The Cost of Employee Assistance Programs (EAPs): Findings from Seven Case Studies

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ABSTRACT. Despite the increasing prevalence of Employee Assistance Programs (EAPs), few studies have examined the cost of these programs. This paper presents consistent and comparable cost data from case studies of EAPs at seven worksites. Because the same data collection instruments and methods were used to collect cost data at each worksite, the data can be used to directly compare cost estimates across programs. The key findings show that EAPs exhibit some economies of scale, that labor costs account for the majority of EAP costs regardless of the services offered, and that EAPs with similar costs per eligible employee may use a substantially different mix of resources. In addition to the cost analyses, the case study findings are compared to recently reported national estimates of EAP costs. The results of this study will help policy makers and employers determine the range of EAP costs for different types of services. *[Article copies available from The Haworth Document Delivery Service: 1-800-342-9678.]*

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INTRODUCTION

In recent years, concern over individuals' mental and emotional health has spread to the workplace. Employers have found that mental health and emotional problems can lead to behaviors that reduce worker productivity, such as absenteeism and accidents. To help workers with these problems, and thereby increase workplace productivity and job satisfaction, many companies offer employee assistance programs (EAPs). The scope of these newly emerging EAPs is drastically different from that of their predecessors. Occupational alcoholism programs in the workplace began emerging in the 1940s in an effort to help workers with alcohol problems. Primarily, these early EAPs were seen as a referral source to alcohol treatment programs, such as Alcoholics Anonymous (AA). EAPs have since broadened their focus to include other employee problems, such as stress-related issues, mental health, and illicit drug abuse. EAP services often extend to workers' families because it has been recognized that many emotional problems may be rooted in the home life (Walsh, 1982).

Although EAPs have existed in some form for over 50 years, their prevalence has increased rapidly in the past decade. In the 1988 Survey of Employer Anti-Drug Programs, the Bureau of Labor Statistics (BLS, 1989) estimated that 6.5 percent of all private, nonagricultural worksites had an EAP. Furthermore, BLS estimated that EAPs were operating in 26.5 percent of worksites with 50 or more full-time employees. In 1990, BLS conducted a follow-up survey with 749 of its original 6,500 sampled worksites and found that the proportion of worksites with EAPs had increased from the original 6.5 percent to 11.8 percent (Hayghe, 1991).

Hartwell et al. (1995) conducted a similar study of EAPs—the National Survey of Worksites and Employee Assistance Programs (NSWEAP)—that was the first national survey since the original BLS study. Interviewers collected data between October 1992 and March 1993 from approximately 3,200 private, nonagricultural worksites with 50 or more full-time employees. Hartwell et al. estimated that 33 percent of all private, nonagricultural worksites with 50 or more full-time employees offered EAP services to their employees in 1993. This prevalence rate was 6.5 percentage points higher than the 1988 BLS study findings for the same type of worksites.

The rise in EAP prevalence has increased the need for studies evaluating the costs and benefits of EAPs. Accurate and detailed cost studies are an important and critical step toward performing a cost-effectiveness or benefit-cost analysis. Cost estimates also provide a standard for evaluating the financial performance of current programs. Most importantly, cost studies provide policy makers with the necessary data to compare the cost

of EAPs to other types of public and private health services (e.g., short-term mental health counseling).

Although there is substantial research on the service delivery of EAPs (NRC-IOM, 1994; Roman and Blum, 1992), little research has examined the costs of EAPs (French et al., 1995). To our knowledge, only NSWEAP reports nationally representative estimates of EAP costs. Hartwell and his colleagues (1995) summarized the NSWEAP cost data along with other general findings, but the work by French et al. (1995) is the only study we know of that focuses specifically on EAP costs. The authors used the NSWEAP cost data to analyze the costs of EAPs across various worksite characteristics such as geographical location and size.

French et al. (1995) examined the cost differences between two types of EAPs–internal and external. Internal EAPs are usually staffed by company employees and are often housed at or near the sponsoring worksite. External EAPs are separate organizations with their own staff, typically located in geographically separate offices, that often serve multiple worksites. French et al. (1995) found that the mean (median) annual cost per eligible employee was $26.59 ($21.84) for internal EAPs and $21.47 ($18.09) for external EAPs. Unfortunately, the current NSWEAP does not contain rich data on EAP services so cost estimates can be used only to compare a given EAP to the "average" and not to compare one EAP model to another. In addition, the NSWEAP cost data were collected through company self-reports rather than through a standardized economic cost instrument.

