating more seamless delivery systems that are founded on a “system of care” concept. This concept emphasizes availability of an array of services, individualized care, services provided in the least restrictive environment, full participation of families, coordination among child-serving agencies and programs, and cultural competence (Stroul, 2002; SAMHSA, 2005).

The financial boundaries and requirements of the many available funding sources must

be “bridged” to provide for their most effective and efficient use. The use of blended or braided financing mechanisms represents a way to bridge these boundaries by providing centralized points of expertise and accountability to better manage financial resources across service sectors (California Center for Research on Women & Families [CCRWF], 2001; Flynn & Hayes, 2003; Koyanagi, 2003a). The benefits of such an approach, as documented in evaluations of ongoing programs that use pooled funding streams, include—

- Identifying and filling gaps in services;
- Eliminating duplicative services;
- Increasing flexibility in the use of existing and expanded services; and
- Promoting interagency collaboration to improve service coordination (Edelman, 1998; Hodges, Nesman, & Hernandez, 1998; Koyanagi, 2003a; O’Brien, 1997).

3. Considerations Regarding Whether to Blend or Braid Funding Streams

The research approach taken in describing and evaluating pooled funding streams was predominantly based on qualitative methods such as interviews with key stakeholder experts in sites that have implemented this financing approach, site visits, and document analyses. Authors then compared and contrasted findings across sites to identify common themes, challenges, and successes. These reports described the pros and cons of pooling funding streams in general, and then, once pooled, distinguished between blending or braiding of funds and the respective programmatic and financial issues that sites have identified and techniques deployed to address them.

Analyses that have evaluated pooled funding systems report that the choice of whether

to blend or braid funding streams involves several considerations, including—

- How State agencies are organized and financed;
- Stakeholders' willingness to collaborate; and
- The costs of creating an expert management information system that can accurately track all expenditures and ensure that all legal requirements contained in funding authorities are met.

Blending funding streams may require overcoming reluctance on the part of agency heads who, through pooling of funds, may feel that they are losing control over how their funds, for which they are accountable, will be spent. Thus, the amounts they may be willing to offer may be lower than what could be achieved through a braided funding approach that retains more individual agency control. Braiding funding streams requires developing and financing a complex and potentially expensive fiscal monitoring system to ensure a single point of accountability for assessing appropriate delivery of services and allocations of costs across funding streams (Crowell, DelliQuadri, & Austin, 1995; Hodges, Nesman, & Hernandez, 1998; Koyanagi, 2003a; Koyanagi & Feres-Merchant, 2000; O'Brien, 1997; Orland & Foley, 1996; Pires, 2002; Potter & Mulkern, 2004).

4. *Blending or Braiding Funding Streams: Key Elements for Success*

In both blended and braided funding approaches, there are several key elements that support their successful creation and implementation. Figure 8 summarizes these common themes and recommendations as identified in numerous studies and evaluations in the literature.

Summary of the Literature: The nature of the literature regarding the use of pooled funding streams is primarily qualitative evaluations based on interviews with key stakeholder experts, by conducting site visits, administering surveys, and document content analyses. Blending or braiding multiple funding streams across service sectors is a desirable way to (1) overcome fragmented multiple mental health treatment systems; and (2) enhance flexibility to provide access to a coordinated array of mental health, medical, and social services that result in better outcomes for children and families with mental health needs. Both approaches require a high level of collaboration and coordination among stakeholders. Merging funds in these ways also requires the development of sophisticated financial and health outcomes monitoring systems to document adherence to fiscal and legal integrity requirements, as well as to document improvements in health status and system viability.

Figure 8. Summary of Key Elements and Recommendations for Blending and Braiding Funding Streams for Comprehensive Mental Health Care Services

1. Presence of key leadership that has the authority, and takes responsibility, for initiating and implementing programmatic changes and for fostering a collaborative environment.
2. Involvement of a wide range of stakeholders, including agency staff, providers, child and family mental health advocacy organizations, and families themselves.
3. Development of a detailed inventory of all available funding streams with a clear understanding of their legal requirements regarding which services are covered, who is eligible to receive and provide them, and data-reporting mandates.
4. Creation of interagency agreements that clearly detail the roles and responsibilities of each agency involved in blending or braiding funds. This includes their levels of financial and service delivery commitment, allocation of management responsibilities, the decision to blend or braid, how cost allocations will be determined and monitored, and reporting mechanisms to communicate results and issues that need to be resolved.
5. Development of a detailed needs assessment that specifies which services are needed for which persons, which services are in place and which need to be created, cost estimates of the number of persons/ services to be provided, and how utilization will be monitored.
6. Establishment of meaningful performance measures and quality improvement systems that include health outcomes as a primary measure, delineating any financial incentives or penalties tied to performance. Measures demonstrating cost effectiveness are important, as well as measures that track the results of the blended or braided approach systemically.
7. Development of contingency plans to ensure continuation of services when funding streams change or are reduced, as well as ongoing efforts to identify new funding sources, such as private foundation grants.
8. Allocation of responsibilities for the administrative overhead costs entailed in creating a tracking system, including staff training in new reporting procedures.
9. Development of reporting mechanisms that provide meaningful results for enlisting and maintaining support from key political and community leaders.
10. Investments in cross-agency information infrastructures to facilitate informed collaborations among all stakeholders.
11. In initiatives that involve the use of Medicaid funds under Sections 1115, 1915(b), or 1915(c) waivers, involvement of collaborating agencies from the beginning in development of proposals to demonstrate cost-sharing responsibilities and uses of funds.

Sources: American College of Mental Health Administration, 2003; Bundy & Wegener, 2000; CCRWF, 2001; Edelman, 1998; Flynn & Hayes, 2003; Foster, 2001; Hanson, Deere, Lee, Lewin, & Seval, 2001; Hayes, 2002; Hepburn & McCarthy, 2003; Hodges, Nesman, & Hernandez, 1998; Kahn & Kamerman, 1992; Koyanagi, 2003a; Koyanagi & Feres-Merchant, 2000; Mauery, Collins, McCarthy, McCullough, & Pires, 2003; National Child Care Information Center, 2002; O'Brien, 1997; Orland & Foley, 1996; Pires, 2002; Potter & Mulkern, 2004; Thomas, Majak, & Murtaza, 1995.

VIII. Conclusions

This focused review of the literature on managed mental health care has documented many studies published over the last 15 years that have demonstrated how the use of managed care techniques for mental health service delivery improves access to services and saves money for private and public sector purchasers. These studies most often show that improved access and cost savings are typically associated with providing treatment to persons with mild to moderate mental health conditions, such as depression or anxiety, who can be successfully treated on an outpatient basis, both with and without use of psychopharmaceuticals. The few studies identified that involved children with SEDs and adults with SPMIs and the effects of managed mental health care on racial and ethnic minorities indicate that these populations have experienced problems accessing mental health treatments, particularly in inpatient and residential settings.

The literature also reflects a great variety of studies aimed at evaluating the benefits and drawbacks of carving in or carving out managed mental health services. In addition to documenting that the carve-out model is presently the predominant form of mental health services organization in managed care settings, these studies have noted the importance of implementing and monitoring care coordination standards between the medical and mental health sectors to ensure comprehensive care, particularly for persons with more severe mental illnesses. In addition, experts in child mental health who have conducted evaluations of systems designed to address the needs of children with SEDs are virtually unanimous in their support of the carve-out design for mental health services that are supported by effective interagency agreements across service delivery sectors.

While there is general agreement in the literature on the importance and clinical desirability of coordinating primary care and mental health services and coordinating mental health and substance abuse services, very little has been published that quantitatively documents effective ways to do so specifically in managed mental health settings. In particular, studies that could quantitatively measure improvements in health outcomes for persons with co-occurring MH/SA disorders would contribute greatly to expanding the case for instituting contractual stipulations and reimbursements for provision of such care. In addition, increasing numbers of studies regarding the use of evidence-based standards and provision of preventive mental health services have documented their financial and clinical desirability.

The literature presents mixed results on the effects of various risk-sharing arrangements for both providers and consumers of managed mental health care. While some authors recommend the use of soft capitation or risk-adjusted case rates with withholds, others caution that risk sharing may provide financial incentives to inappropriately restrict access to high-cost, intensive services needed by persons with SPMIs. Several authors have noted that ongoing monitoring of the ways in which risk sharing affects provider performance and mental health outcomes is needed, adding that traditional safety net, community-based providers (who quite often treat persons with SPMIs) face particular challenges in their ability to manage financial risk.

Finally, the literature regarding pooling of funding streams across multiple systems serving the mental health, physical health, social, and educational needs of children and their families indicates that such pooling is a desirable way to improve flexibility of both funding and service delivery. The choice of whether to blend or braid these funds at the system level is influenced by many factors, including willingness to collaborate, and ability to track accountability for appropriate expenditures of funds and tie them to achievement of desirable outcomes. It should be noted that almost all of the literature on pooling funding is based on qualitative analyses of interviews and site visits with key stakeholder experts.

IX.

