

## Why Does the Private Sector Underinvest in Obesity Prevention and Treatment?

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### Introduction

Over the past several decades there has been a rapid rise in the prevalence of obesity. Currently, 65% of adults are either overweight or obese, an increase from 46% in 1976-1980 and 56% in 1988-1994.<sup>1</sup> These increases in obesity rates have spurred corresponding growth in the prevalence of several diseases, including type 2 diabetes, cardiovascular disease, hypertension, osteoarthritis, several types of cancer, gallbladder disease, and sleep apnea.<sup>2</sup>

As a result of the increase in obesity and related diseases, medical expenditures attributable to obesity have also ballooned. We have estimated that complications from obesity now cost the United States medical system over \$93 billion per year.<sup>3</sup> Costs in North Carolina alone exceed \$2 billion annually.<sup>4</sup> In addition to medical expenditures, obesity results in greater absenteeism and reduced worker productivity. For example, female employees with a BMI over 40 miss roughly one week more per year on average than female employees of normal weight.<sup>5</sup> Including both medical expenditures and increased absenteeism, the costs of obesity at a firm with 1,000 employees are estimated to be \$277,000 per year.

The dramatic increase in prevalence and costs of obesity has captured unprecedented attention by the media. According to the North American Association for the Study of Obesity (NAASO), the number of obesity-related articles appearing in United States newspapers and newswires has more than tripled in the last five years, from approximately 8,000 articles in 1999 to almost 30,000 articles in 2004. National, state, and local governments have also increased efforts to inform the public about the consequences of obesity and strategies for obtaining a healthy weight (e.g., the

*Healthy Lifestyles and Disease Prevention Initiative*, a part of the U.S. Department of Health and Human Services' *Small Steps* program). Despite the attention of policymakers and the media, most employers and insurers have taken little action to fight obesity.

Why have insurers and employers been reluctant to aggressively pursue obesity treatment and prevention strategies? One answer—which is not without merit—is that few proven long-term weight loss and weight maintenance interventions exist. However, even as these strategies are developed and refined, our research suggests that employers may be reluctant to adopt them. In this commentary, we provide an economic perspective on the behavior of employers

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and insurers in fighting obesity and highlight three key points that reveal why obesity prevention and treatment efforts are likely to be underprovided by the private sector.

The three primary factors behind the private sector's underprovision of obesity treatment and prevention are the chronic

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nature of obesity-related diseases that tend to accrue later in life, the fragmented nature of healthcare financing in the United States, and the high rate of job mobility of employees. The implications of these factors can be discerned from the following figure, which shows the increase in costs attributable to obesity for each age between 18 and 75, based on data from the nationally representative 2001-2003 Medical Expenditure Panel Survey (MEPS):

- 1 **Firms have little financial incentive to invest in obesity treatment for younger obese individuals who have not yet developed costly complications.** Although the prevalence of obesity is growing rapidly among youth and young adults, the data in Figure 1 show that the medical costs of a young obese individual are similar to those of a normal weight individual of the same age. The risk of type 2 diabetes and other obesity-related diseases is greater among overweight youth and young adults, but the MEPS data reveal that these conditions are relatively rare among this group. In fact, the annual medical costs for an obese individual do not become statistically greater than the costs for someone of normal weight until they reach their early to mid 30s. Because overweight and obesity is not especially costly among younger populations, firms have little financial incentives to invest in obesity prevention and treatment for them.
- 2 **Employment-based health insurance, combined with the transient nature of the United States workforce, further reduces the incentives to invest in obesity treatment, even among firms who may have a high prevalence of obesity in their employed/enrolled populations.** One may argue that focusing solely on current costs of obesity is short-sighted. In practice, however, firms rarely look to benefits

beyond five years when considering investments in employee wellness. Individuals in today's economy tend to switch jobs roughly every four to five years.<sup>67</sup> Employers also switch insurance carriers intermittently; most employees will not remain with the same employer or insurer for more than a few years. As a result, a firm that pays most of the initial costs of obesity treatment will not garner the long-term benefits of improved health, including reduced medical expenditures and increased productivity—a future firm will instead. As a result, the incentive for firms to invest in obesity prevention and treatment is diminished, leading to reduced offering of such benefits.

- 3 **The existence of the Medicare program further reduces private sector incentives to invest in obesity treatment.** Even organizations that are able to keep their populations enrolled for long periods of time, such as public sector employees, are unlikely to adequately invest in obesity prevention and treatment because of the existence of the Medicare program, which assumes responsibility for primary health insurance coverage for most Americans once they reach age 65. The chronic nature of obesity-attributable diseases implies that a significant percentage of the costs of obesity occur after age 65. In fact, the figure reveals that of the roughly \$58,000 cost of obesity incurred between the ages of 18 and 75, 38% accrued after age 65.

