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Patterns of Service Use in Two Types of Managed Behavioral Health Care Plan

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Abstract

Objective—To describe service use patterns by level of care in two managed care products: employee assistance program (EAP) combined with behavioral health benefits, and standard behavioral health benefits.

Methods—This is a cross-sectional analysis of administrative data for 2004 from a national managed behavioral health care organization (MBHO). Utilization of 11 specific service categories was compared across products. The weighted sample reflected exact matching on sociodemographics (N= 710,014 unweighted; 286,750 weighted).

Results—In the EAP/behavioral health product, the proportion of enrollees with outpatient mental health and substance abuse office visits (including EAP) was higher ($p<.01$), as was substance abuse day treatment/intensive outpatient care ($p<.05$). Use of residential substance abuse rehabilitation was lower ($p<.05$). Other differences were also found.

Conclusion—EAP/behavioral health and standard behavioral health care products had distinct utilization patterns in this large MBHO. In particular, greater use of certain outpatient services was observed within the EAP/behavioral health product.

Introduction

Employers frequently contract with managed behavioral health care organizations (MBHOs) for specialty mental health and substance abuse services through behavioral health carve-outs. [1] [2] Most large workplaces also offer employee assistance programs (EAPs), [3] either separately or purchased in a combined package along with standard behavioral health carve-out benefits from a single vendor. (typically referred to as “integrated” in the managed behavioral health care industry). EAPs are workplace-based programs designed to address behavioral health and other problems that affect employees’ well-being or job performance. [4] They are typically externally contracted to MBHOs and provide outpatient clinical services (e.g., assessment or short-term counseling for mental health, substance abuse, work stress or family problems) as well as nonclinical services and management consultation. [5] Employers may purchase combined EAP/MBHC products from a single source in the expectation that including EAP benefits will encourage different utilization patterns (such as greater and earlier

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use of outpatient care, and less use of expensive higher levels of care) relative to standard managed behavioral health care (MBHC) products.

There is a paucity of published data to inform this question about service use differences in these two common managed care products. Studies have analyzed utilization patterns within MBHO-covered populations, but few have examined single-source EAP/MBHC plans. [6-8] One study by Cuffel and colleagues found a higher marginal increase in access per additional dollar spent on behavioral health benefits in single-source EAP/MBHC plans compared to plans with non-integrated EAP benefits; however, the main focus was the relationship between spending and access. [9] We are not aware of studies describing utilization patterns for specific services under the two types of plans.

This study used data from a national MBHO to examine utilization of specific categories of behavioral health services in its EAP/MBHC product as contrasted with its standard MBHC product. The main research question was whether and how much the use of different types of service within the provided benefit plan varied across the two product types. For example, we looked at whether use of outpatient substance abuse or mental health care in the plan is greater, and use of higher levels of care reduced, within a package of combined EAP/MBHC benefits provided by a single MBHO versus within a package consisting only of MBHC services. We examined solely the utilization within each product, not including EAP services that might be available from some other source to the MBHC enrollees.

Methods

The data source was Managed Health Network (MHN), a national MBHO covering 11 million members. MHN contracts with employers and other payers to manage and deliver specialty behavioral health and EAP services. These services are offered separately or combined (what we term here EAP/MBHC or “single-source,” i.e. both types of benefits provided by a single MBHO). We examined the single-source EAP/MBHC and MBHC products using 2004 administrative data, including de-identified claims and eligibility files. Claims included EAP, specialty mental health and substance abuse services covered by MHN. For EAP claims, only clinical services were included, not assistance such as legal or financial help. The study received Institutional Review Board approval.

In both product types, accessing services involves calling a phone center for authorization. Authorization is a routine process in which eligibility is verified, brief intake is performed, and enrollees receive approval to see a network provider. In the single-source EAP/MBHC product, enrollees call a single toll-free number to access care. Following a brief intake, enrollees assessed as needing regular outpatient care are typically offered the opportunity to use the EAP benefit first, with some exceptions (e.g., medication evaluation or management). Typically 3-5 EAP visits per year are covered at no cost. EAP benefits cover some services that are not for a clinical disorder, e.g., marital therapy in the absence of a psychiatric diagnosis. EAP services are provided by network clinicians in private offices. When an enrollee reaches the EAP visit limit and needs more services, use of the MBHC portion of the benefit is authorized. Enrollees continuing treatment can usually choose to remain with the same network provider seen through the EAP portion of the benefit. Some enrollees, such as those needing a higher level of care or requesting a medication evaluation, bypass the EAP and access services under the MBHC part of the benefit. In the MBHC product, enrollees call a toll-free number to request authorization. Some MBHC product enrollees may have an EAP available through their employers, but this would be outside of MHN's system.

