

Exercise and the Bottom Line

Promoting Physical and Fiscal Fitness in the Workplace: a Commentary

Nicholas A. DiNubile, MD, with Carl Sherman

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In Brief: One important way that physicians can promote regular exercise by patients is to encourage employers to establish exercise facilities and programs in the workplace. Physicians can also help design such programs. Employers who offer exercise opportunities may benefit from reduced healthcare costs, absenteeism, injury rates, and turnover and improved job performance, productivity, and morale.

Increasing healthcare costs have been the focus of intense concern in the United States for at least a decade, and for good reason, considering that yearly national expenditures exceed \$1 trillion (1). Employers shoulder much of these costs and thus have an obvious stake in containing them. But physicians also have a stake in this effort because it directly affects the healthcare system in which they practice and the patients whom they treat.

Most cost-containment strategies have emphasized cutting the expense of healthcare delivery through steps such as increasing efficiency in managed-care organizations and limiting the length of hospital stays. These systemic steps have worked to some extent, but healthcare expenditures are on the rise again, so we need new strategies that stress injury and disease prevention and the individual's responsibility for maintaining a healthy lifestyle.

Prevention of injury and disease has thus far been neglected in healthcare reform efforts, and only a small percentage of national healthcare spending has been dedicated to preventive measures. This is particularly unfortunate because many of the conditions that plague patients are related to lifestyles that they and we as physicians can do something about.

Physicians with an interest in sports medicine have a particular opportunity and responsibility in this regard because we know that increased physical activity--aerobic, strength, and flexibility exercise--benefits our patients. In cooperation with employers, we may be able to promote exercise in the workplace, increase compliance with exercise prescriptions, and thus improve our patients' well-being and companies' bottom lines at the same time.

Benefits of Workplace Workouts

For employees. The importance of exercise for human well-being is well established, though about 25% of Americans engage in no leisure-time exercise (2). A sedentary lifestyle is associated with an increased risk of cardiovascular disease, diabetes, osteoporosis, and certain cancers (2). Physical fitness, on the other hand, is associated with reductions in all-cause mortality (3,4) and delayed disability (5). The federal Centers for Disease Control and Prevention and the American College of Sports Medicine (ACSM) recommend that all adults should accumulate at least 30 minutes of moderate-intensity exercise most days of the week (6). Further, the recent US surgeon general's report (2) cites abundant evidence of the health benefits of regular exercise, making clear that physicians should urge patients to adopt it.

In addition, an on-site exercise facility and program provide obvious practical advantages for employees, including camaraderie for those who want it, regular exercise opportunities that are easily accessible and cost-effective, and more leisure time outside of work--especially important for the growing numbers of working parents.

For employers. A number of studies point out the benefits for companies that provide workplace exercise programs. A reduction of healthcare and insurance costs is a direct result documented in a number of studies (7-10). Others confirm declines in absenteeism (11-13), injury rates (including work-related injuries and compensation claims) (14), injury-related absences (15), and turnover (16), as well as improvements in job performance (17) and productivity (18). In addition, intangible factors such as employee satisfaction may be important in hiring and retaining qualified employees, particularly in times of high employment.

Initiating and sustaining such programs is, of course, not without cost, but benefit/cost ratios suggest that these programs make economic sense. (In these ratios, the benefit is the dollars saved from lower medical costs, absenteeism, and disability expenses, and the cost is the expense of the exercise program. Any ratio of 1 or more reflects a savings for an employer.) In different reviews, benefit/cost ratios for physical activity programs have been reported to range from 0.76 to 3.43 (19) and from 1.15 to 5.52 (20) when these programs are included in a comprehensive health promotion package.

Will workers participate? Though a number of companies have offered fitness programs for employees, relatively few participate and glean the benefits of a physically active life (see "[Do Work-Site Exercise and Health Programs Work?](#)" page 48). Numerous factors probably contribute to this problem. Ironically, healthcare professionals may bear some part of the responsibility, since primary care providers offer advice regarding physical activity to only about 22% of their patients 18 years or older (21).

The Physician's Role

As sports medicine physicians, we see exercise as medicine. Because of this view, we have a particular obligation to prescribe exercise to our patients and promote exercise prescription in the medical community and exercise in society at large. We must also champion compliance, whether our patients exercise at home or at work, since that

determines the effectiveness of any treatment. So what can we do to help advance these goals? How can we make exercise an easier pill to swallow?