Research Gaps

Based upon this focused review of the literature regarding managed mental health care, there are several topic areas that would benefit from additional research. In particular, rigorously designed quantitative studies utilizing longitudinal designs that involve diverse demographics, mental health conditions, and treatment settings would provide vitally needed information for purchasers, providers, consumers, and policymakers. These topic areas include—

1. The effects of managed mental health care on access to care for persons with SPMIs such as schizophrenia and bipolar depression, as well as access for racial and ethnic minorities. Research is particularly needed for the private sector.
2. Measures of the short- and long-term cost effectiveness of the delivery of managed mental health care services across different delivery systems and for patients with varying levels of severity of illness.
3. Identification, definition, and measurement of potential harm that may occur by the use of managed mental health care techniques on various populations, especially as evidenced by effects on mental health status and functioning.
4. Definitions of appropriate end-points to reliably measure mental health outcomes across different delivery systems, whether fee-for-service or managed care.
5. Ongoing evaluations of the advantages and disadvantages of carve-in and carve-out designs, with a focus on consumers' and providers' ability to access a coordinated, comprehensive array of services.
6. The measurable effects on health outcomes of contractually requiring coordination of primary care and mental health care services, as well as coordination of mental health and substance abuse services.
7. With growing recognition of the value of preventive mental health services, effective ways purchasers can build them into mental health care delivery systems to demonstrate return on investment and improved outcomes.
8. The effects of including evidence-based medicine standards for mental health care services in managed care settings as they relate to provider practice, costs, and health outcomes.
9. Research into increased adoption of consumer-directed care principles in private sector managed mental health services.
10. The effects of various risk-sharing financial arrangements for man-

-
- aged mental health services as related to implications for costs, provider practice, and access to care.
11. The effects of blending or braiding funds pooled from multiple Federal, State, and local agencies that have various mental service delivery responsibilities. (Use of formal program evaluation approaches would be particularly helpful in this area.)

Experts Interviewed

- Allen Daniels, University of Cincinnati Department of Psychiatry
- Richard Dougherty, Dougherty Management Associates
- William Ford, Health Systems Research, Inc.
- Sandra Forquer, Comprehensive NeuroSciences, Inc.
- Pamela Greenberg, American Managed Behavioral Health Association
- Ron Honberg, National Alliance for the Mentally Ill
- Edward Jones, PacifiCare Behavioral Health
- Kathryn Kotula, National Association of State Medicaid Directors
- Ted Lutterman, National Association of State Mental Health Program Directors
- Sheila Pires, Human Service Collaborative, Inc.
- David Shern, Florida Mental Health Institute
- Joyce West, American Psychiatric Association, Practice Research Network

Note: These experts spoke from the perspective of their individual professional expertise and not on behalf of their organizations.

Glossary

Access

The extent to which an individual who needs care and services is able to receive them.

Access is more than having insurance coverage or the ability to pay for services. It is also determined by the availability of services, acceptability of services, cultural appropriateness, location, hours of operation, transportation needs, and cost.

Accreditation

An official decision made by a recognized organization that a health care plan, network, or other delivery system complies with applicable standards.

Administrative Services

Organization (ASO)

A health care organization that provides administrative support services only for a self-funded plan or startup MCO.

Adverse Selection

A tendency for utilization of health services in a population group to be higher than average. From an insurance perspective, adverse selection occurs when persons with poorer-than-average life expectancy or health status apply for, or continue, insurance coverage to a greater extent than do persons with average or better health expectations.

Behavioral Health Care

Continuum of services for individuals at risk of, or suffering from, mental, addictive, or other behavioral health disorders.

Beneficiary

A person certified as eligible for health care services. A beneficiary may be a dependent or a subscriber.

Benefit Package

Services covered by a health insurance plan and the financial terms of such coverage. These include cost, limitation on the amounts of services, and annual or lifetime spending limits.

Capitation

A method for payment to health care providers that is common or targeted in most managed care arenas. Unlike the older fee-for-service arrangement, in which the provider is paid per procedure, capitation involves a prepaid amount per month to the provider per covered member, usually expressed as a PMPM (per-member-per-month) fee. The provider is then responsible for providing all contracted services required by members of that group during that month for the fixed fee, regardless of the actual charges incurred. In such an arrangement, the provider is now at risk, picking up risk that the payor or employer used to have exclusively in fee-for-service or indemnity arrangements.

Carve-In

A generic term that refers to any of a continuum of joint efforts between clinicians and service providers; also used specifically to refer to health care delivery and financing arrangements in which all covered benefits (e.g., behavioral and general health care) are administered and funded by an integrated system.

Carve-Out

A health care delivery and financing arrangement in which certain specific health care services that are covered benefits (e.g., behavioral health care) are administered and funded separately from general health care services. The carve-out is typically done through separate contracting or subcontracting for services to the special population.

Case Management

A system requiring that a single individual in the provider organization is responsible for arranging and approving all devices needed under the contract embraced by employers, mental health authorities, and insurance companies to ensure that individuals receive appropriate, reasonable health care services.

Case Mix

The overall clinical diagnostic profile of a defined population, which influences intensity, cost, and scope of health care services typically provided.

Case Rate

A flat fee paid for a patient's treatment based on the diagnosis and/or presenting problem. For this fee, the provider covers all of the services the patient requires for a specific period of time. Also referred to as "bundled rate" or "flat fee-per-case." Very often used as an intervening step prior to capitation. Diagnostic Related Groups (DRGs) are an example of a case rate.

Claim

A request by an individual (or his or her provider) to that individual's insurance company to pay for services obtained from a health care professional.

Continuum of Care

A term that implies a progression of services that a patient moves through, usually one service at a time. More recently, it has come to mean comprehensive services. Also see System of Care and Wraparound Services.

Coordinated Services

Child-serving organizations that talk with the family and agree upon a plan of care that meets the child's needs. These organizations can include mental health, education, juvenile justice, and child welfare. Case management is necessary to coordinate services. Also see Family-Centered Services and Wraparound Services.

Copayment

The portion of the covered health care cost that the insured person has the responsibility to pay, usually as a fixed fee for a specific service type (e.g., \$10 per doctor visit).

Cost-Based Reimbursement

Method of reimbursement in which third parties pay providers for services provided based upon the documented costs of providing that service.

Cost-Benefit Analysis (CBA)

A systematic method for valuing over time the monetary costs and consequences of producing and consuming substance abuse program services. Results from a CBA are often provided in terms of a net present value figure, which shows the difference in inflation-adjusted, discounted costs and benefits of the program in today's dollars or in the dollars of a base year of interest. Results may also be shown in terms of an internal rate of return or a benefit-cost ratio. The data are used in determining the content of a benefit package.

Cost-Effectiveness Analysis (CEA)

A systematic method for valuing over time the monetary costs and nonmonetary consequences of producing and consuming substance abuse program services. Results from a CEA are often shown in terms of total costs and total levels of effectiveness (e.g., total quality-adjusted life-years saved or total numbers of substance abuse cases avoided), or in terms of cost per unit of effectiveness. These data are used by employers to determine contents of a benefit package.

Cost Sharing

Health insurance practice that requires the insured person to pay some portion of covered expenses (e.g., deductibles, coinsurance, and copayments) in an attempt to control utilization.

Cost Shifting

Charging one group of patients more to make up for underpayment by others.

Credentialing

The process of reviewing a practitioner's credentials, i.e., training, experience, or demonstrated ability, for the purpose of determining if criteria for clinical privileging are met.

Cultural Competence

Help that is sensitive and responsive to cultural differences. Caregivers are aware of the impact of culture and possess skills to help provide services that respond appropriately to a person's unique cultural differences, including race, ethnicity, national origin, religion, age, gender, sexual orientation, or physical disability. Caregivers also adapt their skills to fit a family's values and customs.

Deductible

The amount an individual must pay for health care expenses before insurance (or a

self-insured company) begins to pay its contract share. Often insurance plans are based on yearly deductible amounts.

Disease Management Programs

Comprehensive, integrated programs for managing patients' disease conditions. These programs usually target specific disease conditions for which there are effective, evidence-based practice guidelines and are designed for diseases such as depression, diabetes, arthritis, hypertension, and heart disease.

Drug Formulary

The list of prescription drugs for which a particular health plan will pay. Formularies are either "closed," including only certain drugs, or "open," including all drugs. Both types of formularies typically impose a cost scale, requiring consumers to pay more for certain brands or types of drugs. Many State Medicaid programs have preferred drug lists (PDLs) on which they list prescription drugs as either preferred or non-preferred, and they require prior authorization before reimbursing for non-preferred drugs.

Early Intervention

Identifying persons at high risk prior to their having a serious consequence, or persons at high risk who have had limited serious consequences, related to substance use on the job, or having a significant personal, economic, legal, or health/mental health consequence, and providing these persons at high risk with appropriate counseling, treatment, education, or other intervention.

Employee Assistance Plan or Program (EAP)

Resources provided by employers either as part of, or separate from, employer-sponsored health plans. EAPs typically pro-

vide preventive care measures, various health care screenings, and/or wellness activities.

