

Designing Employer-Sponsored Mental Health Benefits



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Contents

Acknowledgments.....	iii
Executive Summary	1
I. Introduction	5
A. Purpose of the Report	6
B. Employer Characteristics and Health Plan Types	7
C. Method	9
1. Interviews and Conceptual Framework	9
2. Literature Review.....	9
3. Actuarial Analysis	10
4. Report	10
D. Organization of the Report	11
II. Prevalence and Financial Implications of Mental Illness	13
A. Prevalence	13
B. Financial Implications	15
1. The Costs to Employers of Untreated Mental Illness.....	16
2. The Cost of Providing Mental Health Benefits	18
3. Return on Investment.....	20
4. Medical Cost Offsets	21
5. Parity of Mental Health Benefits	22
C. Protection from Catastrophic Costs	25
D. Plan Design Issues and Criteria	28
1. Regulatory Requirements.....	29
2. Cost Factors.....	29
3. Consumer-Directed Health Benefits: Issues for Mental Health Benefits.....	31
III. Administration of Mental Health Benefits: Overview of Carve-Out Purchasing Arrangements	33

IV.	Objectives and Options for Designing an Adequate Mental Health Benefit	37
A.	Provide Protection from Catastrophic Costs, Cover a Wide Array of Treatments, and Allow Flexibility within Plan.	37
1.	Current Practice and Evidence from the Literature	40
2.	Options for Meeting the Objective.	47
B.	Ensure Access to Covered Services	49
1.	Current Practice and Evidence from the Literature	50
2.	Options for Meeting the Objective.	57
C.	Include Evidence-Based Practices and Treatment Guidelines as Available in Mental Health Benefits	57
1.	Current Practice and Evidence from the Literature	58
2.	Options for Meeting the Objective.	63
V.	Conclusions.	65
	References.	69

Appendices

Appendix A:	Actuarial Analysis—Relationship Between Benefits and Premiums	81
Appendix B:	Advisory Panel Members	87

List of Exhibits

Exhibit 1. Summary of Workplace Costs of Mental Illness	18
Exhibit 2. Typical Models of Behavioral Health Care Contracting	35
Exhibit 3. In- and Out-of-Network Cost Sharing	46
Exhibit 4. Benefits and Drawbacks of Carving Out to MBHO	53
Exhibit 5. Hawaii’s Medical Definition in State Independent Review Statute. . .	61
Exhibit 6. NGC Mental Health and Substance Abuse Treatment Guideline Categories	62
Exhibit A-1. Estimated PMPM Benefit Costs (excl. admin.) for Typical In-Network Health Care Plan with Varying Levels of Mental Health and Substance Abuse Benefits (U.S. average, 2005)	83
Exhibit A-2. Estimated PMPM Benefit Costs (excl. admin.) for Typical and Modified PPO Plans with Varying Levels of Mental Health/ Substance Abuse Benefits (U.S. average, 2005)	84
Exhibit A-3. Estimated PMPM Benefit Costs (excl. admin.) for Typical and Modified HMO Plans with Varying Levels of Mental Health/ Substance Abuse Benefits (U.S. average, 2005)	85

Executive Summary

This report explores the current design and administration of mental health coverage and what constitutes adequate mental health coverage in employer-sponsored health benefits. The information and suggestions presented in the report have been informed by an extensive literature review, input from experts in a variety of fields relating to mental health and illness and insurance and benefits, and actuarial analysis. While there is no accepted definition of “adequacy” in mental health benefits, this report lays out the necessary components of an adequate mental health benefit by examining such areas as the evidence base for particular mental health benefits; the effects of different types of benefit limits on access, utilization, and costs; the components of a cost-effective mental health benefit package; and the effects of benefits administration on effectiveness.

Recently published analyses of the latest National Comorbidity Study-Replication revealed high lifetime and annual prevalence of mental illnesses in the United States (Kessler, Berglund, Demler, Jin, & Walters, 2005; Kessler, Chiu, Demler, & Walters, 2005). In light of the high level of burden of illness as a result of the prevalence of mental disorders, reduced productivity, and increased absenteeism caused by those disorders, employers have a vested interest in ensuring that appropriate treatments are available, accessible, and affordable. With medication, rehabilitation, psychotherapy, group therapy, self-help, or a combination of these treatments as well as recovery support services, people with mental illness can recover or manage their conditions. The costs to employers of not sufficiently covering mental health benefits include losses in employee productivity, higher disability costs, and the possibility of employees being

faced with catastrophic out-of-pocket costs that for some may result in medical bankruptcy filings.

The literature reviewed for this study did not provide a conclusive guide to the development of an adequate mental health benefit, but major findings include the following:

- Most employer-sponsored health plans cover mental health services, though these services generally are limited and often have cost-sharing requirements that are higher than those for medical/surgical benefits.
- Factors influencing employer choices in designing mental health benefit packages include costs, regulatory requirements, employee attraction and retention, productivity goals, employee health and well-being, and treatment effectiveness.
- The mental health care market is now dominated by managed care, and nearly

three-quarters of Americans with health insurance are covered by managed mental health benefits.

Based on a synthesis of the literature reviewed, discussions with members of the advisory panel, and our actuarial analysis, we offer the following three objectives that employers and the health plans with which they contract should strive to meet in order to provide an adequate mental health benefit to their employees, along with suggested options that employers should consider for achieving each of the objectives.

Objective: Provide protection from catastrophic costs, cover a wide array of treatments, and allow flexibility within plan—

- **Combine the out-of-pocket maximums for mental and physical health care services.** Patients' out-of-pocket expenses for mental health services should be applied to a unified benefit out-of-pocket maximum that also includes unreimbursed expenses for medical/surgical care.
- **Provide coverage for a variety of treatment modalities.** In order to provide adequate coverage, a health plan should provide for a variety of treatment types, including inpatient, intermediate, and outpatient services and prescription drugs.
- **Provide a flexible mental health care benefit with generous or no limits.** An employer that prefers to retain some limits on care covered may wish to focus on limits for inpatient services and clarify explicit criteria for evaluating medical necessity. Some specific options are as follows:
 - *Eliminating limits for outpatient benefits.* Actuarial analysis of the relationship between benefits and premiums finds that increasing the number of covered visits would increase plan costs by a relatively small amount. As the number of covered services increases, the cost per additional unit of service decreases substantially.
 - *Combining coverage for outpatient and intermediate level services* in a managed but unlimited benefit and retaining some generous limits on inpatient care.
 - *Covering inpatient care with generous limits,* as this is unlikely to induce additional demand. Actuarial analysis indicates that providing coverage for additional inpatient days increases plan costs by a relatively small amount, and the cost per additional day decreases as the number of covered days increases.
 - *Providing a flexible benefit package.* Employers or their health plan vendors should create a flexible mental health benefit plan that covers a range of services and treatment types (including intermediate services) and allows enrollees to trade services of different types among the benefit limits.
- **Use the EAP for access and integrate it with the mental health benefit.** If using an employee assistance plan (EAP), employers should advertise the services to employees and their dependents and use the EAP to get members who need care into appropriate treatment quickly.
- **Use treatment plans and prior authorization.** Employers and plans can utilize provider-developed and plan-approved treatment regimens and prior authorization to manage the care delivered to members. Doing so would reduce demand for unnecessary services possibly induced by increased limits or lower cost sharing.
- **Use a disease case management approach to improve outcomes and help manage**

costs. Employers and health plans have found that using disease case management programs for conditions such as asthma and diabetes is an effective way to manage care tied to clinically desirable outcomes. Similar approaches can be taken for managing the treatment of conditions such as depression or anxiety.

Objective: Ensure access to covered services—

- **Choose mental health carve-out vendors carefully** and negotiate contracts to ensure access, quality of care, care management, and appropriate care for vulnerable populations.
- **Incorporate approaches to coordinate mental and physical health care services.** Provide for communication between different provider types and specialties, to include sharing information about diagnoses, treatment plans, prescribed drugs, and prognoses.
- **Take care in structuring mental health benefits as consumer-directed health benefits become more prevalent.** The literature regarding these plans and what they may mean for mental health care delivery is still in its infancy but is growing rapidly. More information is needed from the professional community regarding any special considerations that mental health should receive when establishing these types of plans.
- **Encourage employees to consider mental health needs in funding health savings accounts (HSAs) or other types of accounts.** This is clearly an issue for someone contemplating an HSA who has an existing mental health condition. It is not yet clear how individuals will finance HSAs to insure against the catastrophic costs of an unanticipated mental illness.

- **Contract with health plans that are accredited by a national quality review organization.** These accreditation standards comprise quality performance indicators related to access and outcomes that help to ensure that mental health benefits are provided on a timely basis in safe and effective treatment settings.
- **Assess care provided by primary care providers and referral procedures.** A substantial amount of treatment in the form of mental health screening and prescribing of psychopharmaceuticals occurs in primary care settings. Primary care physicians should monitor for “triggers” that indicate a need for specialty mental health providers to engage in focused therapies such as short-term cognitive behavioral therapy.

Objective: Include evidence-based practices and treatment guidelines as available in mental health benefits—

- **Include coverage of available evidence-based and effective practices and monitor fidelity with treatment guidelines.** Employer health plan purchasers should require coverage of evidence-based practices, as well as assurances from health plans that covered services are effective, where appropriate.
- **Establish or contract with health plans that have outcomes management systems.** These systems may be able to link the use of evidence-based standards and/or treatment guidelines to clinically desirable outcomes. Health plans with outcomes management systems should be flexible enough to incorporate coverage for treatments aimed at maintenance of functioning and prevention of deterioration as well as those focused on recovery from mental health disorders.



Introduction

In the United States, the prevalence of mental disorders has remained relatively stable over time, but rates of treatment, and total spending for mental health treatment, have been rising. Between 1987 and 2000, the number of persons receiving treatment for mental disorders doubled and spending for those disorders increased 3.5 times, accounting for 7.4 percent of the increase in total health care spending over the period. Only heart disease and pulmonary conditions were responsible for a greater proportion of the total spending increase (Thorpe, Florence, & Joski, 2004). In the United States, 39 million people between the ages of 18 and 54 have at least one mental or substance use disorder each year, and 72 percent of them are in the workforce (Hertz & Baker, 2002). The financial impact of mental disorders in the workplace due to absenteeism, “presenteeism,” and disability costs is significant. (The term “presenteeism” describes a situation in which an employee is at work but is less than normally productive, often as the result of a health problem affecting himself/herself or a family member.) At the same time, however, the cost of providing mental health benefits to workers has declined as a percentage of total health plan costs (Buck & Umland, 1997; Foote & Jones, 1999).

Today, 98 percent of workers with employer-sponsored health insurance have mental health benefits as part of that coverage (Kaiser Family Foundation and Health Research and Educational Trust [KFF/HRET], 2004). This was not always true; mental health treatment was long regarded as a State responsibility, and few employers offered mental health benefits until the 1960s. While mental health benefits offered by employers have expanded since the 1960s, they have yet to reach parity with physical health benefits in many cases.

Employer-sponsored health insurance often covers treatments for mental health less generously than it covers treatments for physical

health and imposes stricter limits on coverage or greater cost sharing for patients. While mental health benefits are regulated by the Federal Mental Health Parity Act (MHPA) and various State parity and other laws, these laws often are limited in scope or applicability (Frank, Koyanagi, & McGuire, 1997). Many of the regulations around the provision of mental health benefits apply only to employers with some minimum number of employees, and due to the Employee Retirement Income Security Act of 1974 (ERISA) preemption, State insurance laws do not apply to self-insured employment-based health plans. These regulatory limitations leave employer-sponsored and other health

plans with much flexibility in designing benefits, and as a result, where full parity is not required, mental health benefits often have lower limits on care provision or greater cost sharing than benefits for general or physical health care.

Coverage of mental health treatments by employers has a direct and measurable effect on corporate financial well-being. A growing body of rigorous cost-effectiveness studies has found that employee productivity is greatly enhanced when such treatments are accessible and affordable (Simon et al., 2001; Wang et al., 2004). To the extent they are not, added costs to employers include the costs of diminished productivity on the job and sick leave absences that may incur the cost of hiring temporary replacements. From the perspective of viewing employees as a firm's most important "human capital" asset, providing insurance for both physical and mental health conditions can be seen as an indispensable investment in meeting a firm's goal of achieving sustainable profits in a highly competitive economy.

A. Purpose of the Report

The purpose of this report is to delineate the necessary components of an adequate mental health benefit, keeping in mind plan sponsors' concerns about the cost of that benefit. This report is designed to offer employers and health plan purchasers suggested options to assist them in providing an adequate mental health care benefit to their covered employees and dependents. It also may serve as a tool for policy makers in developing laws, regulations, and government programs that will assist and encourage employers in this effort. This report embodies the culmination of an effort to explore what constitutes adequate mental

health coverage in employer-sponsored health benefits. The information and options presented in the report have been informed by an extensive literature review spanning the 15-year period from 1989 to 2004; input from experts in the fields of mental health and illness, insurance, employers/purchasers, employee benefits design experts, providers, advocates, and academia; and actuarial analysis. Throughout the study, the research focus has been on mental health care rather than behavioral health care, which includes substance abuse services. To the extent possible in this report, mental health benefits are discussed alone, but in some cases, such as the actuarial analysis, substance abuse services are included.

This effort has utilized empirical information and expert opinion to understand the provision of mental health services and the organization and financing of care. Adequacy of a mental health benefit plan is measured differently by individuals and families with varying mental health care needs. In structuring their benefit plan, employers may ask: For whom is the benefit adequate? What levels of services are covered, in what circumstances, and to meet what level of need?

- "Adequate" will be what works for most people based on their needs, and adequacy should consider the efficacy and efficiency of the benefit. As a concept in mental health benefits, adequacy is distinct from both parity and generosity. An adequate mental health benefit would be one that meets the needs of the bulk of the covered population.
- Adequacy must take into consideration the incidence and prevalence of mental disorders in the population, the possible catastrophic costs of mental disorders,

the effect of benefit limits, the impact of benefits administration, and the knowledge base for the provision of various treatments.

While the literature reviewed for this study generally did not comment directly on the adequacy of mental health benefit packages, some studies presented analyses, perspectives, and recommendations identifying criteria to be considered in determining the adequacy of mental health benefits packages. This report does not recommend one particular set of benefits that will be adequate for all employers, employees, and dependents. Rather, it lays out the basis for providing an adequate benefit and offers three objectives to be met by employer-sponsored mental health benefit plans—along with options for meeting those objectives.

B. Employer Characteristics and Health Plan Types

Employer-sponsored health benefit packages vary from employer to employer. The benefits offered by an employer are influenced by a variety of factors, including both characteristics of the firm and the type(s) of health plan offered.

First, certain employer characteristics are associated with different likelihoods of offering health benefits and different benefit structures. These characteristics are

- firm size;
- industry;
- unionization;
- geographic location;
- self-insured status

Firm size impacts employers' likelihood of offering health benefits in general. Large firms are much more likely than small firms to offer health insurance to their employees.

In fact, nearly all large employers (with 200 or more employees) offer health insurance, while less than 6 in 10 small employers (with fewer than 200 employees) do so (KFF/HRET, 2005). According to benefit consultants, very large firms (with more than 20,000 employees) set the standards in benefits offerings, and mid-sized employers (with 5,000 to 10,000 employees) tend to follow their lead.

The industry in which an employer operates also affects its benefits decisions. Government employers and those in the manufacturing industry are the most likely to offer employer-sponsored health insurance, while employers in service industries and agriculture are the least likely (Agency for Healthcare Research and Quality [AHRQ], 2002). Even among employers that offer benefits, the generosity of the benefit plans also likely varies by industry.

Unionization of a firm's workforce is an important factor in benefit plan design. Whether or not an employee population is able to collectively bargain for its benefits has a great impact on benefits generally. Ninety percent of firms with union workers offer health benefits, while 59 percent of firms that do not have union workers do so (KFF/HRET, 2005).

Various aspects of an employer's geographic location also may affect its decisions about whether to offer health benefits, what type of health plans to offer, and how generous to be in its benefit plan. Considerations could include urban/rural status, demand for health benefits in the local labor pool, other sources of coverage in the area, and types of health plans available. A related consideration is whether the firm has a single location or multiple locations, including whether the company operates locally, statewide, or interstate. Ninety-five percent of firms with two

or more locations offer health benefits, while 45 percent of firms with only one location do so (AHRQ, 2002).

Second, health plan types, alone and in combination with the above employer characteristics, also affect the benefit structures provided by an employer. In addition, an employer may offer employees a choice between different health plan types or may utilize different health plan types in different geographic areas. Managed care arrangements, such as health maintenance organizations (HMOs), preferred provider organizations (PPOs), and point-of-service (POS) plans, dominate the market, while fee-for-service (FFS) mental health benefits are less common. For example, it is common for a very large, national (or international) employer to offer nationally available PPO and POS plans as well as locally based HMOs in areas with high concentrations of employees. The array of health plans an employer offers impacts its decisions around mental health benefits, including the decision as to whether to carve out the benefit to a managed behavioral health organization (MBHO). Employers must consider the particulars of their benefit plans when assessing the likely impact of changes. Various health plan types are utilized to offer mental health benefits to employees.

This discussion of health plan types also must include a mention of consumer-directed health benefits (CDHB). In recent years, there has been a movement toward more consumer involvement in the financing and delivery of health care, and some employers have used high-deductible health plans (HDHPs) with account-based spending funds to encourage more consumer involvement in health care decision-making (Fronstin, 2004). Though CDHB makes up a small

percentage of the insurance market, it is growing. A few employers have begun to offer it as a total replacement for all of their health benefits, and others offer it as a choice among a selection of health plans. Enrollment in CDHB is predicted to grow over the coming years; and as it does, attention will need to be paid to how these plans provide for mental health care and whether enrollee needs are being met, particularly in cases of serious mental disorders. Additional issues related to the movement toward CDHB and spending accounts are discussed in Section II below.

Finally, whether an employer's health plan is self-insured or fully insured (via contracts with third-party health insuring organizations) can affect the administration of mental health benefits in that self-insuring allows an employer to disregard many State insurance laws. Self-insured health plans also are exempt from State insurance laws through ERISA and can exclude State-mandated benefits; they are subject to Federal oversight and the Federal MHPA. However, while self-insured employers have greater flexibility in structuring their health benefit plans and would be able to offer less generous benefits, experts assert that self-insured plans provide at least as generous mental health benefits as fully insured plans (Acs, Long, Marquis, & Short, 1996). Self-insured employers, which tend to be larger employers, can have greater control and flexibility over their health benefit packages because they administer their own health plans (or use a third-party administrator). On the other hand, employers with fully insured plans purchase a health benefits package from an insurer and pay premiums for their covered employees. These insurance products are subject to applicable State and Federal laws.

C. Method

1. Interviews and Conceptual Framework

Before the literature review was conducted, key experts representing various stakeholder groups were interviewed and asked to discuss the issues employers face as they design and administer mental health benefits. Expert input and initial research findings then were used to develop a conceptual framework to guide the literature review and analytic report.

2. Literature Review

Articles included in the literature review related to the delivery of mental health services in private managed care plans in the United States during the past 15 years. Thus, the literature spanned the period from 1989 to 2004, during which some key milestones related to the provision of mental health care services were achieved.

- In the early 1990s there was a greater movement to managed delivery systems for behavioral health care. While physical health care already had begun transitioning to managed care, behavioral health care services mostly remained in FFS type plans.
- In 1996, the Federal MHPA was signed into law, with implementation occurring in 1998. MHPA achieved mental health parity to some degree, but differences between physical and mental health care persist.

Several articles specifically address the impact of these events, while others written before their occurrence speak for or against their enactment. These articles provided a useful “before-and-after” perspective on these important issues.

Literature in the review included professional, peer-reviewed, published articles as

well as unpublished “fugitive” literature. Fugitive literature refers to reports, analyses, presentations, position statements, and other general information and research published in non-peer-reviewed sources, such as publications by mental health professional and advocacy organizations. It also may include internal studies conducted by employers, employer groups, insurers, managed care organizations (MCOs), and MBHOs. Fugitive literature supplemented the peer-reviewed literature and also was used in cases where little or no peer-reviewed literature was available.

The initial search was undertaken via PubMed, an electronic retrieval database. The specific search terms used included mental health care, employee assistance programs, managed behavioral health, and a combination of the following terms with “mental health:” carve-out, cost sharing, parity, benefit design, adverse selection, private insurance, managed care, evidence-based medicine, and benefit administration. The search was enhanced by reviewing references cited in the literature to ensure that seminal and influential works were not missed. Additional searches were performed in specific publications, including *Health Affairs*, *Psychiatric Services*, *Archives of General Psychiatry*, and the *Journal of the American Medical Association*. These searches produced literature on the evidence base for different mental health services; the factors affecting benefit design; the characteristics of existing employer-sponsored mental health benefits and analyses of the costs of such benefits; the prevalence of catastrophic costs; and the effects of methods of benefits administration on access, utilization, effectiveness and costs. In all, approximately 7,500 articles were identified.

Nearly 60 percent of the articles identified were strictly clinical in nature, and were eliminated. The literature search also resulted in numerous duplicate citations, which were removed. The remaining articles were sorted by relevance. The following criteria were applied to the 100 most relevant articles for each search term, as determined by the search engine(s):

- Published in English between 1989 and 2004;
- Conducted in the United States;
- Addressed one or more of the following topics: mental health benefits design; financial analysis of mental health benefits; catastrophic costs; administration of mental health benefits; recommendations regarding adequate mental health benefits;
- Addressed mental health benefits from a managed care perspective and focused on private insurance coverage;
- Focused on health services and management issues rather than clinical studies; and
- Considered credible by most audiences, including industry experts and academics, though not necessarily peer-reviewed (for fugitive literature sources).

References not meeting these selection criteria were eliminated, the remaining articles were analyzed, and the literature review was drafted. An advisory panel of industry experts, including those previously interviewed, was then convened via teleconference to discuss the draft literature review. (See Appendix B for the full list of panelists.) This advisory panel provided input on the findings described in the draft literature review, identified areas for further research, and suggested additional literature. Based on the feedback provided by the advisory panel, the literature review was revised and expanded by per-

forming additional targeted searches and adding recommended articles.

3. Actuarial Analysis

Actuarial analysis was performed of the costs of different levels of mental health benefits. To estimate the costs associated with various mental health benefit packages, a series of net premium calculations (i.e., excluding administrative costs) was performed for a typical health care benefit package, assuming different levels of mental health benefits for each calculation. The plan design used was typical of what might be found in an HMO or the in-network portion of a PPO or POS plan (after converting all flat-dollar copayments into coinsurance percentages). It included a \$100 combined annual deductible for all services, a 90 percent benefit rate (i.e., 10 percent beneficiary coinsurance) for physical health services, and a \$1,000 out-of-pocket limit for all beneficiary cost sharing. Cost estimates were developed using a computer program based on commercial health insurance plans and populations, which was calibrated to reflect average costs in the United States for calendar year 2005. (See Appendix A for a complete description of the actuarial analysis and results.)

4. Report

A report was drafted using the findings from the literature, input from the members of the advisory panel, and actuarial analysis of the costs of different levels of mental health benefits in a typical health care benefit package. The advisory panel was then convened in an in-person meeting to discuss the draft report. Based on the feedback of the advisory panel, the report was then revised and augmented with additional research and information on select topics.

Additional literature sources were reviewed and used in preparing the final report for this study, including 13 published in 2005, which provided the most up-to-date statistics in specific areas. In total, 178 literature sources are cited in this final report.

D. Organization of the Report

This report is organized as follows:

- Section II discusses the literature regarding the prevalence of mental disorders and conditions and the financial and other consequences of untreated mental disorders;
- Section III addresses an important issue in the administration of mental health benefits, namely, the use of carve-out arrangements that contractually split administration of general medical and mental health benefits between two health insuring organizations;
- Section IV identifies and describes key objectives employers should strive to meet in crafting their mental health benefit plans and examines current practices, describes the published evidence from the clinical and health services literature, and provides suggested options for employers in the effort to meet those objectives; and
- Section V presents concluding thoughts and a recap of the objectives and options to ensure the provision of adequate mental health benefits.



Prevalence and Financial Implications of Mental Illness

This section describes the prevalence of mental disorders in the United States, the financial implications to employers of those mental disorders and business reasons to provide adequate mental health benefits, including the cost of providing mental health benefits and returns on that investment, protection from catastrophic costs of mental disorders for individuals and their families, and plan design issues and criteria.

A. Prevalence

The 2004 National Survey of Drug Use and Health (NSDUH) estimates that the 12-month period prevalence of “serious psychological distress” (SPD) among non-institutionalized adults aged 18 years or older in the United States is 9.9 percent, representing approximately 21.4 million persons (SAMHSA, 2005). The NSDUH estimate is based on a 6-item index of psychological distress experienced “over the past 12 months”. Only those individuals with index scores of 13 and above are classified as having “serious psychological distress” (SPD). Persons with scores ranging from 1 to 12 are presumed to have “non-serious” psychological distress, and those who score 0 presumably have “no” psychological distress.

