

## SPECIAL ARTICLE

## Behavioral Health Insurance Parity for Federal Employees

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## ABSTRACT

**BACKGROUND**

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To improve insurance coverage of mental health and substance-abuse services, the Federal Employees Health Benefits (FEHB) Program offered mental health and substance-abuse benefits on a par with general medical benefits beginning in January 2001. The plans were encouraged to manage care.

**METHODS**

We compared seven FEHB plans from 1999 through 2002 with a matched set of health plans that did not have benefits on a par with mental health and substance-abuse benefits (parity of mental health and substance-abuse benefits). Using a difference-in-differences analysis, we compared the claims patterns of matched pairs of FEHB and control plans by examining the rate of use, total spending, and out-of-pocket spending among users of mental health and substance-abuse services.

**RESULTS**

The difference-in-differences analysis indicated that the observed increase in the rate of use of mental health and substance-abuse services after the implementation of the parity policy was due almost entirely to a general trend in increased use that was observed in comparison health plans as well as FEHB plans. The implementation of parity was associated with a statistically significant increase in use in one plan (+0.78 percent,  $P < 0.05$ ) a significant decrease in use in one plan (−0.96 percent,  $P < 0.05$ ), and no significant difference in use in the other five plans (range, −0.38 percent to +0.23 percent;  $P > 0.05$  for each comparison). For beneficiaries who used mental health and substance-abuse services, spending attributable to the implementation of parity decreased significantly for three plans (range, −\$201.99 to −\$68.97;  $P < 0.05$  for each comparison) and did not change significantly for four plans (range, −\$42.13 to +\$27.11;  $P > 0.05$  for each comparison). The implementation of parity was associated with significant reductions in out-of-pocket spending in five of seven plans.

**CONCLUSIONS**

When coupled with management of care, implementation of parity in insurance benefits for behavioral health care can improve insurance protection without increasing total costs.

PARITY IN INSURANCE COVERAGE FOR mental health services has been the Holy Grail of mental health policy for decades.<sup>1,2</sup> Ever since President John F. Kennedy directed the Civil Service Commission to offer federal employees mental health benefits on the same basis as benefits for other medical services, parity has been a standard for excellent mental health insurance coverage. The Federal Employees Health Benefits (FEHB) Program, like other competitive insurance markets, was unable to maintain equal coverage for mental health care because of high costs.<sup>3</sup> Strictly limiting coverage for mental health and substance-abuse care is an effective means of controlling costs, but it also limits access and distorts the insurance market. Responding to such concerns, government payers and some private payers have intervened by setting minimum standards for coverage of mental health and substance-abuse care. Parity is intended primarily to correct insurance-market failure and the unfair design of insurance benefits. Advocates have hoped that it would increase access to care. The main argument against parity has been a concern that more generous coverage of these services would result in large increases in spending.<sup>3</sup> Opposition to legislation requiring parity of coverage has been strong, but the successes of managed care in controlling spending on mental health and substance-abuse services offer a counterweight to cost considerations.<sup>4-6</sup> The use of managed care, however, raises concerns about access and quality.

In June 1999, President Bill Clinton directed the Office of Personnel Management to ensure parity of mental health and substance-abuse benefits for the FEHB Program. He also proposed an evaluation to guide federal policy — the first national study of comprehensive parity. This article reports on the effects of parity of mental health and substance-abuse benefits on access, cost, and quality in seven large FEHB plans.

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#### METHODS

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##### EXAMINATION OF PARITY OF MENTAL HEALTH AND SUBSTANCE-ABUSE CARE IN THE FEHB PROGRAM

The FEHB Program has 8.5 million enrollees; approximately 25 percent are current federal employees, 25 percent are retirees, and 50 percent are spouses or dependents of current or retired employees. Enrollees select from over 350 health

insurance products.<sup>7</sup> Beginning on January 1, 2001, the Office of Personnel Management required parity of coverage for mental health and substance-abuse care, defined as coverage that is “identical with regard to traditional medical care deductibles, coinsurance, co-pays, and day and visit limitations.”<sup>8</sup> Parity applied only to in-network insurance benefits.<sup>9</sup> Providers and beneficiaries were informed about the policy change by direct mail from the plans.

