ABSTRACT

Background. Proposals to enroll Medicaid beneficiaries in health maintenance organizations (HMOs) have raised concerns that community-based mental health treatment programs would be adversely affected.

Methods. In Hennepin County (Minnesota) 35% of Medicaid beneficiaries were randomly assigned to prepaid plans. Random samples of individuals with severe mental illness were selected from the prepaid enrollees and from beneficiaries remaining with traditional Medicaid. The two groups were compared with respect to their use of community treatment programs and the write-off (the proportion of patient charges for which payment was not received) experienced by those programs for members of the study sample.

Results. There was no strong evidence that Medicaid beneficiaries with severe mental illness who were randomly assigned to prepaid plans used community-based mental health treatment programs differently than did other Medicaid beneficiaries. However, write-offs were consistently higher for enrollees in prepaid plans.

Conclusions. In the short run, the use of community-based mental health treatment programs need not be affected by enrollment of Medicaid beneficiaries in prepaid plans, providing that Medicaid program administrators take steps to minimize the disruption of ongoing treatment, offer beneficiaries a choice among prepaid plans, and encourage community treatment programs to contract with plans to serve beneficiaries. (Am J Public Health. 1992;82:790–796)

Use of Community-Based Mental Health Programs by HMOs: Evidence from a Medicaid Demonstration

Jon B. Christianson, PhD, Nicole Lurie, MD, MSPH, Michael Finch, PhD, Ira S. Moscovice, PhD, and David Hartley, MHA

Introduction

Proposals to enroll people with severe mental illness, particularly Medicaid beneficiaries, in health maintenance organizations (HMOs) have generated concerns on the part of mental health policy analysts and providers.1-4 Among these concerns is that beneficiaries enrolled in HMOs will use the mental health treatment programs available in their communities less frequently than do beneficiaries under traditional Medicaid. It is feared that this reduced use, particularly if accompanied by reduced payments to treatment programs by HMOs, will have an adverse effect on the financial viability of these programs. In this article we analyze use and reimbursement of community-based mental health treatment programs on the part of Medicaid beneficiaries with severe mental illness. The experience of beneficiaries randomly assigned to prepaid plans is contrasted with that of beneficiaries in traditional Medicaid. Throughout the article, we use the term community-based treatment program to include community mental health centers, crisis centers, day treatment programs, and drop-in centers, all of which are typically major providers of mental health care to indigent populations.

Concerns about the Interface between HMOs and Community-Based Treatment Programs

The manner in which HMOs relate, or might relate, to community-based mental health treatment programs has been a matter of debate. 5,6 A recent survey of the benefits provided by HMOs to their private sector enrollees reported that 53% exclude treatment of chronic mental illness from their standard benefit plan and 64% exclude long-term psychotherapy. These figures suggest that many HMOs may have limited experience in delivering services to severely mentally ill persons and have lead to concerns that HMOs may not take full advantage of community-based programs

in treating their enrollees. However, HMO enrollees with severe mental illness may seek out publicly subsidized communitybased programs to avoid HMO gatekeepers or to circumvent other HMO policies that restrict access. Such a strategy seems particularly likely for Medicaid beneficiaries, who may be familiar with these programs through past use. In some cases, HMOs may encourage the use of community-based treatment programs through contractual and other, less formal, methods, to reduce their own costs of treating enrollees with severe mental illness.8,9 An HMO would realize cost reductions if the charges of the community programs were less than the cost of delivering similar services through HMO providers or if the HMO did not fully reimburse the charges billed by these treatment programs.

If the overall use of community treatment programs drops as a result of enrolling Medicaid beneficiaries in HMOs, program supporters fear that public sector subsidies and Medicaid reimbursements will be reduced. Such reductions could force these programs to scale down their activities or, in the extreme, to discontinue their operations. However, program supporters also foresee possible negative consequences, from a public policy standpoint, of greater use of community-based programs by HMO enrollees. For example, the public sector might, in effect, pay twice for the mental health care of HMO enrollees: once through general public subsidies provided to the programs and once through the capitation payment made by Medicaid to the HMO, which is intended to

The authors are with the Division of Health Services Research and Policy, School of Public Health, University of Minnesota, Minneapolis. Nicole Lurie is also with the Department of Medicine, Hennepin County Medical Center, Minneapolis, Minn.

