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Mental Health and Substance Abuse Parity: A Case Study of Ohio's State Employee Program

Roland Sturm[1]*, William Goldman[2] and Joyce McCulloch[2]

[1]*RAND, 1700 Main Street, Santa Monica, CA 90401, USA*
[2]*United Behavioral Health (formerly US Behavioral Health), 425 Market Street, San Francisco, CA 94105, USA*

Abstract

Background: In the United States, insurance benefits for treating alcohol, drug abuse and mental health (ADM) problems have been much more limited than medical care benefits. To change that situation, more than 30 states were considering legislation that requires equal benefits for ADM and medical care ('parity') in the past year. Uncertainty about the cost consequences of such proposed legislation remains a major stumbling block. There has been no information about the actual experience of implementing parity benefits under managed care or the effects on access to care and utilization.

Aims of the Study: Document the experience of the State of Ohio with adopting full parity for ADM care for its state employee program under managed care. Ohio provides an unusually long time series with seven years of managed behavioral health benefits, which allows us to study inflationary trends in a plan with unlimited ADM benefits.

Methods: Primarily a case study, we describe the implementation of the program and track utilization, and costs of ADM care from 1989 to 1997. We use a variety of administrative and claims data and reports provided by United Behavioral Health and the state of Ohio. The analysis of the utilization and cost effect of parity and managed care is pre–post, with a multiyear follow-up period.

Results: The switch from unmanaged indemnity care to managed carve-out care was followed by a 75% drop in inpatient days and a 40% drop in outpatient visits per 1000 members, despite the simultaneous increase in benefits. The subsequent years saw a continuous decline in inpatient days and an increased use of intermediate services, such as residential care and intensive outpatient care. The number of outpatient visits stabilized in the range of 500–550 visits per 1000. There was no indication that costs started to increase during the study period; instead, costs continued to decline. A somewhat different picture emerges when comparing utilization under HMOs with utilization under a carve-out with expanded benefits. In that case, the expansion of benefits led to a significant jump in outpatient utilization and intermediate services, while there was a small decrease in inpatient days. Insurance payments in 1996/1997 were almost identical to the estimated costs under HMOs in 1993.

Conclusions: In contrast to the emerging inflation anxiety regarding overall health care costs, managed care can provide long-run cost containment for ADM care even when patient copayments are reduced and coverage limits are lifted. This may differentiate ADM care from medical care and reasons for this difference include the state of management techniques (more advanced for ADM care), complexity of treatments (much higher technology utilization in medical care) and demographic factors (medical, but not behavioral health, costs increase as the population ages).

Implications for Health Policy: The experience of the state of Ohio demonstrates that parity level benefits for ADM care are affordable under managed care. It suggests that the concerns about costs that have stymied ADM policy proposals are unfounded, as long as one is willing to accept managed care.

Implications for Research: The continuing decline in costs raises concerns that levels of care may become insufficient. While concerns about costs being too high dominate the policy hurdle for parity legislation at this moment, the next step in research is to address quality of care or health outcomes, areas about which even less is known than about costs.

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Introduction

In the United States, insurance benefits for treating alcohol, drug abuse and mental health (ADM) problems have been much more limited than medical care benefits. Virtually all employer-sponsored health plans have limited the type or quantity of mental health services for which members are eligible, even when there are no similar limits for medical services, and benefits for mental health have actually decreased in the past 10 years.[1–3] To change that situation, 34 states introduced legislation that requires equal benefits for ADM and medical care ('parity') in 1997, but uncertainty about the cost consequences of such proposed legislation has been and remains a major stumbling block: only about a third of the introduced bills passed, another third failed and the remainder is still pending in 1998. Moreover, some bills that passed were often primarily symbolic and had little effect (and therefore uncertainty about their consequences), as in Arizona, Indiana or South Carolina, which merely mirrored federal law.

One problem is that the debate has been primarily informed by conflicting actuarial cost assumptions,[4–8] which

* Correspondence to: Roland Sturm, RAND, 1700 Main Street, Santa Monica, CA 90401, USA
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typically are based on studies that predate managed care. Only one empirical study so far has been based on recent data from plans with unlimited benefits.[9] There has been no publication to date of an employer's experience with implementing parity benefits under managed care or its effects on access to care and utilization. Implementation issues are particularly important under managed care because constraints in the supply of services could render an expansion of nominal benefits meaningless. For example, a common concern is that managed care restricts access to specialty care through or telephone triage or primary care gatekeeping (in HMOs). With low rates of detection of even common psychiatric disorders in primary care, such as major depression,[10] organizational features could easily offset an expansion of benefits.

