

## Cost of employee assistance programs: Comparison of national estimates from 1993 and 1995

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### **Abstract:**

The cost and financing of mental health services is gaining increasing importance with the spread of managed care and cost-cutting measures throughout the health care system. The delivery of mental health services through structured employee assistance programs (EAPs) could be undermined by revised health insurance contracts and cutbacks in employer-provided benefits at the workplace. This study uses two recently completed national surveys of EAPs to estimate the costs of providing EAP services during 1993 and 1995. EAP costs are determined by program type, worksite size, industry, and region. In addition, information on program services is reported to determine the most common types and categories of services and whether service delivery changes have occurred between 1993 and 1995. The results of this study will be useful to EAP managers, mental health administrators, and mental health services researchers who are interested in the delivery and costs of EAP services.

**Keywords:** cost | mental health services | employee assistance programs (EAPs)

### **Article:**

Employee Assistance Programs (EAPs), designed to deal with employees' behavioral health problems, are worksite innovations that have gained significant importance. Recent national worksite surveys have demonstrated a steady growth in EAPs at all types of workplaces in the United States. The Bureau of Labor Statistics conducted a national survey in 1988 that showed that EAPs were present in 6.5% of public and private worksites.<sup>1</sup> A follow-up survey of the same worksites 2 years later indicated that EAP prevalence increased to 11.8%.<sup>2</sup> This growth in EAP prevalence was further supported in two waves of the National Survey of Worksites and Employee Assistance Programs (NSWEAP) that were conducted by the Research Triangle Institute (RTI) in 1993 and 1995. The 1993 national survey found that 33% of all private worksites with 50 or more full-time employees had EAPs.<sup>3</sup> Based on data from the second wave of the NSWEAP, the prevalence rate of EAPs in private worksites with 50 or more full-time employees had increased to 39% by 1995.<sup>4</sup> In addition, both waves of the NSWEAP show that

approximately 10% of those worksites without EAPs were considering starting programs in the coming year.

EAPs are defined as "job-based programs operating within a work organization for the purposes of identifying 'troubled employees,' motivating them to resolve their troubles, and providing access to counseling or treatment for those employees who need those services."<sup>5,6</sup> Evidence collected from worksites clearly points to EAPs becoming normative practices in contemporary workplaces. Parallel and perhaps more dramatic evidence comes from surveys of employees. A 1991 survey of fulltime employed adults revealed that 45 % of employees had EAPs available through their employers, 47% had no EAPs, and 8% did not know whether EAPs were available at their workplaces.<sup>7</sup>

Regardless of EAP prevalence, key questions center on their service provision and cost. Findings from a national survey of worksites on the costs of EAPs in 1993 were reported recently by French, Zarkin, Bray, et al.<sup>8</sup> The study found that the mean (median) annual costs of EAP services per eligible employee were \$26.59 (\$21.84) for internal programs and \$21.47 (\$18.09) for external programs. French et al. also found that internal EAPs provided significantly more services than did external EAPs, which might explain the higher mean and median costs.

This national worksite survey was repeated in 1995 with a similar sampling strategy and questionnaire to estimate changes in EAP prevalence, cost, and characteristics from 1993 to 1995. The main purpose of the present article is to estimate the costs of EAPs in 1995 and compare these values to the estimates derived in 1993. In addition, changes in EAP service provision are analyzed, and the implications for worksite health promotion programs are assessed.

## **Methods**

### **Design**

The first NSWEAP was conducted by RTI between October 1992 and March 1993.<sup>3</sup> With the use of a stratified random sample, data were collected through a computer-assisted telephone interview protocol. The second NSWEAP, the focus of this article, was conducted (also by RTI) between January 1995 and June 1995.<sup>4</sup> Given the congruence in questionnaire design between both surveys, the findings are directly comparable across years.