Requests for reprints should be sent to Jon B. Christianson, PhD, Division of Health Research Services and Policy, School of Public Health, University of Minnesota, 420 Delaware Street, SE, Box 729, Minneapolis, MN 55455.

This paper was submitted to the Journal September 30, 1991, and accepted with revisions March 12, 1992.

cover all of the costs of providing care to HMO enrollees. If the programs were reimbursed appropriately by HMOs for services they provided, then, at least in theory, public subsidies to these programs could be reduced so that double paying did not occur and the programs would not be adversely affected. On the other hand, if budget subsidies were reduced by amounts greater than the reimbursements received by community-based programs for treating HMO enrollees, these programs would be faced with the need to provide more services but with fewer resources.

We tested two general hypotheses related to these issues. The first hypothesis was that the use of community-based treatment programs by severely mentally ill Medicaid beneficiaries would differ from the use observed under traditional Medicaid. Given the conflicting arguments that can be made, we did not assign a directional expectation to this hypothesis. Also, we did not address whether reductions in the use of community-based treatment programs would imply poorer quality care or result in worse patient outcomes, even though these are obviously important research issues. The second hypothesis was that the proportion of patient charges for which payment is not received by community-based programs (which we define as the "write-off") would be higher for Medicaid beneficiaries in HMOs than for beneficiaries in traditional Medicaid.

The Hennepin County Demonstration

In 1982, the Health Care Financing Administration authorized six states to enroll Medicaid beneficiaries in prepaid health plans on a demonstration basis. As part of this demonstration, in Hennepin County (Minneapolis), Minnesota, 35% of all Medicaid beneficiaries were randomly assigned to receive services from prepaid plans. They were then provided with assistance in selecting a plan; those who did not make a choice ultimately were assigned to a plan. Enrollment of individuals who were disabled owing to mental illness occurred between November 1986 and April 1987; service delivery for early enrollees began on January 1, 1987.10

The four prepaid plans that enrolled beneficiaries in the disabled category were all individual practice association plans. Their sponsoring organizations were Blue Cross/Blue Shield, Hennepin County, the University of Minnesota, and an independent organization affiliated with a local

hospital corporation. The Hennepin County plan subcontracted with the county hospital (a major provider of mental health services) and county-subsidized community-based treatment programs for the delivery of mental health care. Blue Cross/Blue Shield also offered access to a broad array of mental health providers, including many community-based programs.

The prepaid plans were reimbursed at 95% of estimated Medicaid costs (projected on the basis of historical trends), with different rates established on the basis of age, sex, Medicare participation, institutional vs noninstitutional residence, and eligibility status. The plans were required to deliver all services covered under traditional Medicaid, including all necessary mental health care; were screened to ensure that they had the ability to provide the required range of mental health services; and were subsequently monitored by the state to ensure that they delivered these services effectively.11 As part of their participation in the demonstration, they were expected to refer enrollees, as needed, to community-based treatment programs and to reimburse these programs for their services.

In implementing the demonstration, several steps were taken to address the concerns expressed by mental health advocates and providers that the prepaid plans would not be able to develop effective linkages with community-based treatment programs and therefore that the continuity of treatment for patients would be interrupted.12 For instance, the demonstration administrator in Hennepin County had experience in mental health care, as did staff members in the state demonstration office. Also, the availability of a countysponsored plan gave beneficiaries an option that provided access to most community-based treatment programs. In addition, enrollees were permitted to switch plans within 60 days of their initial choice, giving them a second chance to select plans that allowed them to maintain their relationships with mental health treatment providers. To minimize transitionrelated problems, an informal grievance procedure was developed that, in most cases, resulted in the prepaid plan's agreeing to pay for completion of treatment by the original provider or completion of the recommended course of treatment by plan providers. A demonstration advisory group was formed to develop standards for monitoring quality of care, for conducting medical records review, and for managing the special needs of mentally ill beneficiaries. At the end of the first demonstration year, plan contracts were amended to enable enrollees to self-refer to mental health providers without authorization from a family practice physician or a psychiatrist.¹³

At the end of the second program year, which was the first year in which disabled beneficiaries were enrolled in prepaid plans, the Blue Cross/Blue Shield plan withdrew from the demonstration, citing unexpectedly high use of services by plan enrollees. Because of Medicaid administrators' concern about the capacity and willingness of the remaining three plans to assimilate all of Blue Cross' disabled enrollees, these individuals were transferred back to traditional Medicaid, although the overall demonstration continued.