Evidence-Based Standards

"The explicit, judicious, and conscientious use of current best evidence from health care research in decisions about the care of individuals and populations. Grades of the quality of evidence are based on several notions, the most elementary of which are as follows. First, studies that take more precautions to minimize the risk of bias (for example, through using reliable and valid measures of health care outcomes) are more likely to reveal useful truths than those that take fewer precautions. Second, studies based on patient populations that more closely resemble those that exist in usual clinical practice are more likely to provide valid and useful information for clinical practice than studies based on organisms in test tubes, creatures in cages, very select human populations, or unachievable clinical circumstances (such as extra staff to provide intensive follow-up, far beyond the resources in usual clinical settings). Third, studies that measure clinical outcomes that are more important to patients (e.g., mortality, morbidity, and quality of life, rather than liver enzymes and serum electrolytes) are more likely to provide evidence that is important to both practitioners and patients." (Source: Haynes, R. Brian (2002). What kind of evidence is it that evidence-based medicine advocates want health care providers and consumers to pay attention to? *BMC Health Services Research*, 2:3. <http://www.biomedcentral.com/1472-6963/2/3>)

Exclusive Provider Organization (EPO)

An EPO functions much as an HMO functions. The primary difference is that an EPO is not governed by Federal legislation, and the range of covered benefits may differ from

that of an HMO, generally offering less in the way of well-care benefits. The advantages and disadvantages of an EPO are the same as for an HMO. EPOs are governed by State legislation, which is not as strict as Federal legislation, and are allowed only in States that have passed legislation that permits them to exist. Many insurance companies that do not have an HMO have formed an EPO to allow them to compete for more employer groups who want to be able to offer a wide range of health option choices to their employees. (Source: <http://www.lymphomation.org/insurance-terms.htm>)

Fee for Service

A type of health care plan under which health care providers are paid for individual medical services rendered.

Gatekeeper

Primary care physician or local agency responsible for coordinating and managing the health care needs of members. Generally, in order for specialty services such as mental health and hospital care to be covered, the gatekeeper must first approve the referral.

Group Model HMO

A health care model involving contracts with physicians organized as a partnership, professional corporation, or other association. The health plan compensates the medical group for contracted services at a negotiated rate, and that group is responsible for compensating its physicians and contracting with hospitals for care of their patients.

Health Employer Data and Information Set (HEDIS®)

A set of HMO performance measures that are maintained by the National Committee for Quality Assurance. HEDIS® data are collected annually and provide an informational

resource for the public on issues of health plan quality.

Health Maintenance Organization (HMO)

An organized system of health care that provides a comprehensive range of health care services to a voluntarily enrolled population in a geographic area on a primarily prepaid and fixed periodic basis. An HMO contracts with health care providers (e.g., physicians, hospitals, and other health professionals). Plan members are required to use participating providers for all health services. Model types include staff, group practice, network, and individual practice associations. Under the Federal HMO Act, an entity must have three characteristics to call itself an HMO: (1) an organized system for providing people health care services, (2) an agreed-upon set of basic and supplemental health and treatment services, and (3) a voluntarily enrolled group of people.

Indicated Prevention

A strategy designed for persons who are identified as having minimal but detectable signs or symptoms or precursors of some illness or condition, but whose condition is below the threshold of a formal diagnosis of the condition.

Managed Behavioral Health Care

Any of a variety of strategies to control behavioral health (i.e., mental health and substance abuse) costs while ensuring quality care and appropriate utilization. Cost-containment and quality-assurance methods include the formation of preferred provider networks, gatekeeping (or precertification), case management, relapse prevention, retrospective review, claims payment, and others. In many employer-negotiated health plans, behavioral health care is separated from

care available in the rest of the health plan for the separate management of costs and quality of care.

Managed Behavioral Health Organization (MBHO)

An organized system of behavioral health care delivery, usually to a defined population or members of HMOs, PPOs, and other managed care structures; also known as a behavioral health carve-out.

Managed Care Organization (MCO)

A generic term applied to a managed care plan; may be in the form of an HMO, PPO, PHO, EPO, or other structure.

Medicaid

A health insurance assistance program funded by Federal, State, and local monies. It is run by State guidelines and assists low-income persons by paying for most medical expenses.

Medically Necessary

Health insurers often specify that, in order to be covered, a treatment or drug must be medically necessary for the consumer. Anything that falls outside of the realm of medical necessity is usually not covered. The plan will use prior authorization and utilization management procedures to determine whether or not the term “medically necessary” is applicable.

Medical Necessity

The evaluation of health care services to determine if they are medically appropriate and necessary to meet basic health needs, consistent with the diagnosis or condition, rendered in a cost-effective manner, and consistent with national medical practice guidelines regarding type, frequency, and duration of treatment.

Medicare

A Federal insurance program serving the disabled and persons over the age of 65. Most costs are paid via trust funds that beneficiaries have paid into throughout the courses of their lives; small deductibles and some copayments are required.

Pharmacy Benefit Manager (PBM)

Third party administrators of prescription drug benefits.

Physician Hospital Organization (PHO)

A PHO consists of a hospital and physicians in individual and group practices who are organized for the purpose of contracting with managed care organizations. Several plans may be available that offer the PHO panel of physicians and the participating hospital for inpatient and outpatient services.

(Source: <http://www.universityhealth.org/body.cfm?id=37611&coTopID=36857>)

Point-of-Service Plan (POS)

A modified managed care plan under which members do not have to choose how to receive services until they need them. Members receive coverage at a reduced level if they choose to use a nonnetwork provider.

Practice Guidelines

Systematically developed statements to standardize care and to assist in practitioner and patient decisions about the appropriate health care for specific circumstances. Practice guidelines are usually developed through a process that combines scientific evidence of effectiveness with expert opinion. Practice guidelines are also referred to as clinical criteria, protocols, algorithms, review criteria, and guidelines.

Preferred Provider Organization (PPO)

A health plan in which consumers may use any health care provider on a fee-for-service basis. Consumers will be charged more for visiting providers outside of the PPO network than for visiting providers in the network.

Prevention

The public health model of prevention includes primary, secondary, and tertiary prevention. An Institute of Medicine (IOM) committee (1994) set forth another definition in which prevention refers to those interventions that take place before the onset of a disorder. IOM classifies preventive interventions as (1) universal preventive interventions, which target the general public or an entire population not identified on the basis of individual risk, (2) selective preventive interventions, which target populations whose risk of a disorder is significantly higher than average at present or over a lifetime, and (3) indicated preventive interventions, which target high-risk individuals who have minimal but detectable signs or symptoms that may lead to a mental disorder.

Primary Care Case Management (PCCM)

Case management that requires a gatekeeper to coordinate and manage primary care services, referrals, preadmission certification, and other medical or rehabilitative services. The primary advantage of PCCM for Medicaid eligibles is increased access to PCPs while reducing use of hospital outpatient departments and emergency rooms.

Primary Care Physician (or Provider) (PCP)

Physicians with the following specialties: group practice, family practice, internal medicine, obstetrics/gynecology, and pediatrics. The PCP is usually responsible for monitor-

ing an individual's overall medical care and referring the individual to more specialized physicians for additional care.

Prior Authorization

The approval a provider must obtain from an insurer or other entity before furnishing certain health services, particularly inpatient hospital care, in order for the service to be covered under the plan.

Psychoeducation

Information and education about an illness, its diagnosis, common or recommended interventions, as well as opportunities for questions and feedback that are provided to a patient and his/her spouse or family.

Quality Assurance

An approach to improving the quality and appropriateness of medical care and other services. Includes a formal set of activities to review, assess, and monitor care to ensure that identified problems are addressed.

Risk

Possibility that revenues of the insurer will not be sufficient to cover expenditures incurred in the delivery of contractual services. A managed care provider is at risk if actual expenses exceed the payment amount.

Risk Adjustment

The adjustment of premiums to compensate health plans for the risks associated with individuals who are more likely to require costly treatment. Risk adjustment takes into account the health status and risk profile of patients.

Risk Sharing

Situation in which the managed care entity assumes responsibility for services for a specific group, but is protected against unexpected high costs by a prearranged agreement for

higher payments for those individuals who need significantly more costly services.

Serious Emotional Disturbances (SEDs)

Diagnosable disorders in children and adolescents that severely disrupt their daily functioning in the home, school, or community. Serious emotional disturbances (SEDs) affect one in 10 young people. These disorders include depression, attention-deficit/hyperactivity, anxiety disorders, conduct disorder, and eating disorders. Pursuant to section 1912(c) of the Public Health Service Act, children with a serious emotional disturbance are persons up to age 18 who currently have or at any time during the last year had a diagnosable mental, behavioral, or emotional disorder of sufficient duration to meet diagnostic criteria specified within DSM-III-R. (*Source:* Federal Register, Volume 58 No. 96 published Thursday May 20, 1993 pages 29422 through 29425.)

Serious Mental Illness (SMI)

Pursuant to section 1912(c) of the Public Health Service Act, adults with serious mental illness SMI are those age 18 and over who currently have or at any time during the past year had a diagnosable mental behavioral or emotional disorder of sufficient duration to meet diagnostic criteria specified within DSM-IV or their ICD-9-CM equivalent (and subsequent revisions) with the exception of DSM-IV “V” codes, substance use disorders, and developmental disorders, which are excluded, unless they co-occur with another diagnosable serious mental illness, which has resulted in functional impairment that substantially interferes with or limits one or more major life activities. (*Source:* Federal Register, Volume 58 No. 96 published Thursday May 20, 1993 pages 29422 through 29425.)

State Children’s Health Insurance Program (SCHIP)

Under Title XXI of the Balanced Budget Act of 1997, the availability of health insurance for children with no insurance or for children from low-income families was expanded by the creation of SCHIP. SCHIPs operate as part of a State’s Medicaid program.

