Addressing Obesity in the Workplace: The Role of Employers

LUANN HEINEN and HELEN DARLING

National Business Group on Health

Context: Employers have pursued many strategies over the years to control health care costs and improve care. Disappointed by efforts to manage costs through the use of insurance-related techniques (e.g., prior authorization, restricted provider networks), employers have also begun to try to manage *health* by addressing their employees' key lifestyle risks. Reducing obesity (along with tobacco use and inactivity) is a priority for employers seeking to lower the incidence and severity of chronic illness and the associated demand for health services.

Methods: This article describes the employer's perspective on the cost impact of obesity, discusses current practices in employer-sponsored wellness and weight management programs, provides examples from U.S. companies illustrating key points of employers' leverage and opportunities, and suggests policy directions to support the expansion of employers' initiatives, especially for smaller employers.

Findings: Researchers and policymakers often overlook the extensive efforts and considerable impact of employer-sponsored wellness and health improvement programs. Greater focus on opportunities in the workplace is merited, however, for the evidence base supporting the economic and health impacts of employer-sponsored health promotion and wellness is growing, although not as quickly as the experience base of large employers.

Conclusions: Public and private employers can serve their own economic interests by addressing obesity. Health care organizations, particularly hospitals,

Address correspondence to: LuAnn Heinen, National Business Group on Health, 50 F Street, NW, Suite 600, Washington, DC 20001 (email: heinen@business grouphealth.org).

The Milbank Quarterly, Vol. 87, No. 1, 2009 (pp. 101–122) © 2009 Milbank Memorial Fund. Published by Wiley Periodicals Inc.

as well as public employers can be important role models. Policy development is needed to accelerate change, especially for smaller employers (those with fewer than 500 employees), which represent the majority of U.S. employers and are far less likely to offer health promotion programs.

Keywords: Obesity, employer health costs, health promotion, wellness programs.

ROM THE INCEPTION OF EMPLOYER-SPONSORED HEALTH coverage in the 1930s and 1940s to the present, most employers have offered and contributed to their employees' health insurance, as they recognize that health benefits are one of the top three factors that prospective employees consider (National Business Group on Health 2007). Besides being essential to recruitment and retention in a competitive labor market, robust health benefits are becoming increasingly costly to employers, and employees bear a significant share of the burden: approximately 20 percent of premiums and additional cost sharing at the point of service (Kaiser Family Foundation/HRET 2008).

Despite many iterations of cost control strategies over three decades, combined in recent years with efforts to improve the delivery system¹ and a new emphasis on health care consumerism, health care costs continue to plague the executive suite. Many executives now recognize that the growing population of employees and dependents who are at serious risk for illness and disability due to obesity will preclude any moderation of costs or reduction in health care utilization.

Consequently, more employers are now taking a population health management approach to employee and family health. Many companies have introduced benefits and programs that are directly aimed at helping employees "choose" healthful lifestyles, and some are targeting spouses and children as well. Employers' willingness to take on such personal matters continues to grow as the true costs of care attributable to obesity become clearer.

The average total medical spending for a U.S. family of four was \$15,609 in 2008 (Milliman 2008). This average, however, masks the varying costs associated with body mass index (BMI); for example, obese female employees have higher average medical expenditures of between \$1,071 (BMI 30 to 35) and \$1,549 (BMI 35 to 40) than do

normal weight female employees (Finkelstein, Fiebelkorn, and Wang 2005). In addition, 27 percent of the growth of health spending between 1987 and 2001 was attributable to obesity (Thorpe et al. 2004), and the total cost of obesity to private employers is approximately \$45 billion per year, in 2002 dollars (Finkelstein, Fiebelkorn, and Wang 2003). Health spending is an estimated 36 percent higher in obese adults under age sixty-five (Sturm 2002) than in normal-weight adults, and most of this higher spending is attributable to treatment for diabetes, hyperlipidemia, and heart disease (Thorpe et al. 2004). Employers thus have come to realize they will not be able to control medical claim costs if they do not start changing the demand for care driven by diabetes, heart disease, sleep apnea, depression, back and knee problems, and many other health conditions caused or exacerbated by obesity.

Obesity also generates indirect costs for employers by increasing workers' compensation claims and related lost workdays (Osbye, Dement, and Krause 2007), absenteeism (Finkelstein, Fiebelkorn, and Wang 2005; Ricci and Chee 2005), presenteeism (Ricci and Chee 2005), and disability in people aged fifty to sixty-nine (Sturm, Ringel, and Andreyeva 2004). Most employers do not routinely measure presenteeism (a self-reported measure of diminished on-the-job work performance due to health or life problems), although acceptance of it as a concept is growing (Hemp 2004). Even without counting the cost of presenteeism, however, productivity costs attributable to obesity are significant. Indeed, analysts believe that the indirect costs of obesity may be greater than the direct medical costs (Wolf and Colditz 1998).

