

Wellness at the Work Place

A Report Fulfilling NM House Joint Memorial 24

Prepared by the New Mexico Department of Health
Chronic Disease Prevention and Control Bureau

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ABSTRACT: This report reviews financial impacts of chronic disease on the state of New Mexico and presents the concept of workplace wellness programs as a strategy for reducing overall health-related costs. The report describes various types of wellness programs, including comprehensive and low-cost options. It concludes with a series of recommendations for lawmakers, employers, health plans, and wellness vendors.

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Executive Summary

Chronic diseases – such as cancer, diabetes, heart disease, or arthritis – cost the state of New Mexico an estimated \$7 billion a year. Rising healthcare costs are prompting many companies and governments to look for ways to lower expenses without reducing benefits. Preventing the most expensive medical conditions from occurring, or at least reducing their severity, are obvious strategies for bringing down costs and keeping people healthier.

“Wellness” strategies can be as simple as getting exercise, stopping smoking, eating right, or receiving routine medical screenings. Because many people spend so much of their day on the job, the workplace can be an ideal setting for encouraging healthy behaviors.

For these reasons, this report describes the costs and impacts of chronic disease in New Mexico, offers information on worksite wellness strategies, and presents a range of recommendations for lawmakers and private sector leaders.

Chronic Disease

Chronic diseases are responsible for six out of every 10 deaths in New Mexico, according to the New Mexico Department of Health. It costs over \$1 billion a year to provide direct medical treatment for people with these diseases, and the cost of lost work days and lower employee productivity is estimated at almost \$6 billion. More importantly, chronic diseases reduce people’s abilities to live their lives to the fullest.

Workplace Wellness

Workplace wellness programs provide opportunities for employers to help their employees prevent chronic diseases. Effective wellness programs may include:

- Annual risk assessments and wellness screenings (blood tests, blood pressure, body mass index, etc.)
- Exercise, nutrition, and weight loss programs
- Tobacco cessation programs
- Health education (posters, newsletters, websites)
- Incentives for participating

The employer pays for these activities, often in New Mexico at a cost of about \$15 per employee per month (with amounts varying depending on the benefits offered). Return on investment data in the state is limited, but national research shows an average 25% reduction in sick leave, health plan costs, and workers compensation and disability costs for

employers with multi-component worksite wellness programs.

New Mexico Employers

A number of large New Mexico employers offer workplace wellness programs, including both of the national laboratories, all of the Air Force bases, and our large companies such as PNM, Johnson and Johnson, First Community Bank, and New Mexico Mutual. A significant amount of our state’s workforce is employed by small companies, however, with half of all private sector employees working for businesses with fewer than 50 employees. Small businesses have a more difficult time underwriting the costs of worksite wellness activities.

Recommendations

In order to enable more New Mexicans to access wellness activities, this report offers a range of recommendations:

- STATE: Increase health risk assessments and health education for state employees.
- STATE: Pass legislation requiring nutritious food in vending machines and cafeterias in state workplaces.
- STATE: Invest in a comprehensive worksite wellness program for state employees.
- STATE: Establish a “Worksite Wellness Month” and education campaign.
- STATE: Offer tax credits for employers offering wellness benefits.
- STATE: Support a trial program to subsidize wellness programs and resources for small businesses.
- EMPLOYERS: Consider creating or enhancing workplace wellness benefits for employees.
- EMPLOYERS: Consider changing the company culture to encourage healthy choices.
- HEALTH PLANS: Consider reducing insurance rates for employers implementing comprehensive wellness programs.
- HEALTH PLANS: Consider providing more wellness materials the employers can share with employees.
- HEALTH PLANS: Consider covering more wellness activities.
- WELLNESS VENDORS: Consider partnering with universities to research wellness outcomes and returns on investment.

Preface

Purpose of this Report

This report was prepared by a working group that convened in response to the unanimous passage of House Joint Memorial 24 (HJM 24) in the 2009 legislative session. The memorial called for the New Mexico departments of health and economic development to:

- 1) Report on the cost and impact of chronic disease on the New Mexico work force;
- 2) Identify the impact of worksite wellness programs on chronic diseases; and
- 3) Identify worksite wellness programs and projects that could reduce chronic disease and improve the overall health of the population of the state.

The working group explored options that would benefit the State of New Mexico, help companies with limited resources, and ultimately increase the number of New Mexico employers providing worksite wellness programs as well as the number of employees using them.

HJM 24 Working Group

The lead author of this report was Lisa McNichol Gatan with the New Mexico Department of Health. The entire working group included:

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Introduction

What is Wellness?

Wellness is the quality or state of being healthy in body and mind, especially as the result of deliberate effort. It is also considered an approach to healthcare that emphasizes prevention of illnesses and injuries and improving quality of life, as opposed to emphasizing treating disease processes.¹ Practically speaking, wellness activities can include exercise, stopping smoking, eating right, or getting screened for heart disease or other preventable illnesses. Increasing numbers of employers are adopting strategies to encourage these types of behaviors, both for the health of their employees *and* to improve their bottom line.