System of Care

A method of addressing children’s mental health needs. It is developed on the premise that the mental health needs of children, adolescents, and their families can be met within their home, school, and community environments. These systems are also developed around the principles of being child-centered, family-driven, strength-based, and culturally competent, and they involve inter-agency collaboration.

Treatment Algorithm

Decision trees designed to guide providers in a stepwise fashion to make treatment decisions based on evidence- and consensus-based standards. The algorithms are not intended to restrict provider judgment in individual cases, but to allow for flexibility of treatment with different populations who have different illnesses.

Utilization

The level of use of a particular service over time.

Utilization Management (UM)

The process of evaluating the necessity, appropriateness, and efficiency of health care service. A review coordinator or medical director gathers information about the proposed hospitalization, service, or procedure from the patient and/or providers, then determines whether it meets established guidelines and criteria, which may be writ-

ten or automated protocols approved by the organization. A provider or integrated delivery network that proves it is skilled in UM may negotiate more advantageous pricing, if UM is normally performed by the HMO but could be more effectively passed downward at a savings to the HMO.

Utilization Review (UR)

The evaluation of the medical necessity and the efficiency of health care services prospectively, concurrently, or retrospectively. UR is limited to the physician's diagnosis, treatment, and billing amount, whereas UM addresses the wider program requirements.

Wraparound Services

Services that address consumers' total health care needs to achieve health or wellness.

These services “wrap around” core clinical interventions, usually medical. Typical examples include such services as financial support, transportation, housing, job training, specialized treatment, or educational support.

Sources:

National Mental Health Information Center, SAMHSA. “Managed Care Glossary.” Available at: <http://www.mentalhealth.samhsa.gov/publications/allpubs/Mc98-70/default.asp>.

Center for Substance Abuse Prevention, SAMHSA. “Workplace Managed Care Working Glossary of Terms.” Available at: <http://workplace.samhsa.gov/Glossary/glossary.htm>.

References

- Alegria, M., Perez, D. J., & Williams, S. (2003). The role of public policies in reducing mental health status disparities for people of color. *Health Affairs*, 22(5), 51–64.
- Alfano, E. (2004). *Get it together: How to integrate physical and mental health care for people with serious mental disorders*. Washington, DC: Bazelon Center for Mental Health Law.
- Alfano, E. (2005). *Integration of primary care and behavioral health: Report on a roundtable discussion of strategies for private health insurance*. Washington, DC: Bazelon Center for Mental Health Law.
- American College of Mental Health Administration. (2003). *Financing results and value in behavioral health services*. Pittsburgh, PA: Author.
- Apgar, K. R. (2001). *Large employer practices in behavioral health benefit design, substance abuse benefits, and the use of carve-outs—The implications for parity*. Washington, DC: Washington Business Group on Health.
- Azocar, F., Cuffel, B., Goldman, W., & McCarter, L. (2003). The impact of evidence-based guideline dissemination for the assessment and treatment of major depression in a managed behavioral health care organization. *Journal of Behavioral Health Services & Research*, 30(1), 109–118.
- Bartels, S. J., Levine, K. J., & Shea, D. (1999). Community-based long-term care for older persons with severe and persistent mental illness in an era of managed care. *Psychiatric Services*, 50(9), 1189–1197.
- Bazelon Center for Mental Health Law. (1997). *NCQA accreditation standards: Insufficient quality check unless supplemented for public sector systems*. Washington, DC: Author.
- Bazelon Center for Mental Health Law. (1998). *Partners in planning: Consumers' role in contracting for public-sector managed mental health and addiction services*. Washington, DC: Author.
- Bluebird, G. (2000). *Participatory dialogues: A guide to organizing interactive discussions on mental health issues among consumers, providers, and family members* (DHHS Publication No. SMA 00-3472). Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.
- Boothroyd, R. A., Shern, D. L., & Bell, N. N. (2002). The effect of financial risk arrangements on service access and satisfaction among Medicaid beneficiaries. *Psychiatric Services*, 53(3), 299–303.
- Boyle, P. J., & Callahan, D. (1995). Managed care in mental health: The ethical issues. *Health Affairs*, 14(3), 7–22.
- Broskowski, A., & Smith, S. (2001). *Estimating the cost of preventive services in mental health and substance abuse under managed care* (DHHS Pub. No. SMA-02-3617R). Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.
- Buck, J. A., Teich, J. L., Umland, B., & Stein, M. (1999). Behavioral health benefits in employer-sponsored health plans, 1997. *Health Affairs*, 18(2), 67–78.

- Buck, J. A., & Umland, B. (1997). Covering mental health and substance abuse services. *Health Affairs*, 16(4), 120–126.
- Bundy, A. L., & Wegener, V. (2000). *Maximizing Medicaid funding to support health and mental health services for school-age children and youth*. Washington, DC: Finance Project.
- Burns, B. J., Costello, E. J., Angold, A., & Tweed, D. (1995). Children's mental health service use across service sectors. *Health Affairs*, 14(3), 147–159.
- California Center for Research on Women & Families. (2001). *Flexible financing: Work group recommendations*. Berkeley, CA: Author.
- CCRWF. See California Center for Research on Women & Families.
- CDC. See Centers for Disease Control and Prevention.
- Center for the Advancement of Health. (2000). *Health behavior change in managed care: A status report—HMO medical directors' report*. Washington, DC: Author.
- Center for Mental Health Services. (1996). *Principles for systems of managed care* (DHHS Report No. MC96-61). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Centers for Disease Control and Prevention. (1995, November 17). *Prevention and managed care: Opportunities for managed care organizations, purchasers of health care, and public health agencies*. Morbidity and Mortality Weekly Review 44(RR14). Atlanta, GA: U.S. Department of Health and Human Services.
- Centers for Medicare and Medicaid Services. (2002, June 14). Final rule: Medicaid managed care. 42 CFR Parts 400, 430, 431, 434, 435, 438, 440, and 447.
- CFAH. See Center for the Advancement of Health.
- Chang, C. F., Kiser, L. J., Bailey, J. E., Martins, M., Gibson, W. C., Schaberg, K. A., et al. (1998). Tennessee's failed managed care program for mental health and substance abuse services. *Journal of the American Medical Association*, 279(11), 864–869.
- Clancy, C. M., & Cronin, K. (2005). Evidence-based decision making: Global evidence, local decisions. *Health Affairs*, 24(1), 151–162.
- CMHS. See Center for Mental Health Services.
- CMS. See Centers for Medicare and Medicaid Services.
- Coleman, M., Schnapp, W., Hurwitz, D., Hedberg, S., Cabral, L., Laszlo, A., et al. (2005). Overview of publicly funded managed behavioral health care. *Administration & Policy in Mental Health*, 32(4), 321–340.
- Crawford, K., Fisher, W. H., & McDermeit, M. (1998). Racial/ethnic disparities in admissions to public and private psychiatric inpatient settings: The effect of managed care. *Administration & Policy in Mental Health*, 26(2), 101–109.
- Crowell, A., DelliQuadri, T., & Austin, M. J. (1995). Planning for managed mental health services in Los Angeles County. *Administration & Policy in Mental Health*, 22(3), 217–232.
- Cuffel, B. J., Goldman, W., & Schlesinger, H. (1999). Does managing behavioral health care services increase the cost of providing medical care? *Journal of Behavioral Health Services & Research*, 26(4), 372–380.
- Cuffel, B. J., & Regier, D. (2001). The relationship between treatment access

- and spending in a managed behavioral health organization. *Psychiatric Services*, 52, 949–952.
- Dana, R. H., Conner, M. G., & Allen, J. (1996). Quality of care and cost-containment in managed mental health: Policy, education, research, advocacy. *Psychological Reports*, 79(3, Pt. 2), 1395–1422.
- Davis, K. (1998). *Consumer-driven standards and guidelines in managed mental health for populations of African descent*. Richmond, VA: National Panel on Managed Mental Health Services for Consumers of African Descent.
- Docherty, J. P. (1997). Barriers to the diagnosis of depression in primary care. *Journal of Clinical Psychiatry*, 58(Suppl. 1), 5–10.
- Dorfman, S. (2000). *Preventive interventions under managed care: Mental health and substance abuse services* (DHHS Report No. (SMA) 00-3437). Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.
- Dorfman, S. L., & Smith, S. (2002). Preventive mental health and substance abuse programs and services in managed care. *Journal of Behavioral Health Services & Research*, 29(3), 233–258.
- Dorwart, R. A., & Epstein, S. S. (1992). Economics and managed mental health care: The HMO as a crucible for cost-effective care. In J. L. Feldman & R. J. Fitzpatrick (Eds.), *Managed mental health care: Administrative and clinical issues*. Washington, DC: American Psychiatric Association.
- Drainoni, M.-L. (1999). *Providing managed behavioral health services to people with disabilities and chronic illnesses: Important policy and program design issues*. Princeton, NJ: Center for Health Care Strategies, Inc.
- Drake, R. E., Essock, S. M., Shaner, A., Carey, K. B., Minkoff, K., Kola, L., et al. (2001). Implementing dual diagnosis services for clients with severe mental illness. *Psychiatric Services*, 52(4), 469–476.
- Drake, R. E., Goldman, H. H., Leff, H. S., Lehman, A. F., Dixon, L., Mueser, K. T., et al. (2001). Implementing evidence-based practices in routine mental health service settings. *Psychiatric Services*, 52(2), 179–182.
- Drake, R. E., McLaughlin, P., Pepper, B., & Minkoff, K. (1991, Summer). Dual diagnosis of major mental illness and substance disorder: An overview. *New Directions for Mental Health Services*, (50), 3–12.
- Draper, D., CyBulski, K., & Ciemnecki, A. (2001). *How are persons with mental illness faring under TennCare?* Princeton, NJ: Mathematica Policy Research, Inc.
- Drissel, A. B. (2005). *Managed care and children and family services*. Baltimore: Policy Resource Center, Annie E. Casey Foundation.
- Edelman, S. (1998). *Developing blended funding programs for children's mental health care systems*. Sacramento, CA: California Institute for Mental Health.
- Eisen, S. V., Shaul, J. A., Clarridge, B., Nelson, D., Spink, J., Cleary, P. D. (1999). Development of a consumer survey for behavioral health services. *Psychiatric Services*, 50(6), 793–798.
- Epstein, J., Barker, P., Vorburger, M., & Murtha, C. (2004). *Serious mental illness and its co-occurrence with substance use disorders, 2002* (DHHS Publication No.