In this article we describe the levers and strategies used by employers—particularly large, private employers—to help employees and families achieve and maintain healthier lifestyles. We also describe programs and practices that are not yet common but should be considered in order to accelerate the progress in turning around the obesity epidemic. Employers and employees fund health care in the United States by (1) paying claims (larger, self-insured employers) or insurance premiums (smaller, fully insured employers) and (2) paying corporate and individual taxes for Medicare and other public programs. Employers and employees clearly have a common interest in the affordability of health care and in addressing obesity as a key driver of health cost trends, disease prevalence, disability, lost productivity, and reduced length and quality of life.

Most Americans between eighteen and sixty-five spend a substantial portion of their days in the workplace or connected to it. To reach nearly 150 million employed Americans (Bureau of Labor Statistics 2008) in a cost-effective way, therefore, employers need to expand their support of improving family health. Many observers predict that soon there will be a new generation of health and wellness programming at work that relies on a much greater alignment of environmental factors supporting employees' health and productivity (Golaszewski, Allen, and Edington 2008). Environmental factors are designs to make healthful behaviors the "default" option; examples include open, attractive central stairways (and less prominent, slow-moving elevators) and cafés for employees stocked with attractively displayed and priced salads and sandwiches (with grill selections occupying less obvious and less attractive space). Behavioral economists suggest that such "nudges" can be highly effective (Thaler and Sunstein 2008). In any case, the workplace need not work against a healthful lifestyle, as often occurs through inadvertent or unconscious policies and practices (e.g., food and beverage options at meetings and in cafeterias). Unfortunately, the actual—and even greater potential impact of workplace culture, policies, and programs on family health is generally not addressed by research and policy.

Employers represent an often overlooked opportunity for advancing workable solutions to combat obesity. While federal agencies such as the Centers for Disease Control and Prevention (CDC) and the Maternal and Child Health Bureau of the Health Resources and Services Administration (MCHB/HRSA) have encouraged workplace initiatives, most policymakers, researchers, and advocates are unaware of the significant health-improvement efforts being made in corporate and public sector workplaces domestically and, increasingly, globally. "Industry" has been seen as part of the problem, but public health attention should also consider what employers can contribute to improve the population's health.

Trends in Employer-Sponsored Wellness and Weight Management Initiatives

A recent survey of more than 450 large employers (National Business Group on Health and Watson Wyatt 2008) identified "employees"

poor health habits" as the number one challenge named by employers as they try to maintain affordable benefit coverage. The same survey looked at employer programs and strategies of response during the three-year period from 2006 to 2008. Ranking number one and number three, respectively, were health risk appraisals (offered by 83 percent of respondents, an 18 percentage point increase in three years) and weight management programs to reduce obesity among employees (74 percent of respondents, a 15 percentage point increase). Based on survey data, observed growth in vendors and suppliers of so-called corporate wellness programs, and employers' testimony, a tipping point may have been reached that leading companies now have, or believe they should have, wellness programs, including a focus on employees' weight management.

In striking contrast to these trends for large employers, only a few small U.S. employers have adopted comprehensive health promotion or weight management programs. In fact, the most recent National Worksite Health Promotion Survey results suggest a decline in offerings by employers with fewer than 750 employees between 1999 and 2004 (Linnan et al. 2008). The same survey reports that only 21 percent of this nationally representative sample of employers offers weight management programs. Reported barriers included a lack of employee interest, lack of resources, and lack of management support. Because small businesses (fewer than 500 employees) employ 50 percent of the private-sector workforce, this survey provides an important, albeit sobering, perspective on the typical American worksite.

Fortune 500 companies face fewer barriers and practice population health management to a far greater extent than ever before, with large employers offering a wide range of options to help employees reduce and manage such personal health risk factors as obesity, along with physical inactivity and tobacco use (Heinen 2006; Heinen, McCalister, and Cox 2005). The first step is identifying the population's health risks using a health risk appraisal (HRA) and/or claims data analysis, after which companies should work with internal stakeholders and external support (health plans, vendors, consultants) to develop a plan to address the principal risk factors. Obesity and overweight are at or near the top of almost any company priority list, with the possible exception of newer companies with relatively young workforces (e.g., Google, where the average age of employees is about thirty-one).²

The main points of leverage or opportunity for employer impact are as follows:

- Health benefit design and incentives that encourage healthy behavior, such as lower premiums for employees who complete both the HRA and a recommended health-coaching activity, reimbursement for consultations with a registered dietician, and cash or points as a reward for regular physical activity.
- Environmental support for healthy lifestyles, including, for example, healthful on-site dining, catering, and vending; open stairwells, walking paths, and signage marking distances and/or encouraging physical activity; break rooms with stretching aids; and free filtered water.
- 3. Culture of health at work and activation of social networks to foster positive change using visible leadership participation; strong (usually branded)³ communications about health and wellness program offerings; site, team, and/or individual competition to promote engagement; health champions (peer leaders); affinity groups; and/or other strategies using the social environment at the workplace to promote health.
- 4. *Community and family connections* to reach family members, including children, through employee education and targeted communications; healthy dinners-to-go offered in the employees' café; family and/or community access to company fitness facilities; and corporate support of physical education in, for example, schools, playgrounds, and parks.