While there are few EAP cost studies, many studies have examined the effectiveness of EAPs (for reviews of EAP evaluation studies, see French, Zarkin, and Bray, 1995; NRC-IOM, 1994; and Jerrell and Rightmyer, 1982). EAP evaluation studies have provided a wealth of information on the effectiveness of EAPs, but because they focus on effectiveness they seldom provide useful information on EAP costs. In fact, some of these studies confuse the cost of the EAP with the cost of *employee problems* (e.g., Decker, Starrett, and Redhorse, 1986; Myers, 1984; CDC, 1990; McDonnell Douglas, 1990). Although finding the dollar cost of employee problems is important in determining the benefits of EAPs, it does not tell employers how much the EAP *itself* costs.

One study that does provide an EAP cost estimate is Ahn and Karris (1989), which examined the benefits and costs associated with the University of Maine's EAP from 1980 to 1983. Their study included the level of employee problem severity in the calculated benefits. Specifically, they disaggregated EAP-serviced clients into 18 distinct analysis groups (3 employment classifications by 6 levels of problem severity). They calculated

the benefits as a function of the number of EAP-serviced clients, salary, fringe benefits, problem severity, lost productivity, and replacement costs of terminated employees. Ahn and Karris estimated the aggregate benefit from providing an EAP to be approximately $276,581 over 3 years, or $92,193 annually. Ahn and Karris only report the EAP's annual operating cost (approximately $28,000) and did not provide any details on how they estimated this figure. They estimated the University of Maine had realized an annual aggregate cost savings (i.e., net benefit) of $64,193. Because Ahn and Karris did not report their cost estimation methods, we are unable to compare their results to those of other researchers except in very broad terms. Looking specifically at costs, their estimates imply an annual EAP operating cost per employee of $12.55 (equivalent to $17.18 in 1992 dollars).

Another EAP evaluation that provides a cost estimate is McClellan (1990). McClellan (1990) examined the benefits and costs of the Ohio state government's EAP. In 1984, the state of Ohio created a statewide EAP for its workforce of approximately 60,000 employees. McClellan encountered many problems in obtaining data on direct and indirect expenditures, illustrating the potential problems with gathering accurate cost data from worksites. McClellan found that the Ohio EAP's budget accounted for only a fraction of the actual program's expenditures and that most of the EAP's cost was buried in the state's health insurance plans. The Ohio EAP comprised 86 external EAP vendors who were paid on a fee-for-service basis by state insurance carriers, insurance administrators, and health maintenance organizations. McClellan's estimate of the total direct cost of the Ohio EAP was derived from the external costs of the 86 vendors. Based on vendors' expenditures and approximately 8,800 face-to-face visits by state employees to the EAPs in 1988, the estimated direct cost per eligible employee per year was approximately $7.33 (equivalent to $8.44 in 1992 dollars). McClellan estimated the indirect annual cost per eligible employee to be $3.09 (equivalent to $3.55 in 1992 dollars). The indirect cost estimate reflected the cost of labor hours allotted to EAP visitations and operations. The estimate included lost time and productivity for state employees who used the EAP or attended supervisory training classes and education programs on state-paid time. It also included labor time of employees working on EAP-related tasks for the Ohio Department of Health and State Joint Action Committee–programs that oversee some of the operations of the Ohio EAP. The estimated aggregate direct and indirect cost of the Ohio EAP for 1988 was $1,008,300 (equivalent to $1,161,014 in 1992 dollars), or $16.81 (equivalent to $19.36 in 1992 dollars) per state employee. McClellan's study provided detailed information on estimating

and collecting cost data, but allowed no comparisons across individual EAP models because it aggregated the 86 external EAP vendors.

Despite the rigorous evaluation methods employed by the studies noted earlier, most EAP cost studies tailor their cost estimation methods to fit the idiosyncrasies of the EAP being studied. Because the cost estimation methods in these studies are very specialized, their cost estimates cannot be compared across different EAP models. Consequently, the literature offers little guidance regarding the differential costs of operating an EAP. Firms considering an EAP need detailed cost estimates on specific resource categories (e.g., personnel and building) rather than just a total or average cost. They also need valid cost comparisons of current EAPs to help them determine the types of program and services best suited to their worksite.