The Office of Personnel Management encouraged the plans to employ managed-care techniques to control anticipated increases associated with expanded mental health and substance-abuse coverage. Before 2001, some plans had already contracted with managed behavioral health care organizations to control costs (in a process known as a “carve-out”).<sup>9</sup>

We analyzed the results of this natural experiment by using a quasi-experimental design to account for secular trends in the use of and spending on mental health and substance-abuse care not associated with implementation of parity of coverage. (Previous evaluations of parity studied a single health plan before and after the implementation of parity and were unable to account for secular trends.) We compared spending in seven large FEHB plans during the period from 1999 through 2002 with spending in a matched set of health plans without parity of coverage or changes in mental health and substance-abuse coverage from Medstat’s MarketScan database. Most of the comparison plans were operated by large, self-insured employers. We matched plans according to location and type of plan.

Initially, nine FEHB plans were selected for study on the basis of location, type of plan (health maintenance organization [HMO] or point-of-service plan vs. preferred-provider organization [PPO]), population size, and interest in participation. Enrollees between the ages of 18 and 64 years were included in the study. Table 1 characterizes the nine FEHB plans and the comparison plans. It shows that the parity policy improved mental health and substance-abuse benefits for seven of the FEHB plans. Two HMOs, which were close to parity in 2000, did not show a substantial change in benefits. The analysis focuses on the seven PPO plans for which an effect of the implementation of parity could be expected. (The data on the effects on HMO plans are available at [www.aspe.hhs.gov](http://www.aspe.hhs.gov).)

**Table 1.** Characteristics of Nine FEHB Program Plans and Their MarketScan Comparison Plans before and after Implementation of Parity of Coverage for Mental Health and Substance-Abuse Services in 2001.\*

Characteristic	FEHB Program Plans		Comparison Plans†	
	2000	2001	2000	2001
	National PPO (N=365,137)		Comparison Plan (N=306,127)	
Annual limit of days of coverage for inpatient	45	No limit	50	50
Cost shared by inpatient	30%	0	Low‡	Low‡
Annual limit of outpatient visits	20	No limit	30–50	30–50
Cost shared by outpatient	30%	\$15	Low§	Low§
Carve-out status¶	No	Yes	6 of 15	5 of 15
	Mid-Atlantic PPO 1 (N=108,460)		Comparison Plan (N=20,392)	
Annual limit of days of coverage for inpatient	100	No limit	30	30
Cost shared by inpatient	40%	0	Low‡	Low‡
Annual limit of outpatient visits	25	No limit	30	30
Cost shared by outpatient	\$25	\$15	Low§	Low§
Carve-out status¶	Yes	Yes	4 of 7	3 of 7
	Mid-Atlantic PPO 2 (N=75,676)		Comparison Plan (N=20,392)	
Annual limit of days of coverage for inpatient	100	No limit	30	30
Cost shared by inpatient	40%	0	Low‡	Low‡
Annual limit of outpatient visits	25	No limit	30	30
Cost shared by outpatient	\$25	\$15	Low§	Low§
Carve-out status¶	No	No	4 of 7	3 of 7
	Northeastern PPO 1 (N=38,716)		Comparison Plan (N=20,392)	
Annual limit of days of coverage for inpatient	100	No limit	30	30
Cost shared by inpatient	40%	0	Low‡	Low‡
Annual limit of outpatient visits	25	No limit	30	30
Cost shared by outpatient	\$25	\$15	Low§	Low§
Carve-out status¶	Yes	Yes	4 of 7	3 of 7
	Northeastern PPO 2 (N=21,459)		Comparison Plan (N=20,392)	
Annual limit of days of coverage for inpatient	100	No limit	30	30
Cost shared by inpatient	40%	0	Low‡	Low‡
Annual limit of outpatient visits	25	No limit	30	30
Cost shared by outpatient	\$25	\$15	Low§	Low§
Carve-out status¶	Yes	Yes	4 of 7	3 of 7

We studied the responses of persons who were continuously enrolled in a plan before and after the implementation of parity of coverage. Using data from all enrollees could confound the effects of parity with those of changes in plan composition. We examined plan benefits to assess the implementation of parity and then assessed

the outcomes. The key outcomes examined were the rate of use of mental health and substance-abuse services, the total spending for such services among users, out-of-pocket spending on such services, and one measure of quality of care, the duration of follow-up for treatment of depression.