Next we describe corporate examples, in each instance highlighting only some aspects of these four comprehensive programs (table 1).⁴ All programs have been in place five or more years and use all four of the preceding levers. In addition, these programs harness the particular advantages of their own worksites (e.g., health professionals on staff or available space for fitness activities) and, conversely, are able to overcome the particular challenges they may face (e.g., manufacturing environment, limited Internet access, multiple locations, 24/7 shifts, high turnover, or high numbers of part-time workers). The examples represent a range of industries: electric and natural gas utility, food manufacturing, health care delivery, and semiconductor technology.

TABLE 1 Employer-Sponsored Wellness Programs and Key Features

Company/HQ	Number of Employees	Description	Wellness Program	Key Feature Highlighted
Northeast Utilities, Hartford, CT	6,000	New England's largest utility, with more than 2M customers in CT, MA, and NH and more than 60 worksites in New England	WellAware	Comprehensive benefits with healthy lifestyle incentives
General Mills, Minneapolis, MN	27,000	World's 6th largest food company; brands include Green Giant, Total, Yoplait, Cheerios, Progresso, Cascadian Farms, and Muir Glen	Total You	Environmental support for healthy lifestyles
Baptist Health South Florida, Coral Gables, FL	12,000	Nonprofit health system with 7 hospitals, outpatient diagnostic and treatment facilities, home care, and other health services	Wellness Advantage	Wellness Advantage Organizational culture of health
Texas Instruments, Dallas, TX	30,000	Developer and manufacturer of semiconductor technologies for consumer and industrial electronic products worldwide	Live Healthy	Community and family connections

Northeast Utilities (NU): Sharing Responsibility for Employee and Family Health

A philosophy of "shared responsibility" between NU and the primary users of health care (employees and families) guides the development of company-offered programs.

The WellAware program was introduced in 1994 based on a review of modifiable health claims, and it continues to evolve. Employees and their spouses or partners are eligible for an annual \$175 cash incentive (\$350 per family) for completing WellAware.

To earn the incentive in 2008, individuals had to participate in a four-step program: (1) take the HRA (composed of a questionnaire about health risks and biometric data, along with specific questions about NU employees' needs and satisfaction with wellness programming); (2) complete and document a weight management or healthy eating program; (3) participate in at least one health education program, for example, "Liquid Calories" or "New American Plate for Breakfast"; and (4) demonstrate at least twelve consecutive weeks of physical activity during the program year. A minimum of thirty continuous minutes of cardiovascular exercise is required, three days per week, for at least twelve weeks. The company allows a wide variety of physical activities in an effort to reward and reinforce the adoption and maintenance of healthy habits rather than specify particular interventions. To preserve individual preference and choice, physical activity may be documented in one of the following several ways:

Motivational fitness programs: NU offers theme-based programs throughout the year, for example, "Peak Fitness," which calls on participants to "climb" twelve of the world's largest peaks by converting their exercise minutes to feet.

Fitness center or group exercise class: Attendance at classes can fulfill the twelve-week requirement.

Home exercise log: The log is available on paper or electronically as an option for those who wish to engage in a variety of exercise activities.

Pedometer walking program: Documentation of steps walked (goal is 10,000 steps most days of the week), walking routes, and mileage are offered at some work locations.

Northeast Utilities also provides on-site, online, and telephonic nutrition counseling to participants in the WellAware program. The company

believes that the incentives and benefits it offers employees and spouses justify the cost based on its analysis of medical claims and changes in health risk levels for WellAware participants.

Reported Results

A twelve-week on-site weight management program enrolled 918 employees, of whom 352 completed a postprogram survey. The total self-reported weight loss was 2,465 pounds, or an average of seven pounds per respondent, with a range between zero and forty pounds.

General Mills: Building a Supportive Work Environment

Vision: A General Mills employee has an active lifestyle and a healthy weight, does not smoke, and has normal cholesterol and blood pressure levels.

The company's goal is to create a work culture and environment that best support its employees in making good decisions about their health and well-being.

In 2004, in-house staff developed the General Mills Health Number screening tool, which is a personalized, "live" version of an HRA offered to all employees. Its purpose is to identify employees' health risks, motivate healthy lifestyle changes, and make health and wellness resources readily available to employees. In an on-site "health fair" environment, employees are asked a series of questions about ten lifestyle factors. They self-report their physical activity, tobacco use, nutrition, seat belt use, alcohol use, and stress level, and health professionals measure the employees' blood pressure, cholesterol, BMI, and fasting blood sugar. Employees receive a Health Number between zero (high health risk) and 100 (lower health risk). Those in need of personal coaching are directed to local resources (such as clinics, therapists, and specialists) or the Mayo Clinic's Health Information website and/or on-site personal health coaching (via telephone) for one-on-one counseling on tobacco cessation, weight management, stress, and exercise.