This paper describes the experience of the State of Ohio with managed care and ADM parity. Ohio went beyond mental health parity by extending the same benefits to treatment for alcohol and drug abuse—but under managed care. The State of Ohio was one of the first large employers in the country to offer unlimited ADM benefits with minimal copayments under managed care and therefore provides an unusually long time series. This may be especially important in the current debate because analysts expect accelerated cost inflation for overall health care costs in the near future.[11] One argument is that switching to managed care has temporarily reduced costs, but that managed care does not alter the inflationary time trend. Under this scenario, plans offering the most generous benefits, especially plans offering true parity for ADM care, would be particularly vulnerable to cost increases. We report how costs developed in Ohio over the past seven years and discuss why ADM care cost trends are likely to have different trajectories than medical care costs.

So far, Ohio remains a rare exception as most other employment-based plans have higher copayments or deductibles for ADM care than for medical care and impose limits on ADM services. This difference between mental health and medical benefits continues to exist in most benefit plans despite the 1996 Federal Mental Health Parity Act because the legislation only requires removal of dollar limits, but does not affect copayments or limits on services.[1,12] The Mental Health Parity Act does not affect alcohol and drug abuse care. We are aware of only a small number of other employers offering similarly generous ADM benefits, but all of them have fewer employees. Ohio is also exceptional in its interest and willingness to have its experience discussed; other employers we have approached have not been ready to come forward.

Data and Methods

Our approach is primarily a case study and the next section provides the historical development and contextual background. The tables combine information from different delivery settings, involving a substantial number of distinct organizations, several of which no longer exist. To bridge the gap across different service delivery settings and managed care organizations, we study claims data from US Behavioral Health (USBH, United Behavioral Health since 1997), utilization reports provided to us by the State of Ohio and actuarial summaries. We only have access to individual level claims for all individuals starting in 1995. Earlier information was collected from annual reports that individual health plans were required to give to the state and from a report that Towers Perrin (consultant to the State of Ohio) performed for the state in 1994. The unavailability of individual level data prior to 1995 means that there are important gaps and we can only report on a limited number of variables that were measured throughout. For example, for several years, we cannot calculate the rate of individuals accessing any ADM specialty care, only the utilization rates per 1000. Another limitation of not having individual level data for all years is that we cannot verify the definitions for aggregating data across different organizations. This means that the numbers for HMOs, Biodyne and USBH may not be fully comparable, although we used broad categories that were referred to in all data sources. When we found more detailed data, we counted residential treatment and recovery homes separately, as they fall between acute inpatient and intensive outpatient care in terms of costs per day and intensity of services. In 1996/1997, insurance payments to providers (excluding patient copayments) were approximately $470 per inpatient day, $250 per residential day, $180 per intensive outpatient day and $55 per outpatient therapy session.

Calculating standard deviations and confidence intervals requires individual level data, which are only available for the last two years. Based on those data, we calculate the width of 95% confidence intervals and provide them with the Tables (alternatively, the standard errors can be obtained by dividing by 1.96). Thus, tests are not exact, but rely on the assumption that prior years are similarly imprecisely measured.

The population remained fairly stable and there were no large-scale layoffs. By the end of 1997, there were 87 639 HMO members and 55 285 members in the indemnity plan, for a total of 142 924 members. Compared to 1993, the HMO enrollment has grown by only 630 members (from an average enrollment of 87 009 members in 13 HMOs in 1993, see breakdown in **Table 1**). This suggests that there probably was no significant shift in the composition of the two populations, which could have been a concern if HMO enrollment had grown substantially during those years. For example, if members without established provider relationships and fewer health care needs were more likely to switch to an HMO, any decrease over time we find among fee-for-service medical plan members would be understated. Gresenz[13] found that behavioral health care utilization patterns can differ among individuals even under the same carve-out plan when they were previously given the choice of a FFS medical plan or an HMO medical plan, although only a few comparisons were statistically significant in a population of about 120 000 individuals and most showed no difference. Nevertheless, such selection effects could be of concern in settings where managed care