### **Sample**

The target population for the 1993 and 1995 surveys consisted of all private nonagricultural worksites in the United States with 50 or more full-time employees. The sampling frame was constructed using the Dun's Market Identifiers Database from Dun's Market Service.<sup>9</sup> A worksite is defined as any business location with a unique, separate, distinct operation including headquarter units within enterprises. The survey interviewers contacted a total of 3,204 eligible responding worksites for the 1993 survey and obtained an overall response rate of 90%. Financial data were collected from 878 responding worksites. In 1995, a total of 2,100 eligible responding worksites were contacted, but the overall response rate dropped to 72%. A

correspondingly smaller number (619) of worksites provided financial data to compute EAP costs in 1995. Sampling weights were computed based on the selection probability of each worksite within the sampling stratum and were adjusted to compensate for nonresponses. Detailed information on the sampling frame, the stratification scheme, and the development of the sampling weights can be found in Boyle, Potter, Rush, et al.<sup>10</sup>

## Measurement

The introductory section of the survey instrument confirmed that the correct worksite was contacted and that the worksite was eligible to participate in the survey. The typical respondent at each worksite was the director of human resources and/or the EAP director for internal EAPs. If the worksite had an active EAP, then approximately 130 questions were administered on worksite demographics, EAP characteristics, EAP services provided, EAP costs, and employee benefits. All questions regarding worksite demographics and employee benefits were administered to non-EAP worksites for comparability.

## Analysis

There are two primary types of EAP settings or models. Internal EAPs typically are staffed by company employees and located at the worksite or within a short distance of the worksite, while external EAPs provide services to worksite employees on a contract basis with offices that typically are located farther from company property. A few worksites have both models available for employees. Given these operational differences between internal and external EAPs, a distinction was made between the two models throughout the descriptive analysis.

Because worksite size varies widely in the United States, the annual cost per eligible employee was analyzed.\* This variable was calculated from data on the total annual cost of the EAP and the number of eligible employees. Eligible employees were defined as all employees eligible for EAP services at all worksites served by the EAP regardless of the number of hours worked.

Analysis of the 1993 survey data<sup>8</sup> showed that a few worksites reported per-employee annual costs of \$0 for either an internal or external EAP. In addition, case studies of existing programs and expert opinion<sup>11</sup> showed that some worksites reported per-employee annual EAP costs that were implausibly high (e.g., \$200 per employee). It is likely that these outliers were coding mistakes or gross miscalculations by respondents. Applying the outlier criterion defined for the 1993 data,<sup>8</sup> any observation that reported per-employee costs below \$1 or above \$150 per year was removed from the cost analysis. These threshold values were selected to eliminate extremely high or low cost estimates and to maintain consistency with earlier methods.<sup>8</sup>

A total of 31 (45) observations in 1993 (1995) failed this outlier test and were dropped. In addition, the subgroups for internal EAPs by firm size, industry, and region were inadequate for statistical inference because of their size (i.e., usually fewer than 30 observations). Thus, only the aggregate cost estimates are reported for internal EAPs. All of the subgroup cost calculations for

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\* While nearly all EAPs provide services for dependents as well as employees, the telephone interviewers were unable to obtain reliable data on the number of dependents covered to estimate the cost per eligible individual.

external programs involved more than 30 observations, and these findings are the focus of the remainder of this article.

## Results

### Employee Assistance Program Prevalence and Service Provision

In 1993, it was estimated that 33 % of worksites nationwide with 50 or more full-time employees had EAPs. Of the worksites with EAPs, 16.7% had internal EAPs, 81.1% had external EAPs, and 2.2% had both internal and external EAPs.<sup>†</sup> The overall EAP prevalence rate increased slightly to 39% in 1995; of those worksites with EAPs, 17% had internal programs, 80% had external programs, and 3% had both.<sup>‡</sup>

EAP costs presumably are related to program services. Table 1 presents a summary of EAP services that normally are referred to as "core technologies" following the EAP research by Roman and Blum<sup>12</sup> and Roman.<sup>13</sup> Internal EAPs provided more assessment and referral services and health promotion activities in 1995 than in 1993 (~2 test).<sup>§</sup> External EAPs were more likely to (1) participate in constructive confrontations with employees, (2) offer short-term counseling, and (3) become involved in health promotion activities in 1995 than in 1993. However, external programs were less likely to offer consultation services with supervisors in 1995. Similar to an observation in 1993, for every service listed (except short-term counseling), internal EAPs were more likely than external EAPs to offer the service in 1995. The final row of Table 1 reports the average number of services provided by each type of EAP by year. Both types of EAPs show a slight increase in the average number of services offered in 1995 compared to 1993. In addition, internal EAPs offered, on average, 1.48 more services than did external EAPs in 1993 and offered 1.63 more services than did external programs in 1995.