In contrast, the 2001–2003 National Comorbidity Study-Replication (NCS-R) estimates that 26.2 percent of non-institutionalized adults aged 18 and older

experienced some type of mental disorder(s), ranging from mild to severe, over a 12-month period (Kessler, 2005). Because the NCS-R captures the 12 month period prevalence for mental disorders that includes “mild” cases, it will include persons who meet the NSDUH criteria for “non-serious” psychological distress.

Consequently, the 12-month period prevalence of SPD estimated by the NSDUH is lower than the estimated 12-month period prevalence of persons with mental disorders estimated by the NCS-R because the NSDUH criteria for SPD is designed to exclude persons with “mild” cases of mental disorders or “non-serious” psychological distress. Excluding the “mild” disorders, the NCS-R prevalence rate for moderate to severe mental disorders is 16 percent (moderate=9.8%; severe=5.8%), a rate which is more consistent with the NSDUH estimate of SPD.

These differences in criteria for the identification of persons with mental problems

between these two epidemiological cross-sectional survey results in differences in estimates of prevalence and treatment rates for persons with mental illness.

Recently published analyses of the latest National Comorbidity Study-Replication (a nationally representative face-to-face household survey conducted between February 2001 and April 2003) revealed high lifetime and annual prevalence of mental illnesses in the United States (Kessler, Berglund, Demler, Jin, & Walters, 2005; Kessler, Chiu, Demler, & Walters, 2005). The authors estimated that approximately half of all Americans will meet the criteria for one or more Diagnostic and Statistical Manual of Mental Disorders (4th ed.) (DSM-IV) disorders at some point in their lives, with first onset usually in childhood or adolescence.

The availability of mental health services is important for persons who have chronic and life-threatening physical conditions, such as cancer, heart disease, diabetes, asthma, multiple sclerosis, or HIV/AIDS (Drainoni, 1999). Supportive mental health services may assist them with managing their illnesses and may lead to better outcomes. For example, depression following surgery for a myocardial infarction is a common occurrence, and if left untreated the risk of death 18 months after surgery is nearly doubled (Frasure-Smith, Lespérance, & Talajic, 1995). Risk of cardiac death in the 6 months after an acute myocardial infarction was estimated to be approximately four times greater in patients with depression compared with nondepressed control subjects. The risk of cardiac death remains elevated even 5 years after an acute myocardial infarction, with cardiac patients with depression or depressive symptomatology having an increased

risk of greater than 3.5-fold compared with cardiac patients without depression (Evans et al., 2005). In another study, for the 5 to 10 years following hospitalization for coronary artery disease, cardiac patients with moderate to severe depression had an 84 percent greater risk of a cardiac death, and a 72 percent greater risk after more than 10 years, than cardiac patients without depression (Barefoot et al., 1996).

Studies also have found that the rate of depression in individuals with diabetes is greater than in individuals without diabetes. A study published in 2002 found that individuals with diabetes were 2.5 times more likely than a comparable sample from the general U.S. population to have diagnosed depression. Patients with comorbid diabetes and depression were most often younger adults (< 65 years), women, and unmarried individuals. Patients with diabetes and depression had higher use of ambulatory care (average of 12 annual visits for comorbid diabetes and depression versus an average of 7 annual visits for patients with diabetes but no depression). Patients with comorbid diabetes and depression filled more prescriptions (average of 43 annual prescriptions) than their counterparts without depression (average of 21 annual prescriptions). Finally, for the year 1996, among individuals with diabetes, total health care expenditures for individuals with depression was 4.5 times higher than that for individuals without depression (\$247,000,000 versus \$55,000,000) (Egede, Zheng, & Simpson, 2002).

Whether the primary diagnosis is a mental or physical disorder, the benefits to employers of providing adequate access to a coordinated spectrum of mental health care services are clear. Doing so results in higher employee productivity, reductions in severity of illnesses

that affect employees' ability to do their jobs and their quality of life, and reductions in costs for employer purchasers when fewer expensive hospitalizations occur as conditions are promptly detected and treated early in lower intensity levels of care. Each of these considerations is addressed below.

B. Financial Implications

The costs associated with mental health care can be significant, but there are also business costs of untreated mental illness, as evidenced by increased absenteeism, presenteeism, diminished productivity, and increased disability claims costs. In fact, in some cases, these costs have been found to be greater than the cost of providing mental health care benefits. The decision of employers to include mental health care services in their benefits packages may be informed by the potential for significant return on investment (ROI) and the opportunity to realize future medical cost offsets. However, the measures of both the costs of mental illness in the workplace and potential savings through ROI and cost offsets are still in development, and exact quantification is difficult.

In light of the high level of burden of illness as a result of the prevalence of mental disorders, employers have a vested interest in ensuring that appropriate treatments are available, accessible, and affordable. Financial implications of mental disorders include both the direct medical costs of treating the disorders and indirect business costs of productivity losses associated with the conditions, which may increase if coverage for mental disorders is insufficient. The costs of not sufficiently covering mental health benefits include losses in employee productivity (in the forms of absenteeism and presenteeism) either as a result of the employee's own

mental disorder or as a result of having to care for a dependent whose mental disorder is not sufficiently covered.

In addition, if an employee or a dependent of an employee has a serious mental illness that is expensive to treat, insufficient mental health benefits will be exhausted quickly, leaving the family with high and often unaffordable self-pay costs. A 2001 analysis of 1.5 million personal bankruptcy filings in the United States revealed that nearly half were filed due to medical bills that exceeded a family's ability to pay for costs not covered by their health plans. Approximately 10 percent were for bills related to treatment for mental disorders (Himmelstein, Warren, Thorne, & Woolhandler, 2005).

Workplace studies have found that direct medical costs to employers generally amount to less than 50 percent of the total employer costs associated with physical and mental illnesses among employees and their dependents (Goetzel, Hawkins, Ozminkowski, & Wang, 2003). While some have characterized productivity losses as "indirect costs," in reality, they are true costs to the organization. Goetzel, Hawkins, Ozminkowski, and Wang (2003) described the nature of these costs:

... [R]esources must be spent to compensate for downtime or for tasks normally performed by absent employees, either in the form of overstaffing or by hiring replacements for them. If employers choose not to overstaff or hire replacements, they may choose to incur the productivity loss, but this will result in fewer goods and services sold, lower revenues, and lower profits...

[I]ndividual health plays an important role in the performance of workers and ultimately the organization that employs them. Knowing that these conditions exert a cost burden on both health and productivity outcomes should inspire

company officials to direct more attention toward better management of these conditions so that worker performance is not compromised (pp. 5, 13–14).

1. *The Costs to Employers of Untreated Mental Illness*

Quantifying the cost of mental illness at the workplace is challenging, and the literature demonstrates that estimates vary greatly. This point was reiterated by members of the advisory panel, who cautioned that it is important to bear in mind that measurements of productivity losses and other workplace costs are in developmental stages. Metrics for the cost of mental illness in context of the workplace include measures of lost productivity and presenteeism, absenteeism, and disability claims costs. “Presenteeism” refers to an employee who is physically present on the job, but due to emotional difficulties, has decreased productivity. Employer costs for lost productivity and absenteeism are significantly higher than direct spending for mental health care services (England, 1999).

A. Lost Productivity and Presenteeism

Estimates of the indirect costs of mental illness in the workplace vary significantly. In 1993, employers incurred \$24 billion in losses from lost productivity and work time associated with employees with depression, which affects about 12 million adults in the workforce (England, 1999). In a later study, depression was estimated to cost \$28.8 billion in lost productivity and worker absenteeism (Coalition for Fairness in Mental Illness Coverage, 2003). In another analysis, Greenberg et al. (2003) found that 60 percent of the economic burden of depression was workplace costs related to absenteeism and presenteeism. The authors reported that in 2000, the workplace costs of depression

totaled \$51.5 billion, or 62 percent of the total economic burden of the illness. The National Mental Health Association (NMHA) estimates that 20 million employee workdays per year are lost due to depression alone (Whitehouse, 2003). Another study reported that the cost to employers of lost productivity among employees with depression was estimated to be \$44 billion annually (Langlieb & Kahn, 2004). A national study by Stewart, Ricci, Chee, Hahn, and Morganstein (2003) found that \$31 billion a year was lost due to unproductive work time, averaging 5.6 hours per week of lost productivity per depressed worker, compared with 1.5 hours per week per nondepressed worker. A report by Pfizer, Inc. estimated that mental disorders are associated with 217 million days of absence or lost productivity, costing \$17 billion annually (Hertz & Baker, 2002). Simon et al. (2001) found that treatment of workers with depression could lead to indirect cost savings that outweigh the direct costs of treatment.

When the scope of conditions studied is broader and includes mental illness and addictive disorders more generally, figures estimating lost productivity costs grow to \$105 billion. Using this expanded scope of conditions, for example, mental and addictive disorders resulted in 1 billion lost days of productivity in 1997 (NMHA, 2001).

Lerner and colleagues developed the Work Limitations Questionnaire (WLQ) as a measure of the on-the-job impact of chronic health problems and/or treatments, including the impact of depression. Using the WLQ, Lerner et al. (2003) found that employee work limitations have a negative impact on work productivity. Depressive symptoms were found in 15 percent of employees surveyed. However, in contrast to other studies

reviewed, depressive symptoms were not significantly associated with lower productivity. These results may reflect reporting inconsistencies, as well as the need for a depression indicator based on established diagnostic criteria as opposed to a general mental health score.

Goetzel (2003) presented estimates of presenteeism for various ailments: On a day during which an employee is affected by an anxiety disorder or depression, 2.2 hours would be unproductive because of the condition. Presenteeism is estimated to contribute more to lost productivity than disability and absenteeism combined (Hymel & Loeppke, 2003). A study by Wang et al. (2004) of the effects of untreated major depression among a cohort of service industry personnel found that, as compared to allergies, arthritis, asthma, back pain, headaches, and high blood pressure, major depression had a significant deleterious effect on job performance. The loss in productivity was measured as equivalent to approximately 2.3 days absent because of sickness per depressed worker per month of being depressed. The authors noted that even with the relatively low salaries of the service workers in the study, the combined salary-equivalent effect of major depression on absenteeism and lost productivity was more than \$300 per month. According to the authors, an important implication of these results is that the cost-effectiveness of depression treatment from the perspective of the employer might be substantially greater than previously thought (Wang et al., 2004).

B. Absenteeism

Several studies have looked at absenteeism resulting from mental illness. Absenteeism is greater among workers with mental health concerns than those without (French &

Zarkin, 1998). A survey of employers found that employees commonly miss 3 to 5 days of work each year and that stress and mental health issues at work were on the rise; on average, the cost of missed workdays was about \$327 per day (Updike, 2003). Individuals under a high level of stress are more than twice as likely to be absent from work more than five times per year (McClanathan, 2004).

Thirty percent of individuals with depression miss one or more workdays each month (J.D. Power and Associates, 2004). Workers with depression are three times more likely to miss work than those who do not have depression (American Psychological Association, 2004). Jones and Brown (2003) stated that absenteeism and presenteeism related to depression among workers result in \$24 billion in losses for employers.

In a 1999 study, decreased use of mental health services was associated with increased absenteeism and increased use of medical outpatient services among employees of a large corporation over a 3-year study period (Rosenheck, Druss, Stolar, Leslie, & Sledge, 1999). Employees in the same firm who did not use mental health services did not exhibit similar increases in absenteeism and use of outpatient medical services.

C. Disability Claims Costs

Disability claims costs related to mental disorders contribute to employer costs. Workers with depression are four times more likely to take disability days than workers who do not have depression (American Psychological Association, 2004). Workers with depression have from 1.5 to 3.2 more short-term disability days, with disability costs for these days ranging from \$182 to \$395 per worker (Coalition for Fairness in Mental Illness Coverage, 2003; Kessler et al., 1999).

Disability claims costs related to mental illness are lower in employer health plans that provide greater access to outpatient mental health services (Coalition for Fairness in Mental Illness Coverage, 2003).

Conti and Burton (1995) found that individuals with depression who were on short-term disability had longer average lengths of disability and a higher probability of recidivism than short-term disability recipients with physical health care conditions such as low back pain, heart disease, high blood pressure, or diabetes.

Exhibit 1 summarizes various estimates of the workplace costs of mental health illness presented in the literature.

2. *The Cost of Providing Mental Health Benefits*

A key concern among employers is that providing better mental health care benefits will result in higher costs and increased utilization of those services. According to a trade journal published by International Society of Certified Employee Benefit Specialists, mental health care costs increased significantly throughout the 1980s and early 1990s; in one year (from 1987 to 1988), these costs grew by 27 percent (Sterman, 1997). Spending for mental health disorders increased three and a half times between 1987 and 2000 (Thorpe, Florence, & Joski, 2004). However, with the growth of health care

Exhibit 1. Summary of Workplace Costs of Mental Illness	
<i>Study</i>	<i>Estimated Costs*</i>
Lost Productivity	
England, 1999	\$24 billion**
Coalition for Fairness in Mental Illness Coverage, 2003	\$28.8 billion**
Greenberg et al., 2003	\$23.8–\$51.5 billion**
Whitehouse, 2003	20 million lost workdays**
Langlieb & Kahn, 2004	\$44 billion**
National Mental Health Association, 2001	\$105 billion
Stewart, Ricci, Chee, Hahn, & Morganstein, 2003	\$31 billion
Hertz & Baker, 2002	\$17 billion
Wang et al., 2004	\$300 per employee per month
Absenteeism	
Updike, 2003	\$327 per day
J.D. Power and Associates, 2004	30% of workers with depression miss 1 or more workdays per month
Jones & Brown, 2003	\$24 billion
Disability Claims Costs	
Coalition for Fairness in Mental Illness Coverage, 2003	\$182 per day
Kessler et al., 1999	\$395 per day
* Estimated costs are annual unless otherwise noted.	
**Costs associated with workers with depression.	

costs generally, a study of a panel of 171 employers with more than 500 employees and a stratified random sample of all U.S. employers with 10 or more employees indicated that employers' costs of providing mental health benefits decreased from 6 percent to 4 percent of total health plan costs between 1993 and 1995 (Buck & Umland, 1997). Foote and Jones (1999) reported that in the Federal Employee Health Benefits Program (FEHBP), the cost of behavioral health services dropped from 5.3 percent to 1.9 percent of total claims from 1987 to 1997, while the benefit plans did not change significantly. The authors attributed this decrease to the growing use of utilization review techniques. Private employers also experienced declines in mental health premium costs ranging from 30 percent to 50 percent upon implementation of benefits management. From 1988 to 1998, the cost of behavioral health care premiums decreased from 6.1 percent to 3.2 percent of total claims costs (Foote & Jones, 1999). In addition, the actuarial analysis performed for this study, which is described in Appendix A, found that increasing the generosity of mental health benefits by raising (or even eliminating) the limits placed on service use would increase plan costs by only a relatively small amount on a per-member per-month (PMPM) basis.

In assessing service needs and costs, employers must consider their employees' dependents as well as the employees themselves. Employer-sponsored mental health benefit packages typically provide mental health coverage to both employees and their dependents. Glied and Cuellar (2003) reported that an estimated 11 percent of American children and adolescents have a mental health condition causing significant functional impairment. The authors found that the total

mental health service-related expenditures for privately insured children and adolescents were \$11.75 billion in 1998, and the out-of-pocket share of costs for these children was 33.5 percent of the total cost in 1998, a significant drop from 1987. This decrease in out-of-pocket costs was due to managed care, increased treatment through primary care providers, and increased prescription drug coverage (Glied & Cuellar, 2003). A study by Glied, Hoven, Moore, Garrett, and Regier (1997), using 1992 data from the National Institute of Mental Health (NIMH) Methods for Epidemiology of Child and Adolescent Mental Disorders study, reported that families with insurance typically paid for half of the mental health services for their children. A study of enrollees in a behavioral health care carve-out found that adolescents are more likely to use inpatient mental health services than adults and younger children, the annual mean cost of inpatient care for adolescents being \$8,975, approximately \$4,000 more than the cost for adults. The authors assert that these higher costs for adolescents imply that the elimination of coverage limits may benefit this group the most (Gresenz, Liu, & Sturm, 1998).

The cost of mental health treatment is increased further by nonadherence to prescribed treatment, which can lead to a greater likelihood of relapse, rehospitalization, and poor outcomes for patients with serious mental illnesses (Centorrino et al., 2001). Rittmannsberger, Pachinger, Keppelmuller, and Wancata (2004) found that nonadherence to prescription regimens can result in additional inpatient treatment (44.8 days, compared with 20.6 days for compliant patients) and is associated with a lack of adequate treatment. Of the 95 patients in inpatient psychiatric treatment studied by

Rittmannsberger and colleagues, only 43 percent took their medicine as prescribed. In addition, one-third of patients with bipolar disorders take less than 30 percent of their medication, leading to rehospitalization and suicide. Nonadherence to treatment is common; however, interventions that address issues of appropriately taking medication to manage illness can enhance adherence (Sajatovic, Davies, & Hrouda, 2004).

Two studies looked at the level of spending necessary to ensure access to mental health care services, specifically in a managed care environment. Weissman, Pettigrew, Sotsky, and Regier (2000) suggest that a PMPM expenditure of \$6.00 (in 1997 dollars) is necessary to provide adequate mental health benefits. Cuffel and Regier (2001) analyzed data on service use and spending from 1992 to 1998 to estimate a target PMPM expenditure of about \$4.50 to ensure access to mental health care services at the level of use that prevailed prior to the widespread adoption of managed care. The authors of both reports suggested that employers that spend substantially less than the amount estimated in the studies may be hampering access to needed mental health services and may be at risk for experiencing higher disability or medical costs.

The spending target of \$6.00 PMPM found by Weissman, Pettigrew, Sotsky, and Regier (2000) is in 1997 dollars. The actuarial analysis prepared for this study (see Appendix A) updates the 1997 estimate to 2005. Projecting the \$6.00 target to 2005 using the Consumer Price Index (CPI) for medical care services (a component of the CPI for medical care in general) results in an increase of 41.3 percent, bringing the amount to \$8.48 PMPM. However, it is more appropriate to use an adjustment factor based on

the overall increase in per-capita medical spending, because that includes utilization increases as well as price increases. Using such a factor to project the authors' spending target to 2005 dollars results in an increase of 63.1 percent, bringing the amount to \$9.79 PMPM. Covering substance abuse services would add approximately 35 percent to this amount, resulting in a total of \$13.22. Note that this is very close to the PMPM benefit cost range calculated for a "less generous" HMO plan (\$13.05–\$13.26) in the actuarial analysis described in Appendix A. (Cuffel and Regier do not mention any adjustment of their data to a single base year, so their spending target could not be projected forward with the same degree of precision as Weissman's target.)

According to members of the advisory panel, plans with generous benefits do not lead to high costs and utilization, but they do lead to employee satisfaction and positive feedback. Employee satisfaction can serve to reduce turnover and improve employee retention—a major goal of benefits in general.

3. Return on Investment

Employers that provide behavioral health coverage do so to improve the health and well-being of their employees, and because they believe that their businesses will benefit from the investment. Employers that cover behavioral health services may experience improvements in the rates of disability program use, medical care costs, productivity, absenteeism, and performance. Mental health treatment is more cost-effective than treatment for some physical conditions (Langlieb & Kahn, 2004).

The NMHA (2001) reported that for every dollar spent on prevention and early treatment of mental illness and addictive disorders, between two and ten dollars is saved. In

testimony before the House Committee on Energy and Commerce, Subcommittee on Health, Regier described one employer that reported a four-to-one ROI in mental health care provision once medical claims, absenteeism, and turnover were factored in (Regier, 2002).

Zhang, Rost, Fortney, and Smith (1999) studied 435 subjects and determined that treatment for depression pays for itself in terms of savings in lost earnings. The authors noted that their measurement of cost included only lost workdays, and did not include other benefits such as reduced pain and suffering and increased productivity while at work. The study also suggests that cost sharing should be limited to encourage individuals with depression to seek professional help. Wang et al. (2004) found that productivity losses related to depression appear to exceed the costs of effective treatment. There is growing recognition that employer purchasers need more accurate and comprehensive estimates of the cost-effectiveness of mental health treatments, particularly estimates that reflect the costs of productivity losses resulting from absenteeism and presenteeism. NIMH currently is sponsoring a new effectiveness trial known as the Work Outcomes Research and Cost-Effectiveness Study. The results of this trial and future research initiatives may illustrate the ways that depression and other mental illnesses affect work performance and better demonstrate the value that mental health treatment holds for employers (Wang et al., 2004).

4. Medical Cost Offsets

Cost savings, or cost offsets, may occur in general medical care as a result of increased access to mental health care services. The cost offset effect of mental health care treatment occurs when expenditures in the mental

health sector lead to savings in another sector or to overall savings. Goodman (1989) reported that mental health care does substitute for aspects of ambulatory physician medical care, and several studies have found cost offsets in physical health services (or the potential for them) as a result of the provision of certain mental health services (Gabbard & Lazar, 1997; Goodman, 1989; Holder, 1998).

Compared with the general population, cost offsets are more likely to occur in the following three populations: distressed elderly medical inpatients, primary care outpatients with multiple unexplained somatic complaints, and nonelderly individuals with alcoholism (Olfson, Sing, & Schlesinger, 1999). Because the evidence supporting cost offsets occurs among targeted mental health interventions in specific population groups, the cost offset effects may not be applicable to broader populations or to more general mental health care services (Sturm, 2000) and are subject to continued analysis and debate among industry experts.

Nitzkin and Smith (2004) cited studies showing high prevalence of psychiatric illness and/or depression among high utilizers of medical care. These authors suggested that screening for and effective treatment of depression may serve to reduce physical complaints and medical visits. Simon, Ormel, Von Korff, and Barlow (1995) studied the overall health care costs associated with depression and anxiety disorders among primary care patients. Patients with depression or anxiety disorders had higher health care costs than patients with no disorder. In a 6-month period, the total costs (mental and physical) for patients with one of the disorders were \$2,390, compared with \$1,397 for patients without depression or anxiety. The

cost differences reflected higher utilization of general medical services.

Simon et al. (2001) examined the cost-effectiveness of a depression management program for high utilizers of medical care and found that the program produced better health outcomes but also increased health service costs. Patients in the depression management program made, on average, two more outpatient visits than the control group and were significantly more likely to receive antidepressant treatment. The authors asserted that achieving better medical results often requires the investment of additional resources. The study included only a 1-year period to study cost-effectiveness; therefore, long-term cost savings may not have been captured.

Olfson, Sing, and Schlesinger (1999) looked at a range of psychosocial treatments and found that the treatments were associated with an average 10 percent reduction in inpatient medical care costs. Individuals frequently seeking outpatient medical services for unexplained medical complaints who also received mental health services had about half the medical costs of like individuals who received no mental health services. Medical costs are reported to decrease by as much as \$900 per employee per year, and absenteeism can be reduced by 9 percent if employees with depression are treated (Regier, 2002). A study of depression in the workplace found that between 45 percent and 98 percent of pharmacotherapy costs for depression could be offset by increased productivity at work (Kessler et al., 1999).

Olfson, Sing, and Schlesinger (1999) asserted that, to achieve cost offsets, physical and mental health care delivery and financing should be integrated, utilization management and medical staff should be trained to identi-

fy patients whose high medical care use may be influenced by mental health conditions, and pricing policies should be combined with utilization management techniques to encourage access to mental health care services. England (1999) stated that to provide mental health care that is appropriate and yields cost offsets, employers and health plans must look beyond the benefit design itself toward care management tools.

In addition, some preventive mental health interventions have been shown to lead to both cost offsets (or cost savings in general health care costs) and positive health outcomes (Olfson, Sing, & Schlesinger, 1999). Examples of effective preventive interventions are prenatal and infancy home visits, targeted smoking cessation, targeted short-term mental health therapy, self-care education for adults, presurgical education for adults, brief counseling to reduce alcohol use, screening children and adolescents for behavioral disorders, and screening adolescents and adults for use of tobacco, use/abuse of alcohol, depression, and anxiety (Dorfman, 2000; Dorfman & Smith, 2002; Nitzkin & Smith, 2004). Such preventive interventions could be considered to be consistent with the overarching goal of managed mental health care and may be appropriate for inclusion in managed care.

5. Parity of Mental Health Benefits

In recent years, there has been an effort to require through Federal law that the mental health benefits provided through a benefit plan be on par with its medical/surgical benefits. Employers and other plan purchasers have been concerned about the potential cost increases of meeting this requirement. As described below, studies and evaluations of the cost effects of mental health parity showed that the cost increases plans experi-

enced were largely insignificant, and other plans reported cost decreases with mental health parity implementation. In addition, the studies described below found that very few employer purchasers dropped mental health benefit coverage altogether, and that quality and access were improved as a result of enacting parity of coverage.

The National Business Group on Health, formerly the Washington Business Group on Health, convened a group of eight very large employers that provided generous mental health benefits to their employees. These employers together employed about 1.2 million employees in the United States, and their health plans covered more than 2.4 million lives. Apgar (2000) reported that one of these employers implemented behavioral health parity in 1993 within a managed care carve-out context and experienced a 46 percent drop in inpatient costs and a 21 percent drop in outpatient costs.

