CORPORATE WELLNESS PROGRAMS: A COST CONTAINMENT STRATEGY

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Scope and Method of Study: The scope of this report involves a comprehensive look at the corporate trend toward wellness in the workplace. Because of the severity of rising health care costs and subsequent impact on profitability, corporations are turning toward containment strategies that enable cost increases to be controlled. An indepth study was conducted on existing corporate wellness programs and their effectiveness in terms of reducing health care costs and improving overall productivity. The information presented in this report was collected through extensive secondary research.

Findings and Conclusions: Overwhelming evidence exists to support the belief that corporate wellness programs are an effective cost containment strategy against rising health care costs. Successful wellness programs have proven not only that healthy employees use the health care system less often, but that they are also more productive and absent less frequently than unhealthy employees. These direct and indirect benefits translate into reduced medical costs and improved productivity for the company.

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I. INTRODUCTION.

Health care costs in the United States are rising faster than the cost of living index and are now one of the key concerns among corporate managers. Over the past 15 years, health care expenditures have increased an astounding 467% and are expected to reach \$1 trillion by the year 2000 (Howard, 1987; Moretz, 1988). Moreover, medical costs now compose more than 13% of the gross national product. This means that on average, more than 13 cents of each dollar spent is used to pay for physician and hospital charges, prescription drugs, and other health care needs (Coors, 1990). Corporations, unfortunately, bear much of this cost burden since approximately 85%-90% of all health insurance is purchased through group plans (Luthans and Davis, 1990)). These costs are having a tremendous negative impact on corporate profits and must be contained if corporations are to remain alive and competitive.

History has shown that the vast majority of corporate health care dollars have been spent in the area of illness treatment, not prevention. In 1987, 99.7% of health care expenditures were dedicated to the treatment of ailments, whereas a mere .3% were focused in the areas of prevention and wellness (Sanders, 1989). Interestingly enough, the American Council of Science and Health reports that approximately 50% of all illnesses and deaths are preventable and related to lifestyle. The top five behaviors leading to bad health are: 1). abuse of alcohol, tobacco, and other addictive substances, 2). neglect of preventive care, 3). hazardous behaviors such as driving while intoxicated, unsafe sexual practices, reckless driving, and not using safety belts, 4). poor dietary habits, and

5). lack of exercise and sleep (Stomper, 1991/1992). By practicing good health habits (e.g., not smoking, eating balanced meals, wearing seat belts, drinking responsibly, avoiding drugs, applying stress management techniques, and exercising regularly) individuals can reduce their need and use of the health care system. In fact, an estimated \$30 million could be saved in medical expenses if all U.S. adults were at least "average" in terms of physical fitness (Cook, 1990).

Fueled with the knowledge that half of all illnesses and deaths are avoidable, corporate managers are looking to wellness as the "last frontier" in containing rising health care costs (past efforts geared at cost sharing, utilization review, and negotiating provider prices failed to yield the desired results). Wellness requires a proactive management focus and involves a formalized approach to preventive health care that positively affects employees and the bottom line. Such preventive health care is based on the premise that employees are assets worthy of investments—investments geared toward building healthy, self-assured, confident, and prepared employees. By creating healthier people and giving them access to early detection programs, medical risk factors can be lowered. While other cost management strategies are designed to make more efficient use of the health care system, wellness is intended to keep employees healthy so they don't need to use the system at all.

Wellness programs vary considerably in depth, format, and design. However, most wellness programs today encompass at least one or more of the following: a staffed, on-site fitness center (equipped with treadmills, bicycles, rowing machines, and other

specialized equipment), weight loss clinics, smoking sessation seminars, stress management classes, back care and/or cardiac care seminars, mental health counseling, and substance abuse counseling. Some corporations also extend their programs to include miniseminars on subjects such as grief, codependence, meditation, child molestation, etc. Most wellness programs share a common practice of using incentives to entice workers to participate; including awards, cash bonuses, compensation for non-absenteeism, competitions, and recognition for special wellness achievements. At the same time, an increasing number of employers are penalizing the workforce for being overweight, smoking, and not wearing seatbelts.

In general, significant anecdotal evidence and a growing body of statistical data substantiate the positive effects of wellness programs on curtailing health care costs. Concrete proof exists that wellness programs pay off in lower health care costs, reduced absenteeism, increased productivity levels, and higher morale (Barley, 1990).

II. SURVEY OF LITERATURE.

Causes of Rising Health Care Costs.

Several factors account for the exhorbitant rise in health care costs in the United States. Some of the primary contributors are rising labor costs in the medical industry, the high cost of medical technology, rising malpractice insurance, over-abundance of hospital beds, overutilization of fee-for-service medicine, rising costs of widespread transplants, rising costs of acquired immune deficiency

syndrome (AIDS), and consumer attitudes toward health care (Luthans and Davis, 1990).

Labor costs of health care workers are rising at a tremendous rate. This is due, in part, to the fact that the health care industry is inherently labor intensive, with 75% of all health care expenditures going to payroll and benefits. Health care workers, most notably nurses, have been underpaid for years and are now demanding their worth in the form of higher salaries. In the past, salaries for nurses flattened out after a mere five years on the job. As a result, many nurses were forced to leave the field to work in other areas of health care or to pursue other kinds of careers. Health care providers have tried to deal with subsequent shortages by raising nursing salaries and offering competitive benefit packages in an effort to make the profession an attractive one (Luthans and Davis, 1990).

The rise in overall health care costs is also attributed to the high cost of medical technology. Hospitals are often eager to have the newest available technology for three reasons: to provide the best possible care to patients, to maintain a hospital image as modern and competent, and to keep the best doctors (since most of them have multiple hospital privileges). Doctors also contribute to the high cost of technology because, although it is not always medically necessary, applying expensive technology provides a useful record in fighting potential malpractice claims. The American Medical Association refers to these "just in case" procedures as defensive medicine and estimates put the costs of such practices at approximately \$15 billion a year (Luthans and Davis, 1990).

Rising malpractice insurance rates are also influencing the rise in health care costs. Consumer awards in a medical malpractice case often times result in millions of dollars. Malpractice premiums now range from \$2000 per year for family practitioners in rural areas to over \$100,000 annually for some specialists in large metropolitan cities (Luthans and Davis, 1990). These costs ultimately get passed down to the average consumer of health care in the form of higher fees-for-services.

The over-abundance of hospital beds is also putting a burden on health care costs. Hospitals have been unable to decrease bed and/or room capacity in response to reduced demand for inpatient services. This excess capacity raises the average cost per patient per day. There simply aren't enough patients among which hospitals can divide their fixed costs.

The excessive number of hospital beds can be partially traced back to the Hill-Burton actions taken by Congress right after World War II. During that time, sufficient health care services and facilities were unavailable throughout the United States. Congress reacted by providing the necessary funds to construct regional and community hospitals throughout the country. Although enacted with good intentions, this policy ultimately backfired because it failed to respond to some very significant demographic changes over time.

Over-capacity has also prevailed because new technologies provide outpatient alternatives for many kinds of treatment and thus, reduces the inpatient occupancy rate as well as the average length of stay. Additionally, over-capacity in many small community hospitals is due mostly to the fact that they can't possibly afford the

equipment and space that new technologies require. Consequently, many patients are utilizing large metropolitan care centers and forcing many small, rural hospitals to close. By the year 2000, 40% of all hospitals in the U.S. are estimated to have closed or been converted for other purposes (Luthans and Davis, 1990).

Over-utilization of fee-for-service medicine is another factor influencing health care costs. The fee-for-service system and the structure of most health care benefit plans, unfortunately, tend to promote overuse of service. The more a doctor performs, the longer a hospital stay lasts, and the more prescriptions are written, the more money the provider of these services makes. In fact, a study conducted by Dr. Robert Brook, a researcher for the Rand Corporation, revealed that 20% of all medical procedures are unnecessary (Luthans and Davis, 1990). In other words, a built-in profit incentive exists causing providers of health care to be motivated not by a client's health, but rather by his/her sickness.

Widespread organ transplants have also placed a burden on health care costs. Organ transplant costs are extremely high and are primarily borne by insurance companies, employers, and hospitals. The total cost each year for such operations exceeds hundreds of millions of dollars. If the organ supply increases, the total cost could jump to billions of dollars a year. These costs get passed onto the consumer and are felt by the patients.

Health care costs are also being affected by the overwhelming costs associated with acquired immune deficiency syndrome (AIDS). The estimated total cost of caring for AIDS patients in 1987 was

\$1.1 billion; by the end of 1991 that cost had climbed to over \$16 billion (Luthans and Davis, 1990). Every American is paying the price for this deadly disease through higher medical costs and insurance premiums as hospitals quickly learn that caring for AIDS patients is a money losing proposition. Hospitals are shifting the financial burden of their AIDS losses onto their patients by raising prices for services unrelated to AIDS.

The AIDS crisis is not only raising hospital costs because of testing and treatment, but in prevention costs as well. For example, one large hospital claimed that the cost of the now standard rubber gloves alone added more than \$500,000 to its budget in one year (Luthans and Davis, 1990).

U.S. consumer attitudes have also influenced rising health care costs because Americans have come to believe that everyone has a "right" to the highest quality health care. Consequently, health care providers in major metropolitan areas are forced to provide the most modern, technically advanced care available to alleviate the risk of being sued.

Many experts attribute cost increases in part to unnecessary and/or excessive use of medical services by Americans, as well as to their lack of responsibility in caring for their own health. Medical economists estimate that 70% of clinic visits are for common colds, upset stomachs, and other conditions that in many cases could be easily treated without professional care (Luthans and Davis, 1990). People who seek care despite the fact that they are really not sick have been termed by the American Medical Association as the "worried well". Americans, in general, have been labeled the most

irresponsible consumers of health care in the world because of their failure to adopt healthy and positive lifestyle habits.

In general, the effect of rising health care costs is strongly inhibiting corporate profitability and growth. Only one of the above factors attributing to the increase in health care costs is controllable, in part, by corporations: consumer attitudes. As a result, many firms are adopting a preventive health and wellness approach to contain skyrocketing medical costs. This approach seeks to change consumer attitudes and to minimize the use of the overall health care system through awareness and healthy lifestyle habits.