Data and Methods

Study Sample

First, Medicaid recipients aged 18 to 65 years who were classified as disabled were identified from Medicaid records. Then an algorithm based on ICD-9 diagnosis codes and the number and frequency of claims was developed to identify beneficiaries in this group with severe mental illness.10 Applying this algorithm to Medicaid claims tapes for the 2 years before November 1986 yielded 500 individuals who had been randomly assigned to the prepaid group. However, 104 were excluded from the study for a variety of reasons (e.g., spoke a language other than English, were deceased, had moved out of area). Completed in-person baseline interviews were obtained for 93% of the potential interviewees (369 individuals) in the prepaid group. In a similar fashion, 510 individuals remaining in traditional Medicaid were identified as severely mentally ill, 90 were excluded from the interview sample, and 93% (370) of the remainder were interviewed at baseline.

Follow-up interviews were planned for 1 year after the baseline interview, but when the state discontinued participation on the part of the disabled group effective January 1988, modification of the interview schedule was necessary. For individuals enrolled in prepaid plans, follow-up interviews were administered during the period between notification of the state's intent to transfer them back to traditional Medicaid and 2 weeks following the transfer. Because intake dates for enrollment, and therefore entry into the study, varied, the period between baseline and follow-up interview ranged from 7 to

	Prepaid	Traditional Medicaid	P Value	
Demographics				
Age, y	41.5	41.6	.91	
Single, %	95.5	94.9	.12	
Education, y	12.1	11.7	.10	
Income, \$/month	384	404	.31	
Female, %	52.8	58.9	.12	
Residence in Henepin County, y	21.9	22.9	.40	
White, %	84.3	83.9	.97	
Health				
Self-rated general health status index (range, 4–16)	10.2	10.1	.53	
Physical functioning index (range, 0-9)	4.2	4.6	.11	
Global assessment scale	55.1	55.0	.92	
Social and community function				
Social contact index (range, 4-24)	13.0	12.7	.39	
Assaulted, robbed, or raped in previous year, %	13.8	17.5	.21	
Suicide attempt in previous year, %	6.2	9.6	.13	
Living in sheltered setting, %	29.3	29.4	.99	
Utilization of inpatient care				
Physical health admission in past year, %	20.4	25.4	.13	
Mental health admission in past year, %	23.6	22.9	.90	
Chemical dependency admission in past year, %	4.5	6.8	.26	
Utilization of outpatient care				
Physical health visit in past 3 months, %	66.6	71.4	.19	
Mental Health visit in past 3 months, %	77.4	73.1	.21	

12 months, with an average length of approximately 11 months. Follow-up data for the comparison group were collected according to the same schedule, with individuals randomly assigned interview dates from 7 to 12 months after their baseline interviews, matching the prepaid group on a one-to-one basis. Follow-up interviews were completed with 354 individuals in the prepaid group and 366 in the traditional Medicaid group, resulting in complete baseline and follow-up data for about 96% of the individuals who completed the baseline survey. As the comparisons in Table 1 indicate, there were no significant differences in demographic characteristics or general use of health services between the two groups.

A second data source was used to supplement the self-report data collected in the in-person interviews. At the follow-up interview, respondents were asked to identify community-based treatment programs they had used since the date of the baseline interview. Record abstractors then visited these programs, beginning approximately 6 months after the date of the follow-up interview to ensure completeness of billing records, and recorded all charges and reimbursements for sample members during the demonstration. Interviews with program administrators suggested that receipt of additional reimbursements for services to sample

members was highly unlikely. No baseline data on charges and reimbursements were collected.