A. The Effects of Federal Mental Health Parity Legislation

The Federal MHPA was signed into law on September 26, 1996. The law prohibits differential treatment regarding annual and lifetime maximums and reimbursement ceilings between physical and mental health benefits. It applies only to plans that offer mental health benefits and does not mandate inclusion of such benefits in health plan packages. Plans that have mental health benefits are allowed to drop such coverage entirely, and they are allowed to continue to place annual and day visit limitations on covered services, as well as to require higher levels of cost sharing for mental health benefits than for physical health benefits (Frank, Koyanagi, & McGuire, 1997).

During debate over Federal mental health parity legislation, a key concern was the impact of parity on the cost of providing mental health benefits. Estimates of the claims cost increases resulting from the Federal parity law ranged from 0.3 percent to 11.4 percent, depending on the specifications of the parity provisions (Fronstin, 1997; Sing, Hill, Smolkin, & Heiser, 1998). However, a recent U.S. Government Accountability Office (GAO) study indicated that the costs associated with the Federal mental health parity law appear to have been negligible. The GAO (2000) found that, while the majority of employers it surveyed did not know to what extent their claims costs were affected, only 3 percent of private employers with more than 50 employees in States without more comprehensive parity laws indicated that their claims costs had increased; 37 percent of surveyed employers reported that implementing the Federal parity rules did not increase claims costs. However, two-thirds of employers that were newly compliant with the Federal rules had increased restrictions for other plan features, such as office visit or hospital day limits, which may have limited the extent to which costs would increase. The survey also found that consumers in these States have seen only minor changes in their health benefits, with little or no increase in access to mental health services. The GAO survey results showed that less than 1 percent of employers eliminated their benefit plans (for mental health or health in general) after enactment of the Federal mental health parity law. The survey also reported that a more comprehensive parity law covering service limits, cost sharing, or both would increase costs by between 2 and 4 percent.

B. Parity in the Federal Employees Health Benefits Program

The U.S. Department of Health and Human Services (DHHS) recently published an evaluation and actuarial analysis of parity in the FEHBP. In January 2001, the FEHBP implemented a policy of full parity, requiring benefit design features for behavioral health services (mental health and substance abuse), such as deductibles, copayments, and limits on visits and inpatient days, to match those for general medical care in all FEHBP plans. This study looked at both implementation results and the impact of the parity policy. Overall, the study found that the implementation of the parity policy was achieved as intended and had little or no significant adverse effect on access, spending, or quality, and it provided users of behavioral health care services with improved financial protection (DHHS, 2004). The study evaluated nine FEHBP plans that were matched to a non-FEHBP comparison group. The use of behavioral health care increased universally during the study period and was reflected in both the FEHBP and non-FEHBP plans. In comparison to the non-FEHBP plans, the FEHBP parity policy did not specifically increase the utilization of mental health care. Even with an increase in access, after adjusting for global spending trends, spending for behavioral health care services actually declined in seven of the nine FEHBP plans, with four of these plans seeing statistically significant declines. The parity policy also resulted in decreases in out-of-pocket spending for beneficiaries in six of the nine FEHBP plans, five of which were statistically significant. Beneficiaries in the other three plans experienced increases in out-of-pocket spending that were in line with system-wide trends. Finally, the study found that quality, represented by the quality of

treatment for major depressive disorder in adults, remained unchanged or improved slightly as a result of the parity policy in all but one of the FEHBP plans studied.

C. The Effects of State Mental Health Parity Legislation

The experiences of States that had implemented mental health parity laws before the Federal parity law, which became effective January 1, 1998, also provide some insights into the cost effects of mental health parity. Sing, Hill, Smolkin, and Heiser (1998) estimated that full parity for mental health and substance abuse services (which is more comprehensive than the Federal parity law) would raise premiums by 3.6 percent on average. In testimony before the U.S. House of Representatives Committee on Energy and Commerce, Subcommittee on Health, Regier (2002) cited studies showing that in Texas and North Carolina, mental health parity implemented in combination with managed care resulted in costs for mental health benefits decreasing between 30 percent and 50 percent, and the population accessing care increased 1 to 2 percent. In Maryland, where mental health care already was provided largely through managed care, costs increased by less than 1 percent when parity was introduced in 1994 (Regier, 2002). In a study of Ohio's State employee benefits program, which implemented a behavioral health carve-out with parity, researchers learned that the cost of behavioral health services was the same in the periods before and after parity was implemented (Sturm, Goldman, & McCulloch, 1998).

Vermont implemented the most comprehensive parity law in the Nation in 1998, at the same time the Federal MHPA went into effect. The State's parity law established equality of coverage for both mental health

and substance abuse and exceeded the provisions of the Federal parity law on every dimension. The law defined mental health conditions broadly and required equal terms with general health care for service limits and cost sharing. Rosenbach et al. (2003) studied the impact of the Vermont parity law on health plans, employers, providers, and consumers. While their study was limited to only the first 2 to 3 years of parity in Vermont, the authors identified several major conclusions around parity in mental health benefits:

- Parity did not cause employers to drop coverage or switch to self-insured products.
- Managed care for mental health and substance abuse services was an important factor in controlling costs.
- Access to outpatient mental health services improved with parity.
- Total spending (health plan payments and consumer out-of-pocket payments to providers) for covered mental health and substance abuse services declined after parity, despite lower consumer cost sharing and higher limits on service use.
- Consumers paid a smaller share of total spending for covered mental health and substance abuse treatment after parity.
- Awareness of parity was relatively low among consumers, which complicated implementation of the law for employers, providers, and consumers.

Managed care may help moderate premium costs when parity is implemented because of the utilization management strategies of many health plans and MBHOs (Burnam & Escarce, 1999; Otten, 1998; Sing, Hill, Smolkin, & Heiser, 1998). Sterman (1997) reported that during the time when managed behavioral health care was growing in prevalence, the rate of inpatient days declined

while the outpatient visit rate increased. Specifically, inpatient days per 1,000 lives decreased from 100 per 1,000 in 1986–1988 to 25 per 1,000 in 1994–1995; and the outpatient visit rate grew from 600 per 1,000 in 1986–1988 to 750 per 1,000 in 1989–1991. The shift from inpatient to outpatient services affected claims costs by decreasing the annual per enrollee cost from \$750 in 1986–1988 to \$150 in 1994–1995.

C. Protection from Catastrophic Costs

While the section above describes costs from the perspective of an employer purchaser, this section describes costs borne by covered employees in the form of out-of-pocket costs that result from the need for services that exceed the duration, level, or scope of mental health services covered by a health plan, as well as the costs of mental health services that are not included in, or are specifically excluded from, the health plan's benefit package and thus not reimbursable.

As previously mentioned, a review of bankruptcy filings for 2001 estimated that about half of the approximately 1.5 million American families who filed for bankruptcy that year cited out-of-pocket medical costs as the reason for their filing (Himmelstein, Warren, Thorne, & Woolhandler, 2005). Results from the 2003 Commonwealth Fund Biennial Health Insurance Survey revealed that 77 million adults reported that they had medical bill problems, accrued medical debt, or both. This finding translates to nearly two of every five (37 percent) adults in the United States. Of these 77 million adults with medical bill problems, 71 million are of working age. The burden of this medical debt has health consequences as well. The survey found that 63 percent of adults who had problems with medical bills had gone without

needed medical care in the past 12 months. Forty-three percent reported that they did not fill a prescription, were unable to go to a needed doctor visit, or skipped recommended follow-up tests or visits (Doty, Edwards, & Holmgren, 2005).

Employers must consider the potential effect on an employee of catastrophic costs resulting from a serious mental disorder. A central purpose of health insurance coverage is to protect individuals and families from catastrophic financial losses caused by illness or injury. Mental health benefits, then, protect against the potential catastrophic costs of a mental disorder. However, there is no single, clear threshold for identifying catastrophic costs, and definitions vary significantly. The cost of the mental health benefit must be weighed against the plan's protection against catastrophic costs, both for the employer and the employee.

“Catastrophic costs” are not well-defined in the literature—instead, many authors refer to “catastrophic episodes,” during which enrollees incur high out-of-pocket costs, or catastrophic costs. Different criteria have been used to define catastrophic costs in mental health care, including dollar thresholds, exhaustion of covered benefits, and diagnosis of certain serious mental disorders. However, none of these criteria have been assigned a generally accepted level above which costs are considered catastrophic. For example, one study in the literature review defined two catastrophic scenarios in which an enrollee would require a large volume of services that would exhaust the benefits provided by many insurance plans. The first scenario consisted of 90 outpatient visits, a 30-day inpatient stay, and 10 inpatient physician visits, and the second consisted of 80 outpatient visits, a 60-day inpatient stay, and

20 inpatient physician visits, both in a 1-year period (Zuvekas, Bantlin, & Selden, 1998). Comparing these catastrophic scenarios with the “typical” mental health benefit covering 30 inpatient days and 20 outpatient visits annually leads to the conclusion that, in general, mental health benefits may be inadequate to protect against catastrophic costs.

Although the majority of individuals receiving mental health services incur relatively low expenses, and completion of outpatient treatment for a mental health disorder typically occurs within 10 visits (DHHS, 1999; Olfson, Sing, & Schlesinger, 1999), individuals with chronic or serious mental illness have a greater likelihood of incurring catastrophic mental health care costs (DHHS, 1999; Frank, Goldman, & McGuire, 1992; Sing, Hill, & Puffer, 2001).

The financial burden of treatment for individuals receiving care for serious mental illnesses may be quite substantial. However, overall, the number of individuals who experience a catastrophic mental health episode in a given year, and therefore incur catastrophic service costs, is very low. One estimate of the number of individuals experiencing catastrophic costs is the 1 percent of plan enrollees exceeding the caps on mental health benefits. Another estimate is the approximately 22.3 percent of the general population suffering from serious mental illness (Narrow et al., 2000; Zuvekas, 2001). Serious mental illnesses are defined on the basis of diagnosis, disability, and duration, and include disorders such as schizophrenia, schizoaffective disorder, manic depressive disorder, autism, major depression, panic disorder, and obsessive-compulsive disorder (Narrow et al., 2000). In addition, while the proportion of the population seeking mental health treatment has grown, just 1 to 2 percent receives inpatient

treatment (Hertz & Baker, 2002; Zuvekas, 2001). Some individuals with high levels of mental health care needs also may exhaust their financial resources to the extent that they qualify for coverage of mental health care services in the public sector. In fact, public programs are paying for a greater proportion of mental health services now than in past years—63 percent in 2001 versus 57 percent in 1991 (Mark et al., 2005).

The U.S. Tax Code currently allows taxpayers to deduct medical and dental expenses that exceed 7.5 percent of their adjusted gross income. In defining the underinsured, or insured persons with insufficient coverage, Schoen, Doty, Collins, and Holmgren (2005) included those with medical expenses totaling 10 percent or more of income, or for those with income below 200 percent of the Federal poverty level, medical expenses totaling at least 5 percent of income.

Studies of out-of-pocket spending provide some helpful information. McKusick, Mark, King, Coffey, and Genuardi (2002) studied the trends in benefits and consumer spending from 1987 to 1997 and determined that changes in health plan benefits during that period resulted in lesser coverage for those with more need or high utilization because of the increased use of service limits that they would likely exceed, while those with less intensive needs had a slight increase in coverage because of the accompanying decrease in cost-sharing levels.

Ringel and Sturm (2001) studied out-of-pocket spending for mental health services among different socioeconomic groups. The study included only individuals with a probable mental health diagnosis who had used mental health services in the previous year. Among the privately insured in their sample, the average out-of-pocket spending was

about 3 percent of household income. However, they found that 5.2 percent of that privately insured group had significant out-of-pocket spending, defined as spending equal to or greater than 20 percent of household income. In relation to the cost of the services received, the privately insured group paid for an average of 30 percent of their treatment costs, and nearly 26 percent of the group paid for 50 percent or more of their total treatment costs. It is important to note that the study did not indicate the type of private insurance, and may include both group and individual coverage. The authors also noted that it is possible that some expenses for the privately insured group may have been incurred at a time during the year when they were not covered by the insurance. Findings were similar to a previous study by Zuvekas, Bantlin, and Selden (1998), which estimated consumer share of cost based on current coverage and possible treatment scenarios. The authors found that for catastrophic mental health episodes, individual out-of-pocket costs would average 30 percent of total treatment costs.

Members of the advisory panel suggested that a particular problem in mental health benefits is that out-of-pocket spending for services received beyond plan limits does not count toward the plan's overall out-of-pocket maximum. This same exclusion is used in both mental and physical health benefits, and any expenses that a member incurs for services beyond the benefit limit (e.g., on chiropractor visits, or inpatient mental health days) do not count toward the plan's out-of-pocket limit (Sing, Hill, & Puffer, 2001). These expenditures that are not counted toward the out-of-pocket maximums in some cases may total very large amounts and contribute to the catastrophic nature of these individuals' and

families' health care costs. The advisory panel members noted that, as mental health benefits often are more limited than physical health benefits, the risk of exceeding the benefit limit and then facing unlimited out-of-pocket costs for additional services may be greater on the mental health side.

D. Plan Design Issues and Criteria

In addition to general concerns about the prevalence of mental disorders and the financial implications of those disorders to both employers and employees, several other factors influence employer decisions regarding mental health benefit design. Employers take into consideration regulatory requirements and costs, and their benefits decisions also are influenced by the goals of employee health and well-being, employee attraction and retention, and employee productivity. Designing mental health benefits can be challenging because employers may have disparate goals in providing mental health benefits. The way the mental health benefit package is designed can help employers achieve a balance among those goals. On one hand, employers want to assure the mental well-being of their employees and encourage appropriate service use; on the other hand, employers face growing health and mental health care costs and see a need to control their expenditures.

The notion of developing criteria for selecting mental health plan components is appealing, because in theory the criteria would simplify employers' decision-making with respect to mental health benefit design. Possibly, criteria could be set with regard to some factors such as the evidence base for or cost-effectiveness of treatments. However, several factors complicate the ability to develop one set of criteria broadly usable by

employers, and may render developing criteria inadvisable. As discussed in the introduction to this report, employers are diverse in their size, industry, unionization of their workforces, locations, self-insured versus fully insured status, and other characteristics that affect their health care benefit strategies. It would be nearly impossible to determine a set of criteria that adequately met the needs of all employers. Factors affecting employers' needs when designing a mental health benefits package also include whether they offer multiple health plans and the types of plans offered (HMO, PPO, etc.).

A study of eight employers that offer generous mental health benefits (Apgar, 2000) identified essential techniques to manage the quality of mental health care: preferred networks, pre-approval for treatment, a full range of treatment settings in the networks, referral mechanisms to connect employees to appropriate services, and utilization review and financial accountability. Areas that remained problematic for the employers included stigma surrounding mental health issues, lack of coordination of care, and co-occurring mental illness and addiction disorders.

Another study of seven employers that offered generous mental health benefits (Robinson, Chimento, Bush, & Papay, 2001) reported that these employers believed generous benefits could decrease health care costs, increase productivity, reduce absenteeism, and create a comparative advantage in the labor market. The study also suggested certain common approaches, including early intervention, offering services across a continuum of care, and covering treatments for a wide range of mental health problems. The study found that between 5 and 7 percent of total health care expenditures were needed to provide a comprehensive mental health bene-

fit. This level of funding reflected the employers' belief that adequate mental health services could reduce other health care costs. These companies also made efforts to reduce the stigma of mental illness and to offer multiple entry points to mental health care to facilitate access to services. They also actively managed their mental health benefits, using extensive review processes and monitoring vendors throughout their contractual relationships.

Specific issues and criteria affecting the design of mental health benefits include the following:

1. Regulatory Requirements

Employers must ensure that their mental health benefits meet Federal and/or State requirements. As previously mentioned, the Federal MHPA of 1996 requires group health plans sponsored by companies with more than 50 employees to provide the same level of annual or lifetime dollar limits of coverage for mental health as they provide for medical and surgical benefits for physical illness, if they offer mental health benefits at all. However, while total coverage limits may not differ, plans may have higher deductible amounts, copayment rates, or limits on covered visits for mental health services. Also, if covering mental health services at the same level as physical health benefits would increase a plan's costs by at least 1 percent, the plan may opt out of the requirement.

In addition, 46 States have laws governing the provision of mental health benefits under employment-based health plans. These laws vary in their focus, from parity to minimum benefit mandates to mandated offering of optional benefits (National Conference of State Legislatures, 2004). More than half the State laws are more comprehensive than the Federal parity law by requiring parity in service limits or cost-sharing provisions. Sixteen

of the State laws require full parity, in that they require mental health coverage in all group health plans sold, and they require parity in all aspects (GAO, 2000). While many States regulate provision of mental health benefits, because of ERISA exemptions, these State insurance laws do not apply to self-insured employer-sponsored plans.

2. Cost Factors

The experts interviewed for this project confirmed that cost is one of the most important considerations for employers in designing a benefit. Employers are concerned about health insurance costs in general. These costs increased by double-digit percentages between 2001 and 2004 and increased by 9.2 percent from spring 2004 to spring 2005 (Gabel et al., 2005). Employers report that the cost of an episode of care for a mental health problem is two to three times the cost of an episode of care for other health problems (Fronstin, 1997). Employers have used various strategies to control mental health care costs, such as cost sharing, utilization review, managed care strategies, capitation (fixed payment per enrollee), and bundling of services (e.g., a fixed total payment for all care provided during an inpatient stay). In the early days of employer-sponsored health insurance, employers covered mental health benefits at the same level as physical health conditions. However, in the 1970s and early 1980s, they found that the costs associated with mental health care were very high, even though a small proportion of their members used the services. In response, employers placed limits on mental health benefits to reduce their risk of these high-cost claims (Fronstin, 1997).

A. Adverse Selection

One element of employer concern regarding benefit plan cost is adverse selection, or

attracting employees who need health care services by offering generous health plans. Deb, Wilcox-Gok, Holmes, and Rubin (1996) found that the perceived mental health risk of family members affected choice of health insurance among privately covered individuals. Branstorm and Cuffel's 2004 study of the existence of adverse selection after limited parity was introduced supports the view that adverse selection does exist in partial carve-outs in which mental health benefits are provided or managed separately from physical health care. In the study, one employer offered a full carve-out, in which employees had no choice of health plan, and a second offered employees a partial carve-out, with the option of choosing between health plans. Under the partial carve-out, new members not only sought out behavioral health treatment more frequently than before the carve-out, but also cost more on average than existing members.

Other studies reviewed reported inconclusive evidence of the occurrence of adverse selection with regard to mental health benefits. Sturm et al. (1995) reported that adverse selection initially occurred when the switch to managed mental health benefits was implemented. Enrollees with depression who switched from FFS to prepaid health plans had fewer mental health visits than those who stayed in the prepaid plans, and those switching from prepaid plans to FFS were among the highest users of mental health services. However, the adverse selection effects eventually dissipated.

B. Moral Hazard

A related concern is that of "moral hazard," which occurs when the availability of generous benefits or lower out-of-pocket costs leads to increased use of services. Moral hazard is a greater risk with respect to mental

health services than with services for physical health care (Frank, McGuire, Bae, & Rupp, 1997). One of the strategies employers have used to control mental health expenditures is increased cost sharing, such as higher copayments for mental health services. Research has shown that mental health care is more responsive to cost-sharing arrangements and that member costs affect the decision to use mental health care more than they affect the decision to use other health care services (Fronstin, 1997). Cost sharing also affects enrollee choice of provider (e.g., psychiatrist, other physician, or other mental health providers such as social workers or psychologists) at the enrollee's initial mental health care visit (Holmes & Deb, 1998).

Higher employee cost sharing can also affect utilization of needed mental health services. Simon, Grothaus, Durham, Von Korff, and Pabiniak (1996) studied the impact of increasing copayments on the use of outpatient mental health services in a staff model HMO. They found that instituting a \$20 per visit copayment was associated with a 16 percent decrease in the likelihood of service use initiation but no change in frequency of visits among current service users. A subsequent increase to \$30 per visit was associated with no significant change in likelihood of use but resulted in a 9 percent decrease in visits per year among those already using services. Previous work by the same authors also found that higher out-of-pocket costs for outpatient mental health visits reduced utilization among HMO members irrespective of illness severity. Mental health care is at least as responsive to price as general medical care (Simon, Von Korff, & Durham, 1994).

In response to the assertion that a lack of coverage for outpatient mental health care would reduce only unnecessary mental health

service utilization, Landerman, Burns, Swartz, Wagner, and George (1994) studied utilization of mental health care services for those with and without diagnoses of a psychiatric disorders and found that both were affected by insurance coverage. This finding provides further evidence that limiting coverage would reduce necessary as well as unnecessary utilization of outpatient mental health care and suggests that coverage limits and higher cost sharing would affect necessary treatment as well.

Although it predates the large-scale market shift to managed care, the RAND Health Insurance Experiment (HIE) was a large-scale social experiment that investigated the effects of alternative health insurance plans with varying levels of cost sharing on the use of health services and on the health status of individuals. As noted by members of the advisory panel, though it dates back to the 1970s and early 1980s, the RAND HIE provides an important context for understanding the effects of out-of-pocket costs on mental health service utilization. Findings from the RAND HIE indicated that ambulatory mental health costs increase four-fold when full insurance is available where previously there had been none, as compared to doubling for ambulatory medical costs (Frank, McGuire, Bae, & Rupp, 1997; Keeler, Wells, Manning, Rumpel, & Hanley, 1986).

The RAND HIE also demonstrated that reducing the level of cost sharing increased the demand for mental health services (Wells, Manning, Duan, Ware, & Newhouse, 1982). The authors reported that the probability of use of ambulatory mental health services in a plan with no cost sharing (0 percent coinsurance) was double that in a plan with high cost sharing (95 percent coinsurance with an out-of-pocket maximum);

ambulatory mental health care expenditures for those in the 0 percent coinsurance plan were 75 percent more than for those in the high cost-sharing plan.

Wells, Manning, and Valdez (1989) found that cost sharing does not have negative effects on mental health outcomes generally. Using data from the RAND HIE, the researchers found that, averaged over the covered population, there was no adverse effect on mental health outcomes of plans requiring cost sharing relative to plans that did not. This finding was particularly strong for those who were initially well and poor; the authors cautioned against generalizing this result to the sick poor, some of whom were shown to have better improvement under a care plan with low or no coinsurance requirements.

3. Consumer-Directed Health Benefits: Issues for Mental Health Benefits

Another consideration related to employer goals and decision-making around health care benefits is the type of health plan used to provide the broader health care benefit. The vast majority of employers currently use managed care plans to provide their health care benefits, with 61 percent of covered workers in PPOs, 21 percent in HMOs, 15 percent in POS plans, and 3 percent in conventional (FFS) plans (KFF/HRET, 2005). In addition, there is considerable and growing interest in CDHB. A growing number of companies are offering HDHPs, which require more upfront spending on the part of the consumer before services are covered, and which may be combined with account-based spending funds, funded either by the employer or the employee or both. In 2005, 20 percent of all firms offered HDHPs to employees, up from 10 percent in 2004 and 5 percent in 2003. These plans are even more common

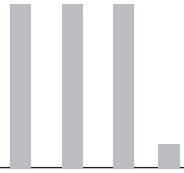
among the largest firms; 33 percent of firms with 5,000 or more workers offer them (KFF/HRET, 2005).

However, fewer firms offer spending accounts along with their HDHPs. According to the 2005 Employer Health Benefits Survey, about 2 percent of firms with health benefits offer HDHPs with health reimbursement arrangements (HRAs), which are funded solely by employers. These plans cover about 1.6 million workers in 2005. In addition, about 2 percent of firms with coverage offer health savings account (HSA)-qualified HDHPs, which allow workers to establish accounts to which both they and their employers can contribute. About 810,000 workers are covered by HSA-qualified HDHPs (Claxton et al., 2005). Persons covered by HDHPs in the individual (non-group) market also can establish HSAs, and a recent study by Forrester Research indicated that the number of HSAs is expected to grow to more than 6 million by 2008, driven by growth in HDHPs (Henrickson, 2005).

Some experts anticipate a shift to more individual coverage as employers drop coverage in response to the rising costs of providing benefits, though this has not yet been borne out in the coverage data. Rather, according to several U.S. Census Bureau *Current Population Reports*, government-sponsored coverage has been increasing in recent years, while individually purchased coverage has remained stable (DeNavas-Walt, Proctor, & Lee, 2005; DeNavas-Walt, Proctor, & Mills, 2004; Mills & Bhandari,

2003). Additional growth in individually purchased coverage may occur as a result of the institution of HSAs. Furthermore, legislation was submitted recently—HR 2355, the Health Care Choice Act of 2005—that would allow an insurer selling individual health insurance policies in a primary State to sell individual policies in secondary States as well, while remaining subject to the insurance laws in the primary State and avoiding most of the insurance laws in the Secondary states, such as those mandating coverage of certain benefits or treatments.

