Employee assistance programs (EAPs) are often the go-to resource for at-risk employees grappling with personal problems such as substance abuse, depression, stress and marital strife. These programs have gained popularity among employers as a preventive or early intervention measure, allowing employees to address personal issues before they escalate into larger — and far costlier — health problems.

EAPs are the primary entry point for more than 150 million American workers seeking professional support, short-term counseling and referrals for personal and behavioral-health concerns. Yet, many EAP providers served employees without knowing or improving upon their plans’ workplace impact — until recently. There is increasing recognition among EAP providers that in order to continue to thrive, the EAP field needs to be able to measure and demonstrate effectiveness in quantifiable business terms.

Measuring employee assistance success has historically focused on utilization rates, client satisfaction and occasional surveys of symptom reduction or problem resolution. The most reliable measure, however, comes...
The most reliable measure, however, comes from quantifying how EAPs affect specific workplace outcomes, such as absenteeism, presenteeism, turnover and workplace accidents. The lack of valid comparative measures of effectiveness leaves most EAPs to operate year after year without knowing or improving static outcomes. Rather than bring results to light, many providers have instead focused on low price and “features” minus any real benefit. This leads to an environment where marginal providers are able to compete with optimal ones because real-life EAP activities and actual results are frequently hidden from or invisible to the employer. While some employers continue to superficially engage these EAPs, they may hazard the health and productivity of otherwise at-risk or underperforming employees.

To accurately gauge financial impact, standard benchmarks are required to calculate ROI and bring EAP (and wellness) in line with the data-driven metrics used in other parts of the business. While there are a variety of EAP ROI calculators on the market, they typically lack the sophistication and well-researched default assumptions that a CFO or other executive stakeholder needs to conduct a proper analysis that is viewed as credible.

As EAP and wellness compete against other benefit programs and corporate investments for capital, it is important that ROI calculations utilize standard financial terminology and measures so they may be properly weighed (i.e., calculating the internal rate of return and net present value) in order to answer the fundamental question: Are the savings sufficient to offset the cost of the EAP?

EAP ROI Calculators
It is still possible to calculate EAP ROI using pencil, paper and a standard financial calculator (as it is to read by candlelight). However, a database of occupational productivity losses, along with a validated instrument to measure reductions in absenteeism and presenteeism, are also vital inputs. The good news is that both items are available — although a commercial EAP ROI calculator will make your life a lot easier. Calculators like these will allow you to determine break-even per-employee per-year (PEPY), utilization and effectiveness rates.

How to Calculate Savings from an EAP
Back to the important question noted earlier: How to calculate savings from an EAP? Where to begin? The first step is to decide which expenses are affected by an EAP, how these expenses are measured and how to calculate savings. As mentioned, typical expenses affected by an EAP include presenteeism, absenteeism, turnover, work accidents, disability and medical expenses (for self-insured companies) or insurance premiums. These costs should be calculated both before and after EAP implementation in order to calculate savings.

The next step is to apply an internal rate of return (IRR) and net present value (NPV) formula, which is available in Excel or any financial calculator.

So, What Is an IRR and NPV?
The IRR is used in capital budgeting to measure and compare the profitability of
Multiply this number times the 90-day value of the investment in an EAP. Discount rate (the opportunity cost of capital, which is usually the risk-free interest rate of U.S. Treasury bills)

Value of the investment in an EAP (the PEPY rate times the number of employees covered).

Value simple enough? No? Then let's proceed step by step, starting with savings.

**Expense savings**

Putting aside the acronyms and boiling everything down to numbers for a moment, a business is hurt when employees with emotional, legal, financial and other problems are distracted. When those distractions become debilitating, they affect employees’ ability to focus on work. By extension, such issues also generate absenteeism associated with visits to psychologists, social workers, financial advisers and attorneys. According to the Attridge study, the prevalence rate of issues in the U.S. population is 1 in 4, or 25%. These include common mental-health disorders but also problems that are “subclinical” in nature. The study reports that employees with work-related issues have a presenteeism rate of 12.3% and absenteeism of 1.5 days for an episode lasting 90 days. (The calculations and formulas used in this article utilize well-researched default data, which were obtained from the 2015 Attridge study.)

Utilizing a database of daily productivity contributions by occupation, industry and region, it is possible to calculate productivity losses associated with both presenteeism and absenteeism. How?

1. Multiply the daily productivity loss of employees times the number of employees with problems (an estimated 25% of the population)
2. Multiply this number times the 90 days for each episode
3. Then multiply by the respective presenteeism and absenteeism rates.

This generates the total productivity loss without an EAP.

**Productivity Losses**

How do you determine the reduction in productivity losses from an EAP? (You'll find that in your general ledger as a negative in your liability accounts. We’re striving to lessen losses, which adds up to a positive.) For this calculation, we can utilize any validated instrument that measures the improvement in concentration (presenteeism) and reduction in visits to providers (absenteeism).

Chestnut Global Partners' Workplace Outcome Suite (WOS) is an example of a validated questionnaire that is administered pre- and post-EAP. Again, using data in the Attridge study (based on a major WOS study), the use of EAPs resulted in a 39.7% reduction in presenteeism and a 44.3% reduction in absenteeism.

