Physical and mental health problems have a potentially large collective impact on corporate productivity. Researchers have shown that certain health problems and health-related behaviors can adversely affect work productivity at both the individual and workforce levels. Effects of physical and mental health problems on absenteeism from work have been quantified, but their impact on productivity at work has proved to be difficult to quantify. Stakeholders in the health-care system have only recently begun to explore the connection between the health status of workers and workplace performance. The potential for realizing greater value from dollars spent on employee health care is believed to be great. An expanded view of value includes consideration of the effects of health problems when employees are physically present for work but exhibiting decreased productivity and below-normal work quality. The financial impact of a particular health problem on corporate productivity can be determined by quantifying the average degree of reduced work capacity that it imposes and the number of employees who are affected.

Employers are under pressure to control and justify the increased costs of providing health-care benefits and other health-related programs. Eliminating or reducing benefits might have severe consequences, including lower employee morale, increased absenteeism, increased morbidity, and increased mortality. The relationship between health and productivity is of interest to all health-care-finance stakeholders who recognize the need for better information about the value of health-care services. Quantification of the effect of specific health problems on work productivity is needed to establish the true costs that they impose.

The loss of productivity resulting from health-related problems represents an indirect corporate cost that has largely been neglected. Estimates of annual health-care costs have not typically accounted for lost productivity at work resulting from illness or injury. When most companies analyze health costs, they usually focus on direct costs: direct medical and indemnity payments associated with the diagnosis and treatment of injury and illness among employees. These costs are much easier to track than indirect costs, which include...
administrative expenses, absenteeism, retraining, and lost productivity. Limitations in work-performance capabilities caused by physical or emotional health problems can have a profound effect on these indirect costs.

**Significance of the Problem**

Work disability from health-related problems is a significant problem for business and industry in the United States, and it has become an important public health and social policy issue.² Approximately 55 million working-age individuals (18–65 years of age) have chronic illnesses or impairments that make them highly vulnerable to disability.² National survey data suggest that 32% of employed adults have ongoing health problems that interfere with their ability to perform job demands.³ The national cost of these chronic health conditions has been estimated to be at least $234 billion annually.⁴ Depression, the mental disorder thought to have the largest effect on work disability,⁵,⁶ is estimated to cause an annual salary-equivalent loss of $24 billion in work absenteeism and at-work performance limitation in the United States.⁷ The results of a study on the effect of migraine headaches demonstrated that work productivity was reduced by 0.6 hr per migraine episode.³ Other studies have examined the effects of allergic disorders on direct and indirect costs, which have been estimated to be $4.5 billion per year.² Allergies might be responsible for as many as 3.5 million lost workdays annually.

Absenteeism and work limitations caused by health-related problems are two major contributors to indirect costs. To demonstrate the fact that improved health management lowers absenteeism and reduces work limitations, employers need assessment tools that can provide meaningful evidence of the relationships. There is a set of core job demands associated with a broad range of jobs that must be met for a worker to be productive. Those demands typically include some type of time demand (i.e., work rate), physical capabilities, mental/interpersonal capabilities, and output standard that are essential for effective and efficient job performance. Decreased individual work productivity is related to the degree to which these demands are not met. Knowing which work limitations are caused by specific physical and emotional health problems (through use of a work-limitations questionnaire) will provide important information for improved health management and increased employee productivity. Such an approach can enhance the value of health-care services, improve the health status of employees, and provide the employer with a competitive advantage in the marketplace.

**Literature Review**

There is a growing body of research that links health status to productivity. Intuitively, human performance is greater when people are physically fit, emotionally stable, and motivated to be productive. Higher levels of human-performance capabilities lead to higher levels of productivity, which in turn can increase corporate profitability.

In an effort to approximate productivity loss attributable to health-related problems, many researchers have focused on costs associated with injury- and illness-related absence (absenteeism, workers’ compensation, and short- and long-term disability). Studies have been conducted to examine the relationship between health status and absenteeism for migraine headaches, depression, allergic disorders, arthritis, diabetes mellitus, and hypertension and heart disease. At least one study has documented the relationship of employee health-risk factors and absenteeism.⁴ A comprehensive literature review by Aldana and Pronk⁸ demonstrated that the health risks and failure to participate in fitness- and health-promotion programs are associated with higher rates of employee absenteeism.

Absenteeism and disability cost data do not completely account for the total loss of productivity resulting from a health-related condition. Such data only represent productivity loss among employees whose health problems are so severe that they are unable to work. There is a much larger group of employees whose health problems have not necessarily produced absenteeism. These employees are physically present at the workplace but performing at a suboptimal level.

“Presenteeism” is a concept that has been defined as the decrement in work performance attributable to a health-related problem.

A number of recent research reports have highlighted the relationship between employee health status and level of work productivity. A study by Goetzel