Key aspects of the corporate headquarters environment are the following:

Healthful on-site dining, with the healthiest selections labeled at each station; healthy "grab and go" choices; a daily "smaller portion, smaller

price, smaller you" option, allowing employees to purchase a reduced portion of an entrée and vegetable side at a reduced price.

No candy or high-calorie impulse purchases at the checkout and receipts can be obtained that have total calories, saturated fat, and salt printed on the receipt.

A free bottle of water with the purchase of a designated "value-added meal" (a healthy entrée); after purchasing six healthy entrées on a punch card, the seventh is free.

In newly built buildings, attractive, open stairwells with changing visual stimulation (works from the corporate art collection have been hung in stairwells at various times).

Attractive walking paths between buildings (in addition to shuttle buses).

On-site fitness centers.

Regular campaigns and communications on nutrition, weight management, and physical activity, including individual employees' success stories.

Health professionals on-site who serve as champions for healthy lifestyles and make themselves available for questions and consultation on health and behavior change.

Tobacco-free campus.

These environmental attributes reinforce the Total You wellness program messages and facilitate the achievement and maintenance of healthy behaviors at work (Okie 2007).

Reported Results

A national sales meeting weight loss competition is held each year among regions, generating much interest from this goal- and performance-oriented group of individuals. Between 2005 and 2007, the percentage change in employees with a BMI greater than or equal to 30 fell from 23 percent in 2005 to 12 percent in 2007 and 6 percent in 2008. Those with two or more health risks declined from 68 percent to 29 percent from 2005 to 2008.

Baptist Health South Florida: Board and Management Leading a Culture of Health

Vision: Baptist Health South Florida will have the healthiest workforce in America.

This nonprofit hospital system's Wellness Advantage program, begun in 2001, enjoys board and management support. According to an annual review of performance by the system's "wellness stakeholders," the program improves every year. The free Health Check (HRA plus biometric screening) is offered twice a year. All employees are asked to participate annually and in return receive a \$10,000 "survivor's benefit" (akin to life insurance). All employees also receive a small gift on their program anniversary to remind them to update their HRA. Employees with risk factors are encouraged to draw up personal action plans and to work with an employee wellness educator throughout the year. Services provided free of charge may include a registered dietician, exercise physiologist, or smoking cessation facilitator.

Weight Watchers at Work is available to all employees, with meetings held at five sites (employees may also attend community sessions). Baptist Health offers reimbursement up to \$500 per year for employees who reach and maintain their goal weight. A pediatric weight loss program supervised by an affiliated pediatrician who is board-certified in weight loss was begun in 2008. This nine-month program is offered at a \$500 discount to those children of Baptist Health employees who reach their goal weight and maintain it for three months.

Management's support is evident in the many creative activities sponsored by Wellness Advantage, for example:

"Take the Stairs Day" promoted by all-employee emails in May (National Fitness Month), with gym bags placed randomly in stairwells for employees to find (and keep).

On-site fitness facilities and negotiated discounts at more than fifty local gyms.

At the on-site locations, the fitness center's open houses twice a year offer healthy snacks, exercise demonstrations, free blood pressure and body composition screenings, and drawings for prizes for an annual 5K run open to all employees, medical staff, friends, and family, in which more than 1,700 people participated in 2007.

A free video library that checks out hundreds of exercise DVDs and videos to employees each year.

Wellness Advantage meals in on-site cafés that are reviewed by a dietician to meet criteria (fat, calories, and sodium) and sell for the subsidized price of \$3 (including a bottle of Baptist Health spring water). Cafeteria receipts list the calories for all purchased items.

Entertaining ten-minute "stretch breaks" at employees' educational events led by employee fitness coordinators to music like "Start Me Up" (Rolling Stones).

Perhaps most compelling as a statement of culture is the organization's practice of asking all new hires to meet with a Wellness Advantage representative as part of their employee orientation, marking their health as a Baptist Health priority. The Gallup Organization's annual survey of Baptist Health employees recently reported that 89 percent agreed or strongly agreed with the statement that they had "participated in one or more programs sponsored by Wellness Advantage" during 2007.

Reported Results

An analysis of medical claims data for a group of 324 continuous participants in Wellness Advantage (2004–2007) showed a 40 percent drop in their medical costs, compared with those of nonparticipants (a savings of more than \$1 million), despite a greater number of outpatient visits and better compliance with medications.

Texas Instruments (TI): Connecting with Families

TI has a long history of encouraging its employees to embrace a healthy lifestyle through its Live Healthy program. Spouses, as key decision makers, and children, as important beneficiaries, are also included.

Texas Instruments has taken several steps to reach its employees' families:

E-health portal with health care tools and resources (healthy recipes, menus, food log, nutrition games, etc.) are available online to all family members.

One hundred percent of employees and families are reached through targeted home mailings. For example, the quarterly *Connect* newspaper, sent to all TI employees' homes, features a Live Healthy section with program checklists, tip sheets, and calendar information.

