STATEMENT ON

FUTURE OF THE MILITARY HEALTH SYSTEM

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Good morning. I would like to thank the Subcomittee for inviting me to testify today on the subject of the health and financial benefits of worksite health promotion programs. My name is Ron Goetzel. I have been involved in research focused on worksite health promotion programs for the past 20 years while employed at Johnson & Johnson, Thomson Healthcare (formerly Medstat), Cornell University, and Emory University.

Over the past 20 years, my work has focused on large-scale evaluations of health promotion, disease prevention, demand and disease management programs. My evaluations have focused on large employer efforts in this area including those at Applied Materials, Boeing, Chevron, Citibank, Dow Chemical, Johnson & Johnson, IBM, Procter & Gamble, Florida Power & Light, Duke University, Sharp Health Care, Saturn Corporation, PG&E, The Associates, Novartis, Highmark, General Electric, Ford, Motorola, Delta, Lucent, International Truck and Engine, First Tennessee Bank, and Texas Instruments, to name but a few.

Defining Worksite Health Promotion

Before going any further, I'd like to define worksite health promotion programs for the subcommittee. Worksite health promotion programs are employer initiatives directed at improving the health and well-being of workers and, in some cases, their dependents. They include programs designed to avert the occurrence of disease or the progression of disease from its early unrecognized stage to one that's more severe. At their core, worksite health promotion programs support primary, secondary, and tertiary prevention efforts.

Primary prevention efforts in the workplace are directed at employed populations that are generally healthy. Examples include programs that encourage exercise and fitness, healthy eating, weight management, stress management, use of safety belts in cars, moderate alcohol consumption, and recommended adult immunizations.

Health promotion also incorporates secondary prevention directed at individuals already at high risk because of certain lifestyle practices (e.g., smoking, being sedentary, having poor nutrition, consuming excessive amounts of alcohol, and experiencing high stress) or abnormal biometric values (e.g., high blood pressure, high cholesterol, high blood glucose, overweight). Examples of secondary prevention include hypertension screenings and management programs, smoking cessation telephone quit lines, weight loss classes, and reduction or elimination of financial barriers to obtaining prescribed lipid-lowering medications.

Health promotion sometimes also includes elements of tertiary prevention, often referred to as disease management, directed at individuals with existing ailments such as asthma, diabetes, cardiovascular disease, cancers, musculoskeletal disorders, and depression, with the aim of ameliorating the disease or retarding its progression. Such programs promote better compliance with medications and adherence to evidence-based clinical practice guidelines for outpatient treatment. Because patient self-management is stressed, health-

promotion practices related to behavior change and risk reduction are often part of disease management protocols.

Establishing a Business Case for Health Promotion

The Centers for Disease Control and Prevention (CDC), in conjunction with its *Healthy People in Healthy Places* initiative, has observed that workplaces are to adults what schools are to children, because most working-age adults spend a substantial portion of their waking hours at work. The question for employers is whether well conceived worksite health promotion programs can improve employees' health, reduce their risks for disease, control unnecessary health care utilization, limit illness-related absenteeism, and decrease health-related productivity losses.

There is growing evidence that the answer is "yes." Here is the logic for increased investment in health promotion:

1) Many of the diseases and disorders from which people suffer are preventable.

2) Modifiable health risk factors are precursors to a large number of these diseases and disorders.

3) Many modifiable health risks are associated with increased health care costs and reduced worker productivity, within a relatively short time window.

4) Modifiable health risks can be improved through health promotion and disease prevention programs.

5) Improvements in the health risk profile of a population can lead to reductions in health care costs and absenteeism, and heightened productivity or readiness.

6) Well-designed and well-implemented worksite health promotion and disease prevention programs can save money, and in our research actually produce a positive return on investment (ROI).

I would now like to highlight some of the salient studies supporting these points.