Statistical Methods

Both "unadjusted" and "adjusted" differences in mean values of measures of service use and reimbursement were calculated for the prepaid and traditional Medicaid groups. Unadjusted differences are differences in average values for the two groups when no statistical controls are applied for differences in baseline characteristics. The groups were similar at baseline with respect to observable characteristics; this similarity supports the use of unadjusted means in making comparisons with the entire sample. Adjusted differences are the differences that remain after a statistical relationship between the service use or reimbursement variable and the set of covariates listed in Table 2 has been estimated. Adjusted comparisons control for remaining baseline differences in beneficiary characteristics. The use of adjusted differences reduces the variance in the estimate of the difference between the experience of beneficiaries in prepaid plans and that of beneficiaries in traditional Medicaid. When estimating adjusted differences in the use and nonuse of community-based programs, we employed logit analysis and calculated differences by setting independent variables

equal to their mean values. When estimating differences in number of visits, we used multiple regression analysis in which the dependent variable was the number of visits reported at the follow-up interview minus the number reported at baseline. By using the change in number of visits to a community mental health program as the dependent variable, we avoided estimation problems that can occur when the distribution of the dependent variable is characterized by a high proportion of zero values, as is the case for visits to some types of treatment programs. The coefficient on the prepaid vs traditional Medicaid variable was interpreted as the difference in the change in the measure for the two groups.

Multiple regression techniques were also used to test hypotheses relating to HMO write-offs. However, because no baseline data on reimbursements were collected, the adjusted difference relates to the average write-off during the period covered, rather than to the change from a baseline to a follow-up value. Because this analysis relates only to beneficiaries with some service use, and there is no concentration of dependent variable values at zero, impacts are not measured in terms of changes from baseline measures.

A drawback to the use of adjusted differences (whether calculated by logit or multiple regression analysis) is that fewer observations are available for analysis because of the cumulative impact of missing values for variables. To minimize the loss of data, mean sample values for independent variables were substituted for missing values; this was done for five or fewer observations for each variable. Where data were missing for dependent variables, observations were dropped from the analysis. Consequently, the sample sizes used in estimating adjusted effects vary; sample sizes are reported in the tables, along with significance levels.

Results

Use of Community-Based Mental Health Treatment Programs

Use of community-based treatment programs was measured on the basis of interview responses at baseline and follow-up; each measure covered the 3-month period prior to the interview. At the baseline interview, a significantly larger percentage of the traditional Medicaid group than of the prepaid group reported visiting a day treatment center (12.90% vs 7.07%), and the difference in average number of visits

approached statistical significance as well (3.47 vs 2.07, respectively). The groups were similar at baseline for other measures of use (Table 3).

A comparison of the unadjusted means for percentage of beneficiaries reporting a visit and average number of visits during the demonstration (Table 3, columns 4 and 5) indicates that prepaid group members used the services less often, but none of these differences were statistically significant (column 6). Two differences approached statistical significance: beneficiaries in prepaid plans reported fewer visits, on average, to community mental health centers (.29 vs .53) and a smaller percentage reported visits to crisis centers (4.18% vs 7.10%).

The number of visits generally declined over the course of the demonstration for the prepaid group, except for drop-in centers, where self-reported use increased (Table 3, columns 7 and 8). There was a reduction of .26 in the average number of community mental health center visits by the prepaid group, compared with an increase of .11 for the traditional Medicaid group; the difference in these changes reached statistical significance at the .07 level (column 9). Changes in the use of day treatment were significantly different at the .08 level, owing to a large decline in the number of visits by the traditional Medicaid group.

Column 10 of Table 3 shows estimates of the difference between the two groups in the probability of using each treatment program during the demonstration, after baseline characteristics of the respondents were controlled for. None of the estimated differences approach statistical significance (column 12). Column 11 presents estimates of differences (prepaid group vs traditional Medicaid group) in the changes in number of visits from baseline to follow-up period when respondent characteristics were controlled for. Again, these estimated differences are not statistically significant.

In summary, these results suggest that the enrollment of Medicaid beneficiaries in prepaid plans had a limited impact on the beneficiaries' propensity to use community-based mental health treatment programs and very little impact on the average number of visits to these programs. A consistent, statistically significant pattern of less use by prepaid group members was not evident when we examined changes from baseline values or when we controlled for the baseline characteristics of respondents in estimating differences.