- (SMA) 04-3905, Analytic Series A-24). Rockville, MD: Office of Applied Studies, Substance Abuse and Mental Health Services Administration.
- Ettner, S. L., Frank, R. G., Mark, T., & Smith, J. W. (2000). Risk adjustment of capitation payments to behavioral health care carve-outs: How well do existing methodologies account for psychiatric disability? *Health Care Management Science*, 3(2), 159–169.
- Feldman, S. (1998). Behavioral health services: Carved out and managed. *American Journal of Managed Care*, 4(Special Issue), SP59–67.
- FIPP. See Forums Institute for Public Policy.
- Flynn, M., & Hayes, C. D. (2003). *Blending and braiding funds to support early care and education initiatives*. Washington, DC: Finance Project.
- Ford, W. E. (1998). Economic grand rounds: Medical necessity: Its impact in managed mental health care. *Psychiatric Services*, 49(2), 183–184.
- Forums Institute for Public Policy. (1997). *Mental health policy in a managed care environment: Implications for access, quality and cost*. Princeton, NJ: Author.
- Foster, E. M. (2001). Expenditures and sustainability in systems of care. *Journal of Emotional & Behavioral Disorders*, 9(1), 1063–1066.
- Fox, D. M. (2005). Evidence of evidence-based health policy: The politics of systematic reviews in coverage decisions. *Health Affairs*, 24(1), 114–122.
- Frank, R. G., Conti, R. M., & Goldman, H. H. (2005). Mental health policy and psychotropic drugs. *The Milbank Quarterly*, 83(2), 271–298.
- Frank, R. G., Huskamp, H. A., McGuire, T. G., & Newhouse, J. P. (1996). Some economics of mental health carve-outs. *Archives of General Psychiatry*, 53(10), 933–937.
- Frank, R. G., Huskamp, H. A., & Pincus, H. A. (2003). Aligning incentives in the treatment of depression in primary care with evidence-based practice. *Psychiatric Services*, 54(5), 682–687.
- Frank, R. G., & Lave, J. R. (1992). Economics of managed mental health. In S. Feldman (Ed.), *Managed mental health services*. Springfield, IL: Charles C. Thomas.
- Frank, R. G., McGuire, T. G., & Newhouse, J. P. (1995). Risk contracts in managed mental health. *Health Affairs*, 14(3), 50–64.
- Gabel, J. (2003). Health benefits in 2003: Premiums reach thirteen-year high as employers adopt new forms of cost sharing. *Health Affairs*, 22(5), 117–126.
- Gallo, J. J., Meredith, L. S., Gonzales, J., Cooper, L. A., Nutting, P., Ford, D. E., et al. (2002). Do family physicians and internists differ in knowledge, attitudes, and self-reported approaches for depression? *International Journal of Psychiatry in Medicine*, 32(1), 1–20.
- Garnick, D. W., Horgan, C. M., Hodgkin, D., Merrick, E. L., Goldin, D., Ritter, G., et al. (2001). Risk transfer and accountability in managed care organizations' carve-out contracts. *Psychiatric Services*, 52(11), 1502–1509.
- Garnick, D. W., Horgan, C. M., Merrick, E. L., Hodgkin, D., Faulkner, D., & Bryson, S. (2002). Managed care plans' requirements for screening for alcohol, drug, and mental health problems in primary care. *American Journal of Managed Care*, 8(10), 879–888.

-
- Giloth, B. E., & Pritchett, S. (2000). Financing patient education. In *Process development: Patient, family, and care giver education policy and procedures for hospitals, clinics and communities*. Rockville, MD: Indian Health Service, U.S. Department of Health and Human Services.
- Goldman, H. H. (1999). The obligation of mental health services to the least well off. *Psychiatric Services, 50*(5), 659–663.
- Goldman, W., McCulloch, J., & Sturm, R. (1998). Costs and use of mental health services before and after managed care. *Health Affairs, 17*(2), 40–52.
- Grazier, K. L., & Eselius, L. L. (1999). Mental health carve-outs: Effects and implications. *Medical Care Research & Review, 56*(Suppl. 2), 37–59.
- Green, S. A., & Bloch, S. (2001). Working in a flawed mental health care system: An ethical challenge. *American Journal of Psychiatry, 158*(9), 1378–1383.
- Gruttadaro, D. E., Ross, E. C., & Honberg, R. (2001). *Legal protections and advocacy strategies for people with severe mental illnesses in managed care systems*. Arlington, VA: National Alliance for the Mentally Ill.
- Hanson, L., Deere, D., Lee, C. A., Lewin, A., & Seval, C. (2001). *Key principles in providing integrated behavioral health services for young children and their families: The starting early starting smart experience*. Washington, DC: Casey Family Programs and the Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.
- Hayes, C. D. (2002). *Thinking broadly: Financing strategies for comprehensive child and family initiatives*. Washington, DC: Finance Project.
- Helfand, M. (2005). Using evidence reports: Progress and challenges in evidence-based decision making. *Health Affairs, 24*(1), 123–127.
- Hepburn, K., & McCarthy, J. (2003). *Promising approaches for behavioral health services to children and adolescents and their families in managed care systems: Vol. 3. Making interagency initiatives work*. Tampa, FL: Florida Mental Health Institute.
- Hermann, R. C., & Rollins, C. K. (2003). Quality measurement in health care: A need for leadership amid a new federalism. *Harvard Review of Psychiatry, 11*(4), 215–219.
- Hill, S. S., Wooldridge, J., Ciemnecki, A., CyBulski, K., Kolln, B., Sinclair, M., et al. (2001). *SSI enrollees in TennCare: Room for improvement*. Princeton, NJ: Mathematica Policy Research, Inc.
- Hoag, S., Wooldridge, J., & Thornton, C. (2000). Setting rates for Medicaid managed behavioral health care: Lessons learned. *Health Affairs, 19*(4), 121–133.
- Hodges, S., Nesman, T., & Hernandez, M. (1998). *Promising practices: Building collaboration in systems of care: Vol. 6. Systems of Care: Promising Practices in Children's Mental Health, 1998 series*. Washington, DC: Center for Effective Collaboration and Practice, American Institutes for Research.
- Hodgkin, D., Horgan, C. M., Garnick, D. W., Merrick, E. L., & Goldin, D. (2000). Why carve out? Determinants of behavioral health contracting choice among large U.S. employers. *Journal of Behavioral Health Services & Research, 27*(2), 178–193.

- Holahan, J., Rangarajan, S., & Schirmer, M. (1999). *Medicaid managed care payment methods and capitation rates: Results of a national survey*. Washington, DC: Urban Institute.
- Horgan, C. M., Merrick, E. L., Garnick, D. W., Hodgkin, D., Cenczyk, R. E., Lusenhop, R. E., et al. (2003). *The provision of mental health services in managed care organizations* (DHHS Publication No. (SMA) 03-3797). Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.
- Huskamp, H. A. (1998). How a managed behavioral health care carve-out plan affected spending for episodes of treatment. *Psychiatric Services, 49*(12), 1559–1562.
- Hutchinson, A. B., & Foster, E. M. (2003). The effect of Medicaid managed care on mental health care for children: A review of the literature. *Mental Health Services Research, 5*(1), 39–54.
- Institute of Medicine. (2003). *Unequal treatment: Confronting racial and ethnic disparities in health care*. Washington, DC: National Academies Press.
- IOM. See Institute of Medicine.
- Kahn, A. J., & Kamerman, S. B. (1992). *Integrating services integration: An overview of initiatives, issues, and possibilities*. New York: National Center for Children in Poverty.
- Kapur, K., Young, A. S., Murata, D., Sullivan, G., & Koegel, P. (1999). The economic impact of capitated care for high utilizers of public mental health services: The Los Angeles PARTNERS program experience. *Journal of Behavioral Health Services & Research, 26*(4), 416–429.
- Kashner, T. M., Rush, A. J., & Altshuler, K. (1999). Measuring costs of guideline-driven mental health care: The Texas medication algorithm project. *Journal of Mental Health Policy and Economics, 2*, 111–121.
- Koike, A., Klap, R., & Unützer, J. (2000). Utilization management in a large managed behavioral health organization. *Psychiatric Services, 51*(5), 621–626.
- Koppelman, J. (2004). *Children with mental disorders: Making sense of their needs and the systems that help them*. Washington, DC: George Washington University National Health Policy Forum.
- Koyanagi, C. (2003a). *The Federal Government and interagency systems of care for children with serious mental disorders: Help or hindrance?* Washington, DC: Bazelon Center for Mental Health Law.
- Koyanagi, C. (2003b). *Mix and match: Using Federal programs to support interagency systems of care for children with mental health care needs*. Washington, DC: Bazelon Center for Mental Health Law.
- Koyanagi, C., & Carty, L. (1996). *Managing managed care for publicly financed mental health services*. Washington, DC: Bazelon Center for Mental Health Law.
- Koyanagi, C., & Feres-Merchant, D. (2000). *For the long haul: Maintaining systems of care beyond the Federal investment: Vol. 3. Systems of care: Promising practices in children's mental health, 2000 series*. Washington, D.C: Center for Effective Collaboration and Practice, American Institutes for Research.
- Kremer, T. G., & Gesten, E. L. (2003). Managed mental health care: The client's perspective. *Professional Psychology: Research & Practice, 34*(2), 187–196.