Chronic Disease

In the absence of high level wellness, a person may exhibit signs of chronic diseases, and may even experience disability or early death as a result of chronic conditions.² Chronic diseases are illnesses that are not contagious, are prolonged in duration, and are rarely cured completely. The most common chronic illnesses are cardiovascular disease, cancer, diabetes, chronic obstructive pulmonary disease, and arthritis. The leading causes, also know as “chronic disease risk factors,” are tobacco use, lack of adequate physical activity, and poor nutrition.³ Poor nutrition and inadequate physical activity contribute to obesity, being overweight, high blood pressure and abnormal cholesterol.³ These conditions are also chronic disease risk factors. According to a national wellness company WellSteps, data suggest that approximately 60% of employees have at least one chronic disease risk factor.⁴

According to a report by the New Mexico Department of Health, “Chronic diseases are responsible for six out of every ten deaths in New Mexico. The diseases affect people of all ages, but are more common among older adults. Nearly 890,000 cases of seven common chronic diseases were reported in New Mexico in 2003. The 2003 direct medical treatment costs for these chronic diseases in New Mexico were estimated at \$1.2 billion, and the cost of lost workdays and lower employee productivity was

\$5.8 billion, leading to a total annual cost estimate of \$7 billion.”³ Heart disease, stroke, hypertension, cancers, diabetes, pulmonary conditions, and mental disorders are included in the above estimates.

The New Mexico Work Force

Among New Mexico’s 1.97 million people,⁵ 48 % comprise the civilian labor force.⁶ The largest proportion of New Mexico’s population is 20-44 years old, followed by those between the ages of 45 and 64.⁷

The annual cost of chronic diseases to New Mexico – in medical treatment, lost workdays, and lower employee productivity – is estimated at \$7 billion.

Around half of the state’s employees work in government, education, health, professional, or business services.⁸ The proportion of government jobs in New Mexico is high because of the presence of Sandia and Los Alamos national defense laboratories and three large Air Force bases,⁸ all of which have comprehensive wellness programs with onsite facilities and staff. The State of New Mexico alone employs over 20,000 people.⁹

Almost half of all private sector employees in New Mexico work in businesses with 49 or less employees. An additional 14% work in companies with 50-99 employees, and 37% work in businesses with 100 or more employees.¹⁰

Tables 1 and 2 list the most common chronic diseases in New Mexico, their risk factors, the percent of New Mexico working age adults with the conditions, and death rates for all ages.^{11, 12}

Table 1: The Burden of Chronic Disease in New Mexico^{11, 12}

Condition or Cause of Death	Percent of NM working age adults with condition (ages 18 – 64) 2007	Deaths (age-adjusted per 100,000 persons, all ages), 2006
Arthritis	21.9%	
Adults ever diagnosed with diabetes	6.1%	
History of any cardiovascular disease (stroke, angina or coronary heart disease, heart attack)	4.4%	
Deaths from diseases of the heart		167.8
Cancer deaths (all cancers combined)		153.7
Deaths from chronic lower respiratory diseases		46.2
Stroke deaths		32.2

Table 2: Risk Factors for Chronic Diseases in New Mexico among Working Age Adults (2007) ¹¹

Risk Factor	Percent of NM adults ages 18 – 64 with the risk factor
Insufficient fruit & vegetable consumption	78.5%
Insufficient physical activity	44.6%
Overweight	35.4%
Obesity	26.5%
High cholesterol	30.3%
High blood pressure	20.1%
Current cigarette smoking	22.6%

Potential Cost Savings for New Mexico

The Milken Institute, an independent economic think tank whose mission is to improve the lives and economic conditions of people in the U.S., reported that chronic conditions account for 40% of annual healthcare.¹³ That means that even a modest 5% to 10% reduction in chronic diseases could produce a major decrease in healthcare costs. Results from another three-year study of 46,000 U.S. employees showed that those with certain chronic disease risk factors incurred significantly higher medical costs than did employees without the risk factors.¹⁴ See Table 3.

Table 3: Medical Costs for Employees with Chronic Disease Risk Factors compared to Employees without Risk Factors¹⁴

Condition	Annual Percent Higher Medical Expenditures
High blood glucose levels	35%
Employees at extremely high or low body weight	21%
Former tobacco users	20%
Current tobacco users	14%
High blood pressure	12%
Sedentary lifestyles	10%
Multiple heart disease risk factors	228%
Multiple stroke risk factors	85%

Absenteeism and Presenteeism

In addition to healthcare costs, lost productivity caused by absenteeism and “presenteeism” are major costs to employers in the U.S. Employees are absent due to personal illness, family issues, personal needs, stress, and an “entitlement” mentality.⁴ WellSteps reports that absenteeism costs \$615 per employee per year.⁴

Presenteeism occurs when employees show up for work but they are not fully engaged and productive, and they work slowly. Reasons for presenteeism include personal illness, poor health, sleep deprivation, and life issue distractions. Employees with presenteeism are more prone to mistakes and transmitting illness to fellow employees (such as influenza), causing a larger fallout in work efficiency.¹⁵ Presenteeism accounted for over 75% of all lost productivity in 2003.¹³

Goetzel and colleagues used a combination of five surveys to estimate that absenteeism associated with chronic conditions resulted in greater than 10 days lost per year, per employee, and that presenteeism resulted in 30 days lost per year, per employee. This research summary was prepared by John Riedel, a health and productivity consultant to self-insured employers.¹⁶

The Role of Employers in Wellness

The Wellness Council of America (WELCOA), a nonprofit organization established in the 1980s to offer leadership in worksite wellness, established the following principles to guide employers who are considering worksite programs:¹⁷

- Healthcare costs are an issue of significant concern.
- A healthy workforce is essential to America's continued growth and prosperity.
- Much of the illness in the U.S. is directly preventable.
- The workplace is an ideal setting to address health and well-being.
- Workplace wellness programs can transform corporate culture and change lives.