This research provides cost estimates from seven case studies of EAPs and compares these costs with recent national EAP cost estimates. The cost estimates presented here were developed using the same methodology and data collection instrument at each worksite. Thus, our cost estimates are comparable across the seven worksites, and provide useful information regarding the costs of individual EAPs to employers.

DATA AND METHODS

Our EAP case study approach is similar to many program evaluation methods in that it measures program costs from the perspective of the provider (i.e., the employer). Our goal in measuring program costs is to provide employers with an estimate of the probable cost to provide a similar EAP at their worksite. Thus, we estimated all direct and indirect costs relevant to the operation of an EAP, excluding costs incurred as a result of the employee seeking treatment (e.g., the cost of the employee's time away from work, the cost of treatment provided by outside providers). Furthermore, because we estimated costs from the employer's perspective, we reported the contract fee paid to external EAP providers as the full cost of an external program to the employer.

To collect cost information for an internal EAP, we designed a cost interview guide and administered it to the EAP director and staff (a copy of the cost interview guide is available from the corresponding author upon request). The cost interview guide included the following resource categories:

- personnel (e.g., salaries, benefits);
- operating (e.g., seminars and workshops for EAP staff, travel, contracted services, printing/duplicating);
- building (e.g., rent);

- equipment; and
- utilities and supplies.

To estimate these costs, the cost interview guide recorded all direct expenditures by the EAP. We identified these costs by asking for data from expenditure records rather than from budgets because budgets often do not accurately predict resource use. We supplemented this information with cost data from general ledger responsibility reports, estimated actual expenditures, purchase requisition records, and other internal documents.

Economists focus on opportunity costs, or the value of a resource in its next-best use. To estimate the opportunity cost of EAP services, the cost interview guide also included resources used free of charge and resources shared with other departments. We estimated the cost of free resources as the price that those resources would have commanded had they been purchased. For example, the opportunity cost of a volunteer counselor is estimated as the salary he/she could earn in a paid position.

When the EAP shared a resource, we attributed its cost to the EAP proportionate to the EAP's share of that resource. For example, if salaried staff members only spent half of their time on EAP duties, then we assigned half of their salary to EAP costs. A similar situation arose when we estimated the cost of a multisite EAP for a single worksite. In that case, we attributed costs proportionate to the amount of time committed to each worksite. For example, if an EAP's resources were typically committed to our case study worksite 20 percent of the time, then we multiplied that EAP's costs by 0.20 to estimate those costs attributable to our case study worksite.

In addition to our cost study, we also conducted a process study to determine how many employees were eligible for EAP services in a given fiscal year, how many employees actually used the EAP in that same year, and what services were offered in that year. We collected data on the number of eligible employees to calculate average EAP costs, which are more comparable across programs than total costs. We gathered data on the number of clients served because an EAP that actually treats more employees usually has higher costs than other EAPs with the same eligible population. Finally, we collected data on the services provided because an EAP that provides more services typically has higher costs than EAPs that provide fewer services.

To compare our findings across the seven case studies, we report the annual cost per eligible employee and provide information on the EAP services offered. We report the annual cost per eligible employee instead of the total annual cost or annual cost per employee served for three reasons. First, the annual cost per eligible employee is a financial statistic

that is highly comparable to other cost figures such as insurance premiums. Second, unlike the total annual cost, the annual cost per eligible employee partially controls for factors such as firm size that may prevent meaningful comparisons across different EAPs. Third, unlike the annual cost per employee served, the annual cost per eligible employee does not imply that only those employees who visit the EAP benefit from it. The annual cost per eligible employee allows for benefits from the training sessions and health promotion activities that many EAPs conduct. For the remainder of this article, we will refer to the annual cost per eligible employee as the "average cost."