**Table 1. (Continued.)**

Characteristic	FEHB Program Plans		Comparison Plans†	
	2000	2001	2000	2001
	Western PPO (N = 51,902)		Comparison Plan (N = 27,376)	
Annual limit of days of coverage for inpatient	100	No limit	30	30
Cost shared by inpatient	40%	0	Low‡	Low‡
Annual limit of outpatient visits	25	No limit	30	30
Cost shared by outpatient	\$25	\$15	Low§	Low§
Carve-out status¶	No**	Yes	5 of 11	4 of 11
	Southern PPO (N = 68,808)		Comparison Plan (N = 27,376)	
Annual limit of days of coverage for inpatient	100	No limit	30	30
Cost shared by inpatient	40%	0	Low‡	Low‡
Annual limit of outpatient visits	25	No limit	30	30
Cost shared by outpatient	\$25	\$15	Low§	Low§
Carve-out status¶	Yes	Yes	5 of 11	4 of 11
	Western HMO (N = 17,902)		Not applicable	
Annual limit of days of coverage for inpatient	30	No limit		
Cost shared by inpatient	0	0		
Annual limit of outpatient visits	40	No limit		
Cost shared by outpatient	\$20	\$20		
Carve-out status¶	Yes††	Yes		
	Northeastern HMO (N = 32,352)		Not applicable	
Annual limit of days of coverage for inpatient	No limit	No limit		
Cost shared by inpatient	0	0		
Annual limit of outpatient visits	40	No limit		
Cost shared by outpatient	\$10	\$10		
Carve-out status¶	Yes	Yes		

\* Since the characteristics of the plans in 2000 were nearly identical to those in 1999, we show only the 2000 characteristics for the period before the implementation of parity on January 1, 2001. Similarly, since the plan characteristics in 2001 were nearly identical to those in 2002, we show only the 2001 characteristics for the period after the implementation of parity. The data are from persons who were continuously enrolled in a health plan before and after the implementation of parity. PPO denotes preferred-provider organization, and HMO health maintenance organization.

† The comparison “plan” is actually a group of plans from MedStat’s MarketScan database. Thus, some of the plan characteristics are best represented as a range of values, a proportion, or a weighted average.

‡ The proportion of the cost shared by the inpatient ranged from 0 to 20 percent, with a weighted average of 5 percent. We consider this to be a low level of cost sharing.

§ The proportion of the cost shared by the outpatient ranged from 0 to 50 percent, with a weighted average of 15 percent. We consider this to be a low level of cost sharing.

¶ For FEHB program plans, we indicate whether the plan contracted with a managed behavioral health care company in a carve-out arrangement. As noted above, the comparison plan is composed of a group of plans, some of which contracted with a managed behavioral health care company in a carve-out arrangement. We show the proportion of component plans that did so in relation to the total.

|| The plan contracted with a managed behavioral health care company in December 2000 in anticipation of the FEHB program’s parity policy beginning in January 2001.

\*\* The plan implemented a carve-out arrangement for their other insurance products in response to the state government’s requirement for parity in 2000, but they did not implement a carve-out arrangement for FEHB Program enrollees until January 2001.

†† The managed behavioral health care vendor is a wholly owned subsidiary of the health plan.

**DATA**

From the seven plans, we obtained four years of data on the design of benefits, enrollment, and medical and pharmacy claims, including two years before and two years after the implementation of parity of coverage for FEHB plans. We analyzed data from a random sample of 20,000 enrollees per plan. We also obtained data on benefits, enrollment, and claims for the matched comparison group during the same period from the MarketScan database.

**IDENTIFYING MENTAL HEALTH AND SUBSTANCE-ABUSE SERVICES**

We classified inpatient and outpatient services associated with specified mental health and substance-abuse diagnoses and psychotropic medications as mental health and substance-abuse services. (A detailed description is available at [www.aspe.hhs.gov](http://www.aspe.hhs.gov).) Mental health and substance-abuse diagnoses were defined as those with diagnostic codes 291, 292, 295 through 309 (except 305.1 and 305.8), and 311 through 314 in the *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD-9-CM). An inpatient was considered a user of mental health and substance-abuse services if the last primary diagnosis and the majority of all primary diagnoses in the inpatient record were mental health and substance-abuse diagnoses. An outpatient was considered a user of mental health and substance-abuse services if any of the following was indicated: a mental health and substance-abuse primary diagnosis, a procedure specific to mental health and substance-abuse care, or a face-to-face encounter with a provider of such care or treatment at a facility specializing in mental health and substance-abuse care. To identify use of psychotropic medications, we developed two lists: a restricted list of medications that are used only for mental health and substance-abuse disorders and an expanded list of medications that are used for both mental health and substance-abuse disorders and other conditions. Expenditures for any medications on the restricted list counted as spending on mental health and substance-abuse care. If the patient made any other use of mental health and substance-abuse services or incurred any related expenditures during the year, then expenditures for any medications on the expanded list counted as spending for mental health and substance-abuse care.