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<sup>†</sup> Because both NSWEAP instruments list only one cost figure per worksite, it was impossible to determine whether the costs reported for worksites with multiple EAPs applied to their internal or external EAPs. For this reason, worksites with both internal and external EAPs were excluded from the cost analyses.

<sup>‡</sup> For a detailed presentation of EAP prevalence findings and other results from the 1993 national survey, see HartweU, Steele, French, et al<sup>3</sup>; Potter, Boyle, Steele, et al.<sup>14</sup>; and Hartwell, Steele, Rodman, et al.<sup>15</sup> For the 1995 prevalence findings, see Hartwell, Steele, French, et al.<sup>4</sup>

<sup>§</sup> Internal EAPs also were more likely to offer other services in 1995 than in 1993 (e.g., provider follow-up), but the changes were not statistically significant.

**Table 1**  
National Estimates of EAP Service Provision by Type of Service,  
Type of EAP, and Year (percentages and standard errors)

Service Usually Provided by EAP	Internal		External	
	1993	1995	1993	1995
Consultation with supervisors	87.84 (2.93)	83.88 (7.61)	58.19 (2.74)	35.86* (3.92)
Participation in constructive confrontations with employees	62.50 (5.03)	71.14 (9.41)	29.58 (2.78)	53.54* (4.13)
Short-term counseling	75.61 (4.52)	76.31 (6.72)	90.77 (1.73)	96.94* (1.20)
Assessment and referral	92.06 (2.83)	99.71* (0.19)	90.35 (1.82)	93.78 (1.72)
Contact providers to determine progress of EAP clients in treatment	77.19 (4.78)	90.65 (4.58)	74.57 (2.86)	79.22 (3.45)
Contact supervisors to determine success of clients after treatment	64.69 (4.90)	73.40 (9.78)	39.80 (3.15)	38.78 (4.05)
Involvement in health promotion activities	67.77 (4.94)	85.46* (4.33)	36.09 (2.77)	48.02* (4.10)
Average number of services provided	5.22 (0.12)	5.63 (0.26)	3.74 (0.09)	4.00 (0.13)

NOTE: Data are weighted to reflect population statistics. Standard errors are in parentheses. EAP = employee assistance program.

\*Significantly different from the 1993 proportion ( $p < .05$ ,  $\chi^2$  test).<sup>16</sup>

Another way in which to describe service provision is through the percentage of EAPs for each number of services. This information is reported in Table 2 by type of EAP and year. As expected, internal EAPs typically offered more services than did external EAPs. For example, more than 90% of internal EAPs provided four or more distinct services in 1993 and 1995. Conversely, only 60% of external EAPs provided four or more services in either year. Furthermore, in 1995, 28% of internal programs offered all seven types of services on the list, while only 6% of external programs offered the same seven services.

**Table 2**  
National Estimates of EAP Service Provision by Number of Services Offered, Type of EAP, and Year (percentages)

Number of Services Offered by EAP	Internal		External	
	1993	1995	1993	1995
1	1.0	0.0	7.4	2.7
2	1.9	0.9	15.0	21.0
3	6.9	8.0	20.3	15.5
4	15.7	7.5	21.0	18.5
5	29.8	21.6	19.2	24.5
6	27.9	34.3	11.2	11.7
7	16.9	27.7	4.1	6.1

NOTE: Data are weighted to reflect population statistics. Estimates represent the percentages of all EAPs (either internal or external and during a particular year) that offered the number of services noted. EAP = employee assistance program.

### Employee Assistance Program Cost

Table 3 shows that the mean EAP cost (reported in 1993 dollars) per eligible employee increased slightly from 1993 to 1995 for both internal and external programs. The median values showed a slight decrease over time in cost for both internal and external programs, but none of the mean or median differences across years was statistically significant (t test). Furthermore, these data indicate that internal EAPs generally were more costly than external EAPs; however, as discussed earlier, part of the differential probably was due to differences in service provision (Tables 1 and 2).

Looking first at the results by firm size for external EAPs (Table 3), the cost differences between 1993 and 1995 were very small and never statistically significant. Industry costs show greater variation than do the size categories. Wholesale/retail trade industries reported the lowest EAP costs in 1993 (mean or median), but service industries had lower costs in 1995. In addition, only service industries show a statistically significant change in EAP costs (mean or median) from 1993 to 1995.