In order to determine the reduction in presenteeism and absenteeism costs, follow these four steps:

1. Multiply the number of employees with problems by the utilization rate
2. Recalculate the pre-EAP productivity loss for absenteeism and presenteeism for just those individuals who utilized the EAP

Reduce the absenteeism and presenteeism costs calculated in Step 2 by the 39.7% and 44.3% figures, respectively

Subtract the value obtained in Step 3 from the total presenteeism and absenteeism cost — not the value attained in Step 2 but the value acquired when calculating total pre-EAP productivity losses.

**Turnover Costs**

Now we turn our attention to calculating the savings in turnover costs. (Again, lessening turnover, the negative, results in a positive. The same holds for accidents, disability and medical savings, which are discussed later.) Some employees with problems will quit their job, which generates turnover costs such as recruiting, relocation and retraining. These amounts may be negligible, or large, depending on the occupation and industry. Again, returning to the Attridge study, the average turnover due to EAP-related issues is 10% and the reduction of turnover expenses from EAPs is also 10%. Thus, multiplying the number of employees with issues (25% of the population) by 10% will result in the number of employees who will turn over (leave their job).

Next, multiply this number by the cost of the average retraining, relocation and recruitment expenses and then add the results. This will generate pre-EAP turnover cost. To calculate the reduction, simply follow the four steps used to calculate the productivity loss savings calculations for each type of turnover cost but use the 10% reduction rate from the Attridge study.

**Accidents**

Now on to savings in accidents. Employees who are distracted (or even worse, those with substance-abuse issues) are more likely to have accidents. As in the case of turnover-related costs, this cost can be small (a bandage) or cause major damage (a construction accident). According
Another calculation involves savings associated with comorbidities for treatment of more severe forms of issues such as depression is $3,000. An EAP reduces this expense by (you guessed it) 10%. Thus, multiplying the number of employees with issues (25% of the population) by 10%, and then multiplying this value by the $3,000 cost will generate the pre-EAP medical cost.

To calculate the reduction, again follow the four steps used to calculate the productivity loss savings calculations listed previously but use the reduction rate from the Attridge study. In order to calculate the estimated reduction in premiums for non-self-insured employers, divide the year-by-year premium increase by the number of employees. This gives you the increase per employee.

Next, estimate the percentage of this increase due to medical treatment of the more severe forms of issues. Say the percentage is 1%. This is the value that should be used in lieu of the $3,000 medical cost. Next, repeat the medical cost savings calculations, using the 10% reduction figure due to an EAP, to obtain the reduction in premiums. (Don't expect a large number.)

Program Turnover
Finally, we have to consider program turnover (not job turnover). Basically this includes the percentage of employees who utilize the EAP but do not follow through, meaning there is no proof that their issue was resolved. This percentage varies depending on the type of employee population or quality of the EAP. How does program turnover affect the ROI? Basically we have to "penalize" the ROI a bit given that the employer paid for a benefit it did not entirely receive. The effect of turnover will be incorporated in the ROI calculation later.

Total savings calculation
Next, add the savings in productivity losses (absenteeism and presenteeism) to the other savings (turnover, accidents, disability and medical-insurance premiums) to obtain the total savings. You now have one of the required variables for the internal rate of return (IRR) and net present value (NPV) calculations.

Calculation of total investment
Just multiply the per-employee per-year (PEPY) times the number of employees covered in the EAP. You now have the second variable needed for the IRR and NPV calculations.

IRR and NPV calculation
You are now ready to plug your numbers into the IRR and NPV formulas. As mentioned earlier, you can use Excel, but a financial calculator will also work. If you're using Excel, just place the investment with a minus sign in one field. Place the total savings in the field below it. Now access the IRR formula in Excel and follow the instructions, and it will calculate the IRR.

For the NPV formula, again place the investment with a minus sign in one field. Place the total savings in the field below it. NPV also asks for the discount rate. Simply use the Treasury bill interest rate (adjusted for 90 days; to do this, divide the yearly rate, say 3%, by 360 days, and multiply by 90) and follow the instructions. It will calculate the NPV.

Finally, remember we have to "penalize" the IRR and NPV because of program turnover. If the turnover rate is, say, 5%, then multiply the IRR and NPV by 95%, and we are done!

Calculating break-even rates
Unless you are using one of the EAP ROI calculators on the market, the process of calculating break-even per-employee per-month (PEPM) and utilization rates will be quite tedious and essentially trial and error. For instance, if you want to calculate the break-even PEPM, leave the utilization and effectiveness rates of all other savings as is, and keep increasing the PEPM until the NPV equals zero and the IRR equals the cost of capital/discount rate. (Why not zero? If you
think about it, your financial folks could have invested the EAP payment in safe Treasury bills, so you have to at least break even with that return.

**Making the Business Case for EAPs**

One of the most common and justified complaints regarding EAP is the lack of a broadly acknowledged standard in assessing real-world financial effectiveness. Organizations using the described ROI calculations can accurately and comprehensively assess the cost effectiveness of their EAP.

Ultimately, this approach brings EAP in line with the data-driven approaches that are changing the way organizations conduct all phases of business and answers the one fundamental question all benefits purchasers must ask: How can I know that these programs improve the health and productivity of my workforce? Using these ROI calculations holds programs accountable, shows their true real-world return and, ultimately, makes the business case for if, or when, it makes sense to invest in EAP and health/wellness coaching.

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