To assess the quality of care for depression, we examined data from patients with a diagnosis of major depressive disorder (codes 296.2 and 296.3). Outpatients were included only if the diagnosis appeared on at least two service dates; inpatients were included if a primary diagnosis of major depressive disorder was the reason for hospitalization.

**STATISTICAL ANALYSIS**

We estimated the economic effect of parity by the difference-in-differences method. The difference in differences is the average difference (before and after the implementation of parity) in outcomes of interest in the comparison plans subtracted from the average difference before and after implementation of parity in the FEHB plans. This approach permitted us to account for any secular trend in outcomes. Any remaining significant differences in outcome are attributed to parity.

To estimate the difference in differences, we had to address two important characteristics of data on health care spending. Most people do not receive mental health and substance-abuse care in any given year (i.e., they have zero spending), and among those who do receive such care, a disproportionate number have high levels of spending. To account for these features, we examined a number of competing approaches that have been discussed in the literature.<sup>10</sup> After testing competing models, we settled on the two-part model because it best fitted the data. We used the generalized linear model to estimate the relation between spending on mental health and substance-abuse care and parity. After checking several link functions and distributional assumptions, we used a normal model to characterize spending. Correlation among repeated annual observations was accounted for by the use of a generalized estimating equation approach.

The first part of the two-part model used logistic regression to estimate the effect of the implementation of parity of coverage on the probability that a person would use mental health and substance-abuse services. The unit of observation was the person-year. In those regressions, we adjusted for the demographic characteristics of the person (age and sex) and the person's relationship to the policyholder (child or spouse). The age variable was used to adjust for any time trend. The key variables of interest were an indicator

variable that was assigned a value of one for the postparity period and zero for the preparity period, an indicator variable that was assigned a value of one for the members of FEHB plans and zero for the members of comparison groups, and the interaction of the two indicator variables. Because the logistic model is nonlinear, the net effect of the parity policy on an outcome could not be calculated directly from the coefficient of the interaction term.<sup>11</sup> Instead, we calculated the average effect on the probability of using mental health and substance-abuse services by employing simulation methods based on the estimated regression model. Using the bootstrap samples, we constructed 95 percent confidence intervals for our final estimates.<sup>12</sup>

The second part of the two-part model used a least-squares regression approach to analyze individual spending on mental health and substance-abuse services for those who used any such services. In this model, we used the same independent variables as in the first part, as well as indicator variables for the diagnosis for which a service user received treatment. The coefficient of the interaction term allowed us to estimate any change in spending on mental health and substance-abuse care due to the parity policy, while accounting for the secular trend in such spending among users of mental health and substance-abuse services. A generalized estimating equation was used to estimate the standard errors of the model's coefficients.

We performed a before-and-after analysis of administrative data to assess any changes in the quality of care, as measured by the duration of follow-up treatment for acute-phase depression. Receiving services (any visits for mental health and substance-abuse care or prescriptions for antidepressant medications) for four months or more is considered a guideline for the quality of treatment of acute-phase depression.<sup>13-15</sup> Episodes of depression care from six of the seven FEHB plans were studied before and after the implementation of parity to assess the proportion of patients with four months or more of follow-up treatment. The national PPO (Table 1) was not studied because the data were different from those in the other plans, and the differences limited comparability. Logistic regression was used to estimate the association between the postparity period and the quality measure. We constructed a 95 percent confidence interval for

the adjusted odds ratios and used a generalized estimating equation approach to account for repeated observations.

## RESULTS

Table 1 shows that the comparison plans did not have parity benefits before 2001 and that they changed very little over the course of the study. Three of the seven FEHB plans did not use a carve-out vendor as a means of managing their mental health and substance-abuse benefits before implementing parity; only PPO 2 in the Mid-Atlantic region was not carved out by 2001. Roughly half the plans that served as comparison groups were carved out before the implementation of parity; only minor changes in carving out occurred in 2001.