CASE STUDY WORKSITE DESCRIPTIONS

Table 1 summarizes the case study worksite descriptions, beginning with the services offered by each EAP. From our process studies, we identified six typical EAP services:

- Telephone hotline–access to the EAP staff via telephone 24 hours a day and distinguished from telephone contact during regular business hours.
- Assessment and referral–an in-person assessment of an employee's presenting problem and referral to treatment if appropriate.
- Short-term counseling–an initial diagnosis of an employee's problem with no more than five follow-up visits for counseling.
- Long-term counseling–similar to short-term counseling but allowing more than five counseling sessions.
- Supervisor and/or employee training–any program designed to train either supervisors or employees to recognize employee problems and to use the EAP if necessary.
- Health promotion and/or wellness programs–any literature, presentation, or other activity designed to promote employees' health or increase employee awareness of potential health risks (e.g., smoking).

In addition to the services offered, Table 1 shows the total number of EAP staff members; the number of full-time equivalents (FTEs), eligible employees, and employees served by each worksite's EAP during the relevant fiscal year; and the utilization rate of each EAP. An FTE is a standardization of staff time into the equivalent of a full-time staff member (i.e., 40-hour work week). The FTEs we report reflect time spent by EAP staff members on EAP duties for the worksite of interest. Thus, if an EAP serves more than one worksite, the FTEs represent only time spent on duties

TABLE 1. Summary of EAP Services and Staffing at Each Worksite

	Site 1		Site 2		Site 3	Site 4	Site 5	Site 6	Site 7
	Internal	External	On-Site Coordinator	External					
Services Offered									
Telephone hotline	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes
Assessment and referral	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Short-term counseling	Yes	No	No	Yes	Yes	Yes	No	No	Yes
Long-term counseling	No	No	No	Yes	Yes	No	No	No	No
Supervisor/employee training	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes
Health promotion pgrograms	Yes	No	Yes	No	No	Yes	Yes	Yes	No
Staffing and Utilization									
Number of EAP staff	3	–	1	–	4	3	7	1	7
Number of FTE EAP staff	1.85	–	1	–	0.78	1.70	1.50	1	6.13
Number of eligible worksite employees	6,000	7,500	1,865		250	4,445	2,100	1,500	20,000
Number of employees served in analysis year	115	292	149		51	283	156	256	767
Utilization rate	2%	4%	8%		20%	6%	7%	17%	4%

related to the worksite studied; or if a staff member has duties outside of the EAP, the FTEs reflect only the time spent on EAP duties. To protect the confidentiality of EAP clients and participating worksites, we are unable to identify a worksite by name or make our data available to other researchers. Instead, we refer to each worksite by a numerical identifier.

Worksite 1

Worksite 1 is a diversified energy company with interests in petroleum refining, transportation and wholesale marketing, motor oil and lubricant marketing, chemicals processing, construction, and oil and gas exploration and production. The corporation can be generally classified as a manufacturing firm. Although Worksite 1 has over 500 worksites nationwide, most employees work at one of two corporate locations that are geographically close to each other. Worksite 1 has an internal EAP and an external EAP with two different service contracts. Worksite 1 contracts with an external company to provide telephone hotline services to 4,181 employees for $5.50 per employee and in-person assessment and referral services to 3,319 employees for $17.00 per employee. In fiscal year 1991, 126 employees used external telephone services, and 166 employees used external assessment and referral services. Thus, the combined external EAP contracts had a utilization rate of 4 percent.

Worksite 1's internal EAP provides more extensive services than the external EAP. In addition to a telephone hotline and assessment and referral services, the internal program also provides short-term counseling, supervisor/employee training, and health promotion programs to approximately 6,000 eligible employees.[1] The internal EAP employs one full-time director, one part-time counselor, and one part-time administrative assistant for a total of 1.85 FTEs. The EAP director holds a master's degree in social work (MSW) and is a Certified Employee Assistance Professional (CEAP). The part-time counselor, a certified physician's assistant (P.A.) with 2 years of college education, provides all short-term counseling. In fiscal year 1991, 115 corporate employees used the internal EAP for a utilization rate of 2 percent.

Worksite 2

Worksite 2 is the headquarters and primary manufacturing plant of a company that manufactures more than 4,000 products for the automotive, building and construction, electrical/electronics, aviation, aerospace, cosmetics, appliance, and consumer hardware industries. Worksite 2 uses an external EAP contractor with one full-time, on-site EAP coordinator to

provide EAP services to approximately 1,865 employees and their families. The external EAP provides assessment and referral, short-term counseling, long-term counseling, and supervisor and employee training. The external EAP also provides back-to-work counseling and planning for employees returning to work after treatment. The on-site coordinator–originally a regular employee whose involvement with the EAP evolved into a formal role over a period of 5 years–provides a telephone hotline and selective assessment and referral services to employees. Employees are referred to both the external EAP and to outside providers. The on-site coordinator also handles EAP promotion and awareness programs and participates in employee and supervisor training. The onsite coordinator does not provide any type of counseling. The EAP served 149 employees in fiscal year 1991 for a utilization rate of 8 percent.