TABLE 2—Covariates Used in the Estimation of Regression-Adjusted Differences (Measured at Baseline) Mean SD Prepaid vs traditional Medicaid (proportion prepaid)^a .50 .50 41.56 11.61 Sex (proportion female)^a .56 50 Race (proportion White) 84 37 Education (highest grade) 11.94 2.48 Living arrangement (proportion living alone)a .38 .49 Marital status (proportion married)^a .05 .21 Income (dollars per month) 397.18 255.81 Participation in Medicare (proportion Medicare) 52 .50 Possession of private insurance (proportion private .11 .31 Number of mental health admissions (prior year) .47 1.23 Number of physical health admissions (prior year) .41 1.05 Number of chemical dependency admissions (prior year) .05 .22 Mental health outpatient visits (past 3 months)⁶ 4.96 7.42 Physical health outpatient visits (past 3 months) 3.03 5.44 Chemical dependency outpatient visits (past three months) 1.11 5.30 General health status index (range, 4-16)^a 10.19 2.36 Number of comorbidities 2.59 Physical functioning index (range, 0-9) 4.43 3.04 Global assessment scale score 55.47 15.21 Community functioning (proportion arrested, jailed, 22 .41 assaulted, or who spent nights on the street) Attempted suicide (proportion) .07 .26 Number of days in plana 328.70 52.69 Scores on SADS A-F subscales^a

Note. A covariate was also entered that interacted with mental and physical health care admissions and visits

Charges and Write-offs for Community-Based Mental Health Treatment Programs

Drop-in and crisis centers were omitted from this analysis because billing records did not exist, were incomplete, or were of questionable reliability. The data on the remaining two programs cover the entire period in which the sample member was a participant in the demonstration, rather than the 3-month recall period used in the analysis of data on service use. The analysis has several limitations. Because comparisons of mean values are reported only for users of services whose records were accessible, the sample sizes are small. Also, the protection provided by randomization does not apply to these comparisons (columns 3 and 4) because they rely only on self-selected samples of individuals who reported some service utilization. Therefore, it is possible that observed differences (column 5) could reflect respondent characteristics as well as demonstration impacts. To address this possibility, we also estimated differences using regression analysis (column 7) to control for selected baseline characteristics (indicated in Table 2), where sample size permitted.

As Table 4 indicates (under the heading "Total"), charges per person were higher, but not significantly higher, for prepaid enrollees than for traditional Medicaid beneficiaries. However, the proportion of the bill not paid (the write-off) was significantly larger for prepaid enrollees (.58) than for traditional Medicaid beneficiaries (.30). As a result, the average reimbursement received for prepaid enrollees was less. The estimated difference in write-off remains approximately the same after adjustments are made for respondent characteristics, and is still significant.

To investigate whether HMOs were hesitant to reimburse for particular treatment modalities or types of providers, we analyzed the data after disaggregation by these variables. Although the sample sizes after disaggregation are small for some categories, all results are reported to facilitate comparisons. When data were disaggregated by type of treatment, prepaid enrollees had higher charges and higher write-offs for psychotherapy, drug therapy, and day treatment. Despite small sample sizes, the difference in write-offs is significant at the .01 level for drug therapy and at the .06 level for psychotherapy after

^aThese baseline characteristics were controlled for in the regression analysis.

TABLE 3—Use of Community-Based Mental Health Treatment Programs at Baseline vs Demonstration Controlling for Sample Characteristics (11)Difference in Mean Value of (10)Mean Value of Change in Number of Difference Change in Num-Mean Values at Mean Values at Visits from Baseline to in Percentage ber of Visits Baseline Follow-up Follow-up with Visit from Baseline to at Follow-up Follow-up (12)PP TM P Value PP ТM P Value PP ÌΜ P Value (PP-TM) (PP-TM) P Value Percentage with visits in previous 3 months Community mental 9.00 7.79 .69 9.03 9.35 99 .00 .99 health center Crisis center 4 82 7.10 .30 4.18 7.10 16 2 25 47 Dron-in center 4 84 3 23 41 5.47 5.81 .9978 .78 Day treatment center 7.07 12.90 .02 7.74 6.43 63 .91 .64 Number of visits in previous 3 months Community mental 55 42 52 .29 .53 13 - 26 .11 .07 .03 .92 health center Crisis center .09 .11 .67 .07 .10 .35 -.02 -.01 79 -.10 .15 Drop-in center .26 .62 .33 46 .48 .92 .20 -- 14 .51 .39 .54 Day treatment center 2.07 3.47 2.00 1.98 .99 -.07 -1.49.08 . . . 1.08 .79 Note. There are 311 individuals with complete baseline and follow-up data for the prepaid (PP) group and 310 for the traditional Medicaid (TM) group. In columns 3, 6, 9, and 12 the P values refer to significance levels for PP-TM differences.