In 2007, the Milken Institute estimated that New Mexico could reduce its health related economic costs by 25% or

Case Study: New Mexico Mutual

New Mexico Mutual offers its worksite wellness program to all employees. Over five years, the business created a culture of health within the workplace with support from the company's president. Programs are evaluated on their ability to deliver a positive return on investment and benefit.

Wellness Program Features:

- Free annual health risk assessments
- Free annual screenings, including blood tests, blood pressure, body mass index, waist circumference and body fat
- An online incentive program through which employees earn points for activities like preventive exams, exercise, health quizzes, and behavior changes
- Events including flu immunizations, lunch and learns, on-site fitness classes, a weight loss support group, and annual health fairs
- Posters and weekly health tips in the newsletter
- An employee assistance and work-life resource

Outcomes (2008):

- Cost: \$20,000 including incentives.
- 93 active participants out of 122 employees
- 28 significantly reduced heart disease risk factors
- 22 lost weight ranging from 2 to 83 pounds, for a total of 247 pounds
- Two quit smoking and another four remained smoke free during the 2008 program year
- One participant lowered their glucose into the normal range during the 2008 year

Other health improvements:

- 121 participated in annual health risk assessment
- 25 reported a significant improvement in nutrition (increased fiber intake and decreased saturated and trans fat intake)
- 21 reported a notable increase in exercise
- 15 completed a weight management course
- One received cancer treatment due to screening

Financial Outcomes (2004-2007)

- Reduction in absenteeism
- Decreased number of health insurance claims for illness
- Health insurance premiums increased slightly in 2005 and leveled off in 2007

\$6 billion over 20 years by adopting an “alternate health path.”¹³ A major portion of those economic savings would occur in the business community as a result of reducing lost productivity. The Milken Institute’s alternative path includes improvements in prevention, behavioral patterns, and treatment. The improvements, which could be partially accomplished with worksite wellness programs, include:

- A reduction in number of obese persons
- A continued reduction in smoking
- Increase physical activity
- Return high cholesterol to 2000 levels
- Improvement in early intervention and treatment
- Lower healthcare cost growth

The Centers for Disease Control and Prevention (CDC) recommends the worksite setting for health promotion and disease prevention initiatives, and has developed numerous online and free related resources.¹⁸

Worksite Wellness Strategies

As noted previously, a growing body of evidence demonstrates the effectiveness of worksite wellness programs in ending tobacco use, increasing physical activity, losing weight, and achieving healthy blood pressure and cholesterol levels.¹⁹ Preventive screenings coupled with health education are key components of the successful programs.¹⁸ Integrating a program into the organization’s structure and linking related initiatives such as employee assistance programs are important elements, as are creating a supportive environment and adopting policies promoting health.^{18, 19, 20}

Research of worksite wellness programs over the past 15 years has led to an understanding of the most effective factors and strategies. Key components are program planning, implementation, and evaluation of procedures and outcomes. Participation, behavior changes, and routinely collected screening and follow-up data can be used in the evaluation. Some have raised concerns that the information may be used to discriminate against employees with existing health conditions and risk factors or to remove sick employees from their jobs. Assuring

participants that their health data is confidential is crucial during all phases of a worksite wellness program.

Comprehensive Strategies

The case studies presented thus far offer “comprehensive” wellness programs. A comprehensive program involves all

Case Study: First Community Bank

The bank provides a comprehensive wellness program for employees at all branch locations. The program is encouraged by the bank president, is led by their marketing vice president, and is supported by a wellness team consisting of an employee from each market. Programs are consistently evaluated for return on investment. The program reaches all employees and impacts family members.

Program Features

First Community Bank provides a similar program to New Mexico Mutual’s. Incentives vary, however. When First Community Bank employees reach a certain number of wellness points, they are rewarded with a “LifeStyle day” (a day off). When they quadruple their points, they choose either a \$200 reduction in insurance premiums the following year or \$200 cash if they are not on the company’s health plan.

Outcomes

Among employees who were actively involved in the wellness program from fall 2006 to fall 2007, the following outcomes were achieved:

- Cost: \$43,500 including incentives.
- 424 active participants out of 779 employees
- 35 employees increased their exercise levels
- 32 lost significant weight
- 29 decreased cholesterol levels
- 17 decreased blood pressure
- Four quit smoking
- One reduced risk status for diabetes

Financial Outcomes

Health insurance rates at First Community Bank remained the same from 2006-2008 while the national trend was increasing significantly.

employees, deals with all major health risks, offers choices, targets both the employees and the worksite environment, and provides periodic evaluation of its results. Successful comprehensive programs organize their worksites for promotion of wellness and make changes in corporate culture to demonstrate commitment. Successful programs also include referral and follow-up of at-risk participants to health and medical care, and support employees as long as they are employed. Comprehensive programs emphasize long-term planning and use data to monitor outcomes. Marketing and promotion of campaigns are essential. The following strategies are used in comprehensive programs.²¹

- Health screening and health risk assessment (HRA)
- Coaching or counseling employees
- Incentives
- Health improvement programs
- Organizing worksite-wide activities

See Appendix B for additional details.