On-site child care is provided at its fitness centers to make it easier for employees with young children to exercise.

Subsidized membership is offered at on-site fitness centers that are open to all family members.

Taking advantage of a key resource—a combined 135,000 square feet of space in its three fitness centers—TI has developed a range of programs and activities to attract employees' families. For example, week-long day camps offered during summer and school vacations help working parents.

TI's Teen Camp is appropriate for ages eleven to fifteen. The program introduces adolescents to a variety of wellness activities, including fitness and nutrition classes led by certified instructors; field trips to indoor rock climbing, bowling, and laser-tag facilities; and active computer and gaming system programs such as Nintendo Wii.

TI Kids Camp for ages six to ten encourages a healthy lifestyle and provides a well-rounded recreation experience for students. Activities include American Red Cross swimming lessons, sports, fitness classes, arts and crafts, and weekly field trips.

In addition, the company offers swimming classes, swim teams, soccer clinics, tennis lessons and "fit kids" group classes to teach fitness and nutrition basics. Junior fitness member certification is available to younger members to learn about personal fitness routines and the safe and proper use of fitness equipment.

TI's family outreach reflects an understanding of the importance of the family unit to employees' health and fitness and may lay the important groundwork for young people to develop positive fitness habits.

Reported Results

An analysis of employees who completed the HRA in both 2006 and 2007 found that the distribution of risks had changed. The percentage of the population at low risk (zero to one risk factor) rose slightly from 17 to 18 percent, the medium-risk group (two to three risk factors) grew from 43 to 46 percent, and the high-risk group (more than four risk factors) dropped from 40 to 35 percent of the population.

Documenting Effectiveness

It is difficult to conduct research in worksites for a variety of reasons, not least of which is employers' reluctance to accommodate its requirements.

Human resource departments tend not to have a budget for research, nor are they willing to spend the needed time or other resources (e.g., IT support) to evaluate programs. Their measures of success are usually very different from those of academic researchers, and even effective programs may be eliminated when there is a downturn in the firm's revenues or market capitalization. This clearly limits the volume and types of research that can be conducted and slows the development of an evidence base that is compelling to academicians and policymakers. (Employers themselves do not require the same level of evidence for decision-making purposes.)

Based on a review of qualifying studies, the CDC's *Guide to Community Preventive Services* does "recommend worksite programs combining nutrition and physical activity to control overweight and obesity" (CDC 2005). These programs were found to be effective in helping employees lose weight and maintain the loss in the short term (approximately six months). Of the seven studies that qualified for review and informed this recommendation, six were published between 1984 and 1989, and the seventh, in 1995. With notable exceptions,⁵ the worksite is generally not a hotbed of research activity.

The National Institutes of Health (NIH) have invested significant resources in understanding the effectiveness of worksite-based weight control programs, with seven randomized trials under way as part of the NHLBI Obesity Education Initiative (Pratt et al. 2007). One of the trials examines LightenUp at the Dow Chemical Company, a comprehensive, evidence-based approach using a series of well-communicated environmental interventions supported by site-level leaders and champions (Wilson et al. 2007). The results of these studies, to be published beginning in 2009, will contribute to the evidence base for supporting (or not supporting) the types of activities just described.

Large employers are increasingly becoming convinced of the value of wellness programs based on their own internal review of HRA and claims data, combined with analyses of wellness program participation and performance. A few companies have recently published program results, such as the IBM Corporation, which has evaluated its physical activity incentive and its Internet-based weight management intervention. The company showed a marked increase in physical activity when a cash incentive was used (Herman et al. 2006). Participants in the Internet-based weight management program reported eating more fruits and vegetables and fewer "junk foods" and showing improved BMI levels compared with those of nonparticipants (Petersen et al.

2008). Additional companies have reported program results on their applications for recognition to programs such as the C. Everett Koop National Health Awards (www.healthproject.stanford.edu) or the National Business Group on Health's Best Employers for Healthy Lifestyles awards (www.businessgrouphealth.org). Demonstration of the program's impact is required for both awards.

Role Models Needed

Although perhaps one hundred or more very large employers have substantial wellness programs affecting a few million employees, and some small and midsized employers are following suit, many others have been slow to react. Certain employers have the visibility to be role models and to influence the climate for change. In particular, *health care* organizations and *public employers* should model best practices in support of employees' health. All health care companies and delivery organizations should adopt wellness programs and policies. Hospitals, especially, are houses of healing open to the community and should serve as examples by offering healthful dining, vending, and tobacco-free campuses. Instead, hospital beds are disproportionately filled with obese patients because of their health problems. Furthermore, the combination of unfit workers caring for obese patients leads to occupational injuries among health care workers and ambulance personnel.