Corporate Impact of Rising Health Care Costs.

As mentioned, rapidly rising health care costs are draining corporate profits. According to the Wellness Council of America, 25 cents of every dollar of net profit for many employers goes to pay for health benefits (Barley, 1990). If estimates are accurate, American businesses will pay \$350-400 billion in 1993 to cover employee health care expenses for that year alone (Harris, 1989). To make matters worse, the indirect costs that are more difficult to measure (i.e., absenteeism, replacement and training costs, productivity losses, and decreases in morale) are considered in many cases to exceed the direct costs of caring for illness. Alarmingly, the diseases that are *lifestyle related* remain the largest drain on corporate health care dollars (Kaman, 1987).

The American Heart Association estimates that the cost of cardiovascular disease nationally exceeds \$56 billion and that each year, according to the National Chamber of Commerce, businesses

lose an estimated 52 million work days to heart disease alone (Kaman, 1987). When costs related to retraining, time lost from work, and employee replacement are factored in, it is clear that cardiovascular diseases account for a substantial portion of the health care costs borne by businesses.

Cardiovascular diseases kill almost one million people each year, 300,000 of which are typically among employees in their pre-retirement years (Henritz and Bramwell, 1989). Many of these deaths and diseases could be avoided through awareness and education on positive lifestyle habits.

Smokers in the workplace have adverse effects on corporate profitability as well. Cigarette smoking is related to 85% of all lung cancer cases and 80-90% of lung illnesses such as emphysema. U.S. businesses annually lose some \$26 billion in productivity and another \$8 billion in medical costs due to employees who smoke (Employee Benefit Plan Review, 1987). The average cigarette smoker loses an estimated 30 minutes a day from work time pursuing the Additionally, employees who smoke tend to cost their habit. employers \$624 more each year in medical care costs than nonsmokers (Modern Office, 1988). Moreover, the absentee rate of smokers and their likelihood of being hospitalized is about 50% higher than non-smokers (Employee Benefit Plan Review, 1987). A study conducted by William Weis of Seattle University also found that smokers in the U.S. have twice the accident rate of non-smokers because of such factors as carelessness caused by attention loss and hand interference (Modern Office, 1988).

Lack of seat belt usage, obesity, inability to cope with stress, and alcohol abuse are four risk factors also expending a large portion of corporate health care dollars. Sixty nine percent of all vehicle deaths and accidents in the U.S. are preventable through the proper use of seat belts, yet many employees choose not to wear them. In fact, health care costs for employees who fail to buckle up are extremely high (they spend 54% more days on the average in the hospital) compared to those employees who wear seat belts (Sherman, 1990).

Obesity in the workplace absorbs health care dollars too. Health care costs of obese employees are approximately 11% higher than average weight employees and they tend to be less productive (Sherman, 1990).

In total, stress and alchohol problems cost corporations over \$40 billion annually. Fourteen percent of all employee medical claims are stress related, the cost of which to corporations is at least \$20 billion annually (Richardson, 1990). Costs associated with alcoholism and/or alcohol abuse among employees are exhorbitantly high as well. Because of counseling costs, lost productivity, absenteeism, and low morale, it is estimated that the alchohol cost burden to corporations is over \$25 billion annually (Hembree, 1987).

Dependent health care costs (i.e., spouses and children of employees) account for 40-60% of employer health care expenditures and thus are worthy of being noted (Employee Benefit Plan Review, 1990). By the year 2000, U.S. corporations could be paying more than \$230 billion a year on dependent care costs alone, making dependent health benefits one of the biggest health care concerns of

businesses (Ham, 1989). Family problems (i.e., lack of day-care, financial difficulties, and adolescent alcohol abuse) affect the workplace in the form of absenteeism, tardiness, poor quality work output, and other behaviors that result in lost productivity. Firms are beginning to recognize that the health of a company is closely related to the physical and emotional health of employees and their families.

Corporate health care costs are not only impacted by employee and dependent lifestyles/behaviors, but also by the changing demographics of the U.S. employee population. One of the most significant demographic trends beginning to impact corporate health care involves the aging babyboomer generation. By the year 2000, boomers (who make up a significant portion of the employee population) will have filled the 35-54 year old bracket (Dychtwald and Gable, 1990).

As babyboomers mature, companies will be faced with the inevitabilities of an aging workforce. These maturing employees are expected to become more accident prone and potentially develop chronic illnesses such as cardiovascular disease, arthritis, cancer, diabetes, etc.--all of which translate into higher corporate health care costs. It is a fact that older workers get sick more frequently than younger employees, experience chronic illnesses more often, and use the health care system more frequently. Moreover, adults over 65 years of age are nearly three times as likely as the total population to be hospitalized, which also means higher health care costs since many babyboomers won't be retiring as early as others have in the past (McDonald, 1990).

In summary, employee and dependent health is a major concern of business organizations today primarily because of the increases in health care costs and the impact of health on productivity. Corporations are looking for ways to contain these skyrocketing costs and improve overall productivity through employee health prevention strategies.

Corporate Wellness Trends.

According to Association Management, a movement toward "healthy" companies is one of five dominant trends facing organizations today (Kurent, 1990). Spurred by evidence of a correlation between lifestyle and medical claims, more and more employers are focusing on preventing illness and offering wellness programs in an effort to contain rising, out-of-control health care costs. Companies are learning that helping employees gain and maintain good physical and emotional health through wellness provides long-term benefits.

Today, over 90% of the 500 largest companies have some form of health promotion program (Levine, 1988). As indicated in Table 1 on the next page, the most popular programs target health conditions that can be improved by changes in behavior, such as smoking cessation, health risk appraisals, back care, and stress management (Powell, 1989).

Participation in wellness programs is an effective way to alter behaviors that lead to illness or death and can do much to improve the health status of employees. Staying healthy is simpler than most people think. Controlling cholesterol intake and quitting smoking are two tasks that can greatly improve a person's health. (Two cigarettes a day can double a person's risk of contracting lung cancer and for every 1% rise in cholesterol above 150, the risk of heart attack increases 2%). Exercise is also simple and important. Three hours a week of moderate exercise such as walking, jogging, tennis playing, bicycling, etc. is sufficient enough to promote good health in both the short and long run (O'Reilly, 1989).

TABLE 1
MOST POPULAR WORKSITE WELLNESS PROGRAMS*

	Percentage	of
Program	Companies With	Program
Smoking Cessation	36%	
Health Risk Assessment	30%	
Back Care	29%	
Stress Management	27%	
Exercise or Fitness	22%	
Off-the-job Accident Prevention	20%	
Nutrition	17%	
Hypertension Control	17%	
Weight Control	15%	

^{*}Based on a survey of 1,358 corporations by the U.S. Department and Human Services, 1985.

Source: Wellness Management, "The Five Essential Characteristics of Successful Wellness Programs", Fall/Winter 1989, p. 1-3.

According to a study conducted by Keaton (1990) of the largest employers in the U.S., the following information pertaining to wellness was revealed: 1). more than 32% of the companies had established health promotion policies and objectives, 2). approximately 44% offered to pay for programs to help employees quit smoking, 3). approximately 24% performed on-site screening to

detect employee health problems, and 4). more than 28% paid for physical fitness facilities.

The trend toward wellness is not only serving as an effective strategy to help promote positive lifestyles among all levels of the organization, it is also serving as a proactive way to deal with the aging babyboomers. The changing demographics of the employee population is calling for radical reform in the way that corporations promote their worksite health care systems. The "graying of America" indisputably means higher health care costs and has made corporate wellness programs an integral employee benefit that employers cannot afford to be without. Wellness programs that promote healthy lifestyles and fitness through proper vehicles can help contain health care costs and keep aging workers on the job.

Wellness programs are being well received by aging babyboomers. As they mature, babyboomers are becoming more and more concerned with health and wellness primarily because of two factors: age and predisposition. In middle and older age, maintenance of health is naturally a crucial concern among individuals as their chances for developing chronic disease increases. Additionally, the well-educated babyboom generation carries with it a predisposed interest in health promotion and substantial knowledge about the role of personal behavior in health maintenance (Dychtwald and Gable, 1990).

Babyboomers are already showing an increased interest in exercise and fitness. For example, babyboomers are joining health clubs, participating in exercise classes, and engaging in a variety of sports. Twenty six percent of boomers claim that they jog regularly,

29% enjoy bicycling, and 23% do calisthenics. Overall, the proportion of babyboomers who regularly swim, dance, bicycle, jog, ski, and participate in team sports is twice that of the rest of the population (Dychtwald and Gable, 1990).

Not only are babyboomers aging, but fewer babies are being born. As a result, U.S. corporations are about to experience the worst labor shortage since the 1850s. The number of highly skilled workers available for hire are expected to fall short of demand (Hoffman, 1990; Waldrop, 1991)). In the near future, corporations will be competing heavily for the best employees among a qualified few.

Fortunately, wellness programs provide a strategy for coping with the anticipated labor shortage. Wellness programs are considered to be an effective tool not only in recruiting the most qualified workforce, but also in retaining existing employees. Benefits that improve the quality of life, or self-improvement benefits, are generally treasured by employees. This is evidenced by the fact that one out of every five labor strikes is conducted over benefit disputes (Hoffman, 1990). Moreover, many young professionals interviewing for jobs tend to be health conscious and are enticed by the idea of wellness in the workplace. Wellness programs, therefore, give a company a competitive edge when it comes to retaining and recruiting workers.

Wellness programs have also received limited recognition among some corporations as a means for containing dependent health care costs. Businesses today are beginning to experiment with techniques for directly involving families in health activities and encouraging them to make choices designed to improve health and

well-being and help lower health care costs. For example, Sentry Insurance Co. offers an adolescent weight management program and a water safety course for 13 and 14 year olds (Employee Benefit Plan Review, 1990).

The overall wellness trend is to consciously structure an organization to support maximum health and development with total commitment. Corporations are recognizing wellness as an integral part of the corporate culture. Wellness programs are viewed as an effective way for management to contain costs and to show the employees that the company really cares about them.

Wellness Benefits.