Cost of Comprehensive Programs

The costs vary based on activities offered and participation. The Solutions Group, an Albuquerque business that provides customized worksite wellness programs, has client companies that pay about \$15 per participant per month.²² This amount includes an annual HRA, wellness screening and online incentive program at a minimum.

Return on Investment for Comprehensive Strategies

It should be noted that the HJM24 working group did not include a health economist. The question of return on investment (ROI) from employee health promotion programs is a very complex issue.

One resource the working group found helpful was produced by the Wisconsin Public Health and Health Policy Institute.²³ (See Appendix A.) The document includes information about the range of ROI estimates for every dollar spent on worksite programs. The document also shows that wellness programs generally require three to five years before having an impact on medical costs.²³ A

separate meta-analysis of 42 economic studies of multi-component worksite programs found that the programs averaged a 25% reduction in sick leave, health plan costs, and workers' compensation and disability costs.²⁴

Another resource the working group found helpful is a return on investment calculator for worksite programs.⁴ The ROI calculator is available online at

Case Study: Albuquerque Public Schools

Start! Walking is a free program designed by the American Heart Association to increase physical activity. Key components include organizational support, social support through walking groups, individual and group goal setting, and tracking and rewarding physical activity.

APS adapted the *Start! Walking* program into an eight-week fitness challenge that encouraged walking and other forms of exercise. About 100 employees were trained as "champions" to encourage participation at their worksite. The event launched in January 2009 with a "Passport to Fitness" event where employees visited various vendor booths. The district superintendent and president of the board attended to encourage participation. Local businesses donated items for incentives and prizes. Health plan representatives helped organize the challenge and donated prizes to motivate employees.

Outcomes

Over 560 employees participated in the 2009 fitness challenge. Sixty-five million steps, over 23,000 miles, and nearly 4,000 hours of physical activity were logged over the eight-week period. After the challenge ended, many schools and departments continued making progress toward their fitness goals.

Other organizations using *Start! Walking* include Christus St. Vincent Regional Medical Center, Española Public School District, Los Alamos National Laboratory, and New Mexico Department of Health.

www.wellsteps.com. The calculator compares the difference between doing “business as usual” and implementing evidence-based wellness strategies. The ROI calculator allows users to estimate savings in healthcare costs, absenteeism, and presenteeism. Different estimates are available for three intervention intensities – low, medium and high.

Wellness programs may average a 25% reduction in sick leave, health plan costs, as well as workers’ compensation and disability costs.

Free and Low-Cost Strategies

For businesses unable to provide comprehensive programs, free and low-cost strategies are a valuable first step. WELCOA has identified the following “Small Business Criterion” for worksite wellness programs.¹⁷ These activities can be accomplished with minimal financial resources, but require human resources. (See Appendix B.)

1. Capturing CEO and management support
2. Designating a company wellness leader
3. Conducting an employee health interest survey
4. Providing an opportunity for health screening
5. Administering an annual physical activity campaign
6. Holding a healthy eating presentation or lunch and learn
7. Establishing an in-house wellness library
8. Disseminating a quarterly health newsletter
9. Implementing healthy policies and procedures
10. Supporting community health efforts

Case Study: American Cancer Society

The NM Department of Health provides an annual contract for the American Cancer Society’s *HealthLinks* program, which focuses on physical activity, nutrition, tobacco policy and cessation. Key components of the program include monthly newsletters, lunch ‘n learns, and workplace assessments. Recent research deems the assessment and follow-up as a promising approach for preventing chronic disease to large numbers of adults.²⁵ The assessment addresses 15 evidence-based worksite wellness strategies:²⁵

- Have a tobacco ban, tobacco cessation quit-line, and cover tobacco cessation treatment
- Have physical activity programs, “use the stairs” signs, and provide physical activity facilities
- Provide healthy food choices
- Use health promotion campaigns and track employee health behaviors
- Promote sun protection
- Send preventive services reminders and track delivery of preventive services
- Cover recommended cancer screenings and influenza vaccination, and provide on-site influenza vaccination

Participation

144 businesses are enrolled in *HealthLinks*, including 93 businesses with 10 employees or less. Many of the businesses are located in rural parts of the state: Alamogordo, Gallup, Grants, Los Lunas, Magdalena, Milan, Ruidoso, and Socorro. Businesses in Farmington and Las Cruces are also utilizing *HealthLinks*.

A variety of industries are participating, as demonstrated by the following business names: Boot Barn, City of Las Cruces, City of Socorro, Doña Ana County, Farmington Chamber of Commerce, NRC Bookkeeping, Rehoboth McKinley Christian Healthcare Services, Ruidoso Valley Chamber of Commerce, Walmart Super Center, Wells Fargo Bank, and others. Recruitment began in summer 2008.

Challenges for Small Businesses

According to an analysis of the 2004 National Worksite Health Promotion Survey published in 2008, only 6.9% of responding worksites with more than 50 employees offered a comprehensive worksite health promotion program, considerably lower than the *Healthy People 2010* goal of 75%.²⁰

Very large worksites with more than 750 employees consistently offered more programs, policies, and services than did smaller worksites. Sites with a staff person dedicated to and responsible for health promotion were significantly more likely to offer a comprehensive program, and sites in the agriculture and mining or financial services sector were significantly less likely than those in other industry sectors to offer such a program.