Worksite 3

Worksite 3 is a small municipality governed by a mayor and board of trustees and administered by a city manager. The current EAP did not have a formal start as a traditional EAP but has grown into that role from a resident crisis intervention and counseling program. EAP services are offered to approximately 250 employees, providing assessment and referral and short- and long-term counseling. The EAP does not, however, provide a telephone hotline, training, or health promotion services. The EAP employs one director, two counselors, and one part-time administrative assistant. Because all staff members split their time between EAP duties and resident counseling duties, EAP duties accounted for only 0.78 FTEs. The director holds a master's degree in counseling psychology and is a National Board-Certified Counselor (NBCC). Both counselors hold master's degrees in counseling psychology and are NBCCs; one counselor is also a CEAP. The EAP served 51 clients in fiscal year 1991 and had a utilization rate of 20 percent.

Worksite 4

Worksite 4 is a financial institution engaged in business financing, specialized financial and operating services (e.g., cash management, trust and private banking), securities trading, and equity finance and investing. Worksite 4 offers internal EAP services to 4,445 employees and their families. The program provides a telephone hotline, assessment and referral, short-term counseling, supervisor training, and extensive health promotion services. The EAP does not provide long-term counseling. The EAP employs one full-time EAP director with an MSW and one part-time

administrative assistant. The EAP also has a contract with a part-time counselor for a total of 1.70 FTEs. The EAP served 283 clients in fiscal 1992 for a utilization rate of 6 percent.

Worksite 5

Worksite 5 is a large community medical center, providing comprehensive medical care to thousands of people each year. It currently offers internal EAP services to 2,100 employees and their families. The EAP provides assessment and referral, employee and supervisor training, and health promotion services, but does not provide a telephone hotline or counseling. The EAP employs one full-time director with a master's degree in social work and family therapy, and CEAP and certified senior addictions counselor credentials. The EAP also has two full-time and three part-time clinical counseling staff members, all of whom have post-baccalaureate professional training: two hold MSWs and three are certified addictions counselors, one of which is a certified family therapist and one a registered nurse. The EAP employs one full-time administrative assistant. The EAP saw 156 clients from Worksite 5 in fiscal year 1991 for a utilization rate of 7 percent. The EAP at Worksite 5 is unique in that it not only serves as the internal EAP for Worksite 5 but also as an external EAP for other area employers. For the purposes of our study, we included only the time spent by the EAP staff on duties related to serving Worksite 5. Thus, although the EAP at Worksite 5 employs seven staff members, they account for only 1.5 FTEs in services to the worksite.

Worksite 6

Worksite 6, a subsidiary of a large communications company, manufactures fiber optic cable for its parent company and other contracts. It currently offers EAP services to 1,500 employees and their families. The EAP provides a telephone hotline, assessment and referral, employee and supervisor training, and health promotion services, but does not provide counseling. The EAP's only staff member formerly was a regular employee and still has duties as a first-line supervisor. The EAP served 256 employees in fiscal year 1992 for a utilization rate of 17 percent.

Worksite 7

Worksite 7, a teaching hospital affiliated with a large, private university, offers internal EAP services to 20,000 employees and their families. The

program provides a telephone hotline, problem assessment and referral, short-term counseling, and employee and supervisor training. The EAP does not provide long-term counseling or health promotion services. The EAP has one full-time director who holds an MSW and is both a certified clinical social worker (CCSW) and a CEAP. The remaining five counselors are also CCSWs; one is a CEAP, as well. The EAP also receives contract services from a psychologist and employs one full-time administrative assistant. The EAP saw 767 employees in fiscal year 1993 and had a utilization rate of 4 percent.