Many firms with wellness and/or fitness programs have reported that for every dollar spent on wellness, they save at *least* \$2-4 in related health care costs (Green, 1989). Indirect benefits from wellness programs (i.e., decreased absenteeism, enhanced morale, improved productivity, etc.) have been realized as well. A listing of the most commonly cited wellness benefits can be found at the top of the next page(Sherman, 1990).

Clearly, wellness programs add value to a corporation in terms of being able to reduce health care costs and improve the well-being of the entire organization. Often times, the savings that result from the indirect benefits of wellness programs outweigh those of medical savings alone. Common sense reveals that healthier employees are more productive and cost less to employ.

BENEFITS OF CORPORATE WELLNESS PROGRAMS

Fewer Medical Claims/Reduced Health Care Costs
Reduced Workers Compensation Claims
Increased Performance and Productivity (Fit workers
have higher production capacities--approximately
five percent higher)

Decreased Absenteeism

Decreased Turnover

Increased Morale

Improved Job Satisfaction

Decreased Accident Rates (Unfit workers are two to three times more vulnerable to industrial accidents than their fit colleagues)

Improved Corporate Image

Improved Recruiting Strategies

Successful Wellness Programs.

The most successful and encompassing health promotion programs are those that are comprehensive in nature (Holt, 1988). These programs go beyond the fitness orientation to include factors that affect all aspects of optimal health, to include physical, emotional, spiritual, intellectual and social dimensions. Wellestablished and successful comprehensive wellness programs include the following design components:

Goals/Objective Setting
Evaluative Measures
Awareness Measures
Strong Leaders/Facilitators
Participative Incentives
Wellness Culture Focus
Communication/Marketing Strategies
Employee Involvement

Successful programs begin with the establishment of goals and objectives to form the foundation for lifestyle and behavioral changes in the organization. By definition, wellness goals (which can take years to achieve) are long-range, non-specific statements which give the corporation direction and purpose in terms of promotional health. Objectives are the means by which specific health goals/targets are to be achieved and are stated in a fashion that emphasizes the health style changes to be accomplished by the employees. A wellness program, like any other, is likely to be less than effective if devised without clear goals and objectives.

An evaluative component is equally important as objective setting for the success of any health promotion program. Program evaluation, although often times dangerously considered as an afterthought, can be just as exciting as program initiation. The secret is to develop the evaluation component while program planning is in the beginning stages.

The evaluative process is an ongoing, systematic one and serves multiple purposes. Evaluations are used to determine goal achievement, to ensure the efficient use of funds, to detect and solve problem areas, and to justify continued program operation and future expansion. Effective evaluations can provide valuable information regarding participants as well as allow prompt redefinition of the target group, objectives and goals when necessary.

According to Holt (1988) the best evaluative programs are incorporated using the following seven steps:

- 1. Set clear program goals and objectives that are measurable and parallel from the onset.
- 2. Determine what information is needed to evaluate the program. Everyone involved in the program will desire specific data to answer his/her concerns. Evaluation is viewed differently by an individual in relation to his or her position and role in the program. For example, the data required from the financial officer will be different from that required from a program participant. In planning the evaluation component, eliciting desired information from all involved in the program is essential.
- 3. Decide who will collect the data. Attention to this step early on will decrease confusion and the likelihood that necessary data will fail to be collected.
- 4. Determine who will perform data analysis. This is important so that the analyzer can have input into the development of the necessary tools and the evaluation process as a whole. The analyzer may be employed internally within the organization or externally, as long as he or she is a professional statistician and researcher.
- 5. Determine when to perform the evaluation. As mentioned previously, evaluation is an ongoing activity that begins with the inception of the program idea. The formal evaluation, however, will be done in accordance with the content to be derived. For example, surveys may be conducted at specified intervals, while compliance is an ongoing assessment.
- 6. Specify and/or develop tools for data collection. This step involves development of evaluation tools that will answer all questions posed about the program. The two most frequently used tools for wellness program evaluation are record-keeping and surveys. Record-keeping procedures accumulate data to measure impact and oucome and are ongoing. Surveys, on the other hand, supply additional data with specified time limits. Regardless of the tool chosen, it should be relevant, reliable, and valid. Validity assures accuracy in collecting required data while reliability measures consistency.

7. Prepare a written report of the evaluation findings. Include suggestions for change and improvement in the report. Send copies of the evaluation to all concerned people.

Successful wellness programs involve not only an evaluative component, but an awareness component as well. According to the National Wellness Association, creating employee awareness of potential benefits/harms associated with specific health related actions (e.g., smoking, obesity, etc.) is absolutely critical to program effectiveness. Awareness efforts not only increase health knowledge, but also impact the attitude and value system of the employee with respect to health promotion. Activities designed to help employees personalize information so that subsequent change is possible have proven to be successful (Caudron, 1990).

The most notable way to achieve health awareness and personalization, as well as to determine the existing health status of employees, is through health risk appraisals (HRAs). HRAs are critical to successful wellness programs and have been found to overcome the lack of involvement by those employees known to possess high health risk factors (e.g., high blood pressure, high cholesterol, obesity, etc.) (Caudron, 1990). Appraisals, sometimes referred to as assessments, are determined through the use of questionnaires that provide statistical evaluations of a person's health risk status. Typically, such questionnaires solicit information from employees about their pulse rate, blood pressure and cholesterol levels, as well as behavioral issues related to diet, smoking, and exercise.

When an HRA is used, information relating to employee medical histories and lifestyles are compared to national statistics on the causes of death/illness of others in the same age and gender group. The results are then calculated and employees are given information about their potential for premature death or disease. Some HRAs calculate an employee's "health" age and compare it to his/her actual chronological age. For example, a 28 year old woman may be assessed as having a 40 year old health age because of negative lifestyle habits such as smoking and overeating. Such feedback information has proven to be a strong motivator for changing life threatening behavior, especially when counseling is used as a follow-up measure (Caudron, 1990).

Before an HRA should be seriously considered, a thorough review of prior health insurance claims of employees is essential in order to discern patterns that might effectively be addressed through health promotion (Moncreiff, 1991). Once accomplished, the most effective way to select an HRA is to first consider: 1). the purpose for which the risk assessment is intended, 2). the nature of the population to be assessed, and 3). the overall goals of the company's health promotion efforts (DeFriese, 1987). The appraisal should include sufficient questions to enable the calculation of risk for the major causes of death and disability, and it should be in a format that is easy to understand.

At times, the selection of an HRA requires the services of outside experts. Standardized health surveys can be purchased for approximately \$500, but a professionally developed customized

survey can cost as much as \$5,000-\$10,000, depending on the complexity of the survey objectives (Terry and Fowles, 1989).

In addition to building awareness, successful programs also depend upon skillful facilitators who know how to assist employees in bringing about positive lifestyle changes. Next to the participants, the facilitators/teachers are the most important people in wellness They play an important role in motivating participants to apply behavior modification techniques that are presented in the (Terry and Fowles, 1989). The most program facilitators/teachers expose employees to a variety of techniques to help them accomplish personal goals. This "variety" allows participants to choose those techniques which are most appropriate for their personalities, learning styles, and needs. Behavior modification, values clarification, checklists, and self-assessment contracts can all be used to achieve success.

Corporate managers must understand that expecting significant changes early on from incorporating techniques is self-defeating and unwise (since the employee may become discouraged, not comply, and eventually drop out of the program). Behavioral change is best viewed as a gradual process in which the goal is accomplished in step-by-step progression. For example, nutritional assessment may reveal that an employee's fat intake needs to be reduced. High fat foods, in this case, should be eliminated slowly by switching to substitute foods, such as pretzels in place of potato chips. Most importantly, effective facilitators teach employees to accept personal responsibility for changing their own behavior.

Wellness facilitators that possess interpersonal and communication skills, flexibility, friendliness, open-mindedness, and enthusiasm have been found to be most effective. Additionally, the best wellness coordinators exhibit objective judgement, have a sincere desire to help others, provide encouragement, and are able to criticize tactfully when necessary. Above all, the most effective facilitators are those that make good role models, are dependable, and are employee-centered.

Support for clients must also be inherent in the design of wellness programs if they are to be successful. Support systems often include family, organizational and peer support systems (Holt, 1988). Family involvement is important since it provides an early foundation for change. Additional support through buddy programs that provide motivation and support have also been met with good results. Self-help groups, too, help employees stay with a program designed to reach specific goals.

Organizational support is also necessary to complete the support foundation. Successful wellness organizations provide environmental support, such as removing cigarette machines from buildings, designating smoke-free areas, removing "junk food" from vending machines, adding juice machines, evaluating the nutritional values of foods offered in cafeterias, and re-arranging work schedules to allow employees to attend exercise, educational, or group support sessions.

For any wellness program to be truly effective, it must provide employees with an incentive to participate (Powell, 1989). Without incentives, employers often find that wellness programs attract and are used only by those employees who need them least (i.e., those that are already physically fit rather than those who are considered high risk employees).

Incentives take various forms and need not create a significant expense for an employer. One form of incentive that has emerged recently involves tying wellness into health care benefits. For example, some wellness incentives link cost-sharing features within the medical plan (e.g., lower deductibles or premiums for employees who are non-smokers and/or those who meet the minimum norms for weight, cholesterol, blood pressure, etc.). Under flexible benefit arrangements, employers take an approach whereby they provide extra "flex" dollars (or credits) to employees who meet specified standards.

Other types of incentives include tangible rewards (e.g., cash bonuses, trophies, or gifts); peer support (e.g., teams for weight loss programs or adopt-a-smoker campaigns); and personal recognition programs to acknowledge superior or improved performance toward a wellness goal. Mesa Limited Partnership, one of the largest independent producers of oil and gas in the U.S., provides incentives to it's workers by passing along health care cost savings to employees--each employee can earn up to \$700 a year for perfect attendance records, regular exercise, and other positive lifestyle habits (Bruzzese, 1990).

A wellness culture is also required for successful program implementation and must be developed in the workplace if wellness is to be recognized and accepted by employees. A strong culture begins with support and commitment from top level managers

(Mo, 1991). In addition to setting examples and serving as role models, corporate level managers who make wellness a priority and build it into the platform of the organization are the most effective. A climate that emphasizes personal responsibility and healthy behavior must be bred into the corporate culture--this institutional climate in turn positively affects healthy behavior physically, emotionally, and intellectually.