The study found that worksites with small numbers of employees are potentially less capable than large employers to offer health promotion programs. It concluded that more work must be done with small businesses to make a “business case” for health promotion, to develop new methods for reaching employees, and to determine the employer and employee incentives (e.g., tax credits, benefit discounts) that are most effective in supporting worker health.

HJM 24 working group members identified challenges in reaching rural communities and identifying worksite campaigns that do not rely on the internet since many workers in New Mexico do not hold office jobs.

What New Mexico Employers Say

The HJM 24 working group launched an electronic survey in July 2009. The survey was distributed to chambers of commerce, business networks, economic development groups, and municipal and county associations across New Mexico. A total of 167 employers completed the survey, including 98 for-profit businesses, 33 nonprofits, and 28 government agencies.

Almost all (97%) of the respondents believed worksite wellness programs improved the health and well-being of employees, and 92% believe such programs positively impact the company bottom line. Most (90%) believe productivity and absentee rates improve with employee wellness programs. Almost half are interested in either developing a worksite program or enhancing an existing program.

Of the companies that answered the survey, over half currently offer health education to employees, such as newsletters and posters, and nearly one-third offer health screenings such as blood pressure, cholesterol, and body mass index, and cost-sharing for health club memberships.

Survey respondents also provided suggestions for this report, many of which are included in the recommendations section.

Recommendations

In order to ease the burden of chronic disease in New Mexico through early detection and preventive measures, the HJM 24 working group recommends that the New Mexico legislature, employers, worksite wellness vendors, and health insurance companies consider the following recommendations. National wellness experts contributed to the recommendations.²⁶ (Additional recommendations from these experts are included in Appendix D.)

What can legislators do?

(Some of these recommendations may have to be considered after state economic conditions improve.)

Start with State of New Mexico employees.

1. **Vending machines and cafeterias:** Pass legislation requiring nutritious food in all vending machines and cafeterias in state facilities where state employees work. Require implementation and enforcement from each state department. The policy should contain nutrition standards that are consistent with the Dietary Guidelines for Americans.
2. **State employee health screenings:** Pass legislation that requires the State of NM health insurance providers to reach 5% of state employees with an annual health risk assessment plus health education based on the results, and aim to increase reach by 5% per year until at least 80-90% of employees participate. Each year, report aggregate annual comparisons to the interim Health and Human Services Committee.
3. **Wellness program for state employees:** Invest in a comprehensive worksite wellness program for all state employees and expect a three-fold return on the investment. One-year cost: \$4.32 million (approximately 20,000 state employees x \$18 per month x 12 months = \$4.32 million). Expected annual return on investment after three to five years of programming: \$12.96 million. Utilize a request for proposal process to identify existing worksite wellness

companies in New Mexico to manage the program and prepare reports with before and after data. Publicize results to the legislative interim Health and Human Services Committee and the business community.

Learn more about worksite program return on investment.

4. **Invite expert presentation:** Host a presentation by a national worksite wellness expert during a fall 2010 legislative interim Health and Human Services Committee meeting. (The HJM24 working group is currently looking into sponsorship for the expert's out-of-state travel expenses.)

Help NM businesses establish worksite wellness programs.

5. **Resource guide for businesses:** Help small businesses implement viable programs by supporting the development of an evidence-based guide that includes available wellness resources statewide. Also provide businesses with training and technical assistance to use the guide. Funding would be needed for staff, publication of materials, development of website, and training costs. Consider including \$5,000 mini-grants for businesses to initiate wellness programs in the resource guide.
6. **Wellness Month and Campaign:** Promote the health and financial benefits of workplace health promotion by conducting a multi-year communications campaign to educate businesses about the return on investment and other known benefits. Utilize the governor and business leaders to encourage companies to initiate programs of their own. Declare a "New Mexico Worksite Wellness Month" and launch the campaign at that time.
7. **Employer tax credit:** Pass legislation to offer a tax credit for small businesses that implement comprehensive worksite wellness programs. (Similar

bills were introduced in 2008 and 2009; future bills should consider including departmental administrative costs.) Also consider ways to incentivize nonprofit organizations that do not benefit from tax credits.

8. **Promote wellness in small business:**

Demonstrate the health and financial benefits of workplace health promotion to employers in the state by conducting a five-year comprehensive wellness program among 25 small businesses with up to 50 employees. Reach rural and urban areas with this initiative. Utilize a request for proposal process to identify existing worksite wellness companies in New Mexico to manage all aspects of the program and prepare reports with before and after data. Publicize program results to the legislative interim Health and Human Services Committee and the business community. Approximate annual cost: \$270,000 (\$18 per employee x 1,250 employees x 12 months).

What can health insurance providers do voluntarily?

9. **Reduced insurance rates: Consider offering** incentives, such as premium reductions or reduced rates, to employers who implement comprehensive wellness programs or meet a certain criteria for worksite programs.
10. **Wellness materials:** Provide a wider range of worksite wellness materials for employers that cannot purchase formal benefits packages.
11. **Cover wellness:** Include coverage for selected evidence-based prevention and wellness improvement activities such as screenings, health risk assessments, and coaching.

What can worksite wellness vendors do voluntarily?

12. **Research:** Partner with local universities regarding worksite wellness research opportunities as well as development of educational handouts and peer-reviewed publications.

What can employers do voluntarily?