Table 1. HMO enrollment and benefit design, 1993

HMO name	Members	ADM outpatient copayment	ADM inpatient copayment
PHP Benefit System	20 784	$10 in physician office, 20% in outpatient clinic	20%
Cigna	13 795	$10	$25 per day
Family Healthnet	6 962	20%	20%
Health First	1 745	0	0
Health Plan of Upper Ohio Valley	1 338	$5	0
HMO Health Ohio	8 220	0	0
Humana Health Plan	2 298	$10	0
Inhealth	6 597	$10	20%
Kaiser Permanente	3 223	$5 for first 5 visits, then $20	0
Personal Physician Care	2 775	0 for first 10 visits, then $20	0
Principal Health Care	6 793	$10	0
Choicecare	3 246	$20	20%
Western Ohio Health Care	5 083	$10	20%

Note: Enrollment based on average membership in 1993; total 1993 HMO enrollment: 87 009.

enrollment increases substantially, especially when the only data available are for the continuing members in an indemnity medical plan, as in the studies by Goldman *et al.*[14] and Ma and McGuire.[15]

The Ohio Experience

Several years before the current interest in parity, the State of Ohio wanted to offer unlimited ADM benefits on par with the medical benefit to its employees and their family members. Because it was quite clear that this was not feasible financially in an unmanaged environment, Ohio started to experiment with behavioral health carve-out contracts in the fiscal year 1990/1991, when ADM benefits for employees under indemnity medical care were carved out to one managed behavioral health organization, Ohio Biodyne (which in 1992 became part of Medco, then, after changes in ownership, Merit Behavioral Health, which was bought in 1998 by Magellan). A feasibility study conducted by Towers Perrin for the State of Ohio in 1994 recommended that all employees, regardless of their medical plan, should receive a single carved-out single ADM plan with no limits. USBH won the contract and began providing managed ADM care to all State of Ohio employees and dependents in 1995. This includes employees receiving *medical* care through a number of different HMOs **(Table 1)**.

The new benefit design was very simple. Starting in 1990 for members in the Ohio (indemnity) medical plan and in 1995 for everybody, there were no deductibles or limits on any type of service. An outpatient session had a $10 copayment and inpatient or intermediate care (which includes residential care, day treatment, partial hospitalization and halfway house) had a $100 copayment per course of treatment. However, all care was managed and had to be provided through network providers (except for the transition period at the beginning of each contract). To obtain care referrals to clinicians, State of Ohio members call a toll-free 24-hour 800 number. Mental health professionals at the masters and doctoral level provide intake coordination and care management. Care delivered outside the managed care network was not eligible for coverage except in the event of an emergency and only if the managed care organization was notified within 24 hours. Until 1995, members of HMOs received ADM care through their HMOs and were subject to a variety of different benefit designs and access policies. All HMOs imposed an annual limit of a maximum of 30 outpatient sessions and/or 30 inpatient days and copayments for outpatient care ranged from 0 to 25 dollars per session. **Table 1** lists the benefit design and membership count for the 13 HMOs in operation in 1993. Since 1995, these HMO members have received ADM care through USBH with the new unlimited benefits. The switch to the carve-out plan resulted in a benefit expansion for HMO members, who previously faced limits on covered benefits and on average (weighting by membership) had higher copayments. While HMOs generally imply primary care gatekeeping, several of the HMOs had subcontracted mental health and substance abuse care to carve-outs in 1993. Ohio Biodyne provided mental health and substance abuse care for two HMOs and United Behavioral Systems for three HMOs, but all with more limited benefits than the Ohio Biodyne contract for indemnity members at that time or the subsequent USBH contract.

The basic benefit design and organizational structure was similar across both carve-out managed care organizations and we therefore expect similar utilization patterns for members in the indemnity medical plan. There were some smaller differences in coverage and implementation. V-code diagnoses (personal problems) were not covered by Biodyne until the third year, but were covered from the beginning under the USBH contract. Under the Biodyne contract, attention-deficit hyperactivity disorder (ADHD) was not covered (parents could obtain counseling on how to deal with an ADHD child, but treatment was not provided). Under the USBH contract, treatment for ADHD was included. Residential treatment was less often used under the Biodyne contract. Biodyne certified three outpatient visits at a time, meaning that the clinician has to request and justify continued treatment after each group of three visits, whereas USBH certified five outpatient visits at a time from 1995 to 1997 and ten visits beginning in 1998.

There are alternative ways regarding how a contract between an employer and the managed behavioral health care organization could be structured and although managed care is often equated with full risk (capitation) contracts, in which the managed care organization receives fixed payments regardless of utilization, they are not the rule. In contrast to HMO contracts, very few employer contracts put a carve-out behavioral health care organization at full risk and recent studies of carve-out experiences analyzed data in

which the managed care organization was at little financial risk.[14,15] However, both the Biodyne and USBH contracts were full risk contracts (and presumably the HMO contracts as well). Because of the strong financial incentives, Ohio took an additional initiative and included performance guarantees in terms of expected utilization levels. Such provisions against underutilization may become more common in the future to guarantee minimal performance standards.