Wellness programs, to be successful, must also be approached from a business perspective, especially in the areas of communication and marketing (Caudron and Rozek, 1990). By and large, wellness programs are received as "good news" by employees --which makes communication a fairly easy task. The role of communication is becoming increasingly important as employers take a more strategic approach to wellness. Communication ideas that have worked well in wellness programs include: monthly newsletters, paycheck stuffers, posters (in hallways, elevators, bathroom stalls, etc.), brochures, table tents on cafeteria tables, "buckle-up" signs in parking lots, weekly themes, seminars, wellness bulletin boards, and point of sale information cards. In addition, corporate marketing efforts have been made through job fairs, health fairs, wellness associations, public announcements, and annual reports.

Successful wellness programs also involve soliciting input from employees (Caudron and Rozek, 1990). Employees who are asked to participate in a firm's decision making process tend to be more motivated and more productive. Additionally, since employees are the ultimate users of the program, they tend to provide the most

useful advice in terms of motivations and desires with respect to program participation. According to the National Association of Suggestion Systems (NASS), employee participation programs saved organizations \$2.2 billion in 1988; part of that figure included suggestions made by employees regarding improvements to existing wellness programs (Nichols, 1989).

Wellness programs, in general, are most successful when treated like a business where goals and objectives are established as well as strategies to meet those objectives. Programs that are not all encompassing in this way have proven to be less than effective.

Employee Motivations Toward Wellness Participation.

The establishment of a corporate wellness program is not complete or useful without a full understanding of what does and does not motivate employees to participate. Since less than 10% of employees account for 30-60% of a firm's health costs, it is critical that the motivations of these high risk employees be considered in wellness program design. Notably, the majority of health care savings stem from transposing unhealthy employees into healthier ones with positive lifestyle habits (Dentzer, 1990).

Health risk appraisals (HRAs) are key motivators for those employees considered to be high risk and not yet involved in the wellness concept. Because the HRA provides a person with information about their potential for pre-mature death or disease, it effectively hits home with most individuals characterized as possessing one or more risk factors (i.e., high cholesterol, over weight, etc.) Frequently, when people hear health warnings and

statistics on television, they tend to ignore them because the warnings are always referenced to another person. However, when people read a personalized assessment that indicates their own genuine risk of heart attack based on heredity, cholesterol, and blood pressure, the warnings take on new significance. As a result, those individuals with high medical risk factors become motivated to improve their health status by becoming more involved in wellness programs.

On-site medical screenings also provide a personalizing effect for high risk employees. Screenings for cholesterol, glaucoma, diabetes, high blood pressure, breast cancer, and sickle cell anemia become catalysts that interest more workers in the wellness concept. In most cases, employees are simply unaware of their health status. For example, in a screening of cholesterol levels at the Sunseeds Corporation, one former employee discovered that his cholesterol level was 275. Prior to receiving that information, he thought he was healthy. After meeting with his physician, he learned that his cholesterol level was caused by a high stress lifestyle and a high fat diet. This employee then became more involved in Sunseed's wellness program based on the newly acquired information regarding his health (Rozek, 1990).

At yet another company, 64% of the employees screened for cholesterol levels had a cholesterol count of over 200 in 1989. In 1990, only 32% had those results. The cholesterol reduction was attributed to an increase in health awareness levels as well as changes in lifestyle habits resulting from participation in the on-site wellness program (Madlin, 1991).

For some companies, offering cash incentives has increased employee participation in wellness programs significantly. Mesa Limited Partnership (MLP) offers it's employees \$240 annually for simply completing a written HRA and submitting to a glucose, cholesterol, and blood pressure check. They offer other forms of cash incentives as well for goal achievement, being a non-smoker, having zero absences in a six month period, etc. In 1986, Mesa paid \$115,000 in bonuses to employees, spouses, and dependents for wellness accomplishments. Approximately 70% of it's employees actively participate in MLP's wellness program and it is believed that cash incentives contribute significantly to the high participation rate (Keaton and Semb, 1990).

Results of MLP's program have been dramatic. In 1984, Mesa management estimated that employees who did not participate in the fitness program averaged \$434 per person (annually) in medical costs. Employees who participated averaged only \$173 each, an annual savings of about \$200,000 in company wide medical expenses (Keaton and Semb, 1990).

In addition to cash incentives, some employees are motivated by other forms of financial incentives. For example, at the Adolf Coors Company, employees who take the HRA questionnaire and are found to have a health age that is the same or less than their chronological (actual) age, receive 90% medical coverage, as opposed to 85% coverage for unhealthier employees. This incentive, coupled with others, has enabled the Coors wellness program to be one of the most well received programs in the nation (Caudron, 1990).

U-Haul, in an effort to encourage employee participation among individuals with poor lifestyle habits, offers to waive it's health insurance co-payment of \$5 each bi-weekly pay period for a single employee (\$10 for one with a covered spouse) who does not use tobacco in any form as well as meets weight guidelines. For U-Haul, the presence of an incentive increases participation by unhealthy employees, increases adherence to a specific behavior, and increases follow through by 10-20% (Madlin, 1991).

In summary, high risk employees appear to be most motivated to participate in wellness programs when their awareness levels are increased through HRAs, on-site screenings, and other informative methods such as seminars, brochures, etc. Employees characterized as high risk often times are unaware of their current health status, or at least unknowledgeable about the consequences of their health status and negative lifestyle habits. Once health information (i.e., health age, death/disease potential) is personalized and once employees understand the degree of control and responsibility that is within their power to improve their health, they tend to express more interest in wellness programs and become more involved.

Problems With Wellness Programs.

According to the literature, some wellness programs are designed or implemented with inherent weaknesses that cause inefficiencies or ultimate program failures. Several known problem areas have been identified in wellness programs and include: failure to treat wellness programs as a business, insufficient and inadequate use of resources, failure to include gender differences and

dependents in program design, low levels of participation, and inadequate or non-existent cost effectiveness measures.

Many wellness programs have not been treated like a business and are falling out because they were predicated on the wrong end results (Kamar, 1987). Omitted from program design often times are long range plans, goals, objectives, and marketing and communication strategies. Management support, too, is often lacking which prevents a sound wellness culture from being established. Managers tend to expect quick results and often fail to realize that after the initial start up of a program, benefits grow slowly early in the program and then accelerate rapidly as the interventions begin to take effect.

Weaknesses of some wellness programs also include the insufficient and inadequate use of resources. In some wellness programs, the number of personnel required to develop and sustain the program was incorrectly estimated. Moreover, the scheduling and coordinating of existing human and equipment resources is also often found to be inadequate in many programs (Fugate, 1990).

Two prevailing weaknesses have been associated with program design. Many do not consider gender differences and many lack variables for dependent involvement. According to Guastini and Marshall (1989), most program designs address the needs of the workforce as if it were still predominantly male. The employee population today consists of more women than ever before in history, yet companies tend to ignore gender specific health care costs. For example, 60% of pregnant women experience complications during their pregnancy and approximately 20% of infants are born with complications. An average expenditure of

\$2000 per pregnancy on pre-natal care, delivery, and post delivery care can prevent many of the costs associated with perinatal complications. The impact of such complications on insurance costs, productivity, and profitability means that the connection between corporations and newborns can no longer be ignored.

Little effort, too, has been made to promote dependent/retiree involvement in wellness programs. Less than one in five U.S. companies offer on-site wellness programs that extend eligibility beyond employees and retirees (even though spouses and children account for well over 29% and 16% respectively of corporate health care expenditures) (Ham, 1989). Of those programs that do involve dependents, few are properly suited to their needs.

Another weakness or problem area associated with many wellness programs involves low participation levels. Employee participation is voluntary and averages only about 20%, the majority of whom are known health buffs anyway (Kertesz, 1990). This is no surprise considering that the average workplace profile consists of 20% "health nuts", 40% "fence sitters", 30% "resistant number crunchers", and 10% "stalwart refuseniks" (Sanders, 1989). Many wellness programs are thought to attract only those individuals who already know the components of a healthy lifestyle. In other words, some managers and experts believe that wellness programs "preach to the choir". For example, aerobics classes are generally taken by employees who are aware of the benefits of exercise, not by high risk individuals who really need cardiovascular conditioning.

Lastly, wellness programs often suffer because no method is put in place at the onset of the program to determine savings and cost effectiveness. About 80% of the corporations that offer health promotion programs have established them without quantifiable proof that the programs actually save money (Caudron and Rozek, 1990). Measuring savings from a wellness program is extremely difficult because no one can say with authority or certainty how much poor health and unhealthy lifestyles actually cost an employer. As a result, health promotion directors have not made enough of an effort to provide hard data to support the claim that corporate fitness provides a true reduction in company borne costs and is thus, cost effective.

In general, worker wellness programs that have been unsuccessful or less than cost effective have been those that were implemented without research, strategy development, or business planning. Unfortunately, many programs are initiated without the proper guidance or direction needed to keep the program on track and lack evaluative measures to substantiate the program's effectiveness.

Statistical Evidence of Programs That Work.

Several major studies have attempted to quantify the benefits associated with comprehensive corporate health promotion programs. These benefits include reductions in illness and mortality, employer health benefit savings, reductions in absenteeism and disability, and/or productivity increases. Although these studies have notable limitations generally found in any social science research, the concurrence of evidence pointing to the "success" of

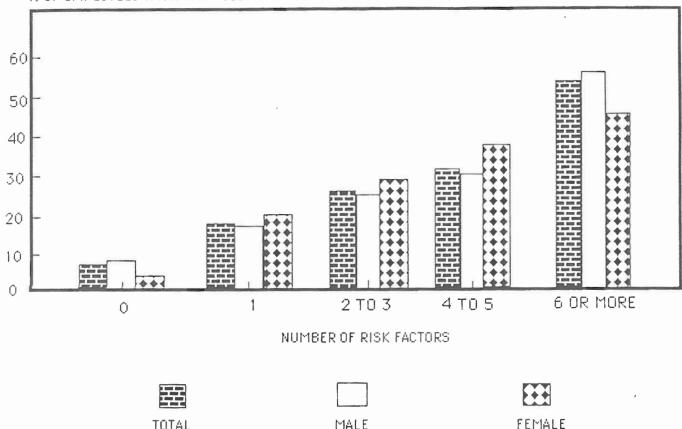
programs in improving employee health practices, reducing medical and disability costs, and improving productivity is indisputable. This research evidence is underscored by case studies of companies with successful promotion programs who are now ready to expand and improve upon these through further investment of time and resources.