With this movement toward CDHB or HDHPs with spending accounts, there are concerns related to coverage for mental health care services. Specific concerns related to mental health care services and HSAs involve the definition of preventive care and the services provided by Employee Assistance Programs (EAPs). In order to qualify to establish an HSA, an individual must be covered by an HDHP, which is allowed to provide first dollar coverage only for preventive care services (U.S. Department of the Treasury, 2004a). Therefore, as long as the services provided by the EAP are considered preventive, it will not create an eligibility problem. A Question and Answer Notice from the U.S. Department of the Treasury indicates that an EAP will not interfere with HSA eligibility “if the program does not provide significant benefits in the nature of medical care or treatment,” and that screening and other preventive care services will be disregarded (U.S. Department of the Treasury, 2004b).



Administration of Mental Health Benefits: Overview of Carve-Out Purchasing Arrangements

When designing a mental health benefit package, employers must consider how they will administer the benefits. Employers may choose from a variety of health plan types: HMOs, PPOs, POS plans, FFS, or CDHB plans. Larger employers may choose to offer several of these plan types, and they should consider how the plans will deliver the mental health benefit. After choosing the plan type(s), employers can choose to have a specialty MBHO deliver the benefit or have the mental health benefit included in the broader health benefit plans. Employers can also consider varying models of risk sharing. Employers can put the plans at full risk with certain limits on losses or profits or create a partial risk-sharing arrangement. Risk sharing increases the pressure on plans to ensure that benefits are utilized appropriately.

An employer also may use self-insurance to exert more control over its health benefit plan. A self-insured plan is one in which the employer retains the financial risk of the health care services utilized under the plan by employees and dependents. Conversely, a fully insured plan is one in which the employer pays a premium per covered member to an insurance company, and the insurance company assumes the financial risk for paying for covered services. Self-insured employers, which generally are large compa-

nies, administer their own health plans (or use a third-party administrator) and are exempt from State insurance laws through ERISA. Self-insured plans are subject to Federal oversight and the Federal MHPA. In 2005, 54 percent of workers with health insurance were enrolled in self-insured or partially self-insured health benefit plans (KFF/HRET, 2005).

Self-insuring offers employers increased flexibility in the benefits covered by their health benefit plans. The exemption from

certain State insurance laws through self-insuring can allow an employer to offer less generous benefits or exclude State-mandated benefits. However, Acs, Long, Marquis, and Short (1996) gave data showing that self-insured plans provided at least as generous outpatient mental health benefits as fully insured plans. In addition, the authors found that average monthly premiums were similar in self-insured and fully insured plans.

Managed care dominates the mental health care market, and nearly three-quarters of Americans with health insurance are covered by managed mental health benefits (Shore & Altman, 1999). The main decision in the administration of employer-sponsored mental health benefits appears to be whether to carve the benefit out to a specialty MBHO. The benefits of carve-outs include cost control, standardization of the benefit, care management, and (possibly) better access to care, while the drawbacks include a lack of coordination with physical health services and the difficulty of treating patients with special needs (Grazier & Eselius, 1999).

Firm size (measured as revenues) is the strongest predictor of an employer's likelihood of carving out its mental health benefits. Large firms are more likely to use carve-outs; 40 percent of Fortune 500 companies carve out their mental health benefits, while only 30 percent of smaller companies (with 10,000 or fewer employees) do so. Firms in the manufacturing and infrastructure industries also are more likely to carve out their mental health benefits, and employers using carve-outs have higher rates of union membership than other firms. In addition, employers interested in special expertise and cost savings are more likely to carve out their mental health benefits, while those more concerned with care coordination are less likely

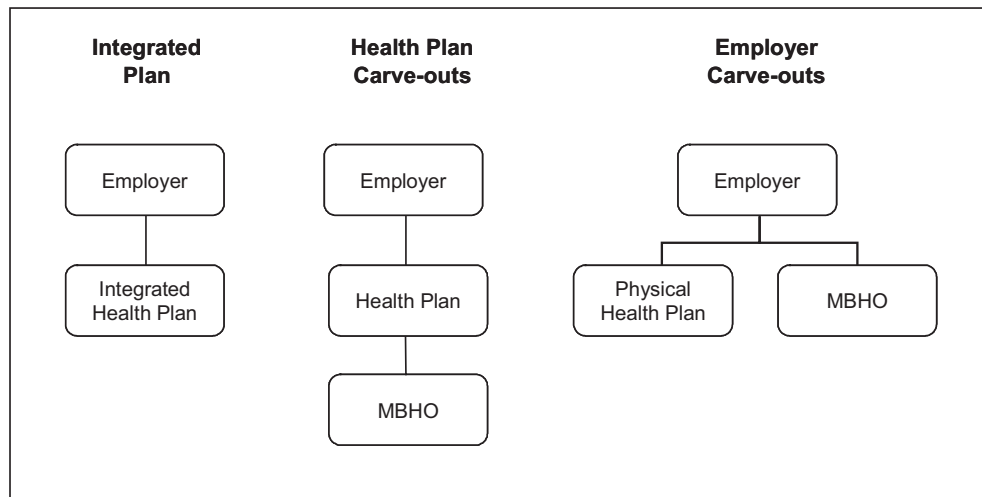
to use carve-outs. Finally, among employees, those in non-HMO plans are more likely than HMO enrollees to have their mental health benefits carved out (Hodgkin, Horgan, Garnick, Merrick, & Goldin, 2000).

Mental health carve-outs can be designed to deliver adequate mental health benefits, but employers must choose their vendors and negotiate their contracts carefully. To influence the cost and quality of care, an employer must be willing to exert its influence during the initial contract negotiations and during periodic contract reviews. Carve-out designs vary, as employers must determine the level of responsibility and control they desire. In addition, many employers use carve-outs for enrollees in certain health benefit plans, such as indemnity plans, while using carved-in benefits (i.e., integrated health plans) for other enrollees, such as those in managed care plans (Hodgkin, Horgan, Garnick, Merrick, & Goldin, 2000).

Mental health services generally are carved out either by the employer or by the health plan. Exhibit 2 shows three typical models of behavioral health care contracting, which are described below. Employers that prefer having to interact with only one entity may prefer either the first or second model of carve-out.

- **Integrated Plan:** The employer contracts with a single integrated health plan, with a carved-in mental health benefit. The health plan is responsible for administering both the physical and mental health benefits.
- **Health Plan Carve-Out:** The employer contracts with a single entity, the health plan, but the health plan then carves out mental health services to an MBHO. The contract exists between the health plan and the MBHO, leaving the employer little

Exhibit 2. Typical Models of Behavioral Health Care Contracting



Note: In all cases, financial risk may or may not be transferred from employer to administrator.

or no ability to affect the contract with the MBHO.

- **Employer Carve-Out:** The employer contracts separately with the health plan(s) for physical health care benefits and directly with an MBHO for mental health care benefits. This arrangement offers the employer greater control over the mental health benefit in areas such as making decisions about what services to cover and the extent of coverage. However, the employer carve-out also places greater

administrative responsibility on employers for maintaining contracts.

In another model (not shown in Exhibit 2), the partial carve-out, certain aspects of mental health care are carved out, such as administrative services, utilization management, or in some cases, all mental health care services once a certain level of utilization has been reached.

The potential effects of mental health carve-out designs on access to, and quality of, benefits are addressed in Section IV.B.

IV.

Objectives and Options for Designing an Adequate Mental Health Benefit

Through review of the literature and expert opinion, we identified three objectives that employer-sponsored mental health benefits should strive to achieve:

- To provide protection from catastrophic costs, cover a wide array of treatments, and allow flexibility within plan;
- To ensure access to covered services; and
- To include available evidence-based practices and treatment guidelines in mental health benefits.

The sections that follow describe the current state of knowledge about actions that have been taken to address these three objectives, and offer suggested options that employer purchasers and plans may consider using to meet them.

A. Provide Protection from Catastrophic Costs, Cover a Wide Array of Treatments, and Allow Flexibility within Plan

Mental health benefits can and should be designed to protect individuals from catastrophic costs, and some options to protect against catastrophic costs have been identified. The literature asserts that the most important risks to insure are risks of catastrophic expenditures and that limiting bene-

fits inhibits protection against catastrophic costs, but authors also state that cost controls are necessary (Frank, Goldman, & McGuire, 1992). For example, according to the literature, users of mental health care services can be protected from catastrophic costs by providing benefit packages that do not have service limits, cover a wide range of treatments, have high annual or lifetime spending limits, and have annual out-of-pocket spending maximums, which could help cap a beneficiary's financial burden (Sing, Hill, & Puffer, 2001). Also, in an early report describing a model mental health benefit, Frank, Goldman, and McGuire (1992) recommend offering a benefit package without service limits but with a higher level of enrollee cost sharing to discourage

inappropriate or excessive use of services. This model would make the benefit most useful to those with real needs for services, rather than inducing demand for services that may be unnecessary (moral hazard).

As previously mentioned, members of the advisory panel noted that out-of-pocket expenses for mental health services often are not counted toward a health plan's overall calculation of protection against catastrophic costs for enrollees. As a result, enrollees are at risk for incurring high out-of-pocket costs associated with mental health treatment services, a finding noted by Zuvekas, Banthin, and Selden (1998) in their analysis of the 1997 National Medical Expenditure Panel Survey. A potential remedy, recommended by the advisory panel, is to require that a health plan's overall catastrophic protection include both physical and mental health out-of-pocket costs.

While limits are used in most mental health benefit packages (in part to mitigate risk), whether limits are necessary for all treatment types is still in question. Twenty percent of individuals covered by employer-sponsored health plans have no day or visit limits on their mental health benefits (Sturm & Pacula, 2000). Several States regulate mental health benefit limits for plans subject to State insurance laws. Some States also mandate that individuals be allowed to use intermediate services in place of inpatient stays, and some even prescribe how to calculate the number of intermediate service units that are equivalent to each inpatient day (National Association of Insurance Commissioners [NAIC], 2003).

In practice, catastrophic coverage for mental disorders may not mean protection against high out-of-pocket expenditures from catastrophic episodes. For example, Utah

legislation addressing employer-sponsored benefits considers catastrophic coverage to mean parity with physical health coverage; catastrophic coverage for mental health is defined as "coverage that does not impose any lifetime, annual, episodic, inpatient service, outpatient service, or *maximum out-of-pocket limit* that places a greater financial burden on an insured member for the evaluation and treatment of a mental health condition than for a physical health condition" (Hawley, 2004, emphasis added). While this definition suggests that adequacy is achieved through parity with physical health care benefits, the literature did not specifically define what constitutes an adequate mental health benefit package. It also has been noted that mandating parity between mental and physical health care benefits does not necessarily ensure adequacy of the mental health benefit if the physical health benefit itself is inadequate (Otten, 1998).

Quantification of catastrophic costs is difficult, as there is no commonly accepted definition of these costs. But even without a definition or threshold for catastrophic costs, it is clear that the costs associated with care for catastrophic mental illness can place a great burden on individuals and their families. At the same time, the occurrence of catastrophic mental health care costs is relatively rare; the majority of individuals complete outpatient treatment within 10 visits. Individuals with serious mental illnesses are at greater risk for catastrophic costs, but only about 2.8 percent of the population has a serious mental illness (Narrow et al., 2000). Limits on care increase the financial burden for these individuals, as they are more likely to exceed these limits.

While few individuals and families experience catastrophic mental health care costs, dependents (especially adolescents) are more

likely to have high-cost illnesses. Covering dependents for possible catastrophic episodes would address several issues, including employee absenteeism (to deal with untreated mental illness at home), low productivity and presenteeism, and possible turnover.

Most employer-sponsored health plans cover mental health services, although these plans generally are limited and often have moderate to high cost-sharing requirements. Several studies suggested that benefit flexibility and innovation are important to ensure that the mental health care package meets the needs of a wide range of enrollees. Services most frequently covered by mental health plans include inpatient psychiatric services, outpatient care, and prescription drugs. Intermediate-level services (e.g., nonhospital residential programs, partial or day hospitalization) are covered less frequently, but can substitute for more expensive inpatient treatment when clinically appropriate.

Employers increasingly are offering EAPs to provide outreach, education, case management, and counseling services for employees, and in some cases to serve as a gateway to additional behavioral health services (Teich & Buck, 2003). England and Vaccaro (1991) profiled the EAPs of six large U.S. corporations, and the results of their interview-based case studies revealed several common beliefs shared by these companies' EAP directors. For example, EAP services were seen as enhancing early case finding and easy access to benefits, as well as providing long-term management of care. Following implementation of these companies' EAPs, improvements in access and quality of care were documented, as well as decreased costs associated with preventive case management services aimed at reducing avoidable hospitalizations and shortening lengths of stay.

Benefit limitations typically take the form of limits on total dollars spent or on the number of days/visits, but the generosity of the limits varies by type of service and plan. Cost-sharing amounts vary significantly according to service, whether the service is provided by an in- or out-of-network provider, and plan type. One of the reasons employers use cost sharing is to discourage inappropriate or excessive use of services; however, some employers use innovative cost-sharing structures to encourage appropriate access to care.

Mental health benefit packages typically include several key components that employers providing mental health coverage will want to consider when making benefit design decisions:

- covered services;
- benefit limits;
- cost sharing; and
- disease management.

Decisions regarding each of these components can affect the adequacy of the mental health benefit.

Additional plan components—related to benefits and service limits—are treatment plans and grievance and appeals procedures. Treatment plans allow for more coordination of care and care management, but often are expensive to support. Grievance and appeals procedures, which allow patients or their representatives to appeal service denials, may serve to address distrust of managed behavioral health caused by disagreements regarding the appropriate course of care, the fact that some health plans are for-profit entities, and overmanagement of the mental health benefit. To address that distrust, a grievance and appeals procedure should be accessible to enrollees, allow patient representatives to

file grievances early in the treatment process, and provide clear guidelines for service authorization (Mechanic, 2002).

1. Current Practice and Evidence from the Literature

A. Covered Services

Employer-sponsored health plans typically cover a wide range of mental health services, and these covered services have remained relatively unchanged over the last several years. Nearly all employer-sponsored mental health benefit packages include coverage for inpatient treatment, outpatient treatment, and prescription drugs, which have become increasingly central to the treatment of mental illnesses (Buck, Teich, Umland, & Stein, 1999; Maxfield, Achman, & Cook, 2004; Merrick et al., 2001; Sing, Hill, & Puffer, 2001). The clinical and cost effectiveness of intermediate-level services such as partial hospitalization were documented in 2001 in an extensive meta-analysis of the literature (Horvitz-Lennon, Normand, Gaccione, & Frank, 2001). Members of the advisory panel indicated that coverage for intermediate-level services is becoming more common but is still not sufficient. To ensure that the benefit package meets the needs of enrollees across types and severity of mental health conditions, an appropriate range of services should be covered. If the required services are not provided, enrollee mental health care needs cannot be met regardless of other design features (e.g., generous limits or low cost-sharing requirements).

In designing an adequate mental health benefit package, ensuring access to an appropriate range of services is of key importance. Because employees have mental health care needs across the spectrum of services, and those needs often shift across the spectrum,

an adequate benefit package provides access to each of these categories of service in combination with each other. For example, an acute mental health event requiring hospitalization often is followed by extensive outpatient and prescription drug therapy. The appropriate combination of services—inpatient, outpatient, and prescription drugs—is critical to improving the mental health condition of an individual in this situation. A benefit package with unlimited inpatient benefits and few or no outpatient benefits is very generous from an inpatient perspective, but does not meet the needs of individuals needing outpatient mental health care services.

i) Inpatient Treatment

Studies show that between 94 and 100 percent of employer mental health plans cover inpatient treatment, which includes care in facilities such as hospitals and nursing homes (Buck, Teich, Umland, & Stein, 1999; Merrick et al., 2001). The proportion of mental health spending going to inpatient treatment decreased dramatically between 1991 and 2001 (Mark et al., 2005). Some critics of managed care have voiced concerns that coverage for inpatient care is sometimes inappropriately denied to those whose severity of illness merits this level of care. Without it (and without appropriate post-discharge follow-up care), a potentially preventable deterioration in mental health status may occur, and additional inpatient admissions may be necessary.

ii) Outpatient Treatment

Outpatient services are covered somewhat less frequently than inpatient services but are covered by between 86 and 98 percent of plans (Buck, Teich, Umland, & Stein, 1999; Merrick et al., 2001). Outpatient treatment

includes both primary care and specialty physicians, other mental health professionals, and treatment provided at a hospital or other facility on an outpatient basis. The proportion of mental health spending accounted for by outpatient treatment remained largely constant between 1991 and 2001 (Mark et al., 2005).

iii) Intermediate Services

As stated above, providing intermediate-level services is becoming more common. Intermediate services offer health plans an alternative to costly inpatient services, when clinically appropriate. Intermediate-level services include less intensive or nonhospital residential programs, partial or day hospitalization, and intensive outpatient services such as psychosocial rehabilitation and case management (Buck, Teich, Umland, & Stein, 1999; Buck & Umland, 1997; Frank, Goldman, & McGuire, 1992; Sing, Hill, & Puffer, 2001). In a study of 1,017 medium and large firms, about half of employer-sponsored health plans included coverage of intermediate services (Sing, Hill, & Puffer, 2001). Intensive outpatient services are covered more frequently than nonhospital residential programs, ranging from 64 percent to 92 percent and 52 percent to 87 percent, respectively. Employer carve-out plans covered intermediate-level services more often than other plan types (Buck, Teich, Umland, & Stein, 1999; Merrick et al., 2001). Forty-nine percent of plans also included coverage for crisis-related services, such as mental health hotlines or crisis intervention (Buck, Teich, Umland, & Stein, 1999).

iv) Prescription Drugs

An increasing number of prescription drugs have been developed to treat mental disorders, and they have come to be considered a

standard mental health benefit, covered by nearly all employer-sponsored plans (Maxfield, Achman, & Cook, 2004; Sing, Hill, & Puffer, 2001). Prescription drugs have grown increasingly important in the treatment of mental disorders; in fact, they are the predominant form of treatment in many cases. While the proportion of the U.S. population using outpatient mental health or substance abuse services was slightly higher in 2001 than in 1996 (7.1 percent versus 6.9 percent, respectively), the mean number of visits per user decreased from 8.4 to 6.6; at the same time, the proportion of the U.S. population using psychotropic drugs increased from 5 percent to 8.1 percent (Zuvekas, 2005). In 2001, 21 percent of mental health spending was for prescription drugs, up from 7 percent in 1991 (Mark et al., 2005). In 2001, about 13 percent of total spending on prescription drugs was for mental health drugs. Costs per prescription have increased recently in certain classes of mental health drugs owing to changes in therapeutic mix (the use of more expensive drugs and drug strengths) and the introduction of new drugs into the class.

While nearly all employer-sponsored health benefit plans include coverage for prescription drugs, generosity of the benefit varies across health plans according to their formulary or preferred drug list requirements. A common structure for prescription drug benefits currently is a three-tiered plan, in which member copayments are lowest for generic drugs, more for preferred brand-name drugs, and highest for nonpreferred brand-name drugs. In addition, prescription drugs typically are not included in calculating the cost of mental health benefits, and these generally are considered separate aspects of an employer's health benefit plan. Utilization and spending for prescription drugs typically

is managed through traditional prescription drug management approaches (e.g., tiered copayments, formularies).

v) Employee Assistance Programs

A considerable and growing percentage of private employers offer EAPs as part of their employee benefit packages. In 1995, 39 percent of employers with 50 or more workers offered an EAP, compared with 33 percent in 1993 (French, Zarkin, Bray, & Hartwell, 1999). In 1997, 28 percent of employees in small firms (fewer than 50 employees) had access to an EAP, as did 61 percent of employees in midsize firms and 75 percent of those in large firms (1,000 or more employees) (Masi et al., 2004). In 2002, a survey of 645 managed behavioral health provider organizations found that 80.2 million individuals were enrolled in EAPs, constituting approximately 32 percent of Americans with health insurance (Open Minds, 2002). In a survey of more than 1,500 worksites with more than 50 employees, 80 percent of EAPs were external with a contractor providing EAP services to employees, 17 percent were internal or staffed by company employees, and 3 percent used a combined external/internal model (French, Zarkin, Bray, & Hartwell, 1999). Internal EAPs are typically more expensive to operate, possibly making them a less popular option (French, Zarkin, Bray, & Hartwell, 1999).

The relationship between the EAP and the mental or behavioral health benefit can influence the role of the EAP and how employees access covered services. In a stand-alone model, there is no service relationship between the EAP and the behavioral health benefit provider. In this situation, the EAP cannot transfer an employee as easily from EAP services to the more extensive services of a behavioral health provider. In an integrated

model, the EAP is linked to the behavioral health provider and may serve as a gateway to behavioral health services (Masi et al., 2004). The integrated model also facilitates a behavioral health provider's ability to suggest use of the EAP for certain patients (Leopold, 2003).

The role of EAPs has evolved over time, from primarily providing confidential access to mental health and substance abuse services, to providing assessment and referral, monitoring short-term disability cases, and conducting utilization review for mental health services (Coughlin, 1992; Kent, 1990). In a national survey of 2,180 employers with more than 10 employees, 79 percent of EAPs provided face-to-face counseling as opposed to telephone counseling only. Two-thirds of the EAPs provided brief therapy for behavioral health problems. Most of the EAPs also reported providing counseling or referral services for work or family issues (Teich & Buck, 2003). EAPs often are considered one-stop shops for mental health and work/family life services (Masi et al., 2004). Experts anticipate that the role and prevalence of EAPs will continue to expand. While many studies reported on the characteristics and prevalence of EAPs, few reported utilization rates. A study of the EAP at Federal Occupational Health, a service unit within the DHHS' Program Support Center that delivers occupational health services to the Federal civilian and military workforces, reported that between 1999 and 2002, approximately 3.5 percent of the 3.3 million enrollees used EAP services (Selvik, Stephenson, Plaza, & Sugden, 2004).

B. Benefit Limits

While covering various types of services and treatments, nearly all plans enforce some limits on the amount or cost of services that

are covered under the plan. Employers and health plans typically place limits on covered mental health benefits to control their financial liability. Some also may use limits out of the concern that mental health services will be used by healthy individuals who are not in need of them. The type of benefit limit used varies according to the type of service (i.e., inpatient or outpatient) and provider. The most common limits are annual limits on the number of visits or days of service. Annual limits most frequently used across employers of varying sizes and plan types are 20 outpatient visits and 30 inpatient days (Barry et al., 2003; Buck, Teich, Umland, & Stein, 1999; Buck & Umland, 1997; Hay Group, 1999; Merrick et al., 2001).

The use of limits on covered mental health benefits has grown over time, and nearly all plans have implemented such limits (Hay Group, 1999). It is estimated that only about 20 percent of all individuals in the United States with employer-sponsored health plans have no day or visit limits on mental health benefits (Sturm & Pacula, 2000). By 1997, annual limits on inpatient days were the most prevalent limit on mental health benefits (Buck, Teich, Umland, & Stein, 1999). McKusick, Mark, King, Coffey, and Genuardi (2002) reported findings from a national household survey that the proportion of plans without limits on inpatient services decreased from 60.4 percent to 25.4 percent between 1987 and 1996. During this time, the level of enrollee cost sharing also decreased. The authors concluded that these benefit design changes—increased use of limits and lower cost-sharing levels—affect mental health care users differently depending on their needed level of utilization. Individuals considered to be catastrophic users (defined as those who used more than 50

inpatient days and 100 outpatient visits) reached their limits sooner and incurred increased out-of-pocket costs for services beyond their limits, whereas infrequent users of mental health care services who were unlikely to reach the limits benefited from the lower cost sharing.

A recent survey of about 3,000 randomly selected employers with three or more employees found that just 19 percent of covered workers have coverage for an unlimited number of outpatient mental health visits, and more than 6 in 10 are limited to 30 or fewer visits per year. For inpatient mental health care services, 21 percent of covered workers have coverage for an unlimited number of days of treatment, 14 percent are covered for 20 or fewer days per year, 45 percent are covered for 21 to 30 days per year, and 21 percent are covered for 31 or more days per year (KFF/HRET, 2004).

While limits on the number of allowed visits are popular, employers and health plans may not realize cost savings from limits on the duration of inpatient stays, as inpatient stays typically are short and the costs are concentrated in the first few days of the stay. In addition, several patient- and provider-specific characteristics influence inpatient mental health lengths of stay (e.g., a primary diagnosis of schizophrenia, the number of previous admissions, a primary diagnosis of a mood disorder, age, a secondary diagnosis of an alcohol- or other drug-related disorder) merit consideration when designing flexible benefits without arbitrary limits (Hopko, Lachar, Bailey, & Varner, 2001; Huntley, Cho, Christman, & Csernansky, 1998).

Sing, Hill, and Puffer (2001) made recommendations for improving mental health benefits without increasing costs. Their

recommendations included strategies to improve access to services by covering a wide range of clinically effective services and treatment, with incentives to substitute lower cost treatment when appropriate (e.g., intermediate-level care). A current benefit design trend is to allow members to trade services within limits. That is, rather than having 1 inpatient day stay, a member can receive 2 to 3 intensive outpatient days or other intermediate-level services, such as partial day treatment. This arrangement both permits greater flexibility in use of services within specified limits and encourages use of less costly mental health services, as appropriate. Members of the advisory panel also suggested combining outpatient and intermediate-level services in a managed but unlimited benefit and retaining some generous limits on inpatient care. The search of the peer-reviewed literature did not locate sources that reported empirical results of the effects of such a combination. It is an area that merits further research.