CASE STUDY FINDINGS

In this section, we report the findings from our cost analysis of each EAP. Table 2 presents the average annual EAP costs for each worksite. Because we collected cost data from four worksites for fiscal year 1991, from two worksites for fiscal year 1992, and from one worksite for fiscal year 1993, Table 2 presents all estimates in 1992 dollars to allow for comparison across the worksites. In addition to the average total cost, we report average costs for the primary resource categories. These categories include personnel, operating resources, building, equipment, and utilities and supplies. Personnel costs are based on FTEs and include salaries and fringe benefits. Operating costs include printing and duplicating costs, the cost of training seminars and workshops for EAP staff, travel, and contracted services. Building costs are based on the actual or estimated rental value of building space actually used by the EAP. Equipment costs include the costs of computers, copiers, and other office equipment as well as the cost of depreciation on that equipment. Utilities and supplies costs include the costs of water, gas, electricity, telephone, and office supplies.

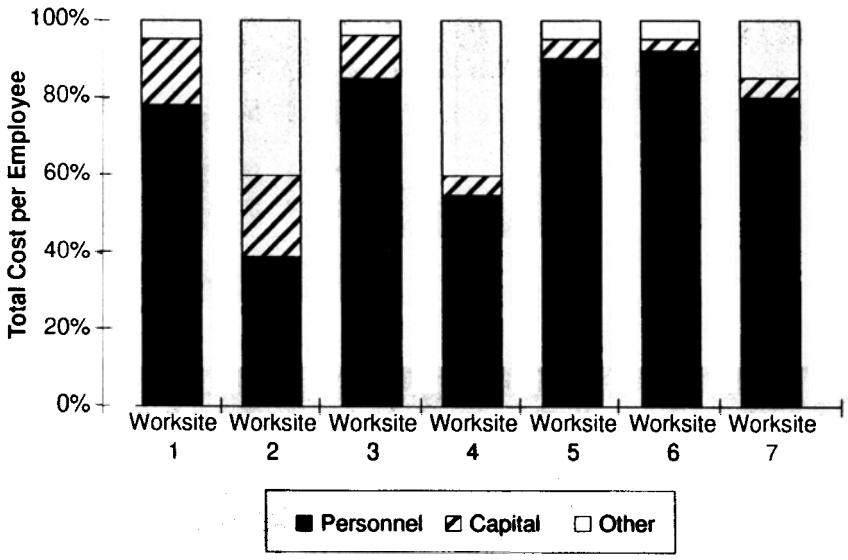
Figure 1 displays these cost categories as a percentage of the average total cost for each worksite. Because some of the cost categories represent a small percentage of average total costs (less than 1 percent in some cases), we aggregated our five cost categories into three categories for Figure 1. The categories are personnel costs, capital costs (i.e., building and equipment), and other costs (i.e., operating, utilities and supplies).

As Table 2 shows, Worksite 1 had an average total cost of $22.37. Of this amount, $16.52 (74 percent) were personnel costs; $2.90 (13 percent) were building costs; $1.30 (6 percent) were operating costs; $1.06 (5 percent) were equipment costs; and $0.59 (3 percent) were utilities and supplies costs. Figure 1 clearly shows the dominance of personnel costs for Worksite 1. Because Worksite 1's internal EAP provides labor-intensive services such as short-term counseling, it is not surprising that person-

TABLE 2. Annual EAP Costs per Eligible Employee, by Resource Category and Worksite

	Site 1		Site 2		Site 3	Site 4	Site 5	Site 6	Site 7
	Internal	External	On-Site Coordinator	External					
Personnel	$16.52	–	$7.68	–	$152.10	$24.79	$31.90	$42.50	$12.72
Operating	$1.30	–	$7.01	–	$6.02	$16.35	$1.31	$5.27	$2.30
Building	$2.90	–	$4.70	–	$10.21	$2.62	$1.84	$0.40	$1.00
Equipment	$1.06	–	$0.46	–	$6.10	$0.47	$0.50	$0.62	$0.08
Utilities and Supplies	$0.59	–	$1.69	–	$7.04	$1.27	$1.62	$0.37	$0.22
Total	$22.37	$10.56	$21.54	$30.54	$181.47	$45.50	$37.17	$49.16	$16.34

FIGURE 1. Distribution of Annual EAP Costs, by Resource Category and Worksite



nel costs accounted for approximately 74 percent of Worksite 1's internal EAP costs per-eligible employee. The per-eligible cost of Worksite 1's external EAP is simply the weighted average contract fee of $10.56[2] and is not shown in Figure 1.