Public employers, including state offices, federal buildings, county facilities, and school districts, all should demonstrate their commitment to healthy employees and a health-promoting work environment. State employees' wellness programs are becoming more common (National Conference of State Legislatures 2008). For instance, Delaware has launched DelaWELL, one of the most comprehensive offerings by any state. Another twelve states have some type of wellness program available to employees, and NCSL reports that King County (Seattle) is projecting that health care costs will fall by as much as \$40 million between 2007 and 2009 owing to wellness initiatives.

What All Employers Can Do

Employers, both public and private, can establish their own policies and practices designed to support healthy weight and healthy lifestyles. They can lead, communicate, and, in a variety of ways, facilitate a culture of

health at work. Many of these steps do not require new expenditures, and a few should even save money (e.g., reducing the volume of food available at worksite or off-site events). Other changes are a matter of creatively reallocating existing resources and benefits and ensuring that various health plans, suppliers, and vendors provide a well-coordinated set of services to employees.

Employers typically work with a number of health plans and insurance carriers providing many different programs (e.g., disease or care management, healthy pregnancy, health information, personal health records, behavioral health/employee assistance program [EAP], tobacco cessation), and "missed opportunities" for intervention, referral, and patient support abound. For example, if a thirty-five-year-old obese employee has an injury or illness for which a disability claim is filed, the disability case manager could refer the patient to a weight management program or coaching service, perhaps offered by a different entity under contract to the employer, rather than process the claim narrowly around predicted disability days. The accident or illness could be seen as a "teachable moment" for an obesity-related intervention, even without a primary diagnosis of obesity. The case manager could also engage the EAP, primary physician, and available worksite resources. Although this type of coordinated response is not commonplace now, it could become the norm. Pregnancy is a common occurrence in working populations and offers another occasion for a healthy weight intervention. Programs offered by health plans and others contracted to employers could also communicate to employees (long before pregnancy) about the serious problems of obesity and pregnancy and promote evidencebased approaches to healthy maternal and child weight, including breast-feeding.

Just as employers no longer condone or make it easier for employees to smoke or drink on the job or at work-related events, they should not enable the excessive consumption of high-calorie foods and beverages. Employers have considerable control over the work environment and can relatively easily make small but conscious decisions to change their employees' habits and behaviors. Traditionally, consumption patterns have been seen as driven mainly by individual choices, and maintaining health is regarded as a matter of personal control and responsibility. However, research over the last ten years has identified environmental factors that foster the overconsumption of food. A recent study by the Rand Corporation concluded that "eating is

influenced more by environmental factors than personal choice" (Cohen and Farley 2007). Researchers have learned that people eat more when they are in a group, frequently continuing to eat as long as there is food in front of them and significantly increasing their consumption based on cues ranging from the size of the serving bowl to a variety of food types offered to descriptive language on menus (Wansink 2006).

Employers can avoid encouraging employees to overconsume, as when unhealthful foods are readily available through cafeterias and vending machines and at meetings. Because employers provide cafeteria and vending space and facilities, as well as fund catered meals for meetings, conferences, and employee events, they are in an excellent position to apply nutritional standards. As a matter of corporate policy, company-paid catering, boxed lunches, and off-site events could meet specified nutritional requirements. Corporate break rooms need not become repositories for unused Halloween candy and holiday leftovers.

Employers could also notify suppliers and vendors that they will audit cafeterias and vending machines. Companies also could reward suppliers who internalize the wellness message and seek to market and profit from healthful choices and smaller portions rather than from calorically dense, supersized "value" meals. Employers' subsidies of cafeteria offerings could be limited to only the most nutrient-rich and least densely caloric foods.

In choosing and managing facilities, employers should consider where they place parking spaces, how safe and attractive they make stairs, ways to build more physical activity into the workday, what stretching or other equipment is placed in break rooms, and whether space for showers and lockers are included—from the perspective of reducing obesity and improving physical activity.

Employers that question the cost impact of obesity or need further justification for these steps can calculate their own cost of obesity using a public domain tool developed by RTI International with primary funding from the CDC and additional support from the National Business Group on Health (RTI International 2007). The obesity cost calculator uses inputs supplied by the employer combined with national data to estimate employer-specific costs. Employers that discover what they are already paying are likely to be more willing to take action to combat obesity in the future.

Public Policy Steps

Policymakers could support worksite weight management programs by changing the tax code so that the expense of an employer-sponsored weight management or fitness program is not considered income to the employee. Current law provides that health insurance benefits and onsite fitness and recreation facilities are not subject to taxation. However, employers' contributions to employees' use of off-site fitness facilities are taxable to the employee and not tax deductible to the employer. Current tax law distinguishes between weight management programs for employees identified as obese, which are tax favored (with a physician's note "prescribing" a weight reduction program), and weight management programs for those who have no diagnosis of obesity, which are not tax favored. This poses obstacles for worksite weight management programs—for example, an employer cannot easily subsidize Weight Watchers on-site (with favorable tax treatment) for employees, since only those medically diagnosed as obese would qualify. In addition, employees are not able to use their own health spending accounts for fitness and weight management programs without a diagnosis of obesity.