Other limits used include maximum annual and lifetime dollar limits on the value of services received (Buck, Teich, Umland, & Stein, 1999). Financial limits vary significantly across plan type. In 1996 (prior to implementation of the Federal MHPA), for employers with more than 500 employees, median annual limits on inpatient services were \$10,000 and lifetime limits were between \$30,000 and \$50,000. Median outpatient annual limits were \$2,000 and lifetime limits were \$25,000 to \$50,000 (Robinson, Chimento, Bush, & Papay, 2001). Survey data from companies with 10 or more employees as well as companies with more than 500 employees showed that in 1997, median lifetime limits ranged from \$25,000 to \$40,000 for inpatient services

and from \$20,000 to \$50,000 for outpatient services. The median annual limits were \$5,000 for inpatient services and between \$1,500 and \$2,000 for outpatient services (Buck, Teich, Umland, & Stein, 1999; Merrick et al., 2001). However, use of annual dollar limits for outpatient services is not as common as it once was (Hay Group, 1999), and industry experts note that the trend has been away from using maximum lifetime limits.

Laws in many States regulate limits on coverage for mental health treatment. According to a compendium of State laws published by the NAIC (2003), 17 States mandate coverage with at least specified minimum benefits in group contracts, 25 States require that mental health services (for at least biologically based mental illnesses) be covered under the same terms and conditions (or with no more restrictive limits) as other illnesses, and the following 4 States regulate coverage limits by placing a specific minimum on covered days or visits:

- Mississippi: Group plans are required to cover at least 30 days of inpatient care, 60 days of partial hospital treatments, and 52 outpatient visits per year.
- Nevada: Plans must provide at least 40 days of inpatient hospital care and 40 outpatient visits each year for severe mental illness.
- Pennsylvania: Coverage for serious mental illness must include a minimum of 30 inpatient and 60 outpatient days annually and must have no difference in annual or lifetime limits from other illnesses.
- Virginia: Coverage is mandated to be the same as for other illnesses except that coverage may be limited to 30 days per policy year.

In some States, trading of services is required to be an option under mental health benefit plans. In Texas, for example, a plan with coverage for inpatient care must cover psychiatric day treatment facilities (an intermediate service); according to the benefits calculation prescribed in statute, a full day of care in a psychiatric day treatment facility is equal to one-half day of inpatient care. Due to ERISA preemption, State laws regarding insurance do not apply to all employers, and many workers and their dependents are not covered by these protections.

A case study of employers providing mental health benefits offered examples of criteria for comprehensive mental health coverage. These criteria included providing benefits beyond the traditional limits of 30 inpatient days and 20 outpatient visits, providing innovative and flexible benefits, including intermediate levels of care, coordinating with EAPs, and encouraging employees' use of mental health services. Examples of innovative programs include wellness programs, disease management, onsite psychiatric care, rapid-response teams for crisis intervention, incentives for participation in preventive health care programs, training for supervisors to detect mental health problems, and opportunities for employees to shape provider networks (Robinson, Chimento, Bush, & Papay, 2001).

Frank, Goldman, and McGuire (1992) recommended that the payment system encourage substitution of lower cost for higher cost providers, as there is an array of provider and facility types that can serve patients appropriately. They also recommended that the payment system be consistent with managed care techniques that have been shown to be effective, including

prior authorization, concurrent review, and case management.

C. Cost Sharing

Cost sharing is required in most managed behavioral health care products to encourage appropriate use of services and to discourage unnecessary or inappropriate use of services. In a study of 434 MCOs in which 704 different products were available, 67 percent of managed care plans required copayments for outpatient mental health services, 30 percent required coinsurance payments, and 3 percent required neither (Hodgkin, Horgan, Garnick, & Merrick, 2003). In 1997, about 94 percent of plans offered by Fortune 500 firms with carved-out mental health benefits had some form of cost sharing. The median in-network cost sharing was a \$15 copayment or 20 percent coinsurance for outpatient services, a \$100 copayment or 20 percent coinsurance for inpatient services, and a \$20 copayment or 20 percent coinsurance for intermediate services (Merrick et al., 2001).

The level of cost sharing may vary depending on whether in- or out-of-network providers supply the services, with higher levels of cost sharing for out-of-network services. In Ma and McGuire's (1998) study of Massachusetts' behavioral health carve-out for State employees, in-network coverage for inpatient services required no cost sharing, while out-of-network services required 20 percent coinsurance. Exhibit 3 shows the median coinsurance rates for in-network versus out-of-network providers in various health plan types.

Some employers have structured cost-sharing requirements to encourage the use of less costly services, to move the provision of services from inpatient settings to less expensive outpatient settings, and to discourage

Exhibit 3. In- and Out-of-Network Cost Sharing				
	<i>Inpatient</i>		<i>Outpatient</i>	
	<i>In-network</i>	<i>Out-of-network</i>	<i>In-network</i>	<i>Out-of-network</i>
PPO	0%	20%	50%	70%
HMO	0%	—	20%	—
POS	0%	20%	20%	40%
FFS	10%	—	20%	—

Source: Sing, Hill, & Puffer, 2001.

inappropriate or excessive use of health services. For example, mental health benefit cost sharing is sometimes structured incrementally, so that initial mental health care visits are provided with little or no cost sharing followed by higher cost sharing for extended use of outpatient services (Robinson, Chimento, Bush, & Papay, 2001). However, according to a member of the advisory panel, this incremental cost sharing is less common now than it once was. While cost sharing is an important tool for discouraging inappropriate or excessive use of mental health services, setting cost-sharing levels too high might discourage individuals from seeking necessary care (Simon, Grothaus, Durham, Von Korff, & Pabiniak, 1996; Simon, Von Korff, & Durham, 1994). In fact, other literature recommended reducing enrollee cost sharing as a way to promote access to care (Sing, Hill, & Puffer, 2001).

D. Use of Disease Case Management Approaches for Chronic Mental Health Conditions

Disease management programs are being used increasingly to improve the care of persons with chronic conditions such as asthma, diabetes, and heart disease (Bodenheimer, 2000). Many disease management strategies have been developed for chronic conditions that are high cost both clinically (in terms of the burden of suffering) and economically (in

terms of resource utilization). Although there is not a universally agreed-upon definition of the term “disease management,” the following is a particularly helpful one that encompasses features commonly found in various definitions:

Disease management is an approach to patient care that coordinates medical resources for patients across the entire health care delivery system. A critical distinction between disease management and other approaches to traditional medical care is a shift in focus from treating patients during discrete episodes of care to provision of high-quality care across the continuum.

There are at least 4 essential components of disease management. These include:

1. An integrated health care delivery system capable of coordinating health care across the continuum;
2. A comprehensive knowledge base of the prevention, diagnosis, treatment, and palliation of disease;
3. Sophisticated clinical and administrative information systems that can be used to analyze practice patterns; and
4. Continuous quality improvement methods (Ellrodt et al., 1997, p. 1687).

Numerous studies have found that the use of a disease case management approach for

persons with chronic mental health conditions such as major depression has resulted in improved patient outcomes and improved ability of employer purchasers and health plans to control costs. For example, a 2001 review of studies that examined the effects of disease management techniques for persons with major depression found that these programs had several common successful features related to screening, patient education, and the use of treatment guidelines. These features included taking responsibility for patient follow-up, determining whether adherence to treatment recommendations was occurring, assessing treatment outcomes for improvement, and intervening when patients were not adhering to their treatment regimens or achieving expected improvements. In many of the studies reviewed, case management services were provided over the telephone at a low cost per case treated. Successful disease management programs were designed to calibrate the level and intensity of services based on patient needs (e.g., determining how best to coordinate the services of primary care providers, case managers, and mental health specialty providers such as psychologists and psychiatrists) (Von Korff & Goldberg, 2001).

A meta-analysis of published studies designed to measure the effects of disease management programs on treatment of depression found that the pooled results of these studies documented statistically significant improvements in the following indicators:

- symptoms of depression;
- physical functioning;
- health status;
- satisfaction with treatment; and
- adherence to treatment regimens.

Other improvements also were found in the following areas:

- the rate of detection of depression;
- adequacy of treatment with antidepressants; and
- outcomes that are influenced by both providers' and patients' adherence.

Although the authors did not measure productivity gains that might have occurred as a result of a disease management approach, they noted that such programs improve quality of care, measured in terms of both processes and outcomes of care. Although such programs can increase treatment costs (at least in the short term), the investment potentially results in longer term cost savings in the form of reductions in avoidable hospitalizations and enhanced employee productivity (Badamgarav et al., 2003).

2. *Options for Meeting the Objective*

To meet the objective of providing protection from catastrophic costs, covering a wide array of treatments, and allowing flexibility within their plans, employers should consider the following options:

- **Combine the out-of-pocket maximums for mental and physical health care services.** Patients' out-of-pocket expenses for mental health services should be applied to a unified benefit out-of-pocket maximum that also includes unreimbursed expenses for medical/surgical care. The role of health insurance generally is to protect against financial ruin caused by medical care costs. The main concern is the total amount of these costs and the ability of the individual or family to shoulder the burden. It may be more appropriate to consider spending for mental and physical health care services together rather than separately when

calculating out-of-pocket maximums and expenditures.

- **Provide coverage for a variety of treatment modalities.** To provide adequate coverage, a health plan should cover a variety of treatment types, including inpatient, intermediate, and outpatient services and prescription drugs. Intermediate services may be provided both as a less intensive treatment modality for those not requiring inpatient care and as a less expensive service. Plans could reduce costs by encouraging providers and patients to “step down” from inpatient to intermediate services as soon as is medically feasible for the patient. Also, as prescription drugs have grown more integral to the treatment of mental illnesses, the prescription drug benefit should cover a range of mental health drugs to ensure access.
- **Provide a flexible mental health care benefit with generous or no limits.** An employer that prefers to retain some limits on care covered may wish to focus on limits for inpatient services and clarify explicit criteria for evaluating medical necessity. Some specific options include the following:
 - *Eliminating limits for outpatient benefits.* Actuarial analysis of the relationship between benefits and premiums finds that increasing the number of covered visits would increase plan costs by a relatively small amount, and as the number of covered services is increased the cost per additional unit of service decreases substantially. If the typical outpatient benefit limit of 20 visits per year is increased to 90 visits (essentially an unlimited benefit), the overall cost of the outpatient mental health benefit will increase by 17 percent, or \$0.68 PMPM for general mental health and \$0.18 PMPM for substance abuse (based on a 90 percent benefit rate). These dollar amounts represent increases of only 0.2 percent (for mental health) and 0.06 percent (for substance abuse) of the PMPM cost for all benefits (physical and mental combined) for a typical health care plan. (See Appendix A for a complete description of this analysis and for PMPM figures for various benefit limits.) Employers and health plans also could calibrate graduated cost sharing for outpatient visits, with the first few visits having low or no cost sharing.
 - *Combining coverage for outpatient and intermediate-level services* in a managed but unlimited benefit and retaining some generous limits on inpatient care. While not yet supported in the empirical literature, based on the advisory panel’s advice it may be feasible to implement such a combination, provided monitoring techniques are in place to measure the effects on access, cost, and quality of services.
 - *Covering inpatient care with generous limits*, as this is unlikely to induce additional demand. Actuarial analysis, described in Appendix A, indicates that providing coverage for additional inpatient days increases plan costs by a relatively small amount, and the cost per additional day decreases as the number of covered days increases. For example, if the typical inpatient benefit limit of 30 days is doubled to 60 days, the overall cost of the inpatient mental health benefit will increase by 22 percent, or \$1.55 PMPM for general mental health and \$0.62 PMPM for sub-

stance abuse (based on an 80 percent benefit rate and assuming average U.S. costs in 2005). These dollar amounts represent increases of only 0.4 percent (for mental health) and 0.2 percent (for substance abuse) of the PMPM cost for all benefits (physical and mental combined) for a typical health care plan.

- *Providing a flexible benefit package.* Employers or their health plan vendors should create a flexible mental health benefit plan that covers a range of services and treatment types (including intermediate services) and allows enrollees to trade services of different types among the benefit limits. A flexible benefit package can adapt to the needs of employees and their dependents, allowing the benefit to cover more people adequately. Flexibility in the benefit package enables providers to ensure that individual patients are provided with treatments that work for them. Plans also should use incentives to encourage the use of lower cost treatments (such as intermediate-level care) and providers where appropriate, and they should ensure that the mental health benefit covers the services needed by patients of different ages with different needs.
 - **Use the EAP for access and integrate it with the mental health benefit.** If using an EAP, employers should advertise the services to employees and their dependents and use the EAP to get those who need care into appropriate treatment quickly. Outreach and employee education should be stressed. The EAP should be portrayed as an acceptable option for employees, to reduce the stigma associated with mental health care. Integration of the EAP with
- the mental health benefit would allow timely provision of treatment to individuals identified through calls to the EAP. Employers also should ensure appropriate funding of the EAP.
- **Use treatment plans and prior authorization.** Employers and plans can use provider-developed and plan-approved treatment plans and prior authorization to manage the care delivered to members. These techniques would serve to reduce demand for unnecessary services possibly induced by increased limits or lower cost sharing. However, plans should avoid creating unnecessary barriers to care, such as heavy-handed utilization management, which may impinge on service delivery. This may be accomplished through providing initial visits without prior authorization or referral requirements. In addition, plans should provide an accessible grievance and appeals procedure with clear guidelines for approval and denial of services.
 - **Use a disease case management approach to improve outcomes and help manage costs.** Employers and health plans have found that using disease case management programs for conditions such as asthma and diabetes leads to clinically desirable outcomes. Similar approaches can be taken for managing the treatment of depression or anxiety to improve employees' ability to remain productive both on and off the job.

B. Ensure Access to Covered Services

Regardless of the numbers and types of services covered by a mental health benefit plan, if employees and their covered dependents cannot access the covered services they need, the benefit is not adequate. Employees must be educated about the benefit and the

services/provider types covered in order to know how to seek care when they need it. Other factors to consider include having sufficient numbers and types of providers in the plans' networks within a reasonable travel distance to meet enrollees' needs and to provide enrollees with a choice of providers and timely appointments.

1. Current Practice and Evidence from the Literature

A. Effects of Financial Risk-Sharing Arrangements on Access to Care

Financial risk-sharing relationships vary among and across delivery models of behavioral health care. On one end of the spectrum, all the financial risk is transferred to the MBHO; on the other end, the MBHO bears little or no risk. Within the spectrum are shared risk relationships, in which payment to MBHOs is based on their performance relative to performance targets (Frank, McGuire, & Newhouse, 1995). Arrangements in which MBHOs share risk appear to be more common than ones in which MBHOs bear no risk (Garnick et al., 2001). In a survey of 458 MBHOs, Garnick et al. (2001) found that in 1999, 12.8 percent of the MBHOs operated under partial risk-sharing agreements. The most frequent risk-sharing arrangement across plan types is one in which MBHOs are fully at risk within certain limits on the MBHO's losses or profits. In 1999, 52.8 percent of managed behavioral health products participated in this kind of arrangement (Garnick et al., 2001). Risk-sharing mechanisms affected the supply of services; outpatient mental health visits were reduced between 20 percent and 25 percent when risk sharing was introduced in an MBHO that covered approximately 2 million enrollees (Rosenthal, 1999; 2000).

For mental health benefits that are carved into the general health care benefit plan, financial risk-sharing relationships between the employee and the employer or plan may change as employers increase their use of CDHB and HDHPs, with or without account-based spending accounts such as HSAs. As discussed in Section II, members of the advisory panel expressed concerns related to coverage for mental health care services in these types of plans, specifically in regard to the definition of preventive care and what services will qualify for coverage or apply to the deductible. As the prevalence of these plans increases, attention will need to be given to these cost and coverage issues, and employees will need guidance on their funding decisions related to HSAs or other health care accounts.

B. Effects of Carve-Outs on Access to Mental Health Care Services

As described in Section III, several factors influence employer decisions about carving out their mental health benefits. In particular, employers must consider various aspects of the plans, including utilization management and quality of care, contracts with accredited MCOs and MBHOs, care management and coordination, provision of services to vulnerable populations, and costs, as discussed below.

i) Utilization Management and Quality of Care

The literature shows that patterns of mental health care utilization have changed with the increased use of the MBHO model, but the overall use of mental health care has not. In some cases, access to care has increased, perhaps due to programs like EAPs, direct access to services under MBHOs, and better coordination and education efforts among specialists, primary care providers, and consumers

(Feldman, 1998; Hodgkin, Horgan, Garnick, Merrick, & Goldin, 2000; Zuvekas, Regier, Rae, Rupp, & Narrow, 2002). For example, enrollees in MBHOs typically access mental health services via a toll-free number that can be reached 24 hours a day or through an EAP referral, while in general managed care health plans, enrollees often are required to see a primary care provider who can then refer them to a mental health care practitioner. MBHO contracts often include mechanisms such as enrollee education about benefits, limited maximum telephone wait times, and maximum wait times before an appointment is scheduled, which can increase access to care (Feldman, 1998). Nearly all Fortune 500 companies that have a carve-out also have an EAP, which can be an easy and non-threatening way for employees to receive care (Merrick et al., 2003).

A review of one large MBHO, United Behavioral Health, found that while it frequently performed utilization reviews for appropriateness of services, the actual denial rate was only 0.8 percent. The authors noted that while the study indicates that service denial was not a common method of limiting care, MBHOs may use other processes to limit access to care, or providers may have learned how to get their requests authorized (Koike, Klap, & Unützer, 2000).

Another study of the private sector by Goldman, McCulloch, and Sturm (1998) found that after an MBHO was contracted for mental health care services, the total number of persons using mental health care services increased, while the average number of outpatient visits per person decreased, probability of inpatient admission declined, and average inpatient length of stay was reduced. In managed behavioral health care arrangements, the use of intermediate care,

such as residential treatment and partial hospitalization in place of hospital care, generally increases, which may allay concerns of overhospitalization and restrictive treatment settings (England & Vaccaro, 1991; Grazier & Eselius, 1999). A case study of a medium-size firm of 1,943 employees that implemented managed behavioral health care found that MBHO enrollees had an increased likelihood of receiving outpatient mental health care and no difference in the level of care in terms of services received once the patient was under care (Grazier, Eselius, Hu, Shore, & G'Sell, 1999). According to a study by Buck, Teich, Umland, and Stein (1999), MBHOs are less likely than other types of plans (e.g., PPOs and HMOs) to impose special limits, with one-third of MBHOs having no special limits at all. The utilization management undertaken by MBHOs may allow them to set higher benefit limits without concern for cost.

Some of the literature suggested that the structure, administrative techniques, and specialization of MBHOs may enable them to provide better mental health care to patients. In integrated medical plans with competing HMOs, HMOs have an incentive to avoid enrolling patients with behavioral health problems because their costs exceed their premiums. Employers can avoid this problem if all employees are enrolled in a single carve-out, which therefore cannot disenroll or avoid expensive patients (Frank, Koyanagi, & McGuire, 1997; Hodgkin, Horgan, Garnick, Merrick, & Goldin, 2000;). In this situation, employees with a mental illness are unable to choose health plans with greater benefits, eliminating the problem of adverse selection. Hodgkin, Horgan, Garnick, Merrick, and Goldin (2000) also hypothesized that a separate budget for behavioral health

services ensures that an HMO cannot divert funds from behavioral health to general health. One author commented that the intense case management capabilities of MBHOs can actually ensure quality care for patients as opposed to using the mechanism to deny care (Durham, 1995). MBHOs can improve care by developing specialized clinical practice protocols to guide care delivery, employing mental health professionals as case managers, and maintaining a comprehensive behavioral health service network (Teitelbaum, Rosenbaum, Burgess, & DeCourcy, 1999). MBHOs also have had success coordinating care between substance abuse and mental health services, which is crucial given the high prevalence of patients with dual diagnoses (Feldman, 1998).

The American Medical Association (AMA) and the American Psychiatric Association (APA) are concerned that providing mental health services separately from physical health through an MBHO stigmatizes and discriminates against enrollees with mental illness. Another belief of some psychiatrists is that MBHOs impose onerous authorization requirements, inappropriately provide only limited authorizations, or provide insufficient reimbursements, which are disincentives for psychiatrists' participation in MBHO networks (APA, 2002).

Quality can be difficult to measure, but some common ways to measure it are hospital readmissions, appropriateness of medications, type of counseling received, access to a range of appropriate mental health providers, and adherence to clinical treatment guidelines. MBHOs are sometimes criticized for shifting patients away from the care of psychiatrists toward less expensive mental health providers like doctoral-level psychologists or master's-level therapists. A study by Sturm

and Klap (1999) found that the majority of MBHO enrollees with depressive disorders and almost all enrollees with psychotic disorders had contact with a psychiatrist. Merrick (1998) found that while inpatient service payments and lengths of stay decreased for MBHO enrollees, readmission rates did not change significantly, and the proportion of discharges receiving follow-up care increased significantly. A case study by Busch (2002) found that MBHO enrollees diagnosed with depression were 25 percent more likely to receive mental health treatment according to AHRQ and APA guidelines. Exhibit 4 summarizes the benefits and drawbacks of an MBHO carve-out.

Altman and Goldstein (1988) laid out the differences in clinical practices, management strategies, and benefit design across different HMO models, including group models, staff models, and individual practice associations (IPAs). The authors noted differences in cost sharing for outpatient visits (lower in staff models, incremental increases in IPAs) and alternative benefits (staff models providing additional day treatment, other models allowing substitution of day treatment for inpatient days). No systematic patterns in access were found in the model types; variation existed both within and between the models. In all types, plans provided more benefits than their specified benefit offerings would suggest. The six HMOs studied required a primary care physician referral for mental health services; however, half of them ignored this requirement and allowed self-referral for at least the initial visit. Staff and group model plans were more likely to extend benefits beyond plan limits to achieve other goals such as prevention of hospitalization, while none of the IPAs did so.

ii) Contracts with Accredited MCOs and MBHOs

Employer purchasers have found that requiring contracted health plans such as carve-out MBHOs to be accredited by organizations such as the National Committee for Quality Assurance (NCQA), the Joint Commission on the Accreditation of Healthcare Organizations (JCAHO), or the Utilization Review Accreditation

Committee (URAC) is an essential way to help ensure access to quality care (Scanlon & Hendrix, 1998). These organizations require that health plans meet a variety of performance measures that include standards for access to care, provider network composition, and improved health outcomes. NCQA and JCAHO, for example, have developed performance standards specifically for MBHOs. URAC has standards for utilization review, case management, and disease management programs. Quality is also measured through NCQA's Consumer Assessment of Health Plans Survey (CAHPS®). A random sample of consumers is surveyed annually about their experiences and satisfaction with their health plans, and CAHPS publicly reports aggregate measures of their responses across health plans. Employer purchasers have found that plans with high scores provide high-quality care and have high consumer satisfaction. This information helps to inform employer purchasers' decisions about the plans with which to contract.

iii) Care Management and Coordination
Carve-outs are thought to improve care management and health service delivery through more sophisticated networks and a high level of expertise on mental health care issues (Grazier & Eselius, 1999). This improved care management may help mitigate the effects of adverse selection and moral hazard. A carve-out also may curb adverse selection by shifting financial risk to the MBHO and by providing the same mental health benefits to members of different health plans offered by one employer. However, most employers using carve-outs do so for only some of their employees and do not create a single benefit for all mental health needs (Sturm & McCulloch, 1998).

Exhibit 4. Benefits and Drawbacks of Carving Out to MBHO	
Benefits	
<ul style="list-style-type: none"> • Pooling of good and bad risks/elimination of adverse selection (if all members are in a single carve-out) • Separate budget, which ensures funds will not be diverted • Case management performed by mental health professionals • Specialized clinical protocols to guide care delivery • Comprehensive mental health network • Coordination of mental health and substance abuse treatments for patients with dual diagnoses • Access to psychiatrists • Follow-up care after hospitalization • Treatments more likely to be provided according to treatment guidelines 	
Drawbacks	
<ul style="list-style-type: none"> • Separation of benefit, which may perpetuate stigma and lead to possible discrimination • Onerous authorization requirements or frequent denials • Insufficient reimbursement of clinicians • Inhibition of creation of a fully integrated system of services intended to holistically address the medical and mental health needs of enrollees, which may not properly sensitize primary care providers to mental health issues of their patients • Possible confusion for enrollees and providers if effective care coordination mechanisms are not in place 	
<p>Sources: APA, 2002; Busch, 2002; Durham, 1995; Feldman, 1998; Frank, Koyanagi, & McGuire, 1997; Grazier & Eselius, 1999; Hodgkin, Horgan, Garnick, Merrick, & Goldin, 2000; Merrick, 1998; Sturm & Klap, 1999; Teitelbaum, Rosenbaum, Burgess, & DeCourcy, 1999.</p>	

Sturm and McCulloch (1998) reported substantial variety in mental health benefits, which the authors asserted is indicative of attempts to address moral hazard and adverse selection. Frank, McGuire, Bae, and Rupp (1997) also asserted that mental health carve-outs may help mitigate adverse selection and reduce the incentives for plans to compete to avoid “bad” risks or individuals with high mental health care needs (e.g., by offering a limited mental health benefits package). Salkever and Shinogle (2000) studied factors influencing employers’ decisions to use mental health carve-outs. They identified two ways in which carve-outs can mitigate adverse selection: (1) employing effective utilization management strategies for mental health services and (2) limiting employees’ choice of mental health benefits packages by using one carve-out arrangement across all health plans offered. The study ultimately was inconclusive regarding whether employers choose carve-outs specifically to control adverse selection.