The average costs for Worksite 2 are somewhat unique in that the EAP at Worksite 2 combines an on-site coordinator and an external EAP. The average total cost of the external EAP is the contract fee of $30.54 per eligible employee and is not shown in Figure 1. Although this contract fee is considerably higher than the fee at Worksite 1, Worksite 2's external EAP provides more services than Worksite 1's external EAP and has a higher utilization rate. The average total cost of the on-site coordinator at Worksite 2 is $21.54. Personnel costs at Worksite 2 account for $7.68 (36 percent) of the total; operating costs for $7.01 (33 percent); building costs for $4.70 (21 percent); equipment costs for $0.46 (2 percent); and utilities for $1.69 (8 percent). The average total cost at Worksite 2 for both the on-site coordinator and the external EAP is simply the sum of the two average total costs per eligible employee (i.e., $52.08).

Figure 1 clearly shows that operating and utilities costs dominate the

other categories for Worksite 2, while personnel costs account for much of the remainder. Operating costs for Worksite 2's EAP are relatively high because the on-site coordinator–a regular employee that took over the role of EAP coordinator–is pursuing formal training in the form of seminars and training sessions for EAP professionals. Because Worksite 2's on-site coordinator only provides limited services, it is not surprising that personnel costs account for a smaller percentage of the average total cost at Worksite 2 than at Worksite 1.

Worksite 3 is the smallest worksite we visited, and its average total costs are the highest at $181.47. Personnel costs are $152.10 (84 percent), operating costs are $6.02 (3 percent), building costs are $10.21 (6 percent), equipment costs are $6.10 (3 percent), and utilities and supplies costs are $7.04 (4 percent) per eligible employee. Figure 1 shows that personnel account for the largest component of average costs at Worksite 3. Unlike other EAP resources, the cost of a full-time counselor does not diminish with a smaller service population. Thus the *total* personnel costs at Worksite 3 are similar to Worksites 1 and 2, but because of a smaller service population, Worksite 3 has a much higher cost *per eligible employee*. The other resource categories account for a very small percentage of Worksite 3's EAP costs.

Worksite 4's average total cost is $45.50, with personnel costs of $24.79 (54 percent); operating costs of $16.35 (36 percent); building costs of $2.62 (6 percent); equipment costs of $0.47 (1 percent); and utilities costs of $1.27 (3 percent). Although the average total cost is considerably higher than for Worksite 1's internal EAP, Worksite 4 also has a higher utilization rate, suggesting that utilization rates may be related to average costs. Figure 1 shows that Worksite 4 is somewhat similar to Worksite 2. These are the only two worksites where personnel costs account for less than 60 percent and operating and utilities costs account for more than 30 percent of total costs per eligible employee. Part of the relatively high operating costs at Worksite 4 can be explained by the EAP's extensive health promotion activities.

Worksite 5's EAP had an average total cost of $37.17. Of this amount, $31.90 (86 percent) were personnel costs; $1.31 (4 percent) were operating costs; $1.84 (5 percent) were building costs; $0.50 (1 percent) were equipment costs; and $1.62 (4 percent) were utilities and supplies costs. Because Worksite 5's EAP provides external EAP service to other worksites in the area, we adjusted the costs shown in Table 2 and Figure 1 to reflect only those costs attributable to resources spent on Worksite 5 employees. Figure 1 shows that, even though the EAP offers no counseling services, personnel costs were the largest contributor to the total annual

cost per eligible employee, accounting for over 80 percent. This point illustrates that most aspects of EAP services–not just counseling–are labor intensive.

Worksite 6 has an average total cost of $49.16, with personnel costs of $42.50 (86 percent); operating costs of $5.27 (11 percent); building costs of $0.40 (less than 1 percent); equipment costs of $0.62 (1 percent); and utilities and supplies costs of $0.37 (less than 1 percent). Except for Worksite 3, Worksite 6 has the highest cost per eligible employee and the highest utilization rate. This correlation further supports the potential link between utilization rates and costs. As shown in Figure 1, Worksite 6 follows the same pattern as the previous worksites: most costs are personnel-related and other cost categories add only small amounts to the total. Similar to Worksite 5, personnel costs account for over 80 percent of the total cost per eligible employee at Worksite 6 even though this EAP does not offer counseling.