13. **Encourage collaboration:** When multiple health insurance providers deliver wellness services to the same business, encourage collaboration to offer more integrated wellness initiatives.
 14. **Offer worksite wellness:** Investigate and implement a worksite program, such as those developed by the American Cancer Society, American Heart Association, CDC, health insurance providers, or the worksite wellness companies listed in this report and Appendix C.
 15. **Change office culture:** Adopt a culture of wellness where healthy living and a higher level of personal health are encouraged. Role model healthy behaviors. Communicate a vision of health in relation to the organization's mission.
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Appendix A: Wisconsin Issue Brief on Wellness Return on Investment



WISCONSIN
Public Health
& Health Policy
INSTITUTE

Translating Research into Policy and Practice

Issue Brief

Employee Health Promotion Programs: What is the Return on Investment?

By Daniel Zank and Donna Friedsam

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Many employers, as part of their efforts to contain rising health care costs, are implementing worksite programs variously described as health promotion, lifestyle programs, health and productivity management, population health management and, simply, wellness programs. The purpose of this issue brief is to consider whether such programs improve health. If so, do they in turn reduce utilization of health care services and reduce health care expenditures?

The popular media have done much to promote the concept of worksite wellness. Last year, *In Business: Madison*¹ magazine printed a story accompanied by a table reporting an impressive range of returns on investment (ROI):

Return on Investment
(Per dollar ROI for lifestyle programs)

Coors	\$6.15
Kennecott	5.78
Equitable Life	5.52
Citibank	4.56
General Mills	3.90
Travelers	3.40
Motorola	3.15
PepsiCo	3.00
Unum Life	1.81

Source: 2004 T.E. Brennan Company, as reported in *In Business: Madison*, September, 2004.

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Would these ROIs stand up to rigorous empirical analysis of the data? What factors produce such disparate returns among these programs? And does the published literature, subject to peer review of scientific methods, support the ROIs reported here?

Health and Productivity Management
Illness and injury associated with an unhealthy lifestyle or modifiable risk factors is reported to account for at least 25% of employee health care expenditures.² The most significant of these risk factors are stress, tobacco use, overweight or obesity, physical inactivity, excessive alcohol use, and poor nutritional habits. Over the past two decades, a variety of groups at the local, state, and national levels have promoted the concept that health risk reduction and care management programs can improve employee health, and that worksite health education, health risk management, and benefit counseling should complement standard health insurance benefits.

The intensity of worksite health promotion programs range from bulletin board, pamphlet or newsletter information to on-site fitness facilities, health risk reduction classes, and personal lifestyle change coaching.³ Wellness programs today often include a health risk assessment (HRA) to evaluate each employee's modifiable risk factors of disease. Program coordinators then target interventions to those that are at increased risk through personal communications and individual follow-up.⁴

Comprehensive health promotion programs may include classes on health risk reduction and job safety, fitness and exercise activities, health club memberships, and reductions in co-payments or premi-

ums for employees who adhere to recommended medical screening guidelines.

Along with this, some employers are restructuring health benefits and encouraging employees' cost-sensitivity when accessing health care.⁵ These changes are intended to reduce employees' need for and utilization of health care, yielding reduced group health care costs. Demonstrated reductions in health care expenditures should then provide employers with a powerful bargaining chip in negotiating lower health insurance premiums during future terms.⁶

Evidence basis: A range of ROI estimates

The empirical research has produced results as varied as the popular media on ROI. Nonetheless, evidence continues to grow that well-designed and well-resourced health promotion and disease prevention programs provide multi-faceted payback on investment. Peer-reviewed evaluations and meta analyses show that ROI is achieved through improved worker health, reduced benefit expense, and enhanced productivity.

- Goetzel and colleagues, in their meta-analysis of two dozen articles summarizing economic evaluations of health and productivity management programs, found an average return of \$3.14 per \$1 invested in traditional health promotion programs. The ROI estimates for the individual programs ranged from \$1.49 to \$13.^{7,8}
- Aldana reviewed 72 articles and concluded that health promotion programs achieve an average ROI of \$3.48 when considering health care costs alone, \$5.82 per \$1 when examining absenteeism, and \$4.30 when both outcomes are considered.⁹

- Ozminkowski and colleagues conducted a 38 month case study of 23,000 participants in Citibank, N.A.'s health management program and reported that within a 2 year period, Citibank realized a ROI between \$4.56 and \$4.73.¹⁰ Follow-up studies found improvements in the risk profiles of participants, with the high-risk group improving more than the "usual care" group¹¹ as a result of more intensive programming.
- Chapman's 2004 meta-evaluation of 42 studies, ranking overall validity of the studies, reports cost-benefit ratios from \$2.05-\$4.64.⁴

In addition to immediately quantifiable cost reductions, researchers have reported a variety of spin-off benefits: greater productivity, intellectual capacity, and reductions in disability¹² and absenteeism.^{9,13,14,15} Such programs may also have positive effects on employee perceptions of the company¹⁴ and worker morale, even among non-participants.¹³ These outcomes go beyond savings in direct health care costs to provide non-health related ROI.

"In the future, value may be measured by the effect of health benefits on worker resilience, commitment, and ability to innovate."⁵

Tailoring program to maximize ROI

Health promotion programs aim to reduce the health risks of employees at high risk while maintaining the health status of those at low risk. A variety of disease management interventions are available to fit the specific risk profiles of various worksites. Insurers and corporations now seek to calibrate their interventions in order to achieve optimal risk reduction and cost-effectiveness.¹⁶

In 2001, University of Michigan researchers reported on stable trends in health care costs for over 2 million current and former employees in an 18 year data set.¹⁷ The mean cost increase per risk factor gained (\$350) was found to be more than double the mean cost decrease per eliminated risk factor (\$150). In other words, increases in costs when groups of employees moved from low risk to high risk were much greater than the decreases in costs when groups moved from high risk to low risk. Their conclusion: Programs designed to keep healthy people

healthy will likely provide the greatest return on investment.

