Since the worth of an employee is directly related to how well or how often he or she can perform the business operation required, obviously fewer breakdowns (sicknesses) will greatly enhance the employee's worth. It seems reasonable then that if businesses want to reduce their operating costs associated with health care and increase productivity, reducing the need for medical care through preventive means is of prime concern.

A healthy employee is able to perform his job with less sick time and more efficiency through continuity. Consider the benefits gained from employing a nonsmoking worker for example. Not only is this employee less bothersome to coworkers who do not smoke and are not concerned with smoking breaks, but according to a U.S. Surgeon General report[2], the smoker costs an employer $4,600 more per year than a nonsmoker. This is a significant business expense to a small company when multiplied by a few hundred employees. An employee making $45,000 per year in salary should reasonably generate $150,000 worth of revenue in the high tech environment to achieve a 20% profit margin. The $4,600 loss for smokers represents 3% loss to the company's profits. For a medium size corporation with a $30 million per year business base and a staff of 25% smokers, the real profit loss could amount to $225,000, an amount sure to cause considerable anguish to the corporation's president and stockholders.

Next consider cardiovascular problems. The healthy employee has more energy and a greater ability to concentrate on business tasks. Less distractions and better health result in increased productivity.
Dr. Kenneth Wetcher[3] states that as a conservative estimate, 18% of any work force looses 25% of its productivity because of serious personal problems. From the previous example, this loss would amount to a staggering $1,350,000 per year in lost revenue. While the total overlap between smokers and those with cardiovascular problems is difficult to estimate, the potential combining all losses could reach $1.5 million, enough to make both a nonsmoking policy and a good health maintenance package very attractive.

In addition to the advantages an organization acquires through the prevention of direct worker breakdown due to illness, the potential for productivity increases with healthy people is also very possible. People function better, physically and emotionally, when they feel better. In other words, as negative health is eliminated, positive health, hence, a productivity increase, is achieved. When this intangible worth is combined with the direct worth of having healthy employees, it becomes obvious that health maintenance is a necessary expense for a business to prosper.

Since a dollar worth and the intangible worth from increased productivity for the healthy employee are valuable and necessary business requirements, the next area a businessman must consider is exactly what area of health maintenance can be controlled or directed by the employer. In this regard, the health maintenance issue can be broken down into five primary areas of concern: nutrition, physical health, exercise, chemicals and stress management. Of these, physical health, as embodied in a employee health care package, is the most important concern to a medium size corporation. However, since significant costs may be associated with medical plans which also incorporate some form of maintenance program not directed at physical health, and since this intangible health maintenance program has significant worth, a careful evaluation of what other similar organizations offer employees is useful in the decision-making process.

HEALTH CARE

Looking at health care options for the medium size corporation, obviously the package selected should be specifically tailored to organizational needs. For this discussion, the business considered will be a research and development (R&D) organization with just under 500 employees. Survey statistics are available for firms of this type as well as other types in reference to physical health care packages.

Dietrich Associates, Inc.[4] published a Non-Cash Benefits Survey in December 1986 which looked at the benefits packages offered by various types of firms from small to large organizations. If a percentile, say 75%, is used as a determinant for what the health care package offered to employees should consist of to be competitive in the labor market, some extremely interesting conclusions can be drawn.

Plan types include basic only, basic and major medical, and comprehensive. In looking at R&D firms, 58% offer basic and major medical at $300 deductible (family) with 42% offering comprehensive. None offer only basic coverage. Therefore, since the difference is too close to be a clear benefits incentive, no competitive edge is lost in offering only basic and major medical coverage with a $300 family deductible or a $100 personal deductible.

Plans paid for by the company, the employee, or shared costs indicate that 83% of the R&D employers choose a shared cost family plan. The percentage breakdown indicates that of those with shared costs, 80% of the employers pay at least 80% of the costs with 100% paying at least 50% of the costs of coverage. Therefore, a medical package which only charges employees 15% of the coverage costs appears to be an attractive benefit. Dental benefits are considered separate, but indicate basically the same cost sharing split.

The final policy area is eligibility. Since only 18% of the R&D companies offer coverage to part-time employees, only full-time employee coverage will be considered. For this coverage, 32% provide coverage the first day, with 82% offering coverage within 31 days. Therefore, coverage which takes effect at 31 days would not be considered a detriment to a competitive health care benefits package.

Some details not addressed thus far and things unique to the specific requirements of the company involved are pregnancy coverage and annual sick leave. By far the most popular coverage among R&D firms in general is 80% coverage when pregnancy for the employee or spouse occurs after 31 days of employment. No coverage is usually offered for pregnancies prior to eligibility. Sick leave varies across the spectrum, with the largest single percentage of R&D employers selecting no maximum. Over 90% of the employers also require forfeiture of unused sick leave.