The unweighted sample consisted of 543,964 enrollees in the EAP/MBHC product and 166,050 enrollees in the MBHC-only product. Since the EAP/MBHC product was purchased only by

employers, to increase comparability across the two products we only included MBHC accounts purchased by employers (not by health plans). We excluded plans purchased by employers in industries represented in only one product type. The remaining sample reflected enrollment from services, sales and government sectors. Weights were applied in order to accomplish exact matching on sociodemographic characteristics and to adjust for partial-year enrollment in order to make the subsamples more comparable (procedure described in detail below). The weighted sample consisted of 286,750 enrollees split evenly across product types.

We categorized each enrollee's benefit package according to whether it was single-source EAP/MBHC or standard MBHC. We observed and compared only the utilization occurring within the coverage scope of each product: EAP and MBHC for the single-source product, and MBHC for the MBHC product. The MBHC sample may have had access to an EAP elsewhere that could not be observed in the study data. Thus, the "MBHC" group was defined as receiving only MBHC benefits from MHN, with or without EAP benefits from another source. Services were categorized as primarily mental health or substance abuse based on primary diagnosis and specialty provider type. Provider type and service category codes were used to determine detailed service categories. ICD-9 diagnoses were grouped into mental health and substance abuse categories using AHRQ's Clinical Classification Software, and we also included behavioral health-related v-codes. [10]

Enrollees in the two products differed on observable variables such as sociodemographics, so in order to more accurately compare utilization patterns we exact-matched the two product-type samples on available sociodemographic variables and reweighted enrollees in selected cells to maximize comparability.[11] We computed separately by product the number of enrollees in each match cell, defined as a unique combination of these variables: gender, age group (4 values), census region (4 values), and spouse/dependent status (yes/no). Next, we computed the ratio of single-source EAP/MBHC to MBHC product enrollees in each cell, and its reciprocal was used as a weight for EAP/MBHC product enrollees. The weighted number of EAP/MBHC product enrollees was thus made equal to the actual number of MBHC product enrollees. We matched on a key subset of covariates, because using all would have resulted in an excessive number of cells, many with unreasonably large weights due to low numbers. (This would have resulted whether using exact matching or propensity scores, since all variables are categorical with few levels). This is equivalent to creating a propensity score from the four variables.

We also sought to correct for possible bias from censored observation of members enrolled for less than 12 months, who were less likely to have any visits than full-year enrollees, by adjusting utilization rate calculations for length of enrollment. For example, a full-year enrollee would have a weight of one in the rate calculation, but an individual enrolled for six months would have a weight of 0.5.

Results are presented in weighted form. Bivariate tests (t-tests) were used to compare utilization measures for the single-source EAP/MBHC and MBHC products. Analyses were corrected for the use of weights that varied by match cell. The correction was accomplished using SUDAAN software, with the match-cell specified as a stratum variable. [12]

Results

Due to matching, weighted proportions across the two product types were equal in terms of gender (51.9% female), age (28.2% younger than 18, 20.4% aged 18-35, 37.4% aged 36-54, 14.0% aged 55 and older), relationship to subscriber (44.3% employee, 22.0% spouse, 33.7% dependent), and region (8.6% Northeast, 33.0% Midwest, 45.3% South, 13.1% West) (data not shown).

Use of specific service types is shown in Table 1. Among all enrollees, use of any outpatient mental health and substance abuse office visits (including EAP) was higher in the EAP/MBHC product (54.8 versus 46.1 service users per 1000 enrollees, $p < .01$), while non-EAP outpatient use was slightly lower (43.5 versus 46.1 service users per 1000 enrollees, $p < .01$). Use of residential substance abuse rehabilitation was lower, but use of substance abuse intensive outpatient/day treatment was higher in the EAP/MBHC product (both $p < .05$). The mean number of days or visits per user was modestly but significantly higher in the EAP/MBHC product for several mental health services including outpatient mental health office visits (both total and non-EAP) and intensive outpatient/day treatment. For substance abuse services, there was no significant difference in mean number of days or visits across product types.

In both products, about half of the substance abuse service users had some mental health service use (data not shown). Less than 2% of mental health service users also used substance abuse services.

Discussion

Analysis of treatment patterns in the two products revealed interesting differences. On the mental health side, utilization within the EAP/MBHC product reflected substantially greater use of any outpatient mental health office visits (including EAP) observable within the benefit plan, compared to the standard MBHC product. It is possible that access to the EAP in the single-source EAP/MBHC product encouraged more enrollees to seek outpatient services, for example through a de-stigmatizing effect of the way that EAPs are typically promoted to employees (assisting with life problems). Because the data do not capture EAP utilization that might have occurred for enrollees in the MBHC product, however, further research would be needed to investigate this point further. The average total number of mental health outpatient office visits per user is also statistically significantly higher among single-source product enrollees, although the magnitude is very modest, suggesting the possibility that treatment engagement was somewhat enhanced. Longitudinal, episode-level analyses would elucidate how combinations of services are being used, and whether most EAP service users are continuing on to use the behavioral health portion of their benefits. The proportion of enrollees using any higher levels of care for mental health did not differ by product. However, the statistically significantly higher quantity per user of some higher levels of care in the single-source product does not readily fit with expectations.