Because managing weight and maintaining fitness are lifelong challenges for most people—and prevention of overweight and obesity is vastly preferred to treatment—policies supporting the maintenance of healthy weight seem sensible. With the hours spent at work and available social supports, the worksite is a good location for fitness routines and weight management programs. Changing the tax code to allow employers to provide broader fitness and weight management benefits for employees and dependents in the same tax-favored way as other employee benefits is an important policy opportunity.

In addition, Senator Tom Harkin's proposed Healthy Workforce Bill of 2007 would provide financial incentives for employers to adopt health promotion programs. This may be attractive to small and midsized employers that could benefit from the financial incentive. Large employers could also benefit but are wary of regulatory oversight and specification of qualified health promotion programs.

More generally, policymakers can begin to view their proposed policies and programs through the lens of "obesity impact." Just as an environmental assessment is often part of laws and regulations at the state and federal level for new energy projects, an obesity impact assessment could be required as part of federal (or state) funding for new programs and

projects. This would focus the attention of lawmakers and organizations seeking federal funding on the problem.

Governors and legislators should examine what is happening in their states and calculate the hidden costs of obesity to business and tax-payers. The short- and long-term effects of increased medical claim costs, disabilities, and lost productivity on the state's health and wealth will prove to be significant. Two excellent examples are from California (California Department of Health Services 2005) and Texas (Texas Comptroller of Public Accounts 2007). When people cannot work, they do not pay taxes to support needed programs and may need public assistance. Public officials may not be looking for new crises to address, but this one is already here and its total impact will be far worse if we delay action.

Obesity must be framed as a societal threat to our common purpose. Every employer and policymaker must understand that they (we) are already paying for the medical claim costs and lost productivity costs of serious overweight and obesity. Thus it is directly in their (our) financial interest to take strong stands on improving the health of employees and families.

Endnotes

- 1. Employers, for example, led the movement to establish uniform, standardized measures for health plans known as HEDIS (Healthcare Effectiveness Data and Information Set).
- Eric Schmidt, Google, Inc., at NASA's Fiftieth Anniversary Lecture series. Available at www.google.com/press/podium/pdf/20080117_Eric_Schmidt_NASA.pdf.
- Branded communications tie the wellness program to a corporate identity, symbol, or product, for example, Well at Dell, Union Pacific Health Tracks, and General Mills Total You.
- 4. Information adapted from applications submitted to the National Business Group on Health (NBGH) for the 2008 Best Employers for Healthy Lifestyles award. NBGH has given 148 awards (Platinum, Gold, and Silver levels combined) in four years (2005–2008) to eighty-three unduplicated U.S. corporate applicants.
- Exceptions include the work of Robert Jeffery of the University of Minnesota, Ron Goetzel
 of Emory University, Wayne Burton of JPMorgan Chase, Dee Edington of the University of
 Michigan, and Ron Kessler of Harvard University.
- 6. The Healthy Workforce Act proposes a tax credit for 50 percent of the cost of a qualified employer health promotion program up to \$200 per employee for the first 200 employees and \$100 per employee for the remaining employees. Employers with existing programs can receive the tax credit for up to three years, and those who do not have programs can receive the tax credit for up to ten years.

References

- Bureau of Labor Statistics. 2008. *Labor Force Statistics from the Current Population Survey*. Available at http://data.bls.gov/cgi-bin/surveymost (accessed June 30, 2008).
- California Department of Health Services. 2005. Press release: Obesity Costs California \$21.7 Billion Annually—California Businesses Lose Billions in Lost Productivity, Health Care and Workers' Compensation. Available at http://www.applications.dhs.ca.gov/pressreleases/store/PressReleases/05-12.html (accessed July 7, 2008).
- Centers for Disease Control and Prevention (CDC). 2005. *The Guide to Community Preventive Services* (updated September 7, 2005). Available at www.thecommunityguide.org/obese/default.htm (accessed December 16, 2008).
- Cohen, D.A., and T.A. Farley. 2007. Eating as an Automatic Behavior. *Preventing Chronic Disease* 5(1). Available at http://www.cdc.gov/pcd/issues/2008/jan/07_0046.htm (accessed June 30, 2008).
- Finkelstein, E.A., I.C. Fiebelkorn, and G. Wang. 2003. National Medical Spending Attributable to Overweight and Obesity: How Much, and Who's Paying? *Health Affairs* Web Exclusive W3:219–26.
- Finkelstein, E.A., I.C. Fiebelkorn, and G. Wang. 2005. The Costs of Obesity among Full-Time Employees. *American Journal of Health Promotion* 20(1):45–51.
- Golaszewski, T., J. Allen, and D. Edington. 2008. Working Together to Create Supportive Environments in Worksite Health Promotion. The Art of Health Promotion in the American Journal of Health Promotion 22(4):1–10.
- Heinen, L. 2006. Obesity in (Corporate) America: Large Employer Concerns and Strategies of Response. *North Carolina Medical Journal* 67(4):307–9.
- Heinen, L., T. McCalister, and J.L. Cox. 2005. Overcoming Cultural Roots of Obesity and Inactivity: Employers Respond. The Art of Health Promotion in the American Journal of Health Promotion 20(2):1–6.
- Hemp, P. 2004. Presenteeism: at Work—But Out of It. *Harvard Business Review* 82:49–58.
- Herman, C.W., S. Musich, C. Lu, S. Sill, J.M. Young, and D.W. Edington. 2006. Effectiveness of an Incentive-Based Online Physical Activity Intervention on Employee Health Status. *Journal of Occupational and Environmental Medicine* 48(9):889–985.
- Kaiser Family Foundation/HRET. 2008. *Employer Health Benefits* 2008 Annual Survey. Available at http://ehbs.kff.org/ (accessed December 16, 2008).