Similar to the small variation by worksite size, variation of external EAP costs by region of the country was slight. In 1995, the regional differences in median cost for external programs ranged from a low of \$16.09 in the Midwest to a high of \$18.05 in the West.

The final part of Table 3 shows the mean and median costs per eligible employee for external EAPs that offered a particular service compared to external EAPs that did not offer that service. Focusing on the median estimates, two important findings can be noted. First, external EAPs that offered consultations with supervisors had significantly lower costs in 1995 than in 1993. Second, external EAPs that did not provide short-term counseling had significantly lower costs in 1995 than in 1993. Other cost differences were present within service categories across years, but the differences generally were small and not statistically significant. While the service-related findings were informative, it is important to remember that these bivariate descriptive

cross-tabulations do not control for the potentially confounding effects of providing multiple services.

To further investigate the relationship between service provision and cost, two additional analyses were performed. First, a simple correlation coefficient was calculated for the total number of services offered and the annual EAP cost per eligible employee. The correlation coefficient was .12 for internal programs in 1993 and .05 for external programs during the same year. The estimates increased slightly in 1995 to values of .19 for internal programs and .13 for external programs. In general, these values signified a positive relationship between number of services provided and cost, especially for internal programs.

The second extension involved the calculation of mean annual cost per eligible employee for those programs that offered all seven service types. Incidentally, this is the most prevalent package of services for internal programs. \*\* Significant differences (t test) were found in the mean EAP cost between internal programs that offered all seven services and those that offered less than seven services, regardless of year (e.g., \$44.03 vs. \$23.43 in 1995). However, external programs exhibited little differences in the mean EAP cost based on whether they provided all seven or fewer services (e.g., \$24.63 vs. \$21.67 in 1995). One possible explanation for this finding might be that not only did internal EAPs offer more services than external EAPs, but the services internal EAPs offered were more intensive (i.e., costly). More research is needed in this area to fully substantiate this claim.

## Conclusions

### Summary and Interpretation of Results

This follow-up study to a recently published<sup>8</sup> 1993 EAP study represents a longitudinal perspective on EAP costs from 1993 to 1995. With the use of a similar instrument and a consistent sampling and survey strategy, the estimated mean (median) cost per eligible employee for internal EAPs was \$26.59 (\$21.84) in 1993. The mean (\$27.69) and median (\$18.04) values in 1995 were not statistically different from the 1993 estimates.

The estimated mean (median) cost per employee for external EAPs was \$21.47 (\$18.09) in 1993, and the mean (median) cost in 1995 was \$22.19 (\$17.50). Again, the cost differences across years were not statistically significant. Within external EAPs, and for most worksite characteristics with the exception of primary industry, the cost estimates were stable across years. In a comparison of EAP types, internal EAPs generally were more expensive than external EAPs in both 1993 and 1995. As noted earlier, most of the cost differentials probably can be attributed to greater service provision and intensity by internal EAPs.

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\*\* From the information reported in Table 2, it might appear that the combination of all seven services is less common than a certain combination of six services. However, since not all internal EAPs that offer six services actually offer the same six services, the combination of seven services is the most prevalent.

**Table 3**  
Annual EAP Cost per Eligible Employee by Worksite Characteristics,  
EAP Services, and Type of EAP (dollars, except *ns*)

	Mean		Median		<i>n</i>	
	1993	1995	1993	1995	1993	1995
<b>All worksites</b>						
Internal	26.59 (2.22)	27.69 (4.98)	21.84	18.04	187	141
External	21.47 (1.31)	22.19 (1.49)	18.09	17.50	691	478
<b>Worksite characteristics</b>						
Number of employees						
50-99	24.32 (4.33)	22.39 (3.27)	18.16	16.12	99	73
100-249	19.21 (1.24)	22.24 (3.16)	18.01	17.60	201	106
250-999	22.52 (1.70)	21.80 (2.13)	17.99	17.04	251	163
> 1,000	20.56 (1.79)	22.45 (1.93)	16.95	18.04	140	136
<b>Industry</b>						
Manufacturing	21.24 (1.53)	20.21 (2.32)	17.23	16.36	156	102
Wholesale/retail trade	15.69 (1.95)	17.26 (1.35)	7.95	17.26	112	41
Communications/utilities/ transportation	26.51 (2.63)	28.79 (6.06)	21.28	16.31	115	79
Financial/real estate/ insurance	19.22 (1.35)	19.82 (1.45)	17.28	17.86	131	114
Mining/construction	26.53 (3.21)	26.19 (4.16)	20.90	17.70	64	74
Services	26.71 (5.54)	14.40* (1.90)	20.30	11.93*	113	45
<b>Region</b>						
Northeast	21.02 (1.99)	25.17 (3.38)	19.33	17.83	142	110
Midwest	20.42 (1.55)	21.10 (2.18)	17.75	16.09	168	143
South	18.36 (1.33)	20.09 (2.81)	15.73	16.60	242	142
West	28.15 (4.72)	23.80 (2.69)	21.17	18.05	139	83
<b>Services usually provided by EAP</b>						
Consultation with supervisors						
Yes	22.16 (1.23)	18.18 (1.89)	19.97	15.61*	351	160
No	22.45 (2.81)	23.28 (1.62)	17.43	17.88	303	312