Utilization and Costs Under Parity—The First Seven Years

Table 2 shows utilization patterns over time for members that are enrolled in the indemnity medical plan. The switch to managed care for ADM care was associated with a dramatic drop in inpatient days per 1000 members (75%) and a large drop in outpatient visits per 1000 members (40%), despite the increase in benefits. These changes are highly significant, even if standard errors were ten times higher than we estimated.

There are two noticeable trends. The most important development may be the continuous trend towards lower acute inpatient care, which decreased each year in terms of inpatient days per 1000 members. The second trend is an increased use of intermediate services, such as residential care and intensive outpatient care. No intermediate care was available in the indemnity plan before the carve-out, which mainly affects substance abuse care because it accounts for a large share of those new intermediate services. The number of outpatient visits tends to stabilize more quickly in the range of 500–550 visits per 1000. These results are very comparable to the experience of some private employers switching to managed care and providing more generous benefits, even in the absence of risk contracts.[14]

A somewhat different picture emerges when comparing managed behavioral health care under HMOs with limited benefits and under carve-outs with unlimited benefits **(Table 3)**. The increase in benefits combined with the change in type of managed care led to a large and statistically significant jump in outpatient utilization (not a drop as in switching from unmanaged to managed care) and intermediate services. There is a small (not statistically significant) decrease in acute inpatient care, but nowhere near the dramatic drop observed in the switch from unmanaged care, and very comparable with the observed time trend under carve-out care. The jump in outpatient and intermediate services in the first carve-out year, followed by a significant drop in services in the second carve-out year could be due to pent-up demand subsiding for the HMO members who had a benefit increase in 1995.

Given the small increase in HMO membership, it is unlikely that selection effects (patients with lower expected utilization enrolling in HMOs) over time could substantially affect these conclusions. Most notably, the decline in inpatient care and growth of intermediate care is very similar in both settings and therefore cannot be an artifact of selection bias in one system because the other system would then show the opposite effect. Secondly, the behavioral health costs per member do not differ significantly by the type of medical coverage during 1996/1997, suggesting that the size of selection cannot be dramatic, although we note that members in the HMO medical plan have fewer inpatient days (but more outpatient sessions) than members in the indemnity medical plan in 1996/1997, which would be consistent with Gresenz,[13] who found lower inpatient costs among HMO patients than among indemnity plan patients.

The fundamental question we wanted to address was as

Table 3. Mental health utilization and substance abuse utilization, per 1000, for HMO members

	HMOs Limited benefits	USHB Parity benefits	
	1993	95/96	96/97
Outpatient visits	368	542	547
IOP days	14.5	49.3	38.8
Residential days	—	20.0	9.6
Inpatient days	32.6	27.3	16.8
$ per member per month	$3.66	$4.66	$3.64

Note: Width of 95% confidence interval (based on 96/97 data): outpatient, ±6 sessions; IOP, ±3.1 d; residential, ±1.7 d; inpatient, ±2.0 d; costs, ±$0.09. Definitions of service units may differ between HMOs and USBH. IOP, intensive outpatient, such as day treatment. Residential care includes recovery homes under USBH, not available under HMOs.

Table 2. Mental health utilization and substance abuse utilization, per 1000, for indemnity medical plan members

	Unmanaged care	Biodyne					USBH	
	Limited benefits	Parity benefits						
	1989	90/91	91/92	92/93	93/94	94/95	95/96	96/97
Outpatient visits	1060	614	555	534	534	507	449	476
IOP days	—	10.9	12.0	28.4	44.8	40.2	33.1	34.4
Residential days	—	—	—	—	—	—	19.1	9.7
Inpatient days	204	51.8	48.2	44.0	40.7	32.1	24.7	20.1
$ per member per month	NA	NA	$5.39	$6.00	$6.53	NA	$4.03	$3.64

Note: Width of 95% confidence interval (based on 96/97 data): outpatient, ±9.4 sessions; IOP, ±4.9 d; residential, ±2.7 d; inpatient, ±3.2 d; costs, ±$0.12. Definitions of service units may differ in the three periods. IOP, intensive outpatient, such as day treatment. Residential care includes recovery homes under USBH. No data available for Biodyne and unknown whether this type of service was unavailable or counted under IOP. NA, no comparable data available.

follows: what about inflationary trends in plans with unlimited mental health and substance abuse benefits? Overall, costs kept declining over the seven years with unlimited ADM benefits for members of the indemnity medical plan (although there was a slight increase in the middle years of the Biodyne contract). Costs drop in the second year of the USBH contract and are expected to fall further as the network matures, a pattern replicated by other large contracts, even when the managed care organization is at no or only minimal risk.[14,15] For members receiving medical care through HMOs, insurance payments for behavioral health care remained about the same in 1997 as in 1993, despite the increase in benefits.