A study conducted by Yen, Edington, and Witting (1990) on

1,838 individuals employed by a large manufacturing company provided strong statistical evidence that, regardless of age and sex, employees with positive health behaviors cost less in medical claims. The study was based on 18 health related measures, including: 1). five psychological perception variables: stress, physical health, life and job satisfaction, and serious medical problems, 2). six lifestyle behavior variables: tobacco use, alcohol use, seat belt use, drug/medicine use, physical activity level, and illness absence days, 3). seven health risk measures: risk-age index, systolic and diastolic blood pressure, cholesterol level, relative body weight, physician identified chronic bronchitis or emphysema, and marital status. of the 18 health related measures were then recoded into two categories--high risk and low risk. Eleven of the eighteen factors were found to be significantly related to medical claims costs and were thus classified as high cost status. As expected, medical costs increased as the number of high risk categories per employee increased. On the average, the annual medical cost was \$190 for the group with zero high risk categories, \$360 for one, \$542 for two and three, \$718 for four and five, and \$1550 for the group with six or more high-risk categories per employee per year. A profile of the employees surveyed is found below in Figure 1.

FIGURE 1. PERCENTAGE OF HIGH COST EMPLOYEES ACCORDING TO NUMBER OF RISK FACTORS





SOURCE: American Journal of Health Promotion, "Associations Between HRA Scores and Employee Medical Claims Costs in a Manufacturing Company", September/October 1991, p. 46-53.

According to Figure 1, the percentage of employees with high-cost status increased from less than eight percent in the group with zero risk factors, to more than 56% in the group with six or more risk factors. The results clearly reflect that the more risk factors

possessed by the employee, the higher the medical costs to the company.

In a study conducted by Tucker and Bagwell (1990) on the relation between aerobic fitness and serum cholesterol levels, it was determined that high fitness levels were associated with low prevelance of elevated total/HDL (high density lipoprotein) ratios. Adults classified as having excellent, very good, good, or fair aerobic fitness levels were .46, .64, .61, and .85 times as likely to have elevated ratios compared to poorly fit adults respectively. High level fitness was also found to be related to high HDL levels and low total cholesterol levels.

The study was conducted on 10,455 adults employed in over 50 corporations who had total cholesterol/HDL ratios greater than 5.0. Medical experts believe that the ratio of HDL to total cholesterol is more significant than the total cholesterol number by itself. (This ratio is obtained by dividing the total cholesterol count by HDLs. For example, a person with a total cholesterol of 200 and an HDL of 40 has a 5:1 ratio). According to Dr. Ken Cooper, HDL should contitute no less than 20% of total cholesterol (Piscatella, 1991). The lower the ratio or the greater the percent of HDL, the more protection against coronary disease.

A written questionnaire was administered to the survey participants to assess demographic and lifestyle information, including use of tobacco and alcohol. A Harpenden skinfold caliper was employed to assess subcutaneous fat at three body sites. The caliper, along with age and gender factors, were used to calculate the

total body fat percentage of each subject. Aerobic fitness was assessed using a step test referred to as the Kasch three minute Pulse Recovery Test (compared to the treadmill test and the 12 minute run, which are considerably more expensive and time consuming to administer). The step test possesses a significant degree of concurrent validity. Approximately 10 ccs of blood were drawn from each subject and analyzed in a certified laboratory using the enzymatic method to determine serum cholesterol levels.

The study found that low levels of aerobic fitness were strongly related to high risk total HDL ratios in employed adults. (See Table 2 at the top of the next page). Control for differences in age, gender, income, body fat, cigarette smoking, and use of alcohol appeared to strengthen the inverse relationship between fitness and cholesterol. Although cause and effect conclusions are not warranted due to the cross-sectional nature of this study, it appears theoretically possible that high levels of aerobic fitness actually help to protect against high serum cholesterol levels in adults.

The findings of this study demonstrate an important implication for companies considering health promotion as a cost containment strategy. High levels of aerobic exercise appear to be strongly associated with healthy levels of serum cholesterol. Because elevated serum cholesterol levels contribute significantly to cardiovascular disease, employers may be able to reduce health care costs resulting from elevated serum cholesterol levels and subsequent cardiovascular disease by encouraging employees to be aerobically fit.

TABLE 2.
ESTIMATED RISK OF ELEVATED TOTAL
CHOLESTEROL/HDL RATIOS BY FITNESS LEVELS

High Risk Total Cholesterol/HDL Ratio*

Aerobic	Variable		
Fitness	Controlleda	%	RRmhb
poor n=2,719	none	30.9	1.00
fair n=3,050	none age, sex, income fat, alcohol, smoking	30.4	.97 .85
good n=1,808	none age, sex, income fat, alcohol, smoking	26.9	.82 .61
very good n=829	none age, sex, income fat, alcohol, smoking	24.6	.73 .64
excellent n=452	none age, sex, income fat, alcohol, smoking	17.7	.48 .46

NOTE: Subjects who had poor fitness levels (n=2,719) were used as the reference group.

Source: American Journal of Health Promotion, "The Relation Between Aerobic Fitness and Serum Cholesterol Levels in a Large Employed Population", September/October 1991, p. 17

A study conducted by Harrington and Richardson, (1990) on an on-going senior wellness program in California revealed that retired employees can, through positive lifestyle practices, lower their use and cost of medical services. The California study consisted of 5,680 individuals who received full wellness intervention, including personal health habit questionnaires, individualized risk appraisals,

^{*} Total/HDL ratios >= 5.0 were considered elevated or at high-risk.

a Variable Controlled includes "none", which provide the unadjusted results; and "age sex, income, fat, alcohol, and smoking" which provide the adjusted results.

b RRmh reflects the odds ratio, an estimate of relative risk, with and without control for potential confounders. For example, the risk of employees in the excellent aerobic fitness category of having elevated total/HDL ratios is .46 times less compared to poorly fit adults (after adjusting for differences in age, sex, income, body fat, alcohol use, and smoking).

recommendation letters, and educational materials. The research showed significant reductions in major health risk factors. Data for the first two years of the controlled study show that reported hospital stays dropped 27%, while visits to the doctor decreased 7%. (See Table 3)

TABLE 3.
REDUCTION IN USE OF MEDICAL SERVICES BY RETIREES

Average Direct Costs*	After 12 Months	Estimated Savings Per Person
Hospital Days (at \$750/day) Doctor Visits (at \$65/per visit)	Down 27% Down 7%	\$123 <u>\$ 10</u> \$133

^{*} Based on National Statistics

Source: <u>Personnel Journal</u>, "Benefits: Retiree Wellness Plan Cuts Costs", August 1990, p. 62.

Other major reported risk factor reductions for the retired group included a 26% reduction in salt intake and a 23% drop in dietary fat. Health habit improvements also cited in the study included an 18% increase in aerobic activity for individuals who were accustomed to walking and a 38% reduction in stress.

The research clearly shows that a properly defined and presented health promotion/disease prevention program can be successful in improving retiree health and vitality. Contrary to popular opinion, seniors can change lifestyle habits that bring immediate long range benefits in positive well-being.

In a study conducted at the Control Data Corporation (Jose, 1990), the relationship between six risk factors and health care costs were explored: exercise, weight, smoking, hypertension, cholesterol, and seatbelt use. Results of the study confirmed that medical costs increase as the number of health risk factors increase.

The Control Data researchers created mathematical models to predict health care costs based on an individual's risk levels for each of the risk factors. Separate models were constructed for males and females. This modeling approach, unlike many others, took into account the interactions of several simultaneous risk factors.

Two hypothetical individuals were examined: one at high risk on all six factors and the other at low risk on all factors. Table 4 below describes the risk factor status of each of these hypothetical individuals.

TABLE 4.
HYPOTHETICAL HIGH- AND LOW RISK INDIVIDUALS

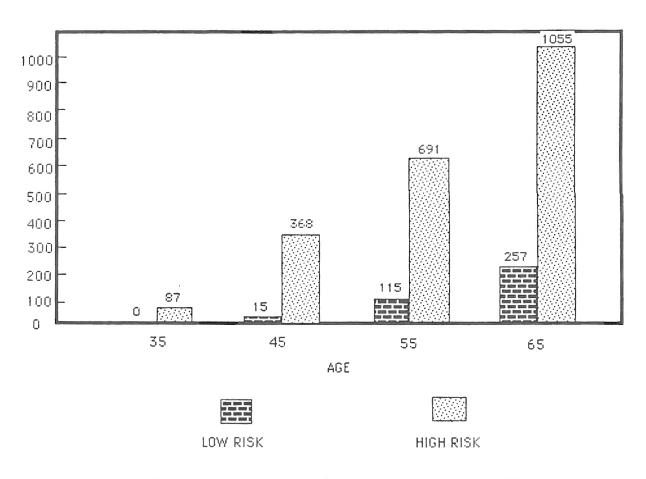
Risk Factor	Low Risk	High Risk
Smoking	non-smoker	40 cigarettes/day
Exercise	4 times/week (20 min)	sedentary
Weight	normal	> 30% overweight
Systolic Blood Pressure	120	> 160
Diastolic Blood Pressure	80	> 95
Cholesterol	160	> 300
Seatbelt Use	100%	0 %

Source: Wellness Management, "The Cost of Unhealthy Workers", Winter/Spring 1990, p. 1-2.

From the models, known health risk status was able to generate estimates of health care costs. Health costs are most striking when cardiovascular related costs are specifically examined, since these are the costs most of the lifestyle factors are expected to

affect. Health care costs are \$87 per year greater for a 35 year old male at high risk on all six factors compared with a 35 year old male at low risk on all factors. This difference increases with age. A 65 year old male at high risk in all areas uses \$798 more in health care on the average than a 65 year old male at low risk. Figure 2 below displays differential cardiovascular costs for high- and low risk males by age.