adjustments are made for differences in respondent characteristics.

When data were disaggregated by provider type, write-offs were consistently higher for prepaid enrollees across all provider types; significant differences occurred for physician and "other clinician" write-offs. For these provider types, charges were also higher for prepaid enrollees, but not significantly so. There were enough observations in these two categories to permit estimation of regression-adjusted means as well. The adjusted differences were comparable to the unadjusted differences; the difference for physician write-offs remained statistically significant.

In summary, community-based mental health treatment programs had higher write-offs for Medicaid beneficiaries enrolled in prepaid plans. When data were disaggregated by provider, significant write-offs occurred for treatment by physicians. One possible explanation for this pattern of higher write-offs is that community-based treatment programs attempted to bill prepaid plans at higher rates than are allowed for traditional Medicaid beneficiaries. Charges for prepaid beneficiaries are higher, but the differences in charges are not statistically significant, whereas differences in write-offs are significant. It is important to reiterate, however, that small sample sizes, together with the large variance that exists in average charges, reduce the likelihood that statistically significant differences in the charge data will be observed.

Discussion

With respect to our first general hypothesis, we found no strong evidence that Medicaid beneficiaries with severe mental illness who were enrolled in prepaid health plans used community-based mental health treatment programs any differently than did other Medicaid beneficiaries. There are a number of possible explanations for this finding. First, beneficiaries were enrolled in prepaid plans for less than a year, and this may have limited the ability of the plans to alter the utilization behavior of enrolled beneficiaries. Our interviews with demonstration administrative staff and the staff of the prepaid plans indicate that plan enrollees continued to receive treatment from their predemonstration providers until the end of an illness episode or until transfer to a plan provider was arranged by mutual agreement. Thus at least some beneficiaries were able to continue as clients of community-based programs with little or no interruption even after their enrollment in prepaid plans.

A second explanation relates to the networks of providers available under the different prepaid plans and the freedom that beneficiaries had to choose among the available plans. As noted previously, the Hennepin County plan provided access to most community-based treatment programs, and Blue Cross/Blue Shield's provider network also included many community-based programs. Furthermore, the plans were not allowed to require that enrollees seek a physician referral to access the services of these programs.

The evidence supports the second general hypothesis: write-offs (based on unadjusted means) were significantly higher for prepaid plan enrollees than for other Medicaid beneficiaries across virtually all categories of provider and service. At least some of these differences remained significant after individual characteristics were controlled for, where sample size permitted. However, this conclusion must be interpreted with caution because there may be differences in the baseline characteristics of sample members that were not adequately controlled for in the regression analysis. Also, there is some evidence suggesting that charges were higher for prepaid plan enrollees, as well.

There is a plausible scenario that would explain our finding of no difference between the two groups in the use of community-based programs, along with higher write-offs for prepaid beneficiaries. Program policies encouraged the prepaid plans not to disrupt treatment that was ongoing at the time the demonstration was