-
- Lave, J. R., & Peele, P. B. (2000). Datapoints: The distribution of payments for behavioral health care. *Psychiatric Services, 51*(6), 723.
- Leff, H. S., Lieberman, M., Mulkern, V., & Raab, B. (1996). Outcome trends for severely mentally ill persons in capitated and case managed mental health programs. *Administration & Policy in Mental Health, 24*(1), 3–11.
- Lehman, A. F., Goldman, H. H., Dixon, L. B., & Churchill, A. (2004). *Evidence-based mental health treatments and services: Examples to inform public policy*. New York: Milbank Memorial Fund.
- Leslie, D. L., & Rosenheck, R. (1999). Shifting to outpatient care? Mental health care use and cost under private insurance. *American Journal of Psychiatry, 156*(8), 1250–1257.
- Leslie, D. L., Rosenheck, R., & White, W. D. (2000). Capitated payments for mental health patients: A comparison of potential approaches in a public sector population. *Journal of Mental Health Policy and Economics, 3*, 35–44.
- Levine, B. L. (2003). *The impact of managed care on agency-based clinicians: An application of the pragmatic case study*. Rutgers, NJ: State University of New Jersey, Graduate School of Applied and Professional Psychology.
- Lurie, N., Moscovice, I. S., Finch, M., Christianson, J. B., & Popkin, M. (1992). Does capitation affect the health of the chronically mentally ill? Results from a randomized trial. *Journal of the American Medical Association, 267*(24), 3300–3304.
- Lyons, S. C., Lyons, J. S., Christopher, N. J., & Miller, S. (1998). Psychiatric hospital outcomes of dual diagnosis patients under managed care. *American Journal on Addictions, 7*(1), 81–86.
- Ma, C. A., & McGuire, T. G. (1998). Costs and incentives in a behavioral health carve-out. *Health Affairs, 17*(2), 53–69.
- Manning, W. G., Liu, C.-F., Stoner, T. J., Gray, D. Z., & Popkin, M. (1999). Outcomes for Medicaid beneficiaries with schizophrenia under a prepaid mental health carve-out. *Journal of Behavioral Health Services & Research, 26*(4), 442–450.
- Margison, F. (2003). Evidence-based medicine in the psychological treatment of schizophrenia. *Journal of the American Academy of Psychoanalysis & Dynamic Psychiatry, 31*(1), 177–190.
- Mark, T. L., & Coffey, R. M. (2003). What drove private health insurance spending on mental health and substance abuse care, 1992–1999? *Health Affairs, 22*(1), 165–172.
- Mauery, D. R., Collins, J., McCarthy, J., McCullough, C., & Pires, S. (2003). *Contracting for coordination of behavioral health care services in privatized child welfare and Medicaid managed care*. Princeton, NJ: Center for Health Care Strategies, Inc.
- McClellan, K. (1998). Managing care for the seriously and persistently mentally ill. *Employee Assistance Quarterly, 13*(4), 23–32.
- Mechanic, D. (1998). Managed behavioral health care: Current realities and future potential. In D. Mechanic (Ed.) *New directions for mental health services*, No 78. San Francisco: Jossey-Bass.
- Mechanic, D. (2003a). Is the prevalence of mental disorders a good measure of the

- need for services? *Health Affairs*, 22(5), 8–20.
- Mechanic, D. (2003b). Managing behavioral health in Medicaid. *New England Journal of Medicine*, 348(19), 1914–1916.
- Mechanic, D. (2003c). Policy challenges in improving mental health services: Some lessons from the past. *Psychiatric Services*, 54(9), 1227–1232.
- Mellman, T. A., Miller, A. L., Weissman, E. M., Crismon, M. L., Essock, S. M., & Marder, S. R. (2001). Evidence-based pharmacologic treatment for people with severe mental illness: A focus on guidelines and algorithms. *Psychiatric Services*, 52(5), 619–625.
- Meredith, L. S., & Mazel, R. M. (2000). Counseling for depression by primary care providers. *International Journal of Psychiatry in Medicine*, 30(4), 343–365.
- Meredith, L. S., Sturm, R., Camp, P., & Wells, K. B. (2001). Effects of cost-containment strategies within managed care on continuity of the relationship between patients with depression and their primary care providers. *Medical Care*, 39(10), 1075–1085.
- Mihalik, G., & Scherer, M. (1998). Fundamental mechanisms of managed behavioral health care. *Journal of Health Care Finance*, 24(3), 1–15.
- Miller, I. J. (1996). Managed care is harmful to outpatient mental health services: A call for accountability. *Professional Psychology: Research & Practice*, 27(4), 349–363.
- Minkoff, K. (1989). An integrated treatment model for dual diagnosis of psychosis and addiction. *Hospital & Community Psychiatry*, 40(10), 1031–1036.
- Minkoff, K. (1998). *Co-occurring psychiatric and substance abuse disorders in managed care systems: Standards of care, practice guidelines, workforce competencies, and training curricula* (Report of the Center for Mental Health Services Managed Care Initiative: Clinical Standards and Workforce Competencies Project, Co-occurring Mental and Substance Disorders Panel). Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.
- Minkoff, K. (2001a). Best practices: Developing standards of care for individuals with co-occurring psychiatric and substance use disorders. *Psychiatric Services*, 52(5), 597–599.
- Minkoff, K. (2001b). Program components of a comprehensive integrated care system for seriously mentally ill patients with substance disorders. *New Directions for Mental Health Services*, (91), 17–30.
- Minkoff, K., & Pollack, D. (Eds.). (1997). *Chronic mental illness: Vol. 4. Managed mental health care in the public sector: A survival manual*. Amsterdam, Netherlands: Harwood Academic Publishers.
- Morrissey, J. P., Stroup, T. S., Ellis, A. R., & Merwin, E. (2002). Service use and health status of persons with severe mental illness in full-risk and no-risk Medicaid programs. *Psychiatric Services*, 53(3), 293–298.
- Moss, S. (1998). *Contracting for managed substance abuse and mental health services: A guide for public purchasers* (DHHS Publication No. (SMA) 98-3173). Rockville, MD: Center for Substance

- Abuse Treatment, Substance Abuse and Mental Health Services Administration. Mowbray, C. T., Grazier, K. L., & Holter. (2002). Managed behavioral health care in the public sector: Will it become the third shame of the States? *Psychiatric Services*, 53(2), 157–170.
- Mrazek, P., & Haggerty, R. (Eds.). (1994). *Reducing risks for mental disorders: Frontiers for preventive intervention research*. Washington, DC: National Academies Press.
- National Business Group on Health. (2005). *Improving health. Improving business. A 4-part guide to implementing employee health improvement and preventive services*. Washington, DC: Center for Prevention and Health Services.
- National Child Care Information Center. (2002). *A fiscal management checklist for partnerships*. Washington, DC: Quilt Project, National Child Care Information Center, Administration for Children and Families, U.S. Department of Health and Human Services.
- National Committee for Quality Assurance. (2004). *Standards and guidelines for the accreditation of MBHOs*. Washington, DC: Author.
- National Mental Health Association. (2002). *Putting prevention into managed mental healthcare: A smart strategy for purchasers*. Alexandria, VA: Author.
- NBGH. See National Business Group on Health.
- NCQA. See National Committee for Quality Assurance.
- New Freedom Commission on Mental Health. (2003). *Achieving the promise: Transforming mental health care in America. Final report*. (DHHS Publication No. SMA-03-3832). Rockville, MD: U.S. Department of Health and Human Services.
- Nitzkin, J. L., & Smith, S. (2004). *Clinical preventive services in substance abuse and mental health update: From science to services* (DHHS Publication No. (SMA) 04-3906). Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.
- Norquist, G., & Hyman, S. E. (1999). Advances in understanding and treating mental illness: Implications for policy. *Health Affairs*, 18(5), 32–47.
- O'Brien, M. (1997). *Financing strategies to support comprehensive, community-based services for children and families*. Washington, DC: National Child Welfare Resource Center for Organizational Improvement.
- Office of Inspector General (2000). *Mandatory managed care: Early lessons learned by Medicaid mental health programs* (OEI-04-97-00343). Washington, DC: U.S. Department of Health and Human Services.
- OIG. See Office of Inspector General.
- Okunade, A. A., & Chang, C. F. (1998). Relative success of State-managed behavioral health care: Does the financing structure play any role? *Journal of Health Care Finance*, 24(3), 27–40.
- Olfson, M., Marcus, S. C., Druss, B., Elinson, L., Tanielien, T., & Pincus, H. A. (2002). National trends in the outpatient treatment of depression. *Journal of the American Medical Association*, 287(2), 203–209.
- Olfson, M., Sing, M., & Schlesinger, H. J. (1999). Mental health/medical care cost offsets: Opportunities for managed care. *Health Affairs*, 18(2), 79–90.