FIGURE 2.
ESTIMATED CARDIOVASCULAR COSTS PER YEAR FOR MALES

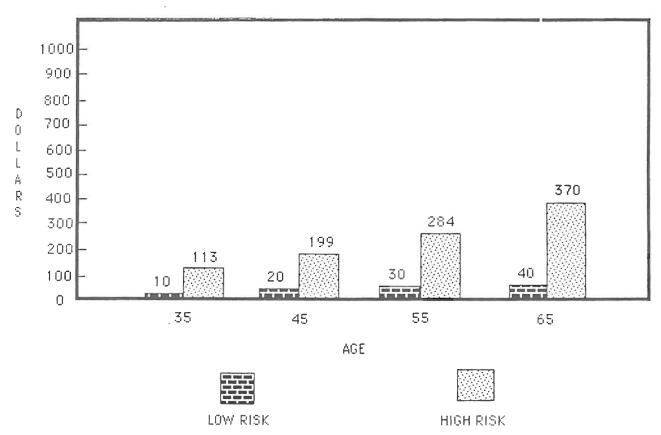


Source: Wellness Management, "The Cost of Unhealthy Workers", Winter/Spring 1990, p. 1-2.

A female of 35 years who is at high risk on all six factors uses \$103 more in health care dollars per year than her low risk

counterpart of the same age. As with men, differential health care utilization by women increases with age. At age 65, the high risk woman uses \$330 more per year in health care dollars than a low risk woman. Figure 3 below displays differential cardiovascular costs for high- and low risk females by age.

FIGURE 3. ESTIMATED CARDIOVASULAR COSTS PER YEAR FOR FEMALES



Source: Wellness Management, "The Cost of Unhealthy Workers", Winter/Spring 1990, p. 1-2.

According to the Control Data Corporation and Figures 1 and 2, cardiovascular costs are much greater for high risk individuals of both sexes. Cardiovascular costs increase directly with age for both high and low risk males and females, but they are much higher and

increase more rapidly for the high risk as opposed to the low risk individuals of all ages. Over 30 years of employment (from 35 to 65 years of age), an employer will spend an estimated \$22,605 more on the high risk male employee than on the low risk male employee.

For over 10 years, Control Data has studied the health of thousands of its employees, targeting risk factors that include smoking and cholesterol levels. The company has found that its wellness program saves them an estimated \$1.8 million in health care costs each year (Doherty, 1989).

A study carried out at the General Electric (GE) Co. (a firm sponsoring both fitness and recreation programs for its employees) found that employees who participate in GE's wellness program have fewer absences from work and express more positive attitudes toward their jobs (Employee Benefit Plan Review, 1989). Annual absenteeism averaged about four days less for employees who were members of either the recreation or fitness programs, as compared to non-members. Non-members also measured significantly less job satisfaction than members of either the fitness or recreation program.

The Tenneco Corporation conducted a non-controlled analysis (in which the elements of the program costs were not considered) that revealed lower medical and ambulatory costs for exercisers versus non-exercisers (Kaman, 1987). A random sampling of 517 employees were used to evaluate differences in health care costs and absenteeism among exercisers and non-exercisers during the start up

of the Tenneco Corporation's health and fitness program. Table 5 below shows the results of that study.

TABLE 5.
RESULTS OF THE TENNECO STUDY

	Exercisers	Non-Exercisers
Absenteeism	47 hours	69 hours
Total Health Care Costs		
Men	\$561	\$1003
Women	\$639	\$1535
Ambulatory Costs		
Men	\$408	\$486
Women	\$243	\$883

Source: Fitness in Business, "Costs and Benefits of Corporate Health Promotion", October 1987, p. 39-43.

In 1984, Tenneco also showed improved job performances among exercisers when compared to non-exercisers. The differences in all categories suggested a positive relationship between exercise participation and cost benefit, but no causal relationship was implied. The studies also suggested that individuals already committed to exercise may join a company such as Tenneco simply because of its strong support for employee fitness. This, in itself, is a strong argument for establishing employee fitness programs.

In 1986, the Mesa Petroleum Company conducted a study that showed similar results to the Tenneco findings. Exercise adherents were found to have fewer sick days and lower health care costs as indicated in Table 6 on the next page (Kaman, 1987).

The Mesa Petroleum study showed that in the second year of program operation, an actual savings of \$107 per employee was

realized. This study demonstrates two important things: wellness programs are cost effective and can require at least a year to reflect substantial savings.

TABLE 6.
MESA PETROLEUM PROGRAM STUDY RESULTS

	1982	<u>1983</u>
Absenteeism Savings (\$/per employee)	\$156	\$303
Medical Cost Savings (\$/per employee)	\$217	\$217
Total Savings (\$/per employee)	\$373	\$520
Budget Costs (\$/per employee)	\$494	\$485
Amount Recovered (%) (savings/budged)	\$76	\$107

Source: <u>Fitness in Business</u>, "Costs and Benefits of Corporate Health Promotion", October 1987, p. 39-43.

Johnson and Johnson (J&J) conducted a study comparing the health care costs of two groups of employees involved in their Live for Life (LFL) Program (with a third control group) from 1980-1983 (Kaman, 1987). Table 7 on the next page summarizes the four year performance of the program, solely in terms of changes in health care costs, in 1979 constant dollars.

According to Table 7, after an initial rise in costs equal to or greater than the control group, the LFL groups both showed health care costs lower than the control group. While the costs for all groups continued to increase, both participating groups showed a trend toward a leveling off of total health care costs in the fourth and fifth years of the program. Mean annual inpatient cost increases

over the four year period of 1980-1983 were \$52 and \$38 for the two LFL groups versus \$101 for the non-LFL group.

TABLE 7.
J&J LIVE FOR LIFE PROGRAM RESULTS

GROUP	NUMBER OF PARTICIPANTS	IN-PATIENT COSTS (PER EMPLOYEE)	MEAN ANNUAL INPATIENT COST INCREASES
		1980 1981 1982 1983	(1980-1983)
Live for Life	5,192	\$110 \$167 \$190 \$265	\$52
Live for Life	3,259	\$144 \$171 \$207 \$258	\$38
Non-LFL	2,955	\$100 \$149 \$229 \$403	\$101

Source: <u>Fitness in Business</u>, "Costs and Benefits of Corporate Health Promotion Programs, October 1987, p. 39.

The results of Johnson & Johnson's study revealed that the company profited from the participants in the health promotion program by the real dollars in health care costs that they saved. Although the results of this study are limited in that program costs were not included, the message is straightforward and clear: participants in this corporate health promotion program have demonstrated a reduction in the rate of increase of health care costs to the company.

The aforementioned studies indicate that wellness programs do indeed have value-added potential to corporations through decreased medical claims costs, increased productivity, decreased absenteeism, and increased job satisfaction.

The Coors Wellness Program: An Indepth Look.

The smartly designed and nationally recognized wellness program at the Adolf Coors Company in Golden, Colorado has proven that not only does their wellness program hold health care costs in check, but it leads to healthier and more productive employees as well.

Coors' health care costs rose only 5.9% between 1988 and 1989 when most companies were fighting increases of more than 18%. According to research at the University of Oregon's Graduate School of Management, for every dollar Coors spends in wellness, they receive a return of up to \$8 (\$6.15 on average)(Hoffman, 1990). In addition, wellness activities save the company at least \$1.9 million annually, through decreased medical costs, decreased sick leave, and increased productivity (Caudron, 1990).

The wellness program at Coors' Brewing Company was designed to help employees and their families lead healthy lifestyles that focus on disease prevention. Through making good decisions about exercise, diet, stress control, injury rehabilitation, and safety, it was determined that employees could change and/or control their behavioral health patterns.

Because wellness depends on individual lifestyles, the Coors wellness program was designed specifically to encourage positive habits and lifestyles, provide programs that encourage behavioral changes to improve general health and wellness, and involve family members in wellness (since the family is one of the greatest influences on individual lifestyle change).

The Coors Wellness Center opened in July 1981 making it one of the first comprehensive corporate wellness facilities in the nation. The wellness program was developed at the request of Chairman William K. Coors, whose objective was (and is) to have the healthiest employees in the Rocky Mountain Region. The Coors Wellness Center is open Monday through Saturday and housed in a 23,000 square foot renovated supermarket. It is an on-site facility located at the entrance of the Coors Brewery that provides exercise equipment, diet counseling, stress control, rehabilitation programs (e.g., cardiac, back injury and orthopedic) and many other primary and secondary prevention programs (Morton, 1991).

The Wellness Center is available to employees, retirees, spouses, and dependents who are age 12 or older. In 1990, there were more than 143,000 visits to the center (Morton, 1991). The facility represents Coors' efforts to change the internal corporate culture and create an environment where health and wellness are not only encouraged, but *expected*.

Operational expenses of the Coors Wellness Program in 1990 were \$585,000. For the company's national work force of 10,000 employees, this is an estimated cost of \$58.59 per person. If the wellness program can be considered to have a direct or indirect impact on all 30,000-plus medically insured individuals at Coors (e.g., spouses and other dependents) the cost is just \$19.53 per person (Morton, 1991).

The Coors philosophy is to provide in-house prevention and rehabilitation programs whenever possible. Not only do these programs give the company greater control over case management,

but they save an extraordinary amount of money over the cost of comparable off-site programs as well. Table 8 below shows the amount Coors saved in 1990 by conducting in-house programs.

TABLE 8.
COORS' WELLNESS PROGRAM SAVINGS

PRIMARY PREVENTION PROGRAMS	DOLLARS SAVED IN 1990
Health Club Activities	\$583,392
Cholesterol Testing	3,817
Blood Lipids	21,200
Mammograms	78,210
Stress Management	23,500
Parenting Courses	1,630
Smoking Cessation	227,745
SECONDARY PREVENTION	
Treadmills	\$145,600
Cardiac Rehabilitation	467,410
Mammography (direct and indirect costs)	1,064,000
Smoking Cessation (direct and indirect costs)	53,550
Wellback Clinic	500,388
Orthopedic Rehabilitation	168,655
SUB-TOTAL	\$3,339,097
Reduced Medical Costs for Regular Users	\$275,405
Reduced Absenteeism (i.e., savings)	245,745
Reduced Benefit Costs	93,419
SUB-TOTAL	\$ 614,569
TOTAL SAVINGS FOR 1990	\$3,953,666

Source: <u>Coors Brochure</u>, "Wellness and the Bottom Line", 1991, Max Morton, Manager--Coors' Wellness Services.