On the other hand, Pelletier's meta-analysis¹⁶ and other program evaluations¹⁸ suggest that individualized risks reduction for high-risk employees within the context of comprehensive programming is the critical element in achieving positive clinical and cost outcomes in worksite interventions.

Dose-Response?

Several factors might affect the impact of various programs and the ultimate ROI, including cultural and environmental factors, workforce demographics, level of participation and longevity of the program. Most cost-benefit studies have been conducted in large companies with more than fifty employees. But researchers have shown that similar results can be obtained by small businesses with as few as five workers actively involved in a well-managed program.¹⁹

Various studies also suggest that even relatively modest levels of participation can achieve substantial program impact. Contrary to reports by the popular media that such programs require more than 70% participation³, published reports of at least one case showed positive ROI with 51% participation.^{10,20,21}

Length of intervention appears to be a more salient variable: an impact on medical costs generally requires three-to five years of programming.^{14,16}

Future developments

Despite the abundance of positive program evaluations, several caveats remain. Negative results are less likely to be reported or published, thus biasing the ROI upward. Uncertainty persists regarding the specific impact of the various program components. But as these programs take hold, further research and evaluation will enable fine-tuning of program investments.

Meanwhile, the preponderance of data and the strength of the published research stand in favor of a positive ROI for health promotion programs. Indeed, the business case for such programs is now well enough defined that some insurance brokers offer discounted rates to companies that institute or subscribe to wellness programs.³ Future questions will focus on how to best

combine comprehensive and focused interventions, the intensity of elements, and how to calibrate the dose-response model to achieve a target ROI. Here, employers, employees, and researchers will need to collaborate to define mutual goals in terms of both clinical and cost outcomes.

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Appendix B: Description of Comprehensive, Free, and Low-cost Worksite Wellness Strategies

Comprehensive Strategy: Health Screening and Health Risk Assessment (HRA) - An HRA is sometimes used in conjunction with a health screening. An HRA is a computerized assessment tool which looks at an individual's family history, health status, and lifestyle. An HRA seeks to identify precursors associated with premature death or serious illness and quantifies the probable impact for each individual. An HRA instrument is derived from an understanding of the course of a disease. Based on this understanding, useful prediction instruments can be constructed to assess the health risks of an individual. Individuals with a higher number of health risks tend to have more serious health problems over time.

For accuracy, it is crucial to obtain direct measures of blood pressure, glucose, triglycerides, cholesterol, LDL-cholesterol and HDL-cholesterol. Some additional tests may be offered such as prostate specific antigen for prostate cancer, thyroid stimulating hormone, Vitamin D, and A1c for monitoring diabetes.

Comprehensive Strategy: Coaching/Individual Counseling - One of the most successful ways to help individuals change and improve their health status is counseling (or coaching) on a one-to-one basis. A wellness counselor/coach should know how to do the following:

- Review employee health risks and encourage physician attention when determined at-risk.
- Contact employees who have health risks.
- Counsel employees on a one-on-one basis, helping them set goals, solve problems, and get expert help when needed.
- Help employees follow their treatment recommendations and make lifestyle and health behavior changes.
- Recruit employees into health improvement programs, such as weight loss and smoking cessation.
- Work with employees one-on-one using guided self-help.

- Conduct classes and small group discussions if necessary.
- Work with wellness committee members to plan and conduct worksite-wide wellness activities.

Comprehensive Strategy: Incentives - Incentives can be used to increase participation rates, help with attendance and completion, and help individuals change or adhere to healthy behaviors. Incentives may be awarded for achieving a goal, maintaining a behavior, participating in events, and more. Incentives are limited to 20% of the cost of employee health care coverage each year, and are subject to HIPAA nondiscrimination rules. If a participant is unable to earn an incentive because of a disability or other condition, they must be given an alternative. For example, wellness programs may reward employees for being at a healthy weight but must also offer reward for employees who participate in a weight management course to try to control their weight.

Incentives include water bottles, gift cards, fitness books, reduced employee contributions for health insurance, and other creative ideas.

Free and low-cost strategy: Physical Activity Campaign Physical activity can be addressed in many ways. Examples include voluntary walking programs; posting signs to remind employees to take the stairs rather than the elevator; and getting a group discount to a local gym and encouraging use.

Free and low-cost strategy: Healthy Eating In-service or Lunch 'n Learn - Providing education coupled with a healthy and nutritious lunch for employees is a low-cost and easy way to promote wellness in the workplace. Another option would be to encourage employees to bring their own healthy lunch or organize a pot luck with healthy options. Local medical professionals may offer free educational sessions in their area of expertise. Examples of lunch 'n learn topics include weight loss, blood pressure, stress, and portion control.

Free and low-cost strategy: Implementing

Healthy Policies and Procedures - Health policies have the ability to reach and impact the greatest number of employees at the lowest cost compared to other strategies. New Mexico laws that prohibit smoking and require space for new mothers to pump breast milk are current workplace policies designed to curb diseases of the lungs and childhood overweight, respectively. The Wellness Rule adopted by the Public Education Department in 2006 also impacts school employees.