For substance abuse treatment, similarly, a higher proportion of enrollees in the single-source EAP/MBHC product used outpatient office visits. The proportion of enrollees using substance abuse intensive outpatient/day treatment was also higher in the EAP/MBHC product, while a lower proportion of enrollees used any residential substance abuse rehabilitation. The combination of these differences suggests the possibility of some shifting to lower levels of care. Such patterns could occur as a result of EAP early identification of substance abuse problems although, again, our study data cannot confirm this. More detailed clinical information at the episode level would be necessary to explain what underlies these findings. Findings also indicate a high level of mental health service use by substance abuse treatment clients in both product types, underlining the importance of examining the full range of behavioral health services for this subpopulation, regardless of product type.

From a purchaser perspective, greater outpatient service use in the single-source EAP/MBHC product may reflect desired patterns. Purchasers considering the two product types would need to factor into their decision-making the complete costs and likely benefits of each. Cost factors would include the cost of purchasing single-source EAP/MBHC versus standard MBHC benefits, taking into account all types of service utilization. They would also include the cost of stand-alone or internally-provided EAP models that could be offered alongside the MBHC

product. Benefits (including clinical and productivity outcomes) would accrue with increased utilization to the extent that services are needed, effective, and timely.

The study has several limitations. Generalizability is limited to the extent that other MBHOs may differ in how they structure these products. Furthermore, the research design does not allow conclusions regarding causality. This is not an analysis of total specialty behavioral health-related utilization for enrollees in each of the two product types, since some MBHC enrollees may have access to an EAP not provided by MHN, (e.g., an internal EAP through their employer), and this utilization was not captured. Key informants at MHN indicated that in general, many employers that purchased a standard MBHC product had internal EAPs, however it was not possible to determine this for each account. Rather, our study provides information only on utilization differences observed within an MBHO's benefit plans. It is also possible that since single-source EAP/MBHC plans cost somewhat more than MBHC plans, employers that purchase this product may be more generous, signaling some systematic difference in purchasers that could have implications for treatment patterns. Conversely, there may not be a difference in overall employer generosity because some of the employers purchasing the MBHC product may also be paying for separate EAP services outside of MHN. Since use of EAP visits does not require a copay, service use within the EAP/MBHC product includes the effects of offering no-co-pay initial visits for much initial outpatient care. As with all claims data, examination of diagnosis is limited to what providers coded. Finally, other factors such as employer size or state parity laws may affect use.

Conclusion

This study found that enrollment in a single-source combined EAP/MBHC product was associated with significant differences in utilization patterns observed within the benefit plan for specific types of behavioral health care. Some differences, such as greater use of outpatient office visits and lower use of substance abuse residential rehabilitation in the EAP/MBHC product, conform to purchaser expectations for potential beneficial effects of EAP availability, although some other findings were mixed. Further research is needed to examine product type and other factors in overall access in a multivariate context; to determine differences across the two products in the characteristics of service users (e.g., diagnosis, more detailed types of services received); and to further analyze individual-level service use in various product types using a longitudinal approach.

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Table 1

Specific Behavioral Health Services Used, by Product Type

Services	Utilization observed within single-source EAP/MBHC product			Utilization observed within MBHC product		
	Service users per 1000 enrollees	Days/Visits per user	SD	Service users per 1000 enrollees	Days/Visits per user	SD
		Mean			Mean	
Number of enrollees (weighted)	143,375			143,375		
Mental Health Services:						
N using any mental health service	7,973			6,705		
Inpatient hospital mental health	1.7	7.8*	4.6	1.8	6.9	5.9
Residential mental health	.1	__a	__a	.1	__a	__a
Mental health day treat/intensive outpatient	.8	11.9*	5.1	.8	9.9	8.4
Outpatient mental health office visits	54.8**	8.9*	5.0	46.1	8.6	8.4
EAP clinical visits	23.7	3.6	1.4	NA	NA	NA
Non-EAP visits	43.5**	9.3**	5.1	46.1	8.6	8.4
Other mental health services	1.2**	3.4**	2.2	1.6	4.6	4.2
Substance Abuse Services:						
N using any substance abuse service	300			241		
Inpatient/residential detoxification	.5	4.7	1.5	.5	4.5	2.6
Inpatient substance abuse rehabilitation	.2	__a	__a	.2	6.0	4.6
Residential substance abuse rehabilitation	.2*	__a	__a	.3	21.3	17.3
Substance abuse day treatment/Intensive outpatient	.9*	14.5	6.2	.8	13.0	8.9
Outpatient substance abuse office visits	1.1**	5.7	3.5	.7	5.5	6.7
EAP clinical visits	.4	2.8	0.9	NA	NA	NA
Non-EAP visits	.8	6.1	3.6	.7	5.5	6.7
Other substance abuse services	.1**	__a	__a	.0	__a	__a

* p<.05

p<.01 – cross-product differences
^aData not shown due to small cell size