After a decade of achievement in the wellness arena, Coors has been able to identify eleven key elements that have been essential to their program's success (Gilfillan, 1991). These elements are listed individually below.

Support from the CEO. Virtually everyone involved with health promotion at Coors agrees that without support and encouragement

from William Coors, chairman and Chief Executive Officer (CEO), the wellness program would not be where it is today.

A Stated Priority. Wellness is more than a part of Coors' corporate culture, it is an objective stated in the company values statement. The statement is as follows: "We foster personal and professional growth and development...and encourage wellness in body, mind, and spirit for all employees".

A Family Affair. Coors offers wellness services to family members as well as employees because, like most companies, it provides medical benefits to spouses and dependents. In fact, for everyone on the payroll, an average of two additional people are covered by the Coors health plan. By making wellness a family affair, Coors reduces the potential use of these benefits and creates the support necessary at home to maintain healthy lifestlyes.

Accessible to Everyone. Coors makes provisions for off-site facilities and resources to make the wellness program accessible to all employees, including people who work away from the main plant. The company arranges for staff or consultants to periodically visit remote locations and conduct health screenings and health education courses. In addition, pay-per-use contracts are arranged with health clubs, giving off-site employees a convenient place to exercise.

Employee Input. Coors actively seeks input from employees and managers to help with planning logistics, such as when to schedule stress management classes, as well as to build support for the wellness program.

<u>Periodic Assessments</u>. Coors conducts periodic needs assessments, such as health risk assessments, to help identify any

health needs that are being overlooked. The company's seat belt campaign, for example, was initiated when the risk assessment revealed that too few employees regularly used seat belts. Coors also monitors injury and sick leave data to determine whether certain groups of employees are using benefits more than others.

Regular Evaluations. In-house and external evaluations help to ensure programs are meeting objectives, allowing Coors to pinpoint where mofications need to be made. These evaluations also help to justify the program's existence.

Internal Communications. Ongoing internal communication keeps employees aware of the company's unwavering commitment to wellness. Table tents, elevator posters, and articles in the weekly employee newspaper are a few of the subtle reminders used.

Tracking. Coors keeps a watchful eye on national and state health concerns, such as drug testing, AIDS and cancer to determine if it's wellness program is adequately addressing broad public health issues.

Community Involvement. Strong involvement with the community shows that Coors takes its commitment to health seriously. Coors also provides free consulting to other organizations that wish to establish wellness programs in an effort to build national support of the wellness effort.

Qualified Specialists. All wellness center staff members have at least a master's degree in exercise physiology, and Max Morton, the wellness program manager, has earned his doctorate degree. In addition to being skilled in the sciences, wellness employees must demonstrate people skills. Contract providers, who are equally

skilled, include certified athletic trainers, licensed physical therapists, registered dieticians and a board-certified cardiologist.

Separate Funding. Coors has found it essential for the wellness program to have its own budget, not one made from the spare change of other departments. This way, the program is held accountable for the dollars it spends and it must justify any requested increases.

The eleven elements cited above have contributed to the success of the wellness program at Coors. Their comprehensive approach has enabled them to yield extremely high benefits, both in terms of reduced costs and improved productivity.

As mentioned, the wellness approach taken by the Coors Brewery Company is highly comprehensive. Among their most successful programs are cardiac rehabilitation, back injury rehabilitation, mammography testing, health hazard appraisals, and dental wellness.

The Coors cardiac rehabilitation program (CRP) was established at the Coors Wellness Center in 1981. The savings generated by this program alone more than cover the operational costs of the Wellness Center. The cardiac program is provided free to Coors employees, spouses, retirees and dependents. Employees who are recovering from cardiac events (e.g., heart attack, angioplasty or coronary bypass) are required to complete a 12 week, physician-monitored program, starting 3-4 weeks after the event. Activities include aerobic classes, diet instruction, and stress management (Gilfillan, 1991).

Carefully tailored to individual needs, the cardiac program analyzes each employee's physical and environmental work demands, social pressures and other stresses. This personal care has led to a high compliance rate and a high level of success. Ninety-eight percent of the employees completing the cardiac rehabilitation program have returned to their own jobs (Gilfillan, 1991).

The average time between the cardiac event and the employee's return to work was 7.5 months <u>prior</u> to the institution of the cardiac rehabilitation program (CRP) (Henritz and Brammel, 1989). Since the inception of the program in 1981, employees have returned to work following a cardiac event in 2.3, 2.5, 2.8, and 2.9 months respectively in 1983, 1984, 1985, and 1986. With the assumption that the pre-program return to work time (i.e., 7.5 months) would have prevailed during subsequent years, the average cost to Coors for wage savings was calculated and is shown in Table 9 below (Henritz and Brammel 1989).

TABLE 9.
WAGE SAVINGS RESULTING FROM THE CRP

YEAR	AVG MON SALARY	THLY	NUMBER (EMPLOYE		MONTH DIFFERENT	TIAL	SAVINGS
1982 1983 1984 1985 1986	\$2179 \$2220 \$2405 \$2585 \$2620	X X X X	21 19 14 10 23	X X X X	5.2 5.2 5.0 4.7 5.5	= = =	\$237,947 \$219,336 \$168,350 \$121,495 \$331,430
		TOTA	L WAGE SAY	INGS D	UE TO CRP		\$1.078.558

Treadmill usage, tests, and evaluations are vital parts to Coors' CRP. Treadmill cost savings were estimated by comparing the costs

of performing treadmill stress tests at the Coors Wellness Center to the average costs of performing them in the local community. The average cost of a treadmill test/evaluation in the Denver metropolitan area was estimated to be \$220. The similar procedure at the Coors Wellness Center was estimated to be \$50 in 1982 and had risen to \$65 in 1986 (including the cardiologist's fee, technician's fee, and supplies). The cost comparison revealed that the Coors Company saved \$21,930, \$14,220, \$16,275, \$15,810, and \$17,670 respectively for the years 1982 through 1986 (Henritz and Brammel, 1989). See Table 10.

TABLE 10.
TREADMILL SAVINGS DUE TO CRP

YEAR	AVERAGE COST	COOR'S COST	# OF PARTICIPA	ANTS	# OF TEST		SAVINGS
1982 1983 1984 1985 1986	\$220 - \$220 - \$220 - \$220 - \$220 -	\$62 \$65 \$65	X 43 X 30 X 35 X 34 X 38	X X X X X	3 3 3 3	=======================================	\$21,930 \$14,220 \$16,275 \$15,810 \$17,670
			TAL COST SAN				\$85,905

SOURCE: The American Journal of Health Promotion, "Phase II Cardiac Wellness at the Adolf Coors Co.", September/October 1989, p. 25.

In addition to wage and treadmill savings from the Coors CRP, rehabilitative savings have been realized as well. Rehabilitative costs (cardiac) in the metro-Denver area for 1982 through 1986 were \$1500, \$1875, \$1875, \$1875, and \$1836 respectively. The cost per person of cardiac rehabilitation at the Coors Wellness Center was \$500, \$515, \$525, \$525, and \$540 in 1982 through 1986 respectively

(Henritz and Brammel, 1989). This cost differential (i.e., community cost minus Coors' cost) resulted in a total savings of \$226,198 for Coors as indicated in Table 11 below.

TABLE 11.
REHABILITATIVE SAVINGS DUE TO THE CRP

YEAR	COMMUNITY COS	ST	COORS COST		# OF PARTICIPA	NTS	SAVINGS
1982	\$1500	-	\$500	X	43	=	\$43,000
1983	\$1875	-	\$515	X	30	=	\$40,800
1984	\$1875	-	\$525	X	35	=	\$47,250
1985	\$1875	-	\$525	X	34	-	\$45,900
1986	\$1836	-	\$540	X	38	=	\$49,248
TOTAL REHABILITATIVE SAVINGS							
		DU	E TO IN-HOUSE	PR	OGRAM		\$226,198

SOURCE: The American Journal of Health Promotion, "Phase II Cardiac Wellness at the Adolf Coors Co.", September/October 1989, p. 25.

The data presented in the Tables 9, 10, and 11 address the cost effectiveness of Coors' Cardiac Rehabilitation Program in an established industrial wellness center. The CRP program was specifically designed to save money as well as develop a better way to rehabilitate employees who had suffered cardiac events. Table 12 below outlines a total cost savings of \$1,390,661 to the Coors Company based on the three variables already discussed: wage savings, treadmill savings, and rehabilitative savings (Henritz and Brammel, 1989).

TABLE 12. CARDIAC WELLNESS SAVINGS FOR 1982 - 1986

WAGE SAVINGS	\$ 1,078,558
REHABILITATIVE SAVINGS	\$ 226,198
TREADMILL SAVINGS	\$ 85,905
TOTAL	\$ 1,390,661

SOURCE: The American Journal of Health Promotion, "Phase II Cardiac Wellness at the Adolf Coors Co.", September/October 1989, p. 25.

After the Cardiac Rehabilitation Program was established, Coors developed an on-site back injury rehabilitation program in 1982 (Gilfillan, 1991). Employees with work-related back injuries can enroll in a four session program on back wellness and injury prevention. Self-awareness and lifestyle discussions are key elements in the sessions.

Coors believes employees return to work sooner after participating in on-site programs (such as cardiac and back injury) than when enrolled in hospital based ones because the education is done in an environment of health and wellness.

In 1985, Coors established CoorsScreen, the first corporate onsite breast cancer screening program in the nation. The program has
created an ongoing awareness of breast cancer screening and
prevention among all female employees, spouses and retirees.
CoorsScreen has also lowered healthcare costs through early
detection of breast cancer. Although each mammogram costs \$55,
the cost to participants is just \$5--Coors picks up the difference. To
date, 85% of the eligible women have participated in the screenings;
26 malignancies and 10 possible malignancies have been detected.
Coors estimates the screenings save the company \$133,000 for each
early detection. This translates into a current savings of more than
\$2.5 million (Gilfillan, 1989).