Motivating patients. Of course, we can advocate an active life by prescribing exercise that is appropriate for our patients and asking how they are doing with their exercise program, whether they exercise at home or at work. Regular exercise comes down to a patient's personal decision, but we physicians can help patients make the commitments necessary to begin and sustain healthful exercise habits. For example, we may be able to motivate patients who are new to or feel self-conscious about exercise by suggesting they begin by walking or exercising with friends or colleagues.

Our own example may set the tone for such discussions. If we exercise, we establish the worth of physical activity. If we have found ways to continue exercising regularly and safely despite barriers such as too little time or tendinitis, we can use our personal experience to bolster our medical and scientific points as we encourage patients to make exercise a part of their daily lives.

Public advocacy. Beyond the office, opportunities to promote fitness programs may be no farther than the hospital where we work or the managed-care organization that we advise or administer, enterprises that may employ hundreds of people. Efforts here may involve teaching fellow physicians or medical students about counseling patients regarding exercise or developing proposals for exercise initiatives in the workplace.

In addition, many physicians have formal or informal links with businesses in the community or with local police and fire departments. Opportunities may include speaking to executives about the cost-effectiveness of corporate fitness programs or educating their employees about the benefits and characteristics of an effective exercise regimen.

Other possibilities include serving in professional societies, community organizations, and government agencies at the local, state, and national levels. I know from personal experience that physicians who work with such groups are welcomed and can help improve the lives of citizens in local communities and even across the nation.

Designing programs. Physicians may also be able to help companies create exercise programs that serve employees and conserve resources. Keeping some basic guidelines in mind can facilitate these efforts.

The three pillars. Programs should include the three pillars of fitness: aerobic training for cardiovascular conditioning, resistance training for muscle and bone strength, and stretching for flexibility.

Keep costs modest. Reasonable results can be achieved with modest expenditures, particularly when the workforce is small. For example, having a full-time trainer on staff might be possible for a large corporation, but a small company can hire a part-time consultant.

A variety of programs. Such programs can take many forms, including subsidies for health club membership and financial incentives for employees who exercise. Developing an in-house facility, however, is perhaps ideal because it allows employees

to integrate exercise with their work schedule and clearly demonstrates the employer's commitment to workers' health.

Workforce-appropriate design. An exercise facility and programs should be designed with a specific workforce in mind. Employees who are deskbound and sedentary will need a general program that includes all three pillars, while firefighters may need special equipment that helps them strengthen the trunk, lower back, and upper body.

Physical exam. Employees should have a preparticipation physical exam. This needn't go beyond the basics for a patient who is healthy, particularly if he or she is a man under 40 or a woman under 50. Those who have two or more heart-disease risk factors or symptoms such as dizziness, lightheadedness, or palpitations should be examined more closely and probably referred for a stress test. The ACSM has excellent guidelines for preparticipation clearance for exercise (22).

Equipment and space. Clean, well-maintained equipment and facilities (including lockers and showers) in pleasant surroundings accessible throughout the day reflect an employer's commitment to the health of employees. Ideally, an exercise facility will be part of a full health-promotion program that includes elements such as nutrition counseling, stress reduction, and health education.

Incentives. In the long run, fitness is its own reward, but short-term incentives encourage participation. Tracking and rewarding faithful attendance and personal improvement such as enhanced aerobic fitness or weight loss are more appropriate than direct competition among participants.

The Challenge of Change

The increasing cost of healthcare in this country is an enormous problem. Physicians who see regular exercise as one of the most promising cost-containment measures have the challenge of promoting it in the individual and collective lives of patients. The challenge is significant because the barriers to regular exercise are as many and varied as our patients and are woven into the fabric of our society. Change will be slow and incremental, but promoting exercise as a preventive medicine will improve the fiscal fitness of our society and the physical fitness and health of our patients.

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Dr DiNubile is an orthopedic surgeon in private practice in Havertown, Pennsylvania, specializing in sports medicine and arthroscopy. He is the director of Sports Medicine and Wellness at the Crozer-Keystone Healthplex in Springfield, Pennsylvania; a clinical assistant professor in the department of orthopedic surgery at the University of Pennsylvania in Philadelphia; the orthopedic consultant to the Philadelphia 76ers basketball team and the Pennsylvania Ballet; the 'Exercise Is Medicine' series editor; and a member of the editorial board of **The Physician and Sportsmedicine**. Mr Sherman is a freelance writer in New York City. Address correspondence to Nicholas A. DiNubile, MD, 510 W Darby Rd, Havertown, PA 19083.

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