	Sample Size		Comparison of Unadjusted Means				Comparison of Means when	
			Mean Values				Sample Characteristics, were Controlled for	
	(1) PP	(2) TM	(3) PP	(4) TM	(5) Difference	(6) P Value	(7) Difference	(8) P Value
Total	61	57						
Charges, \$			2572.06	2228.45	343.61	.59	660.74	.31
Write-off			.58	.30	.28	.00	.24	.00
Disaggregated by treatment								
Psychotherapy	18	19						
Charges, \$			927.43	525.91	401.52	.11	220.07	.52
Write-off			.68	.33	.35	.01	.35	.06
Group Therapy	6	5						
Charges, \$			336.46	895.70	-559.24	.01	NA	NA
Write-off			.49	.74	25	.24	NA	NA
Drug Therapy	35	28						
Charges, \$			241.75	197.73	44.02	.36	-42.91	.41
Write-off			.79	.40	.39	.00	.46	.00
Diagnostic	10	8						
Charges, \$			173.05	237.88	-64.83	.37	NA	NA
Write-off			.86	.75	.11	.49	NA	NA
Day Treatment	19	23						
Charges, \$			5582.87	3759.71	1823.16	.14	761.41	.66
Write-off			.37	.15	.22	.02	.11	.38
Disaggregated by provider								
Physician	36	31						
Charges, \$			453.01	282.60	170.41	.25	1.22	.61
Write-off			.80	.41	.39	.00	.43	.00
Licensed clinical psychologist	8	9						
Charges, \$			258.56	340.83	-82.27	.54	NA	NA
Write-off Master of Social Work	40		.74	.43	.31	.11	NA	NA
	12	13	01001					
Charges, \$			640.21	575.23	64.98	.80	NA	NA
Write-off	-	^	.70	.62	.08	.58	NA	NA
Registered Nurse	5	3	400.50	F00 TF	101.05			
Charges, \$ Write-off			462.50	593.75	-131.25	.74	NA	NA
Other clinicians	00	04	.80	.63	.17	.56	NA	NA
	29	31	4400.04	0.440.00	4040 40			
Charges, \$ Write-off			4422.81 .32	3410.62	1012.19	.03	1166.88 .13	.39

initiated. Policies also did not allow prepaid plans to require prior authorization by a physician for referral to communitybased mental health treatment programs; such a requirement is a typical utilization management technique employed by HMOs. The fact that they were not allowed to require such authorization may have caused the prepaid plans to rely heavily on retrospective denial of payment for services rendered by community-based programs as a means of controlling expenditures. Some programs may have accepted higher write-offs for prepaid enrollees because the subsidy they received from the public sector was based in part on the volume of services they provided. In fact, two prepaid plans attempted unsuccessfully to negotiate reimbursement rates with community-based programs, leading these plans to conclude

that the programs had little incentive to aggressively pursue private reimbursement for the services they provided.¹³

Acknowledgments

Financial support for this research was provided by Hennepin County (Minnesota), the National Institute of Mental Health, the Bush Foundation, the state of Minnesota, and the Hennepin Faculty Associates Young Investigators Program. Dr Lurie is a Henry J. Kaiser Family Foundation Faculty Scholar in general internal medicine.

The authors wish to thank the administrators of community-based treatment programs in Hennepin County for providing access to financial data; the staff of Hennepin County and of the Medicaid program in the State of Minnesota for facilitating access to Medicaid records and for providing their support for the research; and the administrators of the prepaid plans and the Medicaid beneficiaries in our sample for their willingness to participate in in-

person interviews. We also acknowledge the excellent assistance in data collection provided by Colleen King and Susan Ricketts.

References

- Schlesinger M. On the limits of expanding health care reform: chronic care in prepaid settings. Milbank Q. 1986;64:189–215.
- Flinn D, McMahon T, Collins M. Health maintenance organizations and their implications for psychiatry. Hosp Community Psychiatry. 1987;38:255-263.
- Fink P, Dubin W. No free lunch: limitations on psychiatric care in HMOs. Hosp Community Psychiatry. 1991;42:363–365.
- Lehman A. Capitation payment and mental health care: a review of the opportunities and risks. Hosp Community Psychiatry. 1987;38:31–38.
- Meier G. HMO experiences with mental health services to the long-term emotionally disabled. *Inquiry*. 1981;18:125–138.
- Sabin J. Research findings on chronic mental illness: a model for continuing care in health maintenance organizations. Compr