- Olson, K., & Perkins, J. (1999). *Recommendations for making the consumers' voice heard in Medicaid managed care: A guide to effective consumer involvement*. Chapel Hill, NC: National Health Law Program.
- Orland, M. E., & Foley, E. (1996). *Beyond decategorization: Defining barriers and potential solutions to creating effective comprehensive, community-based support systems for children and families*. Washington, DC: Finance Project.
- Pallak, M. S., & Cummings, N. A. (1994). Outcomes research in managed behavioral health care: Issues, strategies, and trends. In S. A. Shueman, W. G. Troy, & S. L. Mayhugh (Eds.), *Managed behavioral health care: An industry perspective*. Springfield, IL: Charles C. Thomas.
- Partnership for Prevention. (2002). *Preventive services: Helping employers expand coverage*. Washington, DC: Author.
- Peele, P. B., Xu, Y., & Kupfer, D. J. (2003). Insurance expenditures on bipolar disorder: Clinical and parity implications. *American Journal of Psychiatry*, *160*(7), 1286–1290.
- PPF. See Partnership for Prevention.
- Pincus, H. A. (2003). The future of behavioral health and primary care: Drowning in the mainstream or left on the bank? *Psychosomatics*, *44*(1), 1–11.
- Pires, S. A. (2002). *Promising approaches for behavioral health care services to children and adolescents and their families in managed care systems: Vol. 1. Managed care design and financing*. Tampa, FL: Florida Mental Health Institute.
- Pires, S., Armstrong, M., & Stroul, B. A. (1999). *Health care reform tracking project: Tracking State managed care reforms as they affect children and adolescents with behavioral health disorders and their families*. Tampa, FL: University of South Florida.
- Potter, D., & Mulkern, V. (2004). *Making the case for flexible funding*. Washington, DC: Community Living Exchange, Rutgers/National Academy for State Health Policy.
- Ray, W. A., Daugherty, J. R., & Meador, K. G. (2003). Effect of a mental health “carve-out” program on the continuity of antipsychotic therapy. *New England Journal of Medicine*, *348*(19), 1885–1894.
- Ridgely, M., Giard, J., & Shern, D. (1999). Florida's Medicaid mental health carve-out: Lessons from the first years of implementation. *Journal of Behavioral Health Services & Research*, *26*(4), 400–415.
- Ridgely, M. S., Mulkern, V., Giard, J., & Shern, D. L. (2002). Critical elements of public-sector managed behavioral health programs for severe mental illness in five States. *Psychiatric Services*, *53*(4), 397–399.
- Ries, R. K. (1994). *Assessment and treatment of patients with coexisting mental illness and alcohol and other drug abuse—Treatment Improvement Protocol (TIP) Series 9* (DHHS Publication No. (SMA) 95-3061). Rockville, MD: Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration.
- Robinson, G., Chimento, L., Bush, S., & Papay, J. (2001). *Administering generous mental health benefits: Opinions of*

- employers* (DHHS Publication No. (SMA) 01-3474). Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.
- Robinson, J. H., Haaz, E. J., Petrica, S. C., Hillsberg, B. S., & Kennedy, N. (2004). Managed care and prevention of mental health and substance abuse problems: Opportunities for growth through collaboration in the new millennium. *Journal of Primary Prevention, 24*(3), 355–373.
- Rochefort, D. A. (n.d.). *Regulating managed mental health care: A policy analysis and discussion of the role of evaluation*. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.
- Rosenbach, M. L., & Young, C. G. (2000). *Care coordination in Medicaid managed care: A primer for States, managed care organizations, providers, and advocates*. Princeton, NJ: Center for Health Care Strategies, Inc.
- Rosenbaum, S., Kamoie, B., Mauery, D. R., & Walitt, B. (2003). *Medical necessity in private health plans: Implications for behavioral health care* (DHHS Pub. No. (SMA) 03-3790). Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.
- Rosenbaum, S., Markus, A., & Teitelbaum, J. (2001). *The devolution of managed care contractor duties: Analysis and implications for public policy in managed behavioral health care* (Issue Brief #20). Washington, DC: George Washington University Center for Health Services Research and Policy.
- Rosenbaum, S., Mauery, D. R., & Kamoie, B. (2001). *Care coordination and physical and behavioral service integration in managed care contracts: Analysis and sample purchasing specifications* (Double Issue Brief #11 & 12). Washington, DC: George Washington University Center for Health Services Research and Policy.
- Rosenthal, M. B. (1999). Risk sharing in managed behavioral health care. *Health Affairs, 18*(5), 204–213.
- Ross, E. C. (2000). Will managed care ever deliver on its promises? Managed care, public policy, and consumers of mental health services. *Administration & Policy in Mental Health, 28*(1), 7–21.
- Rubenstein, L. V., Parker, L. E., Meredith, L. S., Altschuler, A., dePilllis, E., Hernandez, J., et al. (2002). Understanding team-based quality improvement for depression in primary care. *Health Services Research, 37*(4), 1009–1029.
- Sabin, J. E. (1998). Managed care: Public-sector managed behavioral health care: I. Developing an effective case management program. *Psychiatric Services, 49*(1), 31–33.
- Sabin, J. E., & Daniels, N. (1999). Public-sector managed behavioral health care: III. Meaningful consumer and family participation. *Psychiatric Services, 50*(7), 883–885.
- Sabin, J. E., & Daniels, N. (2000). Managed care: Public-sector managed behavioral health care: VI. The Iowa approach to profit and community reinvestment. *Psychiatric Services, 51*(10), 1239–1247.
- Sabin, J. E., & Daniels, N. (2001). Managed care: Strengthening the consumer voice in managed care: I. Can the private sector meet the public-sector standard? *Psychiatric Services, 52*(4), 461–464.
- Sabin, J. E., & Daniels, N. (2002). Managed care: Strengthening the consumer voice

- in managed care: IV. The Leadership Academy Program. *Psychiatric Services*, 53(4), 405–411.
- Salkever, D. S., & Shinogle, J. A. (2000). Empirical evidence on the demand for carve-outs in employment group mental health coverage. *Journal of Mental Health Policy & Economics*, 3(2), 83–95.
- SAMHSA. See Substance Abuse and Mental Health Services Administration.
- Samuels, J. A. (1997). *Risky business: Classifying mental health consumers for capitation reimbursement under managed care*. New York: New York University.
- Sanchez, L. M., & Turner, S. M. (2003). Practicing psychology in the era of managed care: Implications for practice and training. *American Psychologist*, 58(2), 116–129.
- Saunders, R. C., & Heflinger, C. A. (2003). Access to and patterns of use of behavioral health services among children and adolescents in TennCare. *Psychiatric Services*, 54(10), 1364–1371.
- Savelle, T., Robinson, G., & Crow, S. (2000). *Contracting for public mental health services: Opinions of managed care behavioral health care organizations* (DHHS Publication No. (SMA) 00-3438). Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.
- Schlesinger, M., Wynia, M., & Cummins, D. (2000). Some distinctive features of the impact of managed care on psychiatry. *Harvard Review of Psychiatry*, 8(5), 216–230.
- Schwartz, J., & Weiner, M. B. (2003). Finding meaning in medical necessity. *Social Work*, 48(3), 392.
- Seligman, M. E., & Levant, R. F. (1998). Managed care policies rely on inadequate science. *Professional Psychology: Research & Practice*, 29(3), 211–212.
- Seltzer, T. (2003). *Teaming up: Using the IDEA and Medicaid to secure comprehensive mental health services for children and youth*. Washington, DC: Bazelon Center for Mental Health Law.
- Sherbourne, C. D., Wells, K. B., Duan, N., Miranda, J., Unützer, J., Jaycox, L., et al. (2001). Long-term effectiveness of disseminating quality improvement for depression in primary care. *Archives of General Psychiatry*, 58(7), 696–703.
- Shuchman, M., & St. Peter, R. F. (1997). *Primary care physicians concerned about patients' access to mental health services* (Data Bulletin #6). Washington, DC: Center for Studying Health System Change.
- Shumway, M., & Sentell, T. L. (2004). An examination of leading mental health journals for evidence to inform evidence-based practice. *Psychiatric Services*, 55(6), 649–653.
- Snowden, L. R., Cuellar, A. E., & Libby, A. M. (2003). Minority youth in foster care: Managed care and access to mental health treatment. *Medical Care*, 41(2), 264–274.
- Sperry, L., Grissom, G., Brill, P., & Marion, D. (1997). Changing clinicians' practice patterns and managed care culture with outcomes systems. *Psychiatric Annals*, 27(2), 127–132.
- Steinberg, E. P., & Luce, B. R. (2005). Evidence based? Caveat emptor! *Health Affairs*, 24(1), 80–92.
- Stepnick, L. (2002). *Accelerating the adoption of preventive health services: Building new partnerships and community commitment*. Washington,