- Linnan, L., M. Bowling, J. Childress, G. Lindsay, C. Blakey, S. Pronk, S. Wieker, and P. Royall. 2008. Results of the 2004 National Worksite Health Promotion Survey. American Journal of Public Health 98(8):1503–9.
- Milliman, Inc. 2008. *Milliman Medical Index*. Available at http://www.milliman.com/expertise/healthcare/products-tools/mmi (accessed July 7, 2008).
- National Business Group on Health. 2007. Employees and Their Health Benefits: Perceptions, Values and Trade-Offs, April 2007.
- National Business Group on Health and Watson Wyatt. 2008. *The One Percent Strategy: Lessons Learned from Best Performers*. Thirteenth Annual Employer Survey on Purchasing Value in Health Care. Available at http://www.watsonwyatt.com/us/research/resrender .asp?id=2008-US-0037&page=1 (accessed July 7, 2008).
- National Conference of State Legislatures. 2008. *State Employee Health Benefits*. Available at www.ncsl.org/programs/health/stateemploy.htm#wellness (accessed December 16, 2008).
- Okie, S. 2007. The Employer as Health Coach. New England Journal of Medicine 357(15):1465–69.
- Osbye, T., J.M. Dement, and K.M. Krause. 2007. Results from the Duke Health and Safety System. *Archives of Internal Medicine* 167(8):766–73.
- Petersen, R., S. Sill, C. Lu, J.M. Young, and D.W. Edington. 2008. Effectiveness of Employee Internet-Based Weight Management Program. Journal of Occupational and Environmental Medicine 50(2):163–71.
- Pratt, C.A., S.C. Lemon, I.D. Fernandez, R. Goetzel, S.A. Beresford, S.A. French, V.J. Stevens, T.M. Vogt, and L.S. Webber. 2007. Design Characteristics of Worksite Environmental Interventions for Obesity Prevention. *Obesity* 15(9):2171–80.
- Ricci, J.A., and E. Chee. 2005. Lost Productive Time Associated with Excess Weight in the U.S. Workforce. *Journal of Occupational and Environmental Medicine* 47(12):1227–34.
- RTI International. 2007. Obesity Cost Calculator. Available at www.businessgrouphealth.org/healthtopics/obesitycostcalculator .cfm?printPage = 1& (accessed July 7, 2008).
- Sturm, R. 2002. The Effects of Obesity, Smoking, and Drinking on Medical Problems and Costs. *Health Affairs* 21(2):245–53.
- Sturm, R., J.S. Ringel, and T. Andreyeva. 2004. Increasing Obesity Rates and Disability Trends. *Health Affairs* 23(2):199–205.
- Texas Comptroller of Public Accounts. 2007. Special Report: Counting Costs and Calories—Measuring the Cost of Obesity to Texas Employers. Available at http://www.window.state.tx.us/specialrpt/obesitycost/(accessed July 7, 2008).

- Thaler, R.H., and C.R. Sunstein. 2008. Nudge: Improving Decisions about Health, Wealth, and Happiness. New Haven, Conn.: Yale University Press.
- Thorpe, K.E., C.S. Florence, D.H. Howard, and P. Joski. 2004. Trends: The Impact of Obesity on Rising Medical Spending. *Health Affairs* Web Exclusive W4:480–86.
- Wansink, B. 2006. Mindless Eating: Why We Eat More Than We Think. New York: Bantam Dell.
- Wilson, M.G., R.Z. Goetzel, R.J. Ozminkowski, D.M. DeJoy, L. Della, E.C. Roemer, J. Schneider, K.J. Tully, J.M. White, and C.M. Baase. 2007. Using Formative Research to Develop Environmental and Ecological Interventions to Address Overweight and Obesity. *Obesity* 15(suppl. 1):378–47S.
- Wolf, A.M., and G.A. Colditz. 1998. Current Estimates of the Economic Cost of Obesity in the United States. *Obesity Research* 6(2):97–106.

Acknowledgments: The authors gratefully acknowledge the contributions of Kari O'Connor, Northeast Utilities; Timothy Crimmins, General Mills; Maribeth Rouseff, Baptist Health South Florida; and Linda Moon, Texas Instruments.