Table 2 reports descriptive data on rates of use of mental health and substance-abuse services and spending for service users. For all plans, the rates of use and spending increased during the study period. Table 2 also reports difference-in-differences estimates for the probability of use of mental health and substance-abuse services and for spending on such services. After accounting for secular trends in the use of mental health and substance-abuse services, we found a positive and significant effect of parity on the probability of use for one plan, Mid-Atlantic PPO 2; the increase in the rate of use of mental health and substance-abuse services in this plan was 0.78 percentage point greater than the increase in its matched comparison plan. For the remaining six plans, the estimated effect of the implementation of parity on the probability of use either was positive and not significantly different from zero or was significant but negative. Thus, the difference-in-differences analysis indicated that the observed increase in the rate of use of mental health and substance-abuse services after the implementation of parity was almost entirely due to a secular trend in the increased use of such services. The difference-in-differences estimates for spending on mental health and substance-abuse services show significant decreases in spending attributable to parity for three plans, ranging from -\$68.97 to -\$201.99. The estimated effects on spending for the other four plans were moderate, ranging from -\$42.13 to +\$27.11, and did not differ significantly from zero. Thus, this analysis offers no evidence of significant increas-

**Table 2.** Probability of Use of Mental Health and Substance-Abuse Services and Total Spending by Service Users.\*

Plan	Probability of Use of Mental Health and Substance-Abuse Services†		Total Mental Health and Substance-Abuse Spending per User‡		Change in Value before and after the Implementation of Parity‡	
	Preparity	Postparity	Preparity	Postparity	Probability of use of mental health and substance-abuse services	Total spending on mental health and substance-abuse care per user
	percent		\$		percent (95% CI)	\$ (95% CI)
National PPO Comparison plan	14.05 20.60	16.40 23.05	637.00 938.50	692.50 1,058.00	-0.12 (-0.66 to 0.44)	-68.97 (-89.02 to -48.92)§
Mid-Atlantic PPO 1 Comparison plan	18.70 17.25	20.35 19.40	1,199.50 943.50	1,256.50 1,071.00	-0.96 (-1.46 to -0.38)§	-42.13 (-126.32 to 42.05)
Mid-Atlantic PPO 2 Comparison plan	18.55 17.25	21.50 19.40	751.50 943.50	841.00 1,071.00	0.78 (0.20 to 1.39)§	27.11 (-110.96 to 56.74)
Northeastern PPO 1 Comparison plan	15.05 17.25	17.55 19.40	822.00 943.50	911.00 1,071.00	0.23 (-0.31 to 0.74)	-5.50 (-96.20 to 85.10)
Northeastern PPO 2 Comparison plan	14.45 17.25	16.30 19.40	1,302.00 943.50	1,284.50 1,071.00	-0.38 (-0.89 to 0.23)	-119.26 (-234.46 to -4.06)§
Western PPO Comparison plan	16.15 18.05	18.35 20.40	874.00 768.00	976.00 888.50	-0.24 (-0.77 to 0.27)	-22.60 (-84.44 to 39.25)
Southern PPO Comparison plan	17.60 18.05	20.35 20.40	791.00 768.00	734.00 888.50	-0.35 (-0.17 to 0.91)	-201.99 (-255.85 to -148.13)§

\* CI denotes confidence interval, and PPO preferred-provider organization.

† Descriptive data are shown. Preparity and postparity figures are two-year averages for the years from 1999 through 2000 and from 2001 through 2002, respectively.

‡ A difference-in-differences analysis was used to account for secular trends.

§  $P \leq 0.05$ .

es in spending attributable to the implementation of parity of coverage.

Table 3 summarizes the effects of parity on out-of-pocket spending by users of mental health and substance-abuse services. In five of seven plans, the parity policy was associated with significant reductions in out-of-pocket spending, ranging from \$13.82 to \$87.06. There was a small but significant increase in out-of-pocket spending by service users in the national PPO.

The findings on the quality of depression treatment are presented as odds ratios derived from regression analyses. The results for all plans showed an increased likelihood of providing follow-up services to persons undergoing treatment for acute-phase depression. The improvement was significant for three plans. The odds ratio was 1.72 (95 percent confidence interval, 1.22 to 2.41) for the Western PPO, 2.33 (95 percent confidence interval, 1.31 to 4.14) for Northeastern PPO 2, and 1.60 (95 percent confidence interval, 1.19 to 2.16) for the Southern PPO.

## DISCUSSION

Our results demonstrate that the growth in the use of mental health and substance-abuse services and spending on these services in seven FEHB plans was similar to or less than that in other large, privately insured populations. The only plan that had an increase in use attributable to the implementation of parity of coverage was Mid-Atlantic PPO 2, which was the only plan that did not contract with a carve-out managed-care vendor. These results are negative, in the sense that there were few significant differences in the probability of service use or in the amount of expenditures that could be explained by the implementation of parity. A finding of negative results always raises the question of whether the effect of parity on use and spending was really limited or whether the evaluation lacked the necessary power to detect an effect. Two factors lead us to believe that the effect really was limited: the estimated differences between the results for

enrollees in the FEHB Program and comparison enrollees were relatively small in magnitude. The sample sizes used in the analysis were large and were sufficient to show significant effects of similar policy measures, such as the effect of carving out mental health and substance-abuse care while holding the benefit design constant.<sup>16</sup> For these reasons, we believe the evidence points to a finding of little or no effect of the implementation of parity of coverage for mental health and substance-abuse services on use and total spending, rather than reflecting a type II error.