-
- DC: National Institute for Health Care Management Foundation.
- Stroul, B. A. (2002). System of care: A framework for system reform in children's mental health (Issue Brief). Washington, DC: Georgetown University Child Development Center, National Technical Assistance Center for Children's Mental Health.
- Stroul, B. A., Pires, S. A., Armstrong, M. I. & Zaro, S. (2002). The impact of managed care on systems of care that serve children with serious emotional disturbances and their families. *Children's Services: Social Policy, Research, and Practice*, 5(1), 21–36.
- Stroup, T. (1997). Managed behavioral health care in the public sector. *Harvard Review of Psychiatry*, 5(1), 47–49.
- Sturm, R. (1999). Tracking changes in behavioral health services: How have carve-outs changed care? *Journal of Behavioral Health Services & Research*, 26(4), 360–371.
- Sturm, R. (2000). How does risk sharing between employers and a managed behavioral health organization affect mental health care? *Health Services Research*, 35(4), 761–776.
- Sturm, R. (2001). Economic grand rounds: The myth of medical cost offset. *Psychiatric Services*, 52(6), 738–740.
- Sturm, R., & Sherbourne, C. D. (2000). Managed care and unmet need for mental health and substance abuse care in 1998. *Psychiatric Services*, 51(2), 177.
- Substance Abuse and Mental Health Services Administration. (1997). *Improving services for individuals at risk of, or with, co-occurring substance-related and mental health disorders: A SAMHSA conference report and a national strategy*. Washington, DC: U.S. Department of Health and Human Services.
- Substance Abuse and Mental Health Services Administration. (2002). *Report to Congress on the prevention and treatment of co-occurring substance abuse disorders and mental disorders*. Rockville, MD: U.S. Department of Health and Human Services.
- Substance Abuse and Mental Health Services Administration. (2005). *Technical assistance resource guide for the comprehensive community mental health for children and their families program*. Rockville, MD: U.S. Department of Health and Human Services.
- Tanenbaum, S. J. (2005). Evidence-based practice as mental health policy: Three controversies and a caveat. *Health Affairs*, 24(1), 163–173.
- Teich, J. L., & Buck, J. A. (2003). Datapoints: Mental health services in employee assistance programs, 2001. *Psychiatric Services*, 54(5), 611.
- Teitelbaum, J., Rosenbaum, S., Burgess, W., & DeCourcy, L. (1999). *Selected key issues in the development and drafting of public managed behavioral health care carve-out contracts*. Washington, DC: George Washington University Center for Health Policy Research.
- Thomas, M., Majak, B., & Murtaza, N. (1995). Building the foundation for managed mental health care in Alameda County. *Administration & Policy in Mental Health*, 22(3), 289–299.
- Trude, S., & Stoddard, J. J. (2003). Referral gridlock: Primary care physicians and mental health services. *Journal of General Internal Medicine*, 18(6), 442–449.
- Tu, H. T. (2004). Rising health costs, medical debt and chronic conditions (Issue

- Brief #88). Washington, DC: Center for Studying Health System Change.
- USPSTF. See U.S. Preventive Services Task Force.
- U.S. Preventive Services Task Force (2005). *Clinical categories*. Washington, DC: Agency for Healthcare Research and Quality.
- VanLeit, B. (1996). Managed mental health care: Reflections in a time of turmoil. *American Journal of Occupational Therapy, 50*(6), 428–434.
- Vicchiullo, C. I. (2000). *A survey of consumer knowledge, satisfaction, confidence, and advocacy regarding mental health care in the United States: A pilot study*. Boston: Massachusetts School of Professional Psychology.
- Virnig, B., Huang, Z., Lurie, N., Musgrave, D., McBean, A. M., & Dowd, B. (2004). Does Medicare managed care provide equal treatment for mental illness across races? *Archives of General Psychiatry, 61*(2), 201–205.
- Vogel, C. (2001). *Mental health "boundaries" in Medicaid managed care*. Princeton, NJ: Mathematica Policy Research, Inc.
- Vogelsang, I. (1999). Economic aspects of mental health carve-outs. *Journal of Mental Health Policy and Economics, 2*, 29–41.
- Von Korff, M., Katon, W., Bush, T., Lin, E. H., Simon, G. E., Saunders, K., et al. (1998). Treatment costs, cost offset, and cost-effectiveness of collaborative management of depression. *Psychosomatic Medicine, 60*(2), 143–149.
- Watkins, K. E., Burnam, A., Kung, F.-Y., & Paddock, S. (2001). A national survey of care for persons with co-occurring mental and substance use disorders. *Psychiatric Services, 52*(8), 1062–1068.
- Watkins, K. E., Hunter, S. B., Wenzel, S. L., Tu, W., Paddock, S. M., Griffin, A., et al. (2004). Prevalence and characteristics of clients with co-occurring disorders in outpatient substance abuse treatment. *American Journal of Drug and Alcohol Abuse, 30*(4), 749–764.
- Weissman, E., Pettigrew, K., Sotsky, S., & Regier, D. (2000). The cost of access to mental health services in managed care. *Psychiatric Services, 51*(5), 664–666.
- Wells, K. B., Astrachan, B. M., Tischler, G. L., & Unützer, J. (1995). Issues and approaches in evaluating managed mental health care. *Milbank Quarterly, 73*(1), 57–75.
- Wolff, N., Helminiak, T. W., & Tebes, J. K. (1997). Getting the cost right in cost-effectiveness analyses. *American Journal of Psychiatry, 154*(6), 736–743.
- Wooldridge, J., & Hoag, S. (2001). *Challenges to developing and using encounter data in five Medicaid managed care programs*. Princeton, NJ: Mathematica Policy Research, Inc.
- Yarnall, K. S., Pollak, K. I., Ostbye, T., Krause, K. M., & Michener, J. (2003). Primary care: Is there enough time for prevention? *American Journal of Public Health, 93*(4), 635–641.
- Young, A. S., Sullivan, G., Murata, D., Sturm, R., & Koegel, P. (1998). Implementing publicly funded risk contracts with community mental health organizations. *Psychiatric Services, 49*(12), 1579–1584.

Notes

- ¹ EndNote® is a product of Thomson ResearchSoft. Information available at: <http://www.endnote.com/enabout.asp>. Accessed June 26, 2005.
- ² “Cost effectiveness” is generally defined as the ratio comparing the results of a health care program or procedure to the direct and indirect net costs of this program or procedure. Ratios greater than 1.0 denote positive cost effectiveness.
- ³ “Health Insurance: Complete Glossary of Health Insurance Terminology.” Available at: <http://www.agencyinfo.net/iv/medical/health-glossary.htm>. Accessed July 27, 2005.
- ⁴ See, for example, level-of-care criteria described in ValueOptions online Provider Manuals. Available at: <http://www.valueoptions.com/provider/handbooks/criteria.htm>. Accessed July 27, 2005.
- ⁵ Information about the Healthcare for Communities survey is available at: <http://www.hscenter.ucla.edu/research/hcc.shtml>. Accessed July 27, 2005.
- ⁶ “Health Insurance: Complete Glossary of Health Insurance Terminology.” *op. cit.*
- ⁷ A “clubhouse” is a daytime program that emphasizes self-help and the work-centered day. Members of the clubhouse carry out all the functions required to run the program with the guidance of staff, some or all of whom may be former consumers of mental health services. Focus is on performance-based outcomes in practical, functional, and work-related skills. *See:* <http://www.mentalhealth.samhsa.gov/cmhs/CommunitySupport/research/toolkits/pn37ch3table1.asp>.
- ⁸ Available at: http://www.gwumc.edu/sphhs/healthpolicy/chsrp/downloads/behavioral_health/bhib-11-12.pdf. Accessed June 26, 2005.
- ⁹ Information available at: <http://www.hcp.med.harvard.edu/ncs/>. Accessed August 1, 2005.
- ¹⁰ Available at: http://www.uphs.upenn.edu/cmhpsr/PDF/Cooccurring_MH_DA_Panel_Report.pdf. Accessed June 26, 2005.
- ¹¹ Available at: <http://www.modelprograms.samhsa.gov>. Accessed June 26, 2005.
- ¹² Available at: http://www.wbgh.org/services/4_Part_Guide.pdf. Accessed June 26, 2005.
- ¹³ Available at: <http://www.mentalhealthcommission.gov/>. Accessed June 26, 2005.
- ¹⁴ Available at: <http://www.mentalhealth.org/publications/allpubs/MC96-61/default.asp>. Accessed June 26, 2005.
- ¹⁵ Available at: http://www.samhsa.gov/Federalactionagenda/NFC_TOC.aspx. Accessed February 2, 2006.
- ¹⁶ Available at: <http://www.cms.hhs.gov/medicaid/managedcare/cms2104f.asp>. Accessed June 26, 2005.
- ¹⁷ *See:* <http://www.ncqa.org/Programs/HEDIS®/index.htm>. Accessed June 26, 2005.
- ¹⁸ Information about the ECHO survey is available at: <http://www.cahps-sun.org/Products/ECHO/NCQA-ECHO.asp>. Accessed August 4, 2005.
- ¹⁹ Information available at: <http://www.county.milwaukee.gov/display/router.asp?docid=7851>. Accessed October 11, 2005.
- ²⁰ Information available at: <https://www.choicsteam.org/page/program/alias/dawn&article=311&prog=311>. Accessed October 11, 2005.