Table 4 provides a comparison of actual utilization levels with the performance guarantees specified in the contract. Note that the numbers refer to all members and therefore are a weighted average of the numbers for medical indemnity (39% in 1996/97) or HMO (61% in 1996/97) members. Consistent with the goal of relying on intermediate services rather than acute hospital care, utilization of intermediate service exceeded the required levels, whereas the utilization of inpatient days was close to the standard and dropped below it in the second year. Outpatient care was very close to the expected standard.

Discussion

This paper has analyzed the experience of the State of Ohio with unlimited ADM benefits for its state employees. To our knowledge, no other comparable data set exists with seven years of ADM 'parity' under managed care. The main result is that costs for ADM care stayed low and even declined in the last two years, in contrast to persistent anxiety that managed care cannot control costs under unlimited benefits. The implementation of managed care by far overwhelmed the effect of benefit expansion. Unfortunately, that does not answer the question of which level of service intensity meets the criterion of appropriateness.

The factors that differentiate ADM care from medical care and could lead to different cost paths include the state of management techniques, the complexity of treatments and demographic factors. Managed behavioral health care organizations have a sophisticated management system that includes outreach and concurrent review, techniques which are only rudimentary in medical settings and introduced there only recently for disease management of a few chronic diseases. While the management side of ADM services is more advanced than the management side of medical care, the pattern is reversed regarding treatment technologies. Much of the cost explosion in medicine is due to the continuous expansion of technology, whereas ADM treatment technologies remain simple. One exception may be pharmaceutical therapies; there has been a dramatic increase in prescribing antidepressants, particularly new medications (SSRIs), but that is also more of a medical side issue as most prescriptions are by primary care clinicians, not psychiatrists, and paid out of the medical benefits. However, the use of the latest generation of antidepressants and antipsychotics by psychiatrists is directly related to maintaining patients in ambulatory care and decreasing the use of inpatient services. Finally, there is a demographic difference: as the population ages and uses more medical care, ADM care may actually decrease as its main users are individuals in their 30s and 40s.

There are concerns that cost competition will reduce care below acceptable limits and some believe that standards are needed to assure minimal services. Ohio explicitly included such guarantees in its contract with USBH **(Table 4)**. The difficulty with standards is that they may codify inefficient care patterns because it is not clear what constitutes a good standard. For example, a minimum level of 25 acute inpatient days per 1000 members might result in an inefficient and costly shift back from intermediate settings to traditional inpatient care if the growth of residential services is an effective substitute for some more costly hospital stays. Ohio does take the overall care patterns into account and does not insist on each guarantee in isolation, however, and there have been no negative consequences for USBH. Ohio renewed the second and third years of the contract and expressed high satisfaction. Standards also need to vary as populations change. For example, 25 days per 1000 members would be too low for a Medicaid population with a higher prevalence of serious mental health problems. The geographic variation of available services and network experience are among other variables that need to be taken into account when setting standards.

Of course, all of this only begs the question of how efficient standards should be set. Unfortunately, it is quite clear that the scientific information base needed for this task is not available yet. Clinical guidelines, such as those developed by the American Psychiatric Association[16] or the Depression Guideline Panel,[17] are too vague to provide guidance in this matter, nor do employers know prevalence rates in their membership base, which can differ substantially across industries. Only recently, with the publication of the Oregon studies, have validation of consensus treatment guidelines for services to populations become available.[18] Thus, the best that even sophisticated purchasers are likely to be able to do at this moment is to specify standards based on prior experience or the patterns in similar companies, often with the help from actuarial or benefit consulting firms. This was the case in Ohio.

Table 4. Standards and actual utilization (per 1000)

	Contractual standards	USBH	
		95/96	96/97
Min outpatient visits	500	503	519
Min intermediate days/visits	40	62.2	46.7
Inpatient days	25	26.2	18.3

Note: Intermediate services in this table group residential and intensive outpatient in one category. Width of 95% confidence intervals (based on 96/97 data): outpatient, ±6 sessions; intermediate, ±3.5 d; inpatient, ±2 d.