Although spending increases resulting from the implementation of parity did not occur, neither did access to mental health and substance-abuse services increase. Advocates of parity might be pleased about the observed increases in the use of mental health and substance-abuse services in all plans, but these changes were consistent with the presence of secular trends and not attributable to the implementation of parity.

The parity policy reduced out-of-pocket spending by users of mental health and substance-abuse services in all but one of the seven plans. Spending decreased significantly in five plans. There was a small but significant increase in out-of-pocket spending by enrollees in the national PPO, probably as a result of the relatively high cost-sharing requirements of the prescription-drug plan for this PPO.

Some policymakers have expressed concern that any increase in the use of managed care associated with the implementation of parity might result in deteriorating quality. Studies of quality using claims data to compare adherence to guidelines for the treatment of depression and substance abuse before and after the implementation of parity have found little change (see [www.aspe.hhs.gov](http://www.aspe.hhs.gov)). The measure of quality we used — the duration of follow-up after treatment for depression — did not decline in this study, and in three of the plans, it showed a small improvement. Because we were not able to perform a difference-in-differences analysis of the quality measures, it is quite possible that our results reflect secular trends that are independent of the implementation of parity. The findings are quite similar to recent findings that used Health Plan Employer Data and Information Set (HEDIS) measures of follow-up in the treatment of depression.<sup>17</sup> (To put these results in perspective, the

**Table 3. Difference-in-Differences Results for Amount of Out-of-Pocket Spending per User for Mental Health and Substance-Abuse Services before, as Compared with after, the Implementation of Parity.**

Plan	Change per User (95% CI)*
	\$
National PPO	4.48 (0.91 to 8.06)†
Mid-Atlantic PPO 1	-15.43 (-26.14 to -4.73)†
Mid-Atlantic PPO 2	-13.82 (-23.96 to -3.67)†
Northeastern PPO 1	-8.78 (-21.14 to 3.57)
Northeastern PPO 2	-48.12 (-66.85 to -29.39)†
Western PPO	-49.80 (-61.17 to -38.43)†
Southern PPO	-87.06 (-99.73 to -74.38)†

\* CI denotes confidence interval, and PPO preferred-provider organization.

† P≤0.05.

measure we used improved at an annual rate of 2.4 percentage points, whereas the HEDIS measures of follow-up for acute- and continuation-phase depression improved by 2.9 and 2.7 percentage points, respectively, between 2001 and 2002.)

Our study had several limitations. First, as in all quasi-experimental studies, there is a risk of nonequivalence of intervention and comparison groups, particularly with respect to time trends over the length of the period before the implementation of parity. However, the consistency of key findings for multiple matched sets of health plans is reassuring. Second, mental health and substance-abuse diagnoses may be underreported in claims data, resulting in an undercount of use of such services and spending on these services. To address this issue, we employed multiple methods of identifying the use of mental health and substance-abuse services, including a procedure code specific to such services, indication of a face-to-face encounter with a mental health and substance-abuse provider, and indication of treatment at a facility specializing in mental health and substance-abuse care. Third, the use of data only from persons continuously enrolled before and after the implementation of parity eliminated those who changed plans, and the restriction of the analysis to only seven of the FEHB plans potentially limited the generalizability of the findings. However, the study included diverse plans (with different managed-care arrangements) with

more than 3 million FEHB beneficiaries from across the United States, including more than 700,000 continuously enrolled adults, who were the focus of this analysis.

The goals of parity include providing equal coverage and increased financial protection for persons with mental health and substance-abuse disorders. The primary concern has been that the existence of parity would result in large increases in the use of mental health and substance-abuse services and spending on these services. With respect to the seven FEHB plans we studied, these fears were unfounded. In addition, the goal of expanding financial protection by decreasing out-of-pocket spending was realized in all but two of the plans. These findings suggest that parity of coverage of mental health and substance-abuse services, when coupled with

management of care, is feasible and can accomplish its objectives of greater fairness and improved insurance protection without adverse consequences for health care costs.

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