- Psychiatry. 1978;19:83-94.
- Shadle M, Christianson J. The organization of mental health care delivery in HMOs. Administration Men Health. 1988;15:201– 225.
- 8. Bittker T. Key concepts in prepaid mental health service delivery. *HMO Mental Health Newsletter.* 1987;2:1-5.
- Raynes A. Contracts and capitation: the pros and cons of external linkages. Presented at HMO Mental Health: A Course for Administrators and Clinicians, Harvard Medical School, Department of Continuing
- Education, Boston, Mass, October 26-28, 1988.
- Moscovice I, Finch M, Lurie N. Minnesota: plan choice by the mentally ill in medicaid prepaid plans. In: Scheffler R, Rossiter L, eds. Advances in Health Economics and Health Services Research: Risk-Based Payments Under Public Programs. Greenwich, Conn: JAI Press; 1989;10:265–280.
- Medicaid Demonstration Design and Development Task Force. A Plan for a Medicaid Demonstration Project in Hennepin County. A report to the Hennepin County
- Board of Commissioners, Minneapolis, Minn; 1985.
- Christianson J, Lurie N, Finch M, Moscovice I. Mandatory enrollment of medicaid-eligible mentally ill persons on prepaid plans: the Minnesota demonstration project. Administration and Policy in Mental Health. 1988:16:51-64.
- The Medicaid Demonstration Project in Hennepin County, Minnesota: Year One. A report to the Hennepin County Board of Commissioners, Minneapolis, Minn; 1987.

ABSTRACT

Christianson and his colleagues examine how Medicaid beneficiaries receive mental health services in HMOs by analyzing two important aspects of service delivery: the use of community-based treatment programs by Medicaid beneficiaries enrolled in health maintenance organizations (HMOs) and the reimbursement levels paid to these programs by HMOs. The hypotheses studied are complex issues that concern mentalhealth advocates and providers. Traditional community-based mental health services have always struggled to maintain their presence in the health care field, having to contend with changing funding priorities and more serious and multiple problems presented by their patients. For prepaid plans to work effectively for the indigent mentally ill, the complex issues have to be made clear and acknowledged as meaningful variables. (Am J Public Health. 1992;82:796-798)

Commentary: Caring for the Indigent Mentally Ill—New Strategies and Old Problems

Ernesto Ferran, Jr, MD

Dr Christianson and his colleagues analyze two important aspects of mental health care delivery for those who have serious mental disorders and are indigent.1 They want to know whether Medicaid beneficiaries, once enrolled in prepaid medical plans, will utilize mental health services to the same degree as do nonenrolled Medicaid beneficiaries, and whether the plans will pay the mental health providers the amounts requested of them. Advocates for the indigent mentally ill population would define these questions as questions of access to mental health services and protection of funding for providers traditionally vulnerable to new financing schemes. The issues are not only complex, but also mysterious, and they lend themselves to contentiousness and partisanship.

What I want to address are the factors that make these issues complex: the fact that psychiatric standards of care are difficult to quantify; that mental health care providers, in the absence of conclusive outcome studies for traditional services, are promoting new strategies for providing services to the seriously mentally ill; and that agreement on reimbursement for these strategies will continue to be elusive.

By addressing their first question without a directional hypothesis, the authors avoid being drawn into the argument that relates utilization of outpatient mental health care to outcome. It makes sense that they do so: our fascination with health

care expenditures as an object of study or control becomes problematic for disorders of behavior, emotion, or thought, and the relevant standards of care continue to be poorly understood. Consider the near decade-long effort to create adequate diagnosis-related groups for psychiatric disorders. Witness the relatively recent controversies surrounding for-profit psychiatric hospitals, and the accompanying arguments on appropriate inpatient care vs expected or egregious pricing strategies. Have you not wondered, at some point, what it is that the most vulnerable segment of America's homeless really needs—housing, employment, or long-term psychiatric inpatient care? In other words, the quest to quantify robust standards of care for psychiatric disorders continues to generate more controversy than consensus.

The second hypothesis almost speaks for itself: Write-offs will be higher because prepaid plans will not pay the full costs of care. Why wouldn't they? Why even consider that they wouldn't? If outcome data for outpatient mental health services are so scant, and if "managed-care" pricing strategies (e.g., using diagnostic categories to determine allowable units of service) are de-

Ernesto Ferran, Jr, MD, is with Gouverneur Hospital, New York, and with New York University Medical Center.

Requests for reprints should be sent to Ernesto Ferran, Jr, MD, Director of Psychiatry, Gouverneur Hospital, 227 Madison Street, New York, NY 10002.