**Table 3 Continued**

	Mean		Median		<i>n</i>	
	1993	1995	1993	1995	1993	1995
<b>Participation in constructive confrontations with employees</b>						
Yes	22.48 (1.59)	25.05 (2.54)	19.58	17.82	221	218
No	22.78 (1.87)	19.87 (1.60)	19.00	16.88	420	242
<b>Short-term counseling</b>						
Yes	22.22 (1.43)	22.64 (1.56)	18.74	17.51	612	456
No	20.15 (2.83)	12.05* (1.86)	17.30	12.34*	56	20
<b>Assessment and referral</b>						
Yes	21.26 (1.44)	22.87 (1.66)	18.09	17.40	606	435
No	23.65 (2.53)	15.11* (1.52)	19.42	16.31	66	37
<b>Contact providers to determine progress of EAP clients</b>						
Yes	22.17 (1.25)	25.73 (2.75)	18.91	17.49	398	233
No	25.95 (5.67)	21.04 (2.78)	20.12	16.60	121	92
<b>Contact supervisors to determine success of clients after treatment</b>						
Yes	22.47 (1.55)	22.63 (2.73)	19.36	17.25	241	156
No	22.02 (2.03)	20.82 (1.15)	18.61	17.52	385	299
<b>Involvement in health promotion activities</b>						
Yes	21.32 (1.40)	23.69 (2.50)	18.23	17.60	266	227
No	21.97 (2.01)	21.35 (1.82)	18.74	17.27	399	242

NOTE: Data are weighted to reflect population statistics. Standard deviations are in parentheses. EAP = employee assistance program.

\*Significantly different from the 1993 estimate ( $p < .05$ ,  $t$  test for mean values and alternative significance test for median values).<sup>17</sup>

## Limitations

Several limitations of this research should be acknowledged. First, the cost estimates were differentiated by type of EAP, but they were not service specific. Since internal EAPs generally offered a greater number of service components than did external programs,<sup>14</sup> it is predictable that internal EAPs were somewhat more costly than external EAPs. Second, the data were self-reported and were collected through a telephone survey. Self-reported data raise questions about content validity. In addition, the telephone survey approach limited the types of questions that

could be asked and the depth of the information. Third, a worksite representative (e.g., human resources director) was not always the best person to provide information regarding an external EAP. Lastly, since internal EAPs were much less prevalent than external EAPs, sample sizes for most of the subgroup calculations were very small. Consequently, this study reported only the aggregate cost estimates for internal programs.

### **Implications for Behavioral Health Services**

These findings have at least two important uses for behavioral health services research and EAP practice.<sup>8</sup> First, EAP coverage among worksites is growing, but many firms have yet to implement such programs. Hartwell, Steele, French, et al)<sup>3</sup> found that 9% of those worksites without EAPs in 1993 were seriously considering starting programs in the subsequent year. This statistic remained fairly constant at 10% in 1995.<sup>4</sup> The cost estimates presented for 1993 and 1995 can serve as guidelines for the range of costs that firms can anticipate as they begin to explore EAP options. Second, with considerable attention currently focused on state and federal health care reform, and especially on the role of employers, understanding of the costs associated with delivering EAP services will help policymakers in their efforts to estimate the resources needed for employment-based health promotion programs. Finally, many EAPs are establishing formal and informal arrangements with managed care organizations. Consequently, the services offered by EAPs and the corresponding costs will have a significant impact on the delivery and cost of managed care behavioral health services.

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