New health policies to consider are 1) replacing existing vending machines options with more nutritious options, and 2) offering flexible work hours to allow for physical activity during lunch or other parts of the day.

Appendix C: New Mexico Businesses and Organizations with Worksite Wellness Programs

This list represents all businesses and organizations known by the Department of Health and the HJM 24 Working Group to have worksite wellness programs, as of October 2009. There may be additional businesses and organizations that are not listed.

Large businesses (100+ employees)

The Bell Group
Bohannon Huston
First Community Bank
General Mills
Johnson & Johnson Ethicon
New Mexico Student Loans
PNM Resources
Wilson & Co.

Medium-size businesses (50-99 employees)

American Society of Radiologic Technologists
Century Bank
New Mexico Mutual

Small businesses (0-49 employees)

Albuquerque Pipe and Pump Supply
Alvarado Management Co. & Sandia Ski Systems
Ghost Ranch
Management Resource Group
McKee Wallwork Cleveland
New Mexico Finance Authority

Government

City

- City of Albuquerque
- City of Santa Fe

County

- Bernalillo County
- Santa Fe County

Federal

- Cannon, Holloman, and Kirtland Air Force Bases
- Sandia Laboratory
- Los Alamos National Laboratory

State

- State of New Mexico – wellness benefits through health insurance providers
- Department of Health Employee Wellness Program
- Department of Health Diabetes Prevention and Control Program
- Department of Health Tobacco Use Prevention and Control Program
- Department of Health Women, Infants and Children Program

Tribal

- Route 66 Casino
- San Felipe Pueblo

Schools and Colleges

Albuquerque Academy
Albuquerque Public Schools
CNM Workforce Training Center
Española Public Schools
Northern New Mexico College
University of New Mexico

Healthcare (wellness initiatives for their own employees)

El Centro Clinic
Molina Healthcare
Presbyterian Foundation

Healthcare (for businesses and organizations they insure)

Blue Cross Blue Shield of New Mexico
Cristos St. Vincent Regional Medical Center
Lovelace Health Plan
Presbyterian Health Plan
United Health Care

Worksite Wellness Companies in New Mexico

Body Facts
Health Fitness Corporation
Nuvita
The Solutions Group
Wellness Improvement Experts

Appendix D: Recommendations to NM Legislature from Five Leading National Experts in Worksite Wellness

If there is one thing you could ask of our legislature that may make the biggest impact on worksite wellness, what would it be?

Michael O'Donnell, PhD, MBA, MPH; President, American Journal of Health Promotion

1. Develop a great health promotion program for state employees.
2. Promote the health and financial benefits of workplace health promotion to employers in the state.
3. Develop a strategy to help small businesses implement viable programs.

Ron Goetzel, Ph.D., Research Professor and Director, Institute for Health and Productivity Studies, Rollins School of Public Health, Emory University

1. Evaluate programs put in place for state employees and publicize program results to the business community.
2. Support national legislation by going to www.PassWellnessAct.org

Steve Aldana, PhD, CEO and Founder of WellSteps

Enact tax credits for wellness programs. See <http://ebn.benefitnews.com/news/employers-may-see-tax-breaks-on-wellness-programs-2672039-1.html>.

Indiana recently passed a bill to help small businesses provide wellness with tax incentives: wellness.indianachamber.com/index.php/wellness-tax-credit

Larry Chapman, MPH, Senior VP and Director of the WellCert Program, WebMD Health Services

Pursue the following things in the following order:

1. State tax credits for health promotion programming with the state Health department setting standards.

2. Health promotion programming tools for small business provided through the State Health department.
3. Consortium contractor for health promotion services to small business: Using a formal procurement process and an RFP process, select a vendor that can provide wellness consulting and services to small and medium employers statewide. This “preferred” vendor would provide services like: initial consultation, proposal development, establishing a program administrative infrastructure, conducting biometric screening, eHealth portal, planning employee communications, setting up and training an employee advisory committee, etc. The vendor would provide consistent program development activity at the lowest cost possible across the state. The vendor could also sub-contract with others but would help maintain the quality control function.
4. Development of wellness vendor standards for health insurance providers. This could include the development of standards for wellness programming provided by health insurers. These standards could follow the initial lead of the National Committee for Quality Assurance and Utilization Review Accreditation Council wellness vendor certification program and could be augmented in areas that are perceived as more important for your state. This could also include the definition of the span of possible wellness services to be provided and the types of required interventions that should be included in health plan wellness efforts.

Dee Edington, PhD, Director, Univ. of Michigan, Health Management Research Center

1. Give companies tax credits if the company can satisfy the first two pillars:
 - a. Vision from senior management that is connected to the mission of the company (typically earnings) or movement towards mission for non-profits.
 - b. Make improvements in environmental and culture support for employees.

- c. Document in two pages what you are doing in each of the two above areas and how will you measure progress.
 - 2. Additional tax credits during the second or third year if they move to pillars three through five. If the Legislature prefers to incent communities rather than companies they could do so with the same criteria for the first two years
 - a. Vision from senior leaders in the community that is connected to the mission of providing a high quality of life for its citizens.
 - b. Form a coalition of stakeholders within the community to effect improvements in environmental and cultural support.
 - c. Document in two pages what the community is doing in each of the two above areas and how they will measure progress.
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ENDNOTES

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