The Coors voluntary Health Hazard Appraisal (HHA) program, established in 1984, has also proven to be extremely successful (Gilfillan, 1989). It involves the use of a questionnaire to statistically evaluate each employee's or spouses's health risk based on the presence or absence of certain health risk factors. Statistically,

employees are termed "at risk" if their health age is older than their chronological age by two or more years. For example, if an employee is found to have a health age of 51 but is currently only 49, he/she is considered to be an "at-risk" employee.

When individual results are calculated, employees are given matter-of-fact information about their potential for premature death or disease, which has proven to be a strong motivator for changing costly and life-threatening behavior. The HHA group profile also gives Coors management valuable insight into the need for other health promotion programs. To date, more than 70% of employees have completed the questionnaire. Additionally, several programs have been developed as a result of information provided by the HHA, including mammography testing, skin cancer screening, blood pressure information, cholesterol testing, smoking cessation, alcohol education and stress reduction.

In 1988, Coors established their Dental Wellness Center, an onsite clinic which employs a full-time dentist and two full-time hygienests to do diagnostic screening, teeth cleaning, counseling for severe dental anxiety and educational services (Gilfillan, 1991). The dental center, which is open from 7 a.m. to 5 p.m. to allow access to all work shifts, is complete with two patient treatment rooms, a darkroom and a small X-ray area. If the dentist discovers a need for further work, such as extractions, the patient is advised to see his or her regular dentist. Dental wellness is provided free to employees and satisfies the dental deductible. The service has become so popular with employees that the center is usually booked seven weeks in advance. Overall, Coors operates one of the most successful and comprehensive wellness programs in the nation. Their health awareness approach to wellness has proven to be effective in terms of savings, increased productivity, and enhanced morale.

III. RECOMMENDATIONS

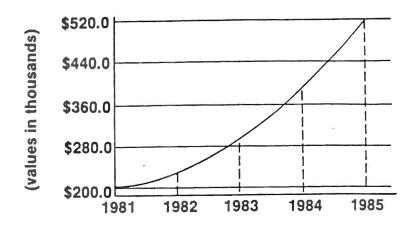
Corporate Wellness: Recommendations On How To Get Started.

For those firms seriously considering a health promotion program, it is important (especially to top level managers and chief executive officers) that justification of the program first be made. To do this, two approaches are highly recommended: 1). analyze the history of the company's health care costs/problems and make future projections and 2). determine the lifestyle behavioral risks of the employee population, the costs associated with these behaviors, and the savings that could result from changing negative behavioral lifestyles into positive ones.

The first step toward justifying a cost-containment program is to conduct a historical analysis of a company's health care costs to identify the extent of rising cost trends. Additionally, it is necessary to determine the company's predominant employee health problems. Both cost and health information can be obtained by working with the personnel department. Most insurance plans have health cost and claims data readily accessible and will designate someone to develop it into a usable format. Once this information is obtained, it should then be depicted in graphical and/or tabular format. Figure 4

below depicts the rising trend of a sample company's health premium costs over a five year period.

FIGURE 4.
PREMIUM HISTORY FROM 1981 TO 1985



In addition to Figure 4, it is also recommended that an illustration be made showing the top health problems related to a company's work force, both by number of events and by associated costs (see Table 13 at the top of the next page). The difference in unit costs per event are important to note when interpreting the table since a relatively low incident rate of heart disease, for example, may still result in the highest cost to the company.

In order to determine projected health costs and problems, a demographic analysis must first be conducted regarding the characteristics of the pertinent employee population. Demographic data should be available through the personnel department regarding the number of employees, their age, marital status, etc. Through the use of computer software programs and the knowledge

of both demographic and normative data, a fairly reliable projection can be made regarding future health care costs for a company.

Table 14 illustrates projected health costs/problems for a sample company.

TABLE 13.
HEALTH COSTS AND EVENTS FOR A
SAMPLE COMPANY IN 1985

Health	Number	Medical
Condition	of Events	Costs
Heart Disease	16.0	\$120,224
Gastrointestinal Disease	20.8	\$57,527
Complications of Delivery	23.7	\$53,232
Back Pain/Problems	15.2	\$49,331
Respiratory/Flu	18.5	\$42,645
Normal Delivery	32.8	\$38,415
Alcohol/Drug Disease	9.6	\$31,766
Common Gyn Complaints/Problems	11.3	\$31,594
Genitourinary Disease	11.6	\$29,681
Liver/Gallbladder Disease	7.0	\$28,721

TABLE 14.
PROJECTED HEALTH COSTS AND EVENTS BY HEALTH AREA

Health	Number	Medical
Condition	of Events	Costs
Heart Disease	20.0	\$160,000
Gastrointestinal Disease	24.0	\$65,000
Complications of Delivery	25.0	\$58,000
Back Pain/Problems	20.0	\$55,000
Respiratory/Flu	23.0	\$52,000
Normal Delivery	35.0	\$48,000
Alcohol/Drug Disease	15.0	\$37,000
Common Gyn Complaints/Problems	16.0	\$36,000
Genitourinary Disease	13.0	\$32,000
Liver/Gallbladder Disease	9.0	\$30,000

By collecting and presenting historical and futuristic data relating to a company's health record in terms of health problems,

number of events, and associated costs, justification for a wellness program can be made easier.

A further recommendation to solidify the issue of justification is to determine the negative and modifiable *lifestyle* related behaviors that contribute to riskier employee health. Once these behaviors have been identified, their economic impact on medical costs and absenteeism can then be ascertained. Based on cost data, an estimate can then be made reflecting the immediate and long term savings that could result for a company with a successful wellness program.

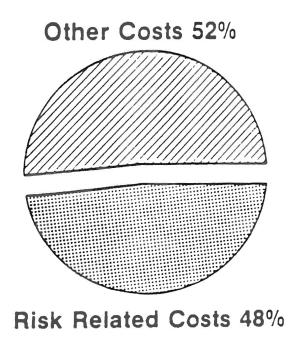
Imposing company-wide health risk appraisals and on-site screenings of cholesterol and blood pressure on a voluntary basis (possibly with the use of incentives) is the most effective way to determine the lifestyle habits of the employee population. The seven most common lifestyle factors known to require the most attention in wellness programs are: alcohol use, hypertension, cholesterol levels, exercise, body weight, cigarette smoking, and seat belt use (Madlin, 1990).

Once the modifiable lifestyle risk factors have been determined, it is recommended that a cost estimate be made reflecting the impact of these lifestlyes on a company's health care costs. The purpose of this estimate is to ascertain what proportion of a company's health care costs are attributable to lifestyle related factors alone.

To assess the costs associated with each lifestyle risk factor, a combination of the direct medical costs and the indirect costs of absenteeism (such as replacement, re-training, lowered productivity)

must be taken into consideration. By working with physicians who serve a company's employees, the quality and accuracy of estimated medical costs associated with lifestyle factors will be greatly enhanced. Cost information related to absenteeism (both directly and indirectly) can be obtained through working with the personnel department and departmental managers. Once these estimates have been compiled, a graphic illustration depicting the proportion of health costs attributable to lifestyle should be made, as shown in Figure 5 below.

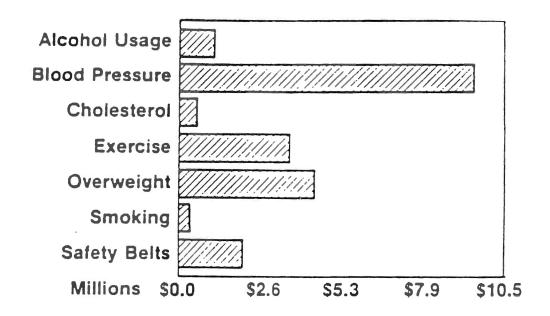
FIGURE 5.
PROPORTION OF HEALTH COSTS ATTRIBUTABLE TO EMPLOYEE LIFESTYLE FOR A SAMPLE COMPANY



The next recommended step is to determine the amount of money a company can expect to save due to the implementation of a wellness program. To do this, action plans for dealing with the most predominant lifestyle factors affecting health care costs must first be

proposed. A projection must then be made on the degree of health improvements expected to occur as a result of program participation. Once projections have been completed, an estimate can be made regarding potential cost savings to a company considering wellness as a cost containment strategy. Figure 6 depicts the amount of savings expected to result for a sample company through the implementation of a wellness program geared toward modifying negative lifestyle habits.

FIGURE 6.
SUMMARY OF POTENTIAL SAVINGS (OVER A
THREE YEAR PERIOD) FROM LIFESTYLE RELATED CHANGES



Once justification for a wellness program has been satisfactorily made and accepted at the corporate level, it is recommended that the program be designed and the action plans be implemented according to the suggestions offered in an earlier section of this document (see "Wellness Programs That Work" and "Employee Motivations Toward

Wellness Participation). Also recommended is a review of the section detailing design problems that have been discovered in some existing programs (see "Problems With Wellness Programs").

In summary, companies considering cost containment strategies to deal with rising health care costs are encouraged to specifically document and illustrate historical health care costs and trends, employee lifestyle factors impacting these costs, and savings that are expected to result from programs designed to modify negative lifestyle behaviors and habits. This information should serve as compelling evidence to justify the implementation of a corporate-wide wellness program. In addition to providing a means of justification, this information also provides baseline data from which a company can evaluate cost containment programs and their effectiveness in reducing or at least "containing" health events/costs.

IV. CONCLUSION

Corporate health care costs are rising at an incredible rate. The available methods to contain these costs are extremely limited and largely uncontrollable. However, one option is available to those corporations seeking to change the health care impact on profitability--wellness. The wellness concept is defined as a preventive approach to health in the workplace and is based on the idea that the less employees use the health care system, the lower the overall health care costs. Healthy employees are resulting in healthy companies in terms of profitability, productivity, and positive morale. Wellness programs have proven to be an effective cost containment strategy for many firms, especially those who have

taken a serious, business style approach to program implementation by incorporating goals, objectives, marketing strategies, incentives, etc. into program design.

In conclusion, the wellness concept is an exploding trend in corporate America. Wellness programs have become such a critical component in cost containment strategies that it isn't a matter of whether corporations will turn to employee wellness ideas, it's a matter of when.

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