Of interest in the area of R&D was the pregnancy coverage breakdown related to the type of R&D performed. In the very high tech basic research environment, more costs were absorbed by the employers than employees. Lower level research organizations required the employee to bear higher costs. This observer suspects that since higher level research usually involves older employees, employers take advantage of the lower birth rate among this group.

In conclusion, a competitive health care benefits package for a medium size R&D company would consist of:

Basic and major medical family or employee coverage at 80% below $2,000,
$100 personal or $300 family deductible,
Dental coverage with a $50 deductible,
Shared on a 15%-85% split for comprehensive,
Eligible after 31 days,
80% pregnancy coverage,
No specific sick leave limit, and
Unused sick leave forfeiture.

EMPLOYER COSTS

Having looked at the advantages and savings associated with health maintenance, and the health care benefits package required for a medium size organization to remain competitive, the next area to consider is actual costs to an employer. Using the Dietrich study, a survey by the Institute of Electrical and Electronic Engineers (IEEE)[5], and cost information provided by two major carriers[6,7] as a baseline, premium rates were evaluated. For the comparison, the typical employee is assumed to have the entire plan for himself and his family. Based on this assumption, the mean premium rate per month for an R&D employer was $190.37 in 1986. With an estimated medical inflation rate of 7.7% annually[8], a mean average of $205.03 can be expected in 1987. Remember, this is the cost for just a physical health care package, and includes no intangible maintenance program.

Maintenance programs are relatively new, having been instituted by industry as a result of information on stress management, nutrition, exercise and similar areas becoming visible to the general public's consciousness. These programs, geared to enhancing productivity, can be made available in a range of forms from simple exercise facilities to complete health promotion programs. Some programs are free, such as those available through government services for drug and alcohol abuse, while other health promotion and employee assistance programs (EAP's) contract with businesses directly.

Providers generally tailor their programs to offer classes and seminars conducted at the employer's facility. However, since the employer is probably not in the best position to select what his specific requirements dictate, the preferred approach is to contract with a provider to first perform an indepth evaluation of employee needs. After the evaluation is completed, the provider will recommend not only a specific program, but the specific cost saving and productivity increases that can be expected.

Not only can a dollar worth be placed on health care maintenance by an outside provider, but the significance of direct cost control in the form of competition among providers is of major significance when the businessman makes his final decision. Additionally, each year, based on corporate growth and turnover, a new decision can be made relative to the level of service selected. Therefore, even a short-term program can have residual benefits to a company in succeeding years, and these benefits can also be readily calculated. In addition, once set up, maintenance responsibilities can be taken over by in-house personnel if the benefits derived exceed the costs involved.

Since it appears that virtually any health maintenance program will increase productivity and "wellness", how can the combination of health care and health maintenance be used to the advantage of the corporation? Specifically, the advantages derived by a medium size research and development corporation consisting mostly of a well population of older engineers and scientists with advanced educations.

THE BOTTOM LINE

Before reaching a decision on the overall package, some corporate factors should be weighed. Most research and development companies are considered "high tech". They tend to struggle when small and are maintained by outside sources when large. The medium size high tech corporation enjoys a unique position in industry. To reach its size it had to be successful to the point that it has overcome the business base, cash flow and management problems that plague smaller businesses, while at the same time building a strong enough base to resist takeover attempts. To a businessman this means two things, good short-term liquid assets and the flexibility to take considered risks. How does this position effect a decision in health care or maintenance programs?

Businesses have basically two choices, purchase a health care policy or be self-insured. Prudence dictates some form of insurance policy for a company be acquired to cover catastrophic illnesses. However, for a medium size company with sufficient cash reserves, self-insurance would seem an attractive choice. In fact, the largest percentage of medium size design or construction, consulting, industrial, utilities, and research and development firms prefer self-insurance over all other types[9]. What this means is successful companies generally feel they pay less if they are self-insured. Sachs/Freeman Associates, Inc.[10], a medium size R&D firm has studied employee health care costs since 1983, and has experienced an average annual savings of $150,000, and they are not totally self-insured. Fully 42% of all R&D firms are totally self-insured[11].

Sachs/Freeman Associates, Inc. selected a maximum liability coverage policy which insures against major illness for an individual in which health costs exceed $35,000. For this coverage, the firm pays about $8 per month for an individual, or $18 per month for an employee and family. Family coverage is paid by the employee while individual coverage is company paid. The $96 per year premium per employee represents less than 1% of the profits which an employee should generate in one year and around $2,188 less than what a premium might cost from an insurer.

CONCLUSION

Based on information presented in this report, a medium size research and development company is best advised, from a business perspective, to make the following minimum decisions regarding health care.

Basic and major medical
Family or employee coverage
$100 personal and $300 family deductible
Eligible after 31 days
80% pregnancy coverage

Outside health maintenance service initially
Self insurance
Catastrophic illness coverage outside

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