Many Diseases and Disorders are Preventable, Yet Costly

A large body of medical and epidemiological evidence shows the links between common, modifiable, behavioral risk factors and chronic disease.[1] Preventable illnesses make up approximately 70 percent of the total burden of disease and their associated costs.[1] Half of all deaths in the U.S. are caused by behavioral risk factors and behavior patterns that are modifiable.[2,3] In particular, the U.S. has been witnessing alarming increases in obesity, diabetes, and related disorders for many years.[4] These diseases strain the

resources of the health care system, as individuals who experience them generate significantly higher health care costs.[5]

Modifiable Health Risks Increase Employer Costs

Analyses by Anderson et al.,[6] show that ten modifiable health risk factors account for approximately 25 percent of all health care expenditures for employers. Moreover, employees with seven risk factors (tobacco use, hypertension, hypercholesterolemia, overweight/obesity, high blood glucose, high stress, and lack of physical activity) cost employers 228% more than those lacking those risk factors.[7] Workers with these risk factors are more likely to be high-cost employees in terms of absenteeism, disability, and reduced productivity.[8]

Workplaces Offer an Ideal Setting for Health Promotion

Most people agree that the workplace presents an ideal setting for introducing and maintaining health promotion programs. The workplace contains a concentrated group of people, who share a common purpose and common culture. Communication and information exchange with workers are relatively straightforward. Individual goals and organizational goals, including those related to increasing productivity, or readiness in military parlance, are generally aligned with one another. Social support is available when behavior change efforts are attempted. Organizational norms can help guide certain behaviors and discourage others. Financial or other incentives can be introduced to encourage participation in programs. Measurement of program impact is often practical using available administrative data collection and analysis systems.

Worksite Health Promotion Can Positively Influence Employees' Health Risks

An important question to consider is whether worksite programs can change the risk profile of workers? Here again, the evidence points to a positive result. Catherine Heaney and I examined 47 peer-reviewed studies, over a 20-year period, focused on the impact of multi-component worksite health promotion programs on employee health and productivity outcomes.[9] We concluded that there was "indicative to acceptable" evidence supporting the effectiveness of multi-component worksite health promotion programs in achieving long-term behavior change and risk reduction among workers. The most effective programs offered individualized risk-reduction counseling, coaching and self-management training to the highest risk employees within the context of a healthy company culture and supportive work environment.[9]

More recently, the CDC Community Guide Task Force released the findings of a comprehensive and systematic literature review focused on the health and economic impacts of worksite health promotion.[10][11]

Health and productivity outcomes from worksite interventions were reported from 50 studies. The outcomes included a range of health behaviors, physiologic measurements, and productivity indicators linked to changes in health status. Although many of the changes in these outcomes were small when measured at an individual level, such changes at the population level were considered substantial.

Specifically, the Task Force found strong evidence of worksite health promotion program effectiveness in reducing tobacco use among participants, dietary fat consumption, high blood pressure, total serum cholesterol levels, the number of days absent from work because of illness or disability, and improvements in other general measures of worker productivity. Insufficient evidence of effectiveness was found for some desired program outcomes, such as increasing dietary intake of fruits and vegetables, reducing overweight and obesity, and improving physical fitness. But overall, the review of literature came up with very positive findings related to health and economic outcomes.

Worksite Health Promotion Can Achieve a Positive Return on Investment

There is now a growing body of evidence suggesting that worksite programs can also save money and even pay for themselves. Several literature reviews that weigh the results from experimental and quasi-experimental research studies suggest that programs grounded in behavior change theory and that utilize tailored communications and individualized counseling for high-risk individuals achieve cost savings and produce a positive return on investment.[12, 13, 14] The ROI research is grounded in evaluations of employer-sponsored health promotion programs. Studies often cited with the strongest research designs and large numbers of subjects included those performed at Johnson and Johnson,[15,16] Citibank,[17] Dupont,[18] the Bank of America,[19, 20] Tenneco,[21] Duke University,[22] the California Public Retirees System,[23] Procter and Gamble,[24] and Chevron Corporation.[25] In a widely cited example of a rigorous ROI analysis, Citibank reported a savings of $8.9 million in medical expenditures from its health promotion program as compared to a $1.9 million investment, thus achieving an ROI of $4.56 to $1.00.[17] A recent contribution to the ROI literature can be found in a study published in the February 2008 issue of the *Journal of Occupational and Environmental Medicine* which found a $1.65 to $1.00 ROI for a worksite program put in place at Highmark, a health plan in Pennsylvania.[26] Even accounting for certain inconsistencies in design and results, most of these worksite programs produced positive cost outcomes.

Conclusion

In summary, I have put forth some of the main arguments in favor of increased investment in health promotion programs for the military. I believe that these programs will not only improve the health and readiness of our soldiers but also save money in the long run.

Thank you again for your time and attention and I welcome your questions and comments.

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