On the related topic of care coordination, the experts interviewed for this project identified the coordination of mental and physical health services as a challenge, especially when mental health services are provided as a carve-out through a separate contract, because this severs the link between the benefits. Separation of the benefits was a common critique of behavioral health carve-outs throughout the literature as well, although it was noted that there are no nationally accepted benchmarks for care coordination and that care coordination is a broader health care issue. While primary care providers are often the first and sometimes the only medical professionals who see patients with mental illness, they may not be as effective in delivering specialized

mental health care as psychiatrists and other mental health clinicians (Goldberg, 1999; Sturm & Klap, 1999; Varmus, 1998). According to one article, more than two-thirds of all prescriptions for psychotropic medications are written by physicians who are not psychiatrists, and 50 percent of patients with mental disorders see a primary care provider only (Fagan, Schmidt, & Cook, 2002). In addition, according to members of the advisory panel, some new psychopharmaceuticals carry “black-box” warnings that require extensive follow-on care, and primary care providers may be reluctant to prescribe such drugs owing to these requirements.

Ideally, primary care providers should have a clear mechanism to refer patients to mental health specialists and to communicate with specialists about past and concurrent treatments. Administrative barriers between primary care physicians and mental health specialists could delay patients receiving the appropriate mental health care. Group Health Cooperative of Puget Sound in Seattle provided an example of a successful collaborative disease case management model in which primary care physicians and mental health providers worked together. A Group Health experiment found that 74 percent of patients with major depression treated in a collaborative setting (a primary care physician and a psychiatrist) saw significant improvement in their condition, compared with 42 percent of patients who received care only from a primary care physician. Key elements of Group Health’s collaborative model included getting physicians and psychiatrists to work closely to share medical records if possible, and ensuring that the billing system encouraged collaboration (Katon et al., 1997; White, 1997).

Rosenbaum, Mauery, and Kamoie (2001) addressed care coordination between physical and behavioral services in managed care contracts. The authors found that the movement toward physical and behavioral health service integration appears to be founded in the belief that integration is fundamental to the standard of primary care itself. NCQA includes standards for care coordination in its accreditation standards for both MBHOs and general MCOs. However, while purchasers identify care coordination as a performance standard of interest, few identify specific benchmarks for care coordination. The authors set forth sample purchasing specifications for care coordination in managed care contracts. They suggested that the contract language may be especially useful for purchasers considering contracting with MBHOs that are not NCQA-accredited or that wish to use standards exceeding those of NCQA.

Another issue to consider in care coordination is the potential for medical cost offsets. Cost offsets may be achieved by appropriately treating diseases like depression or other mental health disorders, which often lead to general disability (Mechanic, 1998). Coordination of care between physical and mental health care gives MBHOs the incentive and ability to practice cost-offset and preventive measures, because the MBHO will reap the benefits (Hodgkin, Horgan, Garnick, Merrick, & Goldin, 2000; Mechanic, 1997). However, a study of eight large employers with generous mental health benefits found that employers choosing behavioral health carve-outs had concluded that the care quality and management offered by a behavioral health specialty benefit outweighed the reported advantages of integrated health care benefits (Apgar, 2001).

iv) Provision of Services to Vulnerable Populations

A concern associated with mental health carve-outs is that they limit care for those with special mental health care needs, such as children and adolescents and those with serious mental illnesses. The most dramatic reductions in costs have been among individuals with the highest expenditures and the most serious illnesses, raising concerns that necessary services may be cut along with unnecessary utilization (Grazier & Eselius, 1999).

Employer mental health benefits often extend to the families of employees, who therefore should be considered when designing the benefit. Adolescents are more likely to use both outpatient and inpatient mental health services than adults. Thus, limits on benefits have a greater effect on adolescents (Gresenz, Liu, & Sturm, 1998). In one study, the implementation of parity and managed care resulted in reduced inpatient use by children and adolescents, but it was not clear if this was the result of reducing unnecessary use or of cutting needed services (Zuvekas, Regier, Rae, Rupp, & Narrow, 2002). In a study of Medicaid beneficiaries, inpatient readmission of children and adolescents who received behavioral health services through a carve-out increased from less than 8 percent to more than 10 percent, and children's inpatient providers were more critical of clinical decisions than other providers were. Researchers suggest that children may have more complex needs than adults and that carve-outs may not have the resources necessary to coordinate their care with family members, schools, and other agencies (Grazier & Eselius, 1999).

Several articles raised the concern that MBHOs limit inpatient care to the point of

hindering the care of the seriously mentally ill (Zuvekas, Regier, Rae, Rupp, & Narrow, 2002). An article in the *Archives of General Psychiatry* concluded that while enrollment in an MBHO does not change the likelihood of an individual with schizophrenia receiving antipsychotic medication, it does negatively impact the use of individual therapy, group therapy, and psychosocial rehabilitation (Busch, Frank, & Lehman, 2004). Huskamp (1999) found, in a study of the Massachusetts State employee carve-out, that seriously mentally ill patients with unipolar depression or substance dependence experienced decreased inpatient and outpatient costs per episode. The author asserted that individuals with severe mental illness potentially experienced a decrease in necessary services. A study by Landerman, Burns, Swartz, Wagner, and George (1994) found that financial requirements such as copayments do reduce the use of mental health care by those with a psychiatric diagnosis. Finally, the Surgeon General's Report on Mental Health noted that patients with serious mental illnesses and children are at greater risk for experiencing negative outcomes associated with benefits limits and quality concerns related to managed care (DHHS, 1999).

v) Costs

Researchers agree that MBHOs reduce costs for the purchaser and the enrollee at least in the short run (Frank & McGuire, 1997; Goldman, McCulloch, & Sturm, 1998; Grazier & Eselius, 1999; Grazier, Eselius, Hu, Shore, & G'Sell, 1999; Huskamp, 1999; Ma & McGuire, 1998; Teitelbaum, Rosenbaum, Burgess, & DeCourcy, 1999; Zuvekas, Regier, Rae, Rupp, & Narrow, 2002). Employers may realize savings ranging from 30 percent to 40 percent in their first year of contracting with an MBHO, with savings stabilizing after

year three (Feldman, 1998). Much of these savings result from MBHO efforts to shift care from inpatient services to less intensive and less costly outpatient services. According to Feldman (1998), in the 10 years following the introduction of MBHOs in the late 1980s, the share of total mental health costs accounted for by inpatient services declined from 75 percent to less than 50 percent.

MBHOs also can reduce mental health care costs by negotiating lower fees with providers, creating economies of scale, supporting the use of lower cost services, and providing better management and selection of services (Feldman, 1998; Grazier & Eselius, 1999; Ma & McGuire, 1998). However, researchers must consider confounding variables in their studies of mental health care costs in MBHOs. In some cases, the drastic cost savings associated with contracting with an MBHO may actually be attributable to switching from an indemnity plan to managed care, as opposed to the MBHO specifically (Hodgkin, Horgan, Garnick, Merrick, & Goldin, 2000). In addition, Goldman, McCulloch, and Sturm (1998) asserted that the particular risk-sharing contractual arrangements between an employer and an MBHO appear to have less impact on total cost savings than certain other factors, such as the competitive market for large employer contracts, management consistency between contracts within an MBHO, and professional values and commitments to patient care.

On the other hand, as described in the above section on care management and coordination, because carve-outs eliminate the relationship between the physical and mental health elements of the health care benefit plan, they eliminate the incentive and ability of a health plan to achieve cost offsets

between the two (Hodgkin, Horgan, Garnick, Merrick, & Goldin, 2000; Mechanic, 1997).

2. *Options for Meeting the Objective*

To meet the objective of ensuring access to covered services, employers should consider the following options:

- **Choose mental health carve-out vendors carefully** and negotiate contracts to ensure access, quality of care, care management, and appropriate care for vulnerable populations.
- **Incorporate approaches to coordinating mental and physical health care services.** Provide for communication between different provider types and specialties, to include sharing information about diagnoses, treatment plans, prescribed drugs, and prognoses.
- **Take care in structuring mental health benefits as CDHB becomes more prevalent.** The literature regarding these consumer-directed plans and what they may mean for mental health care delivery is still in its infancy but is growing rapidly. More information is needed from the professional community regarding any special considerations that mental health should receive when establishing these types of plans.
- **Encourage employees to consider mental health needs in funding HSAs** or other types of accounts. Mental health treatments are clearly an issue for someone contemplating an HSA who has an existing mental health condition. It is not yet clear how individuals will finance HSAs to insure against the catastrophic costs of an unanticipated mental illness.
- **Contract with health plans that are accredited by a national quality review organization.** The accreditation standards of organizations such as NCQA, JCAHO, or

URAC comprise quality performance indicators related to access and outcomes that help to ensure that mental health benefits are provided on a timely basis in safe and effective treatment settings.

- **Assess care provided by primary care providers and referral procedures.** At present, a substantial amount of treatment in the form of mental health screening and prescribing of psychopharmaceuticals occurs in primary care settings. Primary care physicians should monitor for “triggers” that indicate a need for specialty mental health providers (e.g., family therapists, case managers, psychologists, psychiatrists, and social workers) to engage in focused therapies such as short-term cognitive behavioral therapy.

C. Include Evidence-Based Practices and Treatment Guidelines as Available in Mental Health Benefits

The mental health service system has been shaped more by historical tradition, political decisions, and conventions of practice, financing, and organization than by a body of research evidence about effectiveness and efficiency (Goldman, Thelander, & Westrin, 2000). The effectiveness of mental health treatments and services must be taken into consideration when making decisions about what to provide through a benefit plan. Treatments and services that have been proven through research evidence or treatment outcomes to be effective should be among those that are included, as the provision of evidence-based practices can lead to positive outcomes. Evidence-based practices are those that are shown through consistent scientific evidence to be safe (although they may have side effects that have been judged to be acceptable, in light of the positive impacts of

the practices), efficacious, and effective for most persons with a given disorder (Center for Mental Health Services [CMHS], 2004).

1. *Current Practice and Evidence from the Literature*

To identify evidence-based practices, the literature specified several necessary characteristics of the practices, including consistent scientific evidence showing improved outcomes and permitting assessment of the quality of the practices (Drake et al., 2001). Evidence-based practices are a means of achieving the dual goals of quality and accountability in mental health services (Goldman et al., 2001).

In order to ensure their effectiveness, these practices should be implemented with “program fidelity;” that is, they should adhere to the treatment parameters that were found to be effective. Health plan purchasers (i.e., employers) may wish to discuss evidence-based practices with their mental health benefit plans to ensure their provision; however, the lack of an evidence base for a treatment may not be a sufficient reason to exclude the treatment from a benefit package (Lehman, Goldman, Dixon, & Churchill, 2004). Other standards must be used to evaluate the effectiveness of services for which there may be little scientific evidence, such as prevailing professional practice standards, community needs, and other pragmatic factors. Other services may be of self-evident value and not require additional evaluation, and some may continue to be offered with the caveat that an evaluation must be undertaken in the future. Health care systems are also urged to track indicators, outcomes, and costs to document efficacy and cost-efficiency of programs and to secure support of managers and fiscal officers for preventive services (Nitzkin & Smith, 2004).

A. Sources of Information about Evidence-Based Practices

The Substance Abuse and Mental Health Services Administration (SAMHSA) Center for Mental Health Services (CMHS) identified several sources of information about evidence-based practices (CMHS, 2004):

- Individual researchers undertake reviews or meta-analyses of clinical research.
- Voluntary organizations of scientists, such as the Cochrane Collaborative and the Campbell Collaboration, use systematic reviews to synthesize the evidence around health care practices to help clinicians and patients make informed decisions.
- Professional and trade organizations support the publication of reviews and meta-analyses in scientific journals and issue practice guidelines. Many of these guidelines are included in the National Guideline Clearinghouse (NGC), which is discussed later in this section.
- The Evidence-Based Practices Project, which was initiated by the CMHS and the Robert Wood Johnson Foundation, is a national demonstration project in which States have developed centers for implementing evidence-based practices in mental health, and which has identified treatment practices that are strongly supported by research.
- The following Federal agencies support the identification and dissemination of evidence-based practices in mental health:
 - National Institute of Mental Health (NIMH)¹
 - Substance Abuse and Mental Health Services Administration, through the National Registry of Effective Programs and Practices (NREPP)²
 - Another source of information on evidence-based practices is NREPP,

created as a resource to help professionals in the field become better providers of prevention programs. NREPP reviews and screens the evidence base for substance abuse and mental health practices and programs and then rates them based on methodological rigor, program adoptability, and usefulness to communities.

- Agency for Healthcare Research and Quality (AHRQ)—formerly the Agency for Health Care Policy and Research (AHCPR), through the Evidence-Based Practice Centers³ (EPCs) and the U.S. Preventive Services Task Force⁴ (USPSTF)
 - AHRQ-designated EPCs undertake systematic reviews of the scientific evidence on health care topics and publish reports to help guide practice in those areas.
 - AHRQ-sponsored USPSTF conducts rigorous, impartial assessments of the scientific evidence regarding the effectiveness of a broad range of clinical preventive services and publishes recommendations in the Guide to Clinical Preventive Services.

B. Issues in Implementing Evidence-Based Practices

In a paper stemming from the national Evidence-Based Practices Project, Drake et al. (2001) described the rationale for and difficulty in implementing evidence-based practices in routine mental health service settings. The authors found that evidence-based practices are not provided to the majority of patients in routine mental health programs and that implementation is difficult. Issues include organizational structure and commitment, resource development, clarity

of roles and responsibilities, and service boundaries. The authors recommended that mental health services for persons with severe mental illness reflect the goals of consumers, which include independence, employment, satisfying relationships, and good quality of life. They also asserted that evidence-based practices should be the minimum provisions in mental health settings for persons with severe mental illness and should not be displaced by interventions of unknown or lesser effectiveness.

At the end of 2001, Goldman and colleagues reviewed articles published that year in a journal series on evidence-based practices. The authors asserted that the implementation of evidence-based practices supports the goals of quality and accountability in health care, as the practices represent quality improvements, and accountability is accomplished through the monitoring of programs for consistency with practices whose effectiveness has been demonstrated. The authors also found, however, that some treatments and services lack evidence, especially when patients with mental disorders suffer from comorbid conditions that have not been studied in the research on treatment effectiveness, thereby making applicability of the findings questionable. The authors pointed to the need for more research to determine the effectiveness of evidence-based practices in various subpopulations and asserted that, despite myriad studies on innovation and implementation of health and mental health services, definitive evidence is lacking to assist in implementing specific evidence-based practices.

One of the concerns regarding the identification of evidence-based practices is that they may not be implemented with fidelity. In order to achieve expected outcomes from an evidence-based practice, it is important to

adhere to specific programmatic standards (Drake et al., 2001). Program fidelity or fidelity of implementation refers to the degree to which program implementation remains true to the program that was studied and found to be effective. Lehman, Goldman, Dixon, and Churchill (2004) asserted that “Fidelity in implementing programs is key to both effectiveness and costs.” These authors cited evidence showing that implementing a particular program with good fidelity led to cost reductions and improved outcomes, while implementing the same program with poor fidelity increased costs and led to poorer outcomes than if the program had not been implemented. Regular monitoring of programs and outcomes is essential, and program fidelity measures have been developed that permit monitoring and accountability for several evidence-based psychosocial interventions. Additional technologies need to be developed to motivate and train providers to implement practices with program fidelity (CMHS, 2004).

In their synthesis of literature on evidence-based practices, Goldman et al. (2001) highlighted the importance of financing structures on the implementation of evidence-based practices. Every author in the reviewed series of articles identified financing policies as barriers to the implementation of evidence-based practices. The authors stated that services for which clinicians can get paid will take precedence, and evidence-based practices will be pushed aside if they are not covered. They asserted that in order for evidence-based, state-of-the-art treatments to be delivered, the necessary medications must be on a plan’s formulary, and the necessary interventions must be covered. Evidence-based practices must be covered services under the health plan if they are to be utilized or provided.

C. Evidence-Based Mental Health Services

Research has identified the evidence base for several preventive behavioral health interventions with positive outcomes. A review of the literature published by CMHS in 2004 (Nitzkin & Smith, 2004) found the following clinical preventive mental health services to be worthy of consideration for implementation in all health care settings:

- Home visitation for selected pregnant women and some children up to age 5;
- Supplemental educational services for vulnerable infants from disadvantaged families;
- Screening of children and adolescents for behavioral disorders;
- Screening of adolescents and adults for depression and anxiety; and
- Psychoeducation for persons scheduled for major surgical procedures, persons with major chronic diseases, and selected other heavy users of health care services.

Psychoeducation for selected patients and screening for depression in persons with chronic conditions have been shown to have the potential to reduce overall health care costs within 12 months of initiation of new or expanded preventive services. These services are likely to reduce the burden of behavioral illnesses but not prevent them completely (Nitzkin & Smith, 2004).

Two earlier related reports published by SAMHSA also presented preventive behavioral interventions recommended for consideration by MCOs and found that the most expensive of the services would add less than 1 percent to the average HMO premium. The average increase in premium would be less than 0.5 percent across all of their six recommended interventions (Broskowski & Smith, 2001; Dorfman, 2000). The reports encouraged MCOs to consider implementing these

behavioral interventions, as they were shown to improve medical outcomes, increase patient satisfaction, reduce medical use and costs, and require a very small increase in premium costs.

Lehman, Goldman, Dixon, and Churchill (2004) pointed to a substantial body of outcomes research showing the efficacy of a wide range of mental health services. The authors found that “the most effective services combine optimal medication management with psychosocial interventions that provide the patient and the family with information about the illness, ongoing supports, and rehabilitation services.” They offered examples of evidence-based practices for adults with schizophrenia, for adults with mild to moderate depression, for children with conduct disorders, for children with attention deficit hyperactivity disorder, and for those with specific other mental illnesses, such as severe mood disorders, bipolar disorders, anxiety disorders, posttraumatic stress disorder, and borderline personality disorder. These authors recommended that a wide array of effective services be available. Choice and selection among effective services are essential, both to maximize treatment response and to encourage adherence to treatment, because many services are not equally effective for all individuals and varying subgroups and individuals respond differently to treatment.

D. Treatment Guidelines

As the development of the evidence base for treatment of mental health services grows, purchasers, health plans, and providers continue to rely on the use of treatment guidelines that have been developed and used in the field. Health plans often stipulate what levels of evidence are used for determining reimbursement of covered services in their medical necessity definitions and utilization

review processes (Rosenbaum, Kamoie, Mauery, & Wallitt, 2003). Until such time as more mental health treatments have established evidence bases, one approach to treatment decision-making is to create a hierarchy of evidence within the medical necessity definition. One model for this is found in Hawaii’s State independent review statute, shown in Exhibit 5.

AHRQ sponsors the NGC, a searchable database of clinical practice guidelines and related documents. The NGC aims to provide health care professionals and providers, health plans, integrated delivery systems, purchasers, and others access to objective, detailed information on clinical practice guidelines and to further the dissemination,

Exhibit 5. Hawaii’s Medical 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, & Wallitt, 2003

implementation, and use of the guidelines. The NGC includes many guidelines pertaining to treatment recommendations for mental health disorders, submitted by a variety of organizations. Exhibit 6 shows the various behavioral health categories for which treatment guidelines are provided in the NGC and the number of guidelines in each category.

In addition, the American Psychological Association's Society of Clinical Psychology (Division 12) has developed an online guide to empirically supported treatments (ESTs) in the field of psychotherapy for various mental

disorders. The resource is directed toward consumers to fulfill their needs for information about the benefits of psychotherapy in different situations. It describes various psychotherapies that have met basic standards of effectiveness. Separately, in 1999, the division also commissioned *A Guide to Treatments That Work* (CMHS, 2004).

In a May 2002 update to the *Guide to Clinical Preventive Services*, the USPSTF recommended screening adults for depression in clinical practices with the capacity to ensure accurate diagnosis, effective treatment, and follow-up care (USPSTF, 2002). However, while medical literature supports the effectiveness of screenings, few MCOs require mental health screenings in primary care settings, leading to missed opportunities for diagnosis and treatment of disorders. Horgan et al. (2003) reported on data from a 1999 survey of 493 MCOs in 60 markets, including HMOs, PPOs, and POS plans. The survey asked about the organizations' policies on the screening and treatment of mental health disorders in primary care settings and found that only 21 percent of commercial managed care products required primary care physicians to screen their patients for mental health disorders. Among those that required screening, 85 percent or more distributed practice guidelines addressing treatment, referral, and patient education for the disorders. Among all commercial managed care products, 51 percent provided practice guidelines for mental health treatment in primary care. Guidelines included provisions for brief interventions, consultations with specialty practitioners, patient education, and the prescribing and monitoring of psychotropic medications.

E. Outcomes Management

A related consideration in developing a mental health benefit package and ensuring its

Exhibit 6. NGC Mental Health and Substance Abuse Treatment Guideline Categories

<i>Mental Disorder Categories in the National Guideline Clearinghouse</i>	<i>Number of Guidelines</i>
Adjustment Disorders	2
Anxiety Disorders	6
Delirium, Dementia, Amnestic, Cognitive Disorders	28
Dissociative Disorders	1
Eating Disorders	9
Factitious Disorders	1
Impulse Control Disorders	1
Mental Disorders Diagnosed in Childhood	14
Mood Disorders (including depression)	18
Neurotic Disorders	1
Personality Disorders	2
Schizophrenia and Disorders with Psychotic Features	10
Sexual and Gender Disorders	4
Sleep Disorders	11
Somatiform Disorders	2
Substance-Related Disorders	19
Source: AHRQ, National Guideline Clearinghouse, www.guideline.gov , accessed on 9/13/2004.	

effectiveness is the assessment and monitoring of treatment outcomes. Treatment outcomes may be an especially effective metric in the case of therapies for which program fidelity is difficult to measure or achieve (e.g., therapies other than pharmacotherapies). Outcomes management systems have been designed and implemented for large MCOs, and outcomes have been monitored in public-sector managed behavioral health benefit plans (Brown, Burlingame, Lambert, Jones, & Vaccaro, 2001; Hodges & Wotring, 2004). Outcomes monitoring and self-reports of symptoms, quality of life, and level of functioning can be used to identify best practices and have become important in both clinical practice and policy making (Holcomb, Beitman, Hemme, Josylin, & Prindiville, 1998). Outcome-informed treatment (or outcomes management) utilizes outcomes data to improve treatment effectiveness (Brown, Burlingame, Lambert, Jones, & Vaccaro, 2001).

A large MBHO implemented an outcomes management system to improve treatment outcomes for patients receiving outpatient behavioral health care services. The methodology of this outcomes management system involved brief standardized evaluations completed at frequent intervals by patients to assess their responses to treatment and to determine which patients are most in need of continued treatment. The system was implemented initially among a subset of providers in February 1999, and a recent study of the system assessed care provided by more than 5,000 individual clinicians and 75 multidisciplinary behavioral health group practices (Matsumoto, Jones, & Brown, 2003).

This outcomes management system identifies patients who need continued treatment and gives clinicians case-by-case feedback,

which allows treatment dollars to be focused on those who will benefit most from additional therapy. The evaluations also help to identify effective clinicians, so that referrals may be directed toward those providers with the best outcomes (Matsumoto, Jones, & Brown, 2003). Brown, Burlingame, Lambert, Jones, and Vaccaro (2001) asserted that mental health treatment should ensure that patients achieve a given level of outcome rather than a specified duration of treatment; they found that the costs of additional treatment for the most ill patients are offset by discontinuing treatment for those who are unlikely to benefit, and that it is possible to focus resources on those at highest risk without increasing total costs of care.

2. *Options for Meeting the Objective*

To meet the objective of including evidence-based practices and treatment guidelines as available in mental health benefits, employers should consider the following options:

- **Include coverage of available evidence-based and effective practices and monitor fidelity with treatment guidelines.** Employer health plan purchasers should require coverage of evidence-based practices, as well as assurances from health plans that covered services are effective, where appropriate. Plans could allow choice and selection among effective practices. In the absence of a scientifically established evidence base, the “evidence base” often is established by what works most effectively for the “average” individual with the condition. Allowing for a hierarchy of evidence in medical necessity definitions enables benefits to be more broadly available and accessible. Plans also should ensure that the prescription drug benefit covers a range of effective mental health

drugs. Fidelity with treatment guidelines can be monitored by incorporating reliable quality indicators as a component of performance measurement.