Although the concern that competition reduces *services* below desirable levels of care is valid, this does not mean that fallings *costs per se* are a concern or an indicator of underuse. Many of the cost decreases do not reflect reductions in quantity or quality of clinical services, but a shift in the locus of care and increased efficiencies in care delivery. A large part of the decline in costs in USBH plans over time is a maturing of the network, which includes faster referrals to network clinicians and an increasing acceptance of network providers by patients. It also includes lower contractual rates with facilities due to renegotiations made possible by the large volume of referrals from USBH. This was a main factor in the cost reduction in the second year under the USBH contract. Two different factors can contribute to lower rates. One clearly is market power and many facilities are willing to accept lower rates in exchange for a guaranteed stream of patients. However, this may be a temporary factor that will disappear if the oversupply of providers diminishes. A second factor is more efficient organization. Group practices that share overhead expenses and scheduling can provide services more responsively and efficiently than solo clinicians and there is much room in many facilities to improve program operations. In contrast to the emerging inflation anxiety regarding overall health care costs, there may be another period of falling ADM costs ahead of us without changes in the level of services provided.

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References

1. Sturm R, McCulloch J. Mental Health and Substance Abuse Benefits in Carve-Out Plans and the Mental Health Parity Act of 1996. *J. Health Care Finance*, 1998; **24**: 84–95.
2. Hay Group. Health Care Plan Design and Cost Trends—1988 through 1997. Washington, DC: Hay Group, 1998.
3. Jensen GA, Rost K, Burton RPD, Bulycheva M. Mental Health Insurance in the 1990s: Are Employers Offering Less to More? *Health Affairs* 1998; **17**(3): 201–208.
4. Bachman R. *An Acturial Analysis of the Domenici–Wellstone Amendment of Provide Parity for Mental Health Benefits*. Coopers and Lybrand, 1996.
5. McDevitt R. The Costs of Uniform Plan Provisions for Medical and Mental Health Services: An Analysis of S. 298. *Watson Wyatt Worldwide*, 1996.
6. Melek S, Pyenson B. The Costs of Non-Discriminatory Health Insurance Coverage for Mental Illness. Milliman and Robertson, 1996.
7. O'Grady MJ. Mental Health Parity: Issues and Options in Developing Benefits and Premiums. *CRS Report for Congress*, 96–466 EPW, US Library of Congress. *Congressional Research Service*, 1996.
8. Rodgers J. Analysis of the Mental Health Parity Provision in S. 1028, Price Waterhouse, 1996.
9. Sturm R. How Expensive is Unlimited Mental Health Care Coverage Under Managed Care. *J. Am. Med. Assoc.* 1997; **278** (18): 1533–1537.
10. Wells KB, Sturm R, Sherbourne C, Meredith LS. *Caring for Depression*. Cambridge, MA: Harvard University Press, 1996.
11. Levit KR, Lazenby HC, Braden BR. The National Health Accounts Team, National Health Spending Trends in 1996. *Health Affairs* 1998; **17** (1): 35–51.
12. Frank RG, Koyanagi C, McGuire TG. The Politics and Economics of Mental Health Parity Laws. *Health Affairs* 1997; **16**: 108–119.
13. Gresenz CR, Utilization and Costs of Managed Mental Health Care: The Effects of Selection into Plan and Employer. *J. Mental Health Policy Econ.* in press.
14. Goldman W, McCulloch J, Sturm R. Costs and Utilization of Mental Health Services Before and After Managed Care. *Health Affairs* 1998; **17**(2): 40–52.
15. Ma CA, McGuire TG. Costs and Incentives in a Mental Health Carve-Out. *Health Affairs* 1998; **17** (2): 53–69.
16. American Psychiatric Association. Practice guideline for major depressive disorder in adults. *Am. J. Psychiatry* 1993; **150** (April suppl.): 1029.
17. Depression Guideline Panel. 1993. *Depression in Primary Care: Volume 2. Treatment of Major Depression*. AHCPR Publication 93–0551. Rockville, MD: US Department of Health and Human Services, Public Health Service, Agency for Health Care Policy and Research.
18. McFarland B, George R, Goldman W, Pollack D, McCulloch J, Penner S, Angell R. Population-Based Guidelines for Performance Measurement: A Preliminary Report. *Harvard Review of Psychiatry* 1998; **6** (1): 23–37.