Worksite 7 has an average total cost of $16.34. Personnel costs are $12.72 (79 percent); operating costs are $2.30 (14 percent); building costs are $1.00 (6 percent); equipment costs are $0.08 (less than 1 percent); and utilities and supplies costs are $0.22 (1 percent). Figure 1 shows that the EAP at Worksite 7 is similar to the EAPs at Worksites 1, 3, 5, and 6 in that personnel costs account for over 60 percent of the total cost per eligible employee.

SUMMARY AND DISCUSSION

Our results highlight five key issues. First, both the overall costs of an EAP and the distribution of those costs across resource categories depend on the service delivery characteristics of the EAP. We consistently found that higher utilization rates were associated with higher costs per eligible employee. We also found that the distribution of costs across our five resource categories were related to the types of services offered by the individual EAP. However, we could not determine if the presence of any one particular service caused one resource category to dominate another.

Second, personnel account for the majority of EAP costs regardless of the mix of services offered. EAPs are labor intensive, so this finding is not surprising. As Table 2 suggests, labor resources are also subject to economies of scale because the worksite serving the most employees (Worksite 7) had one of the lowest annual personnel costs per eligible employee, while the worksite that serves the fewest employees (Worksite 3) had the highest annual personnel costs per eligible employee.

Third, although other resource categories display some evidence of

economies of scale, the pattern is not as clear as for personnel costs. Average building costs, equipment costs, and utilities and supplies costs varied little over the worksites. Worksite 3 did have considerably higher average costs in all of these categories, but these values were still under $11.00 per eligible employee. Operating costs exhibited some variation across worksites, probably because we included the costs of EAP staff training and contracted services in this category. Worksites that have relatively high costs in these areas may want to further disaggregate these categories to better understand the distribution of cost items.

Fourth, we found that different EAPs can have substantially different cost mixes and still have similar "bottom lines." For example, the internal EAPs at Worksite 1 and Worksite 2 had similar average total cost estimates of $22.37 and $21.54, respectively. Yet over 70 percent of Worksite 1's average total cost is attributed to personnel, while only 36 percent of Worksite 2's average total cost is personnel-related. Cost-effectiveness studies that fail to examine the distribution of costs across resource categories may lead to erroneous policy recommendations if they do not provide policy makers with the information needed to determine the optimal resource mix. Understanding the nature of the cost elements related to an EAP is a critical step toward fully understanding how all the service components of an EAP interact to provide the most cost-effective program.

Fifth, our cost estimates are generally consistent with national estimates. Currently, the only nationally representative estimates of EAP costs are from the NSWEAP project (French et al., 1995; Hartwell et al., 1995). Although our estimates of annual cost per eligible employee are somewhat higher than those obtained from the NSWEAP (average total costs of $26.59 for internal EAPs and $21.47 for external EAPs), our estimates are well within the range of costs reported in the NSWEAP studies. Furthermore, our results are consistent with the NSWEAP finding that, on average, external EAPs have lower costs than internal EAPs (French et al., 1995). Of the two external EAPs in our case studies, one had the lowest estimated cost per eligible employee of all EAPs studied, and the other had lower estimated annual costs per eligible employee than four out of the six internal EAPs studied.

Although a recent national survey provides new information on the costs of EAPs, abstracting these national estimates to a specific EAP is difficult without detailed knowledge of the service delivery process. Because we used a standardized data collection instrument, our results can be systematically compared among the different EAPs studied. Furthermore, our case study approach provides critical descriptive information that al-

lows EAP practitioners and policy makers to compare the costs of their programs to those presented here. Consistent information on the costs of different EAPs will help employers and policy makers identify the optimal resource mix for both established and prospective EAPs.

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NOTES

1. Telephone access, health promotion activities, and training are actually available to all 33,000 employees at Worksite 1. Due mainly to geographical inconveniences, few employees outside of the two corporate locations actually use these services. Therefore, we consider Worksite 1's eligible population to be the 6,000 employees at the two corporate locations.

2. The weighted average contract fee was calculated as follows:

$$FEE = 0.5 \times [(4{,}181 \text{ employees} \times \$5.50) + (3{,}319 \text{ employees} \times \$17.00)]$$

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