- **Establish or contract with health plans with outcomes management systems.**

These systems may be able to link the use of evidence-based standards and/or treatment guidelines to clinically desirable outcomes. As distinguished from medical

services, often designed to lead to “cure” or “recovery,” the goal of some mental health treatments may be stabilization or maintenance of functioning. Health plans with outcomes management systems should be flexible enough to include coverage for treatments aimed at maintenance of functioning and prevention of deterioration as well as those focused on recovery from mental health disorders.

Conclusions

The high prevalence of mental disorders in the United States and the business costs to employers of having employees and dependents with mental disorders make a powerful case for employers to provide adequate mental health benefits. Adequate mental health benefits improve productivity and employee retention, and employers should encourage employees' use of mental health care services in order to reduce the business costs associated with untreated mental disorders. Employers may see returns on their investment in mental health benefits in the form of medical cost offsets (which can save employers money by reducing overall health care costs), lower rates of disability program use, and a more productive workforce. Employers also have to consider their other goals in offering a mental health benefit, such as reduced absenteeism, increased productivity, and employee turnover; employee satisfaction; and a healthier workforce.

The costs associated with mental health care can be significant, so financial considerations influence employers' decisions related to mental health benefit packages. Two key considerations are the cost of providing mental health benefits and the cost of mental illness in the workforce. The cost of providing mental health benefits grew significantly between the 1970s and early 1990s; however, costs have been moderated by the increased prevalence of managed mental health care and utilization management techniques. The potential cost of mental health parity was a major concern before the passage of the Federal MHPA in 1996, but studies indicate that Federal and State parity laws have contributed only modestly to premium growth, and in some cases have resulted in decreased health care costs. The cost of mental illness in the workplace typically is measured in terms of diminished productivity,

absenteeism, presenteeism, and disability claims costs. However, these factors are difficult to quantify, as the methods for analyzing many of them, as well as the methods for quantifying ROI and medical cost offsets, are still being developed and refined. As the cost of untreated mental illness is likely to be significantly more than the cost of providing the benefit, investment in adequate mental health benefits appears to be a wise business decision.

The literature on catastrophic costs was limited, but it was clear that while costs of that magnitude are rare, their effects can be devastating, and therefore they should be considered in designing a benefit program. Since the main purpose of health insurance generally is to protect individuals and families from financial ruin due to an illness, protection from catastrophic costs resulting from treatment for mental disorders is

arguably the most important objective in designing an adequate mental health benefit.

Other considerations include providing adequate care for patients of different ages (such as adolescent dependents, who have greater use of certain types of mental health care) and ensuring adherence to treatment in order to achieve good outcomes and any possible cost savings. The mode of benefit administration can determine the extent to which benefits, generous or not, are accessible to the enrollee. Benefit administration can influence access and quality of care as well as the cost of the plan.

Employers and health plans can rely on the growing base of scientific evidence to aid in their benefit design decisions. The use of evidence-based practices, treatment guidelines, quality improvement mechanisms, and outcomes management systems promises to reduce waste in the mental health care system while increasing quality and accountability.

The recommendations and findings in the literature varied greatly and did not provide a conclusive guide to the creation of an adequate mental health benefit. Many factors influence employer choices in designing or purchasing their mental health benefit plans, including employer characteristics and health plan types, financial implications, regulatory requirements, productivity goals, employee attraction and retention, and employee health and well-being. Mental health benefit plans may differ from one employer to another, and a variety of plans may be considered adequate.

Based on a synthesis of the literature reviewed, discussions with members of the advisory panel, and our actuarial analysis, we offer the following three objectives that

employers (and the health plans with which they contract) should strive to meet in order to provide an adequate mental health benefit to their employees, along with suggested options that employers should consider for achieving each of the objectives.

Objective: Provide protection from catastrophic costs, cover a wide array of treatments, and allow flexibility within plan.

- Combine the out-of-pocket maximums for mental and physical health care services.
- Provide coverage for a variety of treatment modalities.
- Provide a flexible mental health care benefit with generous or no limits.

Options include the following:

- *Eliminating limits for outpatient benefits;*
- *Combining coverage for outpatient and intermediate level services;*
- *Covering inpatient care with generous limits; and*
- *Providing a flexible benefit package.*
- Use the EAP for access and integrate it with the mental health benefit.
- Use treatment plans and prior authorization.
- Use a disease case management approach to improve outcomes and help manage costs.

Objective: Ensure access to covered services.

- Choose mental health carve-out vendors carefully.
- Incorporate approaches to coordinating mental and physical health care services.
- Take care in structuring mental health benefits as CDHB becomes more prevalent.

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- Encourage employees to consider mental health needs in funding HSAs or other types of accounts.
 - Contract with health plans that are accredited by a national quality review organization.
 - Assess care provided by primary care providers and referral procedures.

Objective: Include evidence-based practices and treatment guidelines as available in mental health benefits.

- Include coverage of available evidence-based and effective practices and monitor fidelity with treatment guidelines.
- Establish or contract with health plans with outcomes management systems.

References

- Acs, G., Long, S., Marquis, M. S., & Short, P. (1996). Self-insured employer health plans: Prevalence, profile, provisions, and premiums. *Health Affairs, 15*(2), 266–278.
- Agency for Healthcare Research and Quality (AHRQ). (2002). *2002 Medical Expenditure Panel Survey—Insurance Component*. Rockville, MD: Center for Financing, Access and Cost Trends.
- Altman, L., & Goldstein, J. (1988). Impact of HMO model type on mental health service delivery: Variation in treatment and approaches. *Administration in Mental Health, 15*(4), 246–261.
- American Psychiatric Association (APA). (2002). *Carve-outs and discrimination: Position statement*. Washington, DC: Author.
- American Psychological Association. (2004). The costs of failing to provide appropriate mental health care. Retrieved August 23, 2004, from www.apa.org/practice/failing.html.
- Apgar, K. (2000). *Large employer experiences and best practices in design, administration, and evaluation of mental health and substance abuse benefits—A look at parity in employer-sponsored health benefit programs*. Washington, DC: Washington Business Group on Health report to the U.S. Office of Personnel Management.
- Apgar, K. (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 report to the Substance Abuse and Mental Health Services Administration.
- Badamgarav, E., Weingarten, S., Henning, J. M., Knight, K., Hasselblad, V., Gano, A., et al. (2003). Effectiveness of disease management programs in depression: A systematic review. *American Journal of Psychiatry, 160*(12), 2080–2090.
- Barefoot, J. C., Helms, M. J., Mark, D. B., Blumenthal, J. A., Califf, R. M., Haney, T. L., et al. (1996). Depression and long-term mortality risk in patients with coronary artery disease. *The American Journal of Cardiology, 78*(6), 613–617.
- Barry, C., Gabel, J., Frank, R., Hawkins, S., Whitmore, H., & Pickreign, J. (2003). Design of mental health benefits: Still unequal after all of these years. *Health Affairs, 22*(5), 127–137.
- Bodenheimer, T. (2000). Disease management in the American market. *British Medical Journal, 320*, 563–566.
- Branstorm, R., & Cuffel, B. (2004). Policy implications of adverse selection in a preferred-provider organization carve-out after parity. *Psychiatric Services, 55*(4), 357–359.
- Broskowski, A., & Smith, S. (2001). *Estimating the cost of preventive services in mental health and substance abuse under managed care*. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.

-
- Brown, G. S., Burlingame, G. M., Lambert, M. J., Jones, E., & Vaccaro, J. (2001). Pushing the quality envelope: A new outcomes management system. *Psychiatric Services, 52*(7), 925–934.
- Buck, J., Teich, J., Umland, B., & Stein, M. (1999). Behavioral health benefits in employer-sponsored health plans, 1997. *Health Affairs, 18*(2), 67–78.
- Buck, J., & Umland, B. (1997). Covering mental health and substance abuse services. *Health Affairs, 16*(4), 120–126.
- Burnam, M. A., & Escarce, J. (1999). Equity in managed care for mental disorders. *Health Affairs, 18*(5), 22–30.
- Busch, A., Frank, R., & Lehman, A. (2004). The effect of a managed behavioral health carve-out on quality of care for Medicaid patients diagnosed as having schizophrenia. *Archives of General Psychiatry, 61*(5), 442–448.
- Busch, S. (2002). Specialty health care, treatment patterns, and quality: The impact of a mental health carve-out on care for depression. *Health Services Research, 37*(6), 1583–1601.
- Center for Mental Health Services (CMHS). (2004). *Mental Health, United States, 2002* (R. W. Manderscheid & M. J. Henderson, Eds.). DHHS Pub No. (SMA) 3938. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Centorrino, F., Hernan, M., Drago-Ferrante, G., Rendall, M., Apicella, A., Langar, G., et al. (2001). Factors associated with noncompliance with psychiatric outpatient visits. *Psychiatric Services, 52*(3), 378–380.
- Claxton, G., Gabel, J., Gil, I., Pickreign, J., Whitmore, H., Finder, B., et al. (2005, September 14). What high-deductible plans look like: Findings from a national survey of employers, 2005. *Health Affairs Web Exclusive, W5-434—W5-441*.
- Coalition for Fairness in Mental Illness Coverage. (2003, March 24). Employers should support mental health parity. Retrieved from www.mhlg.org/business_3-03.pdf.
- Conti, D. J., & Burton, W. N. (1995). The cost of depression in the workplace. *Behavioral Healthcare Tomorrow, 4*(4), 25–27.
- Coughlin, K. M. (1992). Expanding employee assistance programs is paying dividends. *Business Health, 10*(9), 45–49.
- Cuffel, B. J., & Regier, D. (2001). The relationship between treatment access and spending in a managed behavioral health organization. *Psychiatric Services, 52*(7), 949–952.
- Deb, P., Wilcox-Gok, V., Holmes, A., & Rubin, J. (1996). Choice of health insurance by families of the mentally ill. *Health Economics, 5*(1), 61–76.
- DeNavas-Walt, C., Proctor, B. D., & Lee, C. H. (2005). Income, poverty, and health insurance coverage in the United States: 2004. U.S. Census Bureau, *Current Population Reports*, P60–229.
- DeNavas-Walt, C., Proctor, B. D., & Mills, R. J. (2004). Income, poverty, and health insurance coverage in the United States: 2003. U.S. Census Bureau, *Current Population Reports*, P60–226.
- Dorfman, S. (2000). *Preventive interventions under managed care: Mental health and substance abuse services*. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.

- Dorfman, S., & Smith, S. (2002). Preventive mental health and substance abuse programs and services in managed care. *The Journal of Behavioral Health Services & Research, 29*(3), 233–258.
- Doty, M. M., Edwards, J. N., & Holmgren, A. L. (2005). *Seeing red: Americans driven into debt by medical bills*. New York: The Commonwealth Fund.
- 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., Goldman, H., Leff, H. S., Lehman, A., Dixon, L., Mueser, K., et al. (2001). Implementing evidence-based practices in routine mental health service settings. *Psychiatric Services, 52*(2), 179–182.
- Durham, M. L. (1995). Commentary: Can HMOs manage the mental health benefit? *Health Affairs, 14*(3), 116–123.
- Egede, L. E., Zheng, D., & Simpson, K. (2002). Comorbid depression is associated with increased health care use and expenditures in individuals with diabetes. *Diabetes Care, 25*(3), 464–470.
- Ellrodt, G., Cook, D. J., Lee, J., Cho, M., Hunt, D., & Weingarten, S. (1997). Evidence-based disease management. *Journal of the American Medical Association, 278*(20), 1687–1692.
- England, M. J. (1999). Capturing mental health cost offsets. *Health Affairs, 18*(2), 91–93.
- England, M. J., & Vaccaro, V. A. (1991). New systems to manage mental health care. *Health Affairs, 10*(4), 130–137.
- Evans, D. L., Charney, D. S., Lewis, L., Golden, R. N., Gorman, J. M., Krishnan, K. R. R., et al. (2005). Mood disorders in the medically ill: Scientific review and recommendations. *Biological Psychiatry, 58*(3), 175–189.
- Fagan, P., Schmidt, C., & Cook, B. (2002). A model of managed behavioral health care in an academic department of psychiatry. *Psychiatric Services, 53*(4), 431–436.
- Feldman, S. (1998). Behavioral health services: Carved out and managed. *The American Journal of Managed Care, 4*, SP59–SP67.
- Foote, S. M., & Jones, S. B. (1999). Consumer-choice markets: Lessons from FEHBP mental health coverage. *Health Affairs, 18*(5), 125–130.
- Frank, R., Goldman, H., & McGuire, T. (1992). A model mental health benefit in private health insurance. *Health Affairs, 11*(3), 98–117.
- Frank, R., Koyanagi, C., & McGuire, T. (1997). The politics and economics of mental health “parity” laws. *Health Affairs, 16*(4), 108–119.
- Frank, R., & McGuire, T. (1997). Savings from a Medicaid carve-out for mental health and substance abuse services in Massachusetts. *Psychiatric Services, 48*(9), 1147–1152.
- Frank, R., McGuire, T., Bae, J., & Rupp, A. (1997). Solutions for adverse selection in behavioral health care. *Health Care Financing Review, 18*(3), 109–122.
- Frank, R. G., McGuire, T. G., & Newhouse, J. P. (1995). Risk contracts in managed mental health care. *Health Affairs, 14*(3), 50–64.
- Frasure-Smith, N., Lespérance, F., & Talajic, M. (1995). Depression and 18-month prognosis after myocardial infarction. *Circulation, 91*(4), 999–1005.

-
- French, M., & Zarkin, G. (1998). Mental health, absenteeism and earnings at a large manufacturing worksite. *Journal of Mental Health Policy and Economics*, 1(4), 161–172.
- French, M. T., Zarkin, G. A., Bray, J. W., & Hartwell, T. D. (1999). Cost of employee assistance programs: Comparison of national estimates from 1993 and 1995. *Journal of Behavioral Health Services and Research*, 26(1), 95–103.
- Fronstin, P. (1997). Issues in mental health care benefits: The costs of mental health parity. *EBRI Issue Brief*, no. 182.
- Fronstin, P. (2004). Health savings accounts and other account-based health plans. *EBRI Issue Brief*, no. 273.
- Gabbard, G. O., & Lazar, S. G. (1997). *Efficacy and cost effectiveness of psychotherapy*. American Psychoanalytic Association Commission on Psychotherapy by Psychiatrists. Retrieved August 23, 2004, from <http://www.apsa.org/pubinfo/efficacy.htm>.
- Gabel, J., Claxton, G., Gil, I., Pickreign, J., Whitmore, H., Finder, B., et al. (2005). Health benefits in 2005: Premium increases slow down, coverage continues to erode. *Health Affairs*, 24(5), 1273–1280.
- Garnick, D., 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.
- Glied, S., & Cuellar, A. (2003). Trends and issues in child and adolescent mental health. *Health Affairs*, 22(5), 39–50.
- Glied, S., Hoven, C., Moore, R., Garrett, A. B., & Regier, D. (1997). Children's access to mental health care: Does insurance matter? *Health Affairs*, 16(1), 167–174.
- Goetzel, R. Z. (2003). Valuing lost productivity: Determining the health and productivity cost burden of physical and mental health conditions. Presentation slides, WBGH/IBI 2003 National Forum on Health, Productivity and Absence Management.
- Goetzel, R. Z., Guindon, A. M., Turshen, J., & Ozminkowski, R. J. (2001). Health and productivity management: Establishing key performance measures, benchmarks, and best practices. *Journal of Occupational and Environmental Medicine*, 43(1), 10–17.
- Goetzel, R. Z., Hawkins, K., Ozminkowski, R. J., & Wang, S. (2003). The health and productivity cost burden of the top 10 physical and mental health conditions affecting six large U.S. employers in 1999. *Journal of Occupational and Environmental Medicine*, 45(1), 5–14.
- Goldberg, R. J. (1999). Financial incentives influencing the integration of mental health care and primary care. *Psychiatric Services*, 50(8), 1071–1075.
- Goldman, H., Ganju, V., Drake, R., Gorman, P., Hogan, M., Hyde, P., et al. (2001). Policy implications for implementing evidence-based practices. *Psychiatric Services*, 52(12), 1591–1597.
- Goldman, H., Thelander, S., & Westrin, C. G. (2000). Organizing mental health services: An evidence-based approach. *Journal of Mental Health Policy and Economics*, 3(2), 69–75.
- 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.

- Goodman, A. C. (1989). Estimation of offset and income effects on the demand for mental health treatment. *Inquiry*, 26, 235–248.
- Grazier, K., & Eselius, L. (1999). Mental health carve-outs: Effects and implications. *Medical Care Research and Review*, 56(Suppl. 2), 37–59.
- Grazier, K. L., Eselius, L. L., Hu, T. W., Shore, K. K., & G'Sell, W. A. (1999). Effects of a mental health carve-out on use, costs, and payers: A four-year study. *Journal of Behavioral Health Services and Research*, 26(4), 381–389.
- Greenberg, P. E., Kessler, R. C., Birnbaum, H. G., Leong, S. A., Lowe, S. W., Berglund, P. A., et al. (2003). The economic burden of depression in the United States: How did it change between 1990 and 2000? *Journal of Clinical Psychiatry*, 64(12), 1465–1475.
- Gresenz, C., Liu, X., & Sturm, R. (1998). Managed behavioral health services for children under carve-out contracts. *Psychiatric Services*, 49(8), 1054–1058.
- Hawley, J. E. (2004). *2004 Catastrophic mental health report*. Salt Lake City: Utah Insurance Department.
- Hay Group. (1999). *Health care plan design and cost trends—1988–1998*. Arlington, VA: National Association of Psychiatric Health Systems and Association of Behavioral Group Practices.
- Henrickson, K. (2005). *Will health plans profit from HSAs?* Cambridge, MA: Forrester Research, Inc.
- Hertz, R., & Baker, C. (2002). *The impact of mental disorders on work*. U.S.A.: Pfizer, Inc.
- Himmelstein, D. E., Warren, E., Thorne, D., & Woolhandler, S. (2005, February 2). MarketWatch: Illness and injury as contributors to bankruptcy. *Health Affairs* Web Exclusive, W5-63—W5-73.
- Hodges, K., & Wotring, J. (2004). The role of monitoring outcomes in initiating implementation of evidence-based treatments at the state level. *Psychiatric Services*, 55(4), 396–400.
- Hodgkin, D., Horgan, C. M., Garnick, D. W., & Merrick, E. L. (2003). Cost sharing for substance abuse and mental health services in managed care plans. *Medical Care Research and Review*, 60(1), 101–116.
- 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 and Research*, 27(2), 178–193.
- Holcomb, W. R., Beitman, B. D., Hemme, C. A., Josylin, A., & Prindiville, S. (1998). Best practices: Use of a new outcome scale to determine best practices. *Psychiatric Services*, 49(5), 583–595.
- Holder, H. D. (1998). Cost benefits of substance abuse treatment: An overview of results from alcohol and drug abuse. *Journal of Mental Health Policy and Economics*, 1(1), 23–29.
- Holmes, A. M., & Deb, P. (1998). Provider choice and use of mental health care: Implications for gatekeeper models. *Health Services Research*, 33(5), 1263–1284.
- Hopko, D. R., Lachar, D., Bailey, S. E., & Varner, R. V. (2001). Assessing predictive factors for extended hospitalization at acute psychiatric admission. *Psychiatric Services*, 52(10), 1367–1373.
- Horgan, C. M., Merrick, E. L., Garnick, D. W., Hodgkin, D., Cenczyk, R. E.,

-
- Lusenhop, R. W., et al. (2003). *The provision of mental health services in managed care organizations*. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.
- Horvitz-Lennon, M., Normand, S. T., Gaccione, P., & Frank, R. G. (2001). Partial versus full hospitalization for adults in psychiatric distress: A systematic review of the published literature (1957–1997). *American Journal of Psychiatry*, 158(5), 676–685.
- Huntley, D. A., Cho, D. W., Christman, J., & Csernansky, J. G. (1998). Predicting length of stay in an acute psychiatric hospital. *Psychiatric Services*, 49(8), 1049–1053.
- Huskamp, H. (1999). How a managed behavioral health care carve-out plan affected spending for episodes of treatment. *Psychiatric Services*, 49(12), 1559–1562.
- Hymel, P., & Loeppke, R. (2003). The impact of wellness programs upon health care costs: Where we are...where we're going. Presentation slides, WBGH/IBI 2003 National Forum on Health, Productivity and Absence Management.
- J.D. Power and Associates. (2004, March 23). Clinical depression can have a significant impact on the productivity of employees and students. Press Release. Westlake Village, CA: Author. Retrieved from <http://www.jdpower.com/pdf/2004025.pdf>.
- Jones E., & Brown, G. (2003). Behavioral health care: A worthwhile investment? *Employee Benefit Review*, August 2003.
- Kaiser Family Foundation and Health Research and Educational Trust (KFF/HRET). (2004). *Employer health benefits: 2004 annual survey*. Menlo Park, CA: Author.
- Kaiser Family Foundation and Health Research and Educational Trust (KFF/HRET). (2005). *Employer health benefits: 2005 annual survey*. Menlo Park, CA: Author.
- Katon, W., Von Korff, M., Lin, E., Unützer, J., Simon, G., Walker, E., et al. (1997). Population-based care of depression: Effective disease management strategies to decrease prevalence. *General Hospital Psychiatry*, 19(3), 169–178.
- Keeler, E., Wells, K., Manning, W., Rumpel, J. D., & Hanley, J. (1986). *The demand for episodes of mental health services*. Santa Monica, CA: The Rand Corporation.
- Kent, J. (1990). The role of employee assistance programs in managed mental health care. *Medical Interface*, 14, 25–28.
- Kessler, R. C., Barber, C., Birnbaum, H. G., Frank, R. G., Greenberg, P. E., Rose, R. M., et al. (1999). Depression in the workplace: Effects on short-term disability. *Health Affairs*, 18(5), 163–171.
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K., & Walters, E. E. (2005). Lifetime prevalence and age-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, 62(6), 593–602.
- Kessler, R. C., Chiu, W. T., Demler, O., & Walters, E. E. (2005). Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, 62(6), 617–627.

- Koike, A., Klap, R., & Unützer, J. (2000). Utilization management in a large managed behavioral health organization. *Psychiatric Services, 51*(5), 621–626.
- Landerman, L. R., Burns, B. J., Swartz, M. S., Wagner, H. R., & George, L. K. (1994). The relationship between insurance coverage and psychiatric disorder in predicting use of mental health services. *American Journal of Psychiatry, 151*(12), 1785–1790.
- Langlieb, A., & Kahn, J. (2004). ROI from mental health care is more than anecdotal. *Employee Benefits News*, January, 11–12.
- Lehman, L., Goldman, H., Dixon, L., & Churchill, R. (2004). *Evidence-based mental health treatments and services: Examples to inform public policy*. New York, NY: The Milbank Memorial Fund.
- Leopold, R. (2003). *A year in the life of a million American workers*. New York, NY: MetLife Group Disability.
- Lerner, D., Amick, B., Lee, J., Rooney, T., Rogers, W., Chang, H., et al. (2003). Relationship of employee-related work limitations to work productivity. *Medical Care, 41*(5), 649–659.
- Ma, C. A., & McGuire, T. (1998). Costs and incentives in a behavioral health carve-out. *Health Affairs, 17*(2), 53–69.
- Mark, T. L., Coffey, R. M., Vandivort-Warren, R., Harwood, H. J., King, E. C., & MHSA Spending Estimates Team. (2005, March 29). U.S. spending for mental health and substance abuse treatment, 1991–2002. *Health Affairs* Web Exclusive, W5-133—W5-142.
- Masi, D., Altman, L., Benayon, C., Healy, H., Jorgensen, D., Kennish, R., et al. (2004). Employee assistance programs in the year 2002. In Center for Mental Health Services, *Mental health, United States, 2002* (R. W. Manderscheid & M. J. Henderson, Eds.). DHHS Pub No. (SMA) 3938. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Matsumoto, K., Jones, E., & Brown, J. (2003). Using clinical informatics to improve outcomes: A new approach to managing behavioural healthcare services. *Journal on Information Technology in Healthcare, 1*(2), 135–150.
- Maxfield, M., Achman, L., & Cook, A. (2004). *National estimates of mental health insurance benefits*. DHHS Pub. No. (SMA) 04-3872. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.
- McClanathan, A. (2004). Behavioral health benefits: Key to a healthy workforce. *Employee Benefits Journal, 29*(1), 11–16.
- McKusick, D., Mark, T., King, E., Coffey, R., & Genuardi, J. (2002). Trends in mental health insurance benefits and out-of-pocket spending. *Journal of Mental Health Policy and Economics, 5*(2), 71–78.
- Mechanic, D. (1997). Approaches for coordinating primary and specialty care for persons with mental illness. *General Hospital Psychiatry, 19*(6), 395–402.
- Mechanic, D. (1998). Emerging trends in mental health policy and practice. *Health Affairs, 17*(6), 82–98.
- Mechanic, D. (2002). Removing barriers to care among persons with psychiatric symptoms. *Health Affairs, 21*(3), 137–147.
- Merrick, E. (1998). Treatment of major depression before and after implementation of a behavioral health

- carve-out plan. *Psychiatric Services*, 49(12), 1563–1567.
- Merrick, E., Horgan, C., Garnick, D., Hodgkin, D., Keck, K., & Cenczyk, R. (2003). The EAP/behavioral health carve-out connection. *Employee Assistance Quarterly*, 18(3), 1–5.
- Merrick, E. L., Garnick, D. W., Horgan, C. M., Goldin, D., Hodgkin, D., & Sciegaj, M. (2001). Benefits in behavioral health carve-out plans of Fortune 500 firms. *Psychiatric Services*, 52(7), 943–948.
- Mills, R. J., & Bhandari, S. (2003). Health insurance coverage in the United States: 2002. U.S. Census Bureau, *Current Population Reports*, P60–223.
- Narrow, W. E., Regier, D. A., Norquist, G., Rae, D. S., Kennedy, C., & Arons, B. (2000). Mental health service use by Americans with severe mental illnesses. *Social Psychiatry and Psychiatric Epidemiology*, 35(4), 147–155.
- National Association of Insurance Commissioners (NAIC). (2003). *Compendium of state laws on insurance topics*. Kansas City, MO: National Association of Insurance Commissioners.
- National Conference of State Legislatures. (2004, July). State laws mandating or regulating mental health benefits. Retrieved from <http://www.ncsl.org/programs/health/Mentalben.htm>.
- National Mental Health Association (NMHA). (2001). *Labor Day 2001 report: Untreated and mistreated mental illness and substance abuse costs U.S. \$113 billion a year*. Alexandria, VA: Author.
- Nitzkin, J., & Smith, S. (2004). *Clinical preventive services in substance abuse and mental health update: From science to services*. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.
- Olfson, M., Sing, M., & Schlesinger, H. J. (1999). Mental health/medical care cost offsets: Opportunities for managed care. *Health Affairs*, 18(2), 79–90.
- Open Minds. (2002). Managed behavioral health and employee assistance program enrollment reaches 227 million in 2002. Retrieved December 20, 2004, from <http://www.openminds.com/pressroom/mbhoyearbook02.htm>.
- Otten, A. (1998). *Mental health parity: What can it accomplish in a market dominated by managed care?* New York, NY: Milbank Memorial Fund.
- Regier, D. (2002). Prepared witness testimony to the U.S. House of Representative's Committee on Energy and Commerce's Subcommittee on Health. Retrieved August 7, 2004, from <http://energycommerce.house.gov/107/hearings/07232002Hearing671/Regier1136.htm>.
- Ringel, J. S., & Sturm, R. (2001). Financial burden and out-of-pocket expenditures for mental health across different socioeconomic groups: Results from Healthcare for Communities. *Journal of Mental Health Policy and Economics*, 4(3), 141–150.
- Rittmannsberger, H., Pachinger, T., Keppelmuller, P., & Wancata, J. (2004). Medication adherence among psychotic patients before admission to inpatient treatment. *Psychiatric Services*, 55(2), 174–179.
- Robinson, G., Chimento, L., Bush, S., & Papay, J. (2001). *Comprehensive mental health insurance benefits: Case studies*. Rockville, MD: Center for Mental Health

- Services, Substance Abuse and Mental Health Services Administration.
- Rosenbach, M., Lake, T., Young, C., Conroy, W., Quinn, B., Ingels, J., et al. (2003). *Effects of the Vermont Mental Health and Substance Abuse Parity Law*. DHHS Pub. No. (SMA) 03-3822. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.
- 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. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.
- 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. *George Washington University Center for Health Services Research and Policy Double Issue Brief* nos. 11 & 12.
- Rosenheck, R. A., Druss, B., Stolar, M., Leslie, D., & Sledge, W. (1999). Effect of declining mental health service use on employees of a large corporation. *Health Affairs*, 18(5), 193–203.
- Rosenthal, M. B. (1999). Risk sharing in managed behavioral health care. *Health Affairs*, 18(5), 204.
- Rosenthal, M. B. (2000). Risk sharing and the supply of mental health services. *Journal of Health Economics*, 19(6), 1047–1065.
- Sajatovic, M., Davies, M., & Hrouda, D. (2004). Enhancement of treatment adherence among patients with bipolar disorder. *Psychiatric Services*, 55(3), 264–269.
- 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 and Economics*, 3(2), 83–95.
- Scanlon, D. P., & Hendrix, T. J. (1998). Health plan accreditation: NCQA, JCAHO, or both? *Managed Care Quarterly*, 6(4), 52–61.
- Schoen, C., Doty, M. M., Collins, S. R., & Holmgren, A. L. (2005, June 14). Insured but not protected: How many adults are underinsured? *Health Affairs Web Exclusive*, W5-289—W5-302.
- Selvik, R., Stephenson, D., Plaza, C., & Sugden, B. (2004). EAP impact on work, relationship, and health outcomes. *Journal of Employee Assistance*, 2nd Quarter, 18–22.
- Shore, M., & Altman, L. (1999). Managed care and the treatment of mental illnesses and substance abuse disorders in the United States. *Journal of the Irish Colleges of Physicians and Surgeons*, 28(3), 163–165.
- Simon, G. E., Grothaus, L., Durham, M. L., Von Korff, M., & Pabiniak, C. (1996). Impact of visit copayments on outpatient mental health utilization by members of a health maintenance organization. *American Journal of Psychiatry*, 153(3), 331–338.
- Simon, G., Manning, W., Katzelnick, D., Pearson, S., Henk, H., & Helstad, C. (2001). Cost-effectiveness of systematic depression treatment for high utilizers of general medical care. *Archives of General Psychiatry*, 58(2), 181–187.

-
- Simon, G., Ormel, J., Von Korff, M., & Barlow, W. (1995). Health care costs associated with depressive and anxiety disorders in primary care. *American Journal of Psychiatry*, 152(3), 352–357.
- Simon, G. E., Von Korff, M., & Durham, M. L. (1994). Predictors of outpatient mental health utilization by primary care patients in a health maintenance organization. *American Journal of Psychiatry*, 151(6), 908–913.
- Sing, M., Hill, S., & Puffer, L. (2001). *Improving mental health insurance benefits without increasing costs*. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.
- Sing, M., Hill, S., Smolkin, S., & Heiser, N. (1998). *The costs and effects of parity for mental health and substance abuse insurance benefits*. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.
- Sterman, P. (1997). The costs of behavioral health care coverage. *Employee Benefits Journal*, 22(1), 2–10.
- Stewart, W., Ricci, J., Chee, E., Hahn, S., & Morganstein, D. (2003). Cost of lost productive work time among US workers with depression. *JAMA*, 289(23), 3135–3144.
- 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., Goldman, W., & McCulloch, J. (1998). Mental health and substance abuse parity: A case study of Ohio's state employee program. *Journal of Mental Health Policy and Economics*, 1(3), 129–134.
- Sturm R., Jackson, C., Meredith, L., Yip, W., Manning, W., Rogers, W., et al. (1995). Mental health care utilization in prepaid and fee-for-service plans among depressed patients in the Medical Outcomes Study. *Health Services Research*, 30(2), 319–340.
- Sturm, R., & Klap, R. (1999). Use of psychiatrists, psychologists, and master's level therapists in managed behavioral health care carve-out plans. *Psychiatric Services*, 50(4), 504–508.
- Sturm, R., & McCulloch, J. (1998). Mental health and substance abuse benefits in carve-out plans and the Mental Health Parity Act of 1996. *Journal of Health Care Finance*, 24(3), 82–92.
- Sturm, R., & Pacula, R. L. (2000). Mental health parity and employer-sponsored health insurance in 1999–2000: I. Limits. *Psychiatric Services*, 51(11), 1361.
- Substance Abuse and Mental Health Services Administration. (2005). *Results from the 2004 National Survey on Drug Use and Health: National Findings* (Office of Applied Studies, NSDUH Series H-28, DHHS Publication No. SMA 05-4062). Rockville, MD.
- Teich, J., & Buck, J. (2003). 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. Center for Health Policy Research, The George Washington University, *Managed Behavioral Health Care Issue Brief* #3.

- Thorpe, K., Florence, C., & Joski, P. (2004, August 25). Which medical conditions account for the rise in health care spending? *Health Affairs* Web Exclusive, W4-437—W4-445.
- Updike, M. (2003, December). Absenteeism slow to capture management's attention. *Employee Benefits News*, 26–27.
- U.S. Department of Health and Human Services (DHHS). (1999). *Mental health: A report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health, Chapter 6 “Organizing and Financing Mental Health Services.”
- U.S. Department of Health and Human Services (DHHS). (2004). *Evaluation of parity in the Federal Employees Health Benefits (FEHB) Program: Final report*. Washington, DC: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation and U.S. Office of Personnel Management.
- U.S. Department of the Treasury. (2004a, March 30). Notice 2004-23, Provides a safe harbor for preventive care benefits. Retrieved from <http://www.treas.gov/offices/public-affairs/hsa/pdf/notice2004-23.pdf>.
- U.S. Department of the Treasury. (2004b, August 9). Part III—Administrative, Procedural, and Miscellaneous, Health Savings Accounts—Additional Qs & As, Notice 2004-50. Retrieved from <http://www.irs.gov/pub/irs-drop/n-04-50.pdf>.
- U.S. Government Accountability Office (formerly U.S. General Accounting Office) (GAO). (2000). *Despite new Federal standards, mental health benefits remain limited*. Washington, DC: United States General Accounting Office.
- U.S. Preventive Services Task Force (USPSTF). (2002). *Screening for depression: Recommendations and rationale*. Agency for Healthcare Research and Quality. Retrieved February 8, 2005, from <http://www.ahrq.gov/clinic/3rduspstf/depressrr.htm>.
- Varmus, H. (1998). *Parity in financing mental health services: Managed care effects on cost, access, and quality: An interim report to Congress by the National Advisory Mental Health Council*. Rockville, MD: National Institute of Mental Health, National Institutes of Health, U.S. Department of Health and Human Services.
- Von Korff, M., & Goldberg, D. (2001). Improving outcomes in depression. *British Medical Journal*, 323(7319), 948–949.
- Wang, P. S., Beck, A. L., Berglund, P., McKenas, D. K., Pronk, N. P., Simon, G. E., et al. (2004). Effects of major depression on moment-in-time work performance. *American Journal of Psychiatry*, 161(10), 1885–1891.
- 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., Manning, W., Duan, N., Ware, J., & Newhouse, J. (1982). *Cost sharing and the demand for ambulatory mental health services*. Santa Monica, CA: The Rand Corporation.

-
- Wells, K. B., Manning, W. G., Jr., & Valdez, R. B. (1989). The effects of insurance generosity on the psychological distress and psychological well-being of a general population. *Archives of General Psychiatry*, 46(4), 315–320.
- White, B. (1997). Mental health care: From carve-out to collaboration. *Family Practice Management*, 4(8), 32–33, 37–38, 41–42.
- Whitehouse, D. (2003). Working with your behavioral health partner: A world being transmogrified. Presentation slides, WBGH/IBI 2003 National Forum on Health, Productivity and Absence Management.
- Zhang, M., Rost, K., Fortney, J., & Smith, G. R. (1999). A community study of depression treatment and employment earnings. *Psychiatric Services*, 50(9), 1209–1213.
- Zuvekas, S. H. (2001). How would mental health parity affect the marginal price of care? *Health Services Research*, 35(6), 1207–1227.
- Zuvekas, S. H. (2005). Prescription drugs and the changing patterns of treatment for mental disorders, 1996–2001. *Health Affairs*, 24(1), 195–205.
- Zuvekas, S. H., Banthin, J. S., & Selden, T. M. (1998). Mental health parity: What are the gaps in coverage? *Journal of Mental Health Policy and Economics*, 1(3), 135–146.
- Zuvekas, S. H., Regier, D. A., Rae, D. S., Rupp, A., & Narrow, W. E. (2002). The impacts of mental health parity and managed care in one large employer group. *Health Affairs*, 21(3), 148–159.

Notes

- ¹ More information available at <http://www.nimh.nih.gov/nimhhome/index.cfm>
 - ² More information available at <http://modelprograms.samhsa.gov/template.cfm?page=nrepbutton>
 - ³ More information available at <http://www.ahrq.gov/clinic/epc/>
 - ⁴ More information available at <http://www.ahrq.gov/clinic/uspstfix.htm>
- More information available at <http://nmhicstore.samhsa.gov/cmhs/ManagedCare/pubs.aspx>

Appendix A

Actuarial Analysis— Relationship Between Benefits and Premiums

Relationship Between Benefits and Premiums

In addition to including financial considerations as part of the literature review for this study, we performed an actuarial analysis of the costs of different levels of mental health benefits in a typical health care benefit package. Our analysis found that raising (or even eliminating) limits placed on mental health service use would increase plan costs by only a relatively small amount on a per-member per-month (PMPM) basis.

To estimate the costs associated with various mental health benefit packages, we performed a series of net premium calculations (i.e., excluding administrative costs) for a typical health care benefit package, assuming different levels of mental health benefits for each calculation. The plan design that we worked with is typical of what might be used for an HMO or for the in-network portion of a PPO or POS plan (after converting all flat-dollar copayments into coinsurance percentages). It includes a \$100 combined annual deductible for all services, a 90 percent benefit rate (i.e., 10 percent beneficiary coin-

urance) for physical health services, and a \$1,000 out-of-pocket limit for all beneficiary cost sharing. We developed our cost estimates using a computer program that is based on commercial health insurance plans and populations, and we calibrated it to reflect average costs in the United States for calendar year 2005.

The first step was to develop baseline costs by calculating the net premium for a benefit plan that excludes coverage for mental health services but that otherwise reflects the benefits found in a typical in-network benefit plan. That is, we determined the PMPM benefit costs for the *non-mental health benefits* under this plan. Then we recalculated the net premium assuming the inclusion of various mental health benefit packages. We considered four types of mental health benefits: general mental health inpatient, substance abuse inpatient, general mental health outpatient (including office visits for talk therapy and/or medication management), and substance abuse outpatient. We added mental health benefits to the baseline plan in increments of 10 days (for

inpatient services) or 10 visits (for outpatient services). Finally, to see the range of costs that can result from using different values for the benefit rate (i.e., one minus the member coinsurance percentage), we calculated the net premiums using two different benefit rates for inpatient benefits (80 percent and 100 percent) and two different benefit rates for outpatient benefits (50 percent and 90 percent).

The results of this analysis are shown in Exhibit A-1. For each of the four types of mental health benefits, for each level of coverage shown (i.e., number of inpatient days or outpatient visits covered), and for each benefit rate used, the exhibit shows (1) the total PMPM cost for all benefits (for both physical and mental health services), (2) the cost for the specified level of mental health benefits, and (3) the incremental cost per unit of additional mental health service.

Perhaps the key result of this analysis is that, as we increase the number of covered services, the cost per additional unit of service decreases substantially. For example, the cost of going from 0 general mental health inpatient days to 10 days (assuming an 80 percent benefit rate) is \$3.59 PMPM, or about 36¢ per additional day. Meanwhile, the cost of going from 20 days to 30 days is 93¢ PMPM (\$7.02 minus \$6.09), or about 9¢ per additional day. Note that going from a 90-day benefit to a 365-day benefit (i.e., to the point of parity with the physical health benefit) is practically free in terms of the cost per additional covered day (0.1¢ for general mental health inpatient benefits, and 0.02¢ to 0.03¢ for substance abuse inpatient benefits). A similar result holds for outpatient benefits: The PMPM cost of covering 90 visits per year (essentially an unlimited benefit), compared to the cost of covering 70 visits, is 0.2¢

to 0.4¢ per additional covered visit (depending on the coinsurance rate) for general mental health outpatient benefits, and 0.02¢ to 0.9¢ for substance abuse outpatient benefits. Note that these incremental costs already include the effect of induced utilization that results from providing more generous benefits (i.e., benefit packages with higher service limits). Even with this effect taken into account, health plan experience shows that most utilization will be concentrated in the first few days or visits, and that only a small proportion of the covered population will incur a high number of utilized services.

To show how the “a la carte” cost estimates presented in Exhibit A-1 relate to the benefit plans actually found in the employer marketplace, we developed cost estimates for typical PPO and HMO benefit packages (including mental health benefits) as determined by The Hay Group’s 1998 survey of employers. Exhibits A-2 and A-3 show the benefit provisions and our cost estimates for the typical and modified PPO and HMO benefit plans described in Tables 6 through 9 on page 25 of Sing, Hill, and Puffer (2001). Note that the benefit packages labeled as “more generous” are not necessarily designed in accordance with the “adequacy” criteria found in the literature and discussed throughout this report. Instead, they indicate the typical benefit design among plans that are at the 75th percentile of actuarial values for plans of that type (PPO or HMO), according to The Hay Group’s Mental Health Benefit Value Comparison model and 1998 survey of employers (as referenced in Sing, Hill, & Puffer, 2001). Note that the “actuarial value” of a benefit package is defined as the expected direct cost of providing that package of benefits, expressed as a per-member amount (i.e., spread over the entire population cov-

Exhibit A-1. Estimated PMPM Benefit Costs (excl. admin.) for Typical In-Network Health Care Plan with Varying Levels of Mental Health and Substance Abuse Benefits (U.S. average, 2005)

PMPM Cost with no MH/SA benefit \$289.16

IP MH Days	Total PMPM Cost		Cost for IP MH		Add'l Cost/Day	
	Ben. Rate = 80%	100%	Ben. Rate = 80%	100%	Ben. Rate = 80%	100%
10	\$292.75	\$293.65	\$3.59	\$4.49	\$0.36	\$0.45
20	\$295.25	\$296.77	\$6.09	\$7.61	\$0.25	\$0.31
30	\$296.18	\$297.94	\$7.02	\$8.77	\$0.09	\$0.12
45	\$297.31	\$299.35	\$8.15	\$10.19	\$0.08	\$0.09
60	\$297.73	\$299.87	\$8.57	\$10.71	\$0.03	\$0.04
90	\$298.34	\$300.64	\$9.18	\$11.48	\$0.02	\$0.03
365	\$298.51	\$300.85	\$9.35	\$11.69	\$0.001	\$0.001

IP SA Days	Total PMPM Cost		Cost for IP SA		Add'l Cost/Day	
	Ben. Rate = 80%	100%	Ben. Rate = 80%	100%	Ben. Rate = 80%	100%
10	\$290.60	\$290.96	\$1.44	\$1.80	\$0.14	\$0.18
20	\$291.60	\$292.21	\$2.44	\$3.05	\$0.10	\$0.13
30	\$291.97	\$292.67	\$2.81	\$3.51	\$0.04	\$0.05
45	\$292.42	\$293.24	\$3.6	\$4.07	\$0.03	\$0.04
60	\$292.59	\$293.45	\$3.43	\$4.29	\$0.01	\$0.01
90	\$292.84	\$293.76	\$3.68	\$4.60	\$0.01	\$0.01
365	\$292.90	\$293.84	\$3.74	\$4.68	\$0.0002	\$0.0003

OP MH Visits	Total PMPM Cost		Cost for OP MH		Add'l Cost/Visit	
	Ben. Rate = 50%	90%	Ben. Rate = 50%	90%	Ben. Rate = 50%	90%
10	\$290.90	\$292.29	\$1.74	\$3.13	\$0.17	\$0.31
20	\$291.44	\$293.27	\$2.28	\$4.11	\$0.05	\$0.10
30	\$291.61	\$293.57	\$2.45	\$4.41	\$0.02	\$0.03
50	\$291.71	\$293.76	\$2.55	\$4.60	\$0.005	\$0.01
70	\$291.77	\$293.87	\$2.61	\$4.71	\$0.003	\$0.01
90	\$291.82	\$293.95	\$2.66	\$4.79	\$0.002	\$0.004

OP SA Visits	Total PMPM Cost		Cost for OP SA		Add'l Cost/Visit	
	Ben. Rate = 50%	90%	Ben. Rate = 50%	90%	Ben. Rate = 50%	90%
10	\$289.59	\$289.93	\$0.43	\$0.77	\$0.04	\$0.08
20	\$289.73	\$290.18	\$0.57	\$1.02	\$0.01	\$0.03
30	\$289.77	\$290.26	\$0.61	\$1.10	\$0.004	\$0.01
50	\$289.80	\$290.30	\$0.64	\$1.14	\$0.001	\$0.002
70	\$289.81	\$290.33	\$0.65	\$1.17	\$0.0006	\$0.001
90	\$289.83	\$290.36	\$0.67	\$1.20	\$0.0009	\$0.002

Source: Lewin estimates, using HealthMAPS® 2005 Medical Rate Manual and Software.

ered by the plan, not just those who utilize the benefit). It does not include administrative costs or any profit or contingency margins.

In developing these cost estimates, we used the same assumptions regarding the average in-network fee discount (15 percent) and—for the PPO plans—the portion of claims that occur in-network (70 percent) as those used by The Hay Group in determining the relative actuarial values of the plans in their survey. One result of using these assumptions is that the PMPM cost of the HMO plans is

higher than the cost of the comparable PPO plans: the lack of a 15 percent discount on out-of-network PPO services is offset by the considerably lower benefit rate for these services (in general, 20 percentage points less than the corresponding in-network benefit rate). A larger discount on in-network provider fees—say, 25 to 30 percent, which would not be unusual in the current health insurance marketplace—would result in lower costs for the HMO, because 100 percent of its utilization is in-network (versus 70 percent for the PPO).

Exhibit A-2. Estimated PMPM Benefit Costs (excl. admin.) for Typical and Modified PPO Plans with Varying Levels of Mental Health/Substance Abuse Benefits^a
(U.S. average, 2005)

	<i>Typical PPO Plans</i>			<i>Modified PPO Plans^b</i>		
	Less Generous	Median	More Generous	Less Generous	Median	More Generous
Inpatient day limit	28	30	30	28	30	30
Inpatient benefit rate						
In-network	90%	100%	100%	90%	100%	100%
Out-of-network	70%	80%	80%	60%	80%	80%
Outpatient visit limit	20	30	30	15	25	30
Outpatient benefit rate						
In-network	50%	50%	90%	60%	50%	90%
Out-of-network	30%	30%	70%	30%	30%	70%
Total PMPM Cost ^c	\$296.23	\$297.73	\$299.93	\$296.11	\$297.80	\$300.07
Cost for MH/SA Benefits	\$11.13	\$12.63	\$14.83	\$11.01	\$12.70	\$14.97

Source: Based on plan designs described in Tables 6 and 7 on p. 25 of Sing, Hill, and Puffer (2001).

Notes: "Less generous" indicates the typical plan at the 25th percentile of the distribution of actuarial values among PPO plans, and "more generous" indicates the typical plan at the 75th percentile. All flat-dollar copayments have been converted to coinsurance rates. Source: The Hay Group's Mental Health Benefit Value Comparison model and 1998 survey of employers, referenced in Sing, Hill, and Puffer (2001).

^aSubstance abuse benefit limits are separate but numerically equal to the general mental health benefit limits.

^bModified plans allow each in-network inpatient day to be traded for two days of crisis residential services, partial hospitalization, and/or psychosocial rehabilitation. This is assumed to increase in-network inpatient MH/SA costs by 2%.

^cPMPM costs based on Lewin estimates, using HealthMAPS[®] 2005 Medical Rate Manual and Software.

**Exhibit A-3. Estimated PMPM Benefit Costs (excl. admin.) for Typical and Modified HMO Plans with Varying Levels of Mental Health/Substance Abuse Benefits^a
(U.S. average, 2005)**

	<i>Typical HMO Plans</i>			<i>Modified HMO Plans^b</i>		
	Less Generous	Median	More Generous	Less Generous	Median	More Generous
Inpatient day limit	30	30	30	30	30	30
Inpatient benefit rate	100%	100%	100%	100%	100%	100%
Outpatient visit limit	30	30	30	30	30	30
Outpatient benefit rate	50%	80%	90%	50%	80%	90%
Total PMPM Cost ^c	\$302.21	\$303.77	\$304.29	\$302.42	\$303.98	\$304.50
Cost for MH/SA Benefits	\$13.05	\$14.61	\$15.13	\$13.26	\$14.82	\$15.34

Source: Based on plan designs described in Tables 8 and 9 on p. 25 of Sing, Hill, and Puffer (2001).

Notes: "Less generous" indicates the typical plan at the 25th percentile of the distribution of actuarial values among HMO plans, and "more generous" indicates the typical plan at the 75th percentile. All flat-dollar copayments have been converted to coinsurance rates. Source: The Hay Group's Mental Health Benefit Value Comparison model and 1998 survey of employers, referenced in Sing, Hill, and Puffer (2001).

^aSubstance abuse benefit limits are separate but numerically equal to the general mental health benefit limits.

^bModified plans allow each in-network inpatient day to be traded for two days of crisis residential services, partial hospitalization, and/or psychosocial rehabilitation. This is assumed to increase in-network inpatient MH/SA costs by 2%.

^cPMPM costs based on Lewin estimates, using HealthMAPS® 2005 Medical Rate Manual and Software.

Appendix B

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<p>Sam Zuvekas, PhD Agency for Healthcare Research and Quality</p>	
<p>* Participated in initial expert interviews.</p>	

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