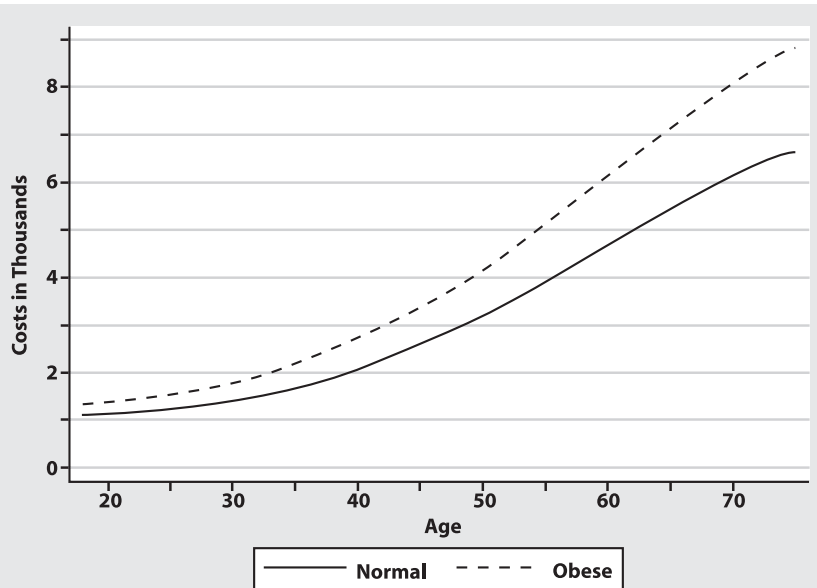
As retiree health insurance benefits become increasingly rare, firms are less likely to take the costs of obesity after age 65 into account when determining the optimal amount to invest in obesity treatment. For example, suppose a medical treatment was available for a one-time cost of \$40,000 that guaranteed that an obese individual would have the same medical cost profile as someone of normal weight for their entire life (assumed to be to age 75). Assuming a 0% discount rate (money today has the same value as money in the future), a firm that considers an individual's entire cost profile would invest in this technology for its captive obese population. However, if firms only consider the time period up to age 65, the cost of the treatment technology is greater than the \$36,000 in savings (62% of \$58,000) that would accrue to the firm, and therefore firms are unlikely to make this investment.

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## Discussion

In summary, the chronic nature of obesity-related diseases, employment-based health insurance, the high rate of job mobility of today's workforce, and the existence of the Medicare trust fund reduce the incentives of the private sector to invest in obesity prevention and treatment. For these same reasons,

**Figure 1.**  
**Annual Medical Expenditures for Normal Weight and Obese Employees in the 2001-2003 Medical Expenditure Panel Survey**



there is also likely to be an underinvestment of research into effective employer-based obesity intervention strategies because of concerns that the private sector might be unlikely to finance them even if proven effective.

It should be noted that while these factors reveal that firms are likely to underinvest in obesity prevention and treatment, the increasingly high prevalence and costs of obesity suggest that the profit maximizing level of obesity prevention and treatment is positive and growing. As noted earlier in this edition, Blue Cross Blue Shield of North Carolina (BCBSNC) has committed a substantial amount of resources toward obesity treatment and is optimistic that their investment will pay off in terms of improved health and reduced costs. Given the high prevalence of obesity in their enrolled population and the fact that tenure in their plan is relatively long compared to the rest of the industry, it makes economic sense that they are one of the few private sector insurance plans to offer expanded benefits for obesity prevention and treatment. In fact, they remain one of a shrinking number of health plans that provide coverage for gastric bypass surgery, a high cost procedure that many employers/insurers have opted not to cover. Other firms will look to BCBSNC for feedback concerning the costs, cost-effectiveness, and budgetary implications of their coverage decisions. If they are able to show that their investments result in improved health and reductions in future—but not too distant—expenditures, other insurers are likely to follow their path.

Given the issues presented above and the increasing national prevalence of obesity, BCBSNC and other insurers should also pursue development and marketing of innovative health plans that are structured to keep individuals enrolled in the plan for long periods of time so the investment in prevention and treatment can be recouped by the plan. Although not directly addressed above, firms might also consider incorporating financial incentives for individuals to make personal investments aimed at maintaining their health. For example, a few firms offer premium discounts or rewards to employees who maintain or move towards a healthy BMI or who meet other health criteria.<sup>8</sup> These reductions in premiums may be worth the investment to an employer/insurer that can keep their captive population healthy and enrolled in the plan long enough to recoup the investment.

Given the abundance of affordable high calorie foods, the sedentary nature of modern lifestyles and most occupations, and the reliance on technology to accomplish everyday tasks, a majority of Americans find it increasingly difficult to maintain a healthy weight. Employers and insurers have an opportunity to implement strategies to help them maintain and improve health, but in a competitive marketplace, they will do so only to the extent that it serves the best interest of the firm. As a result, halting the obesity epidemic may require a substantial deviation from the current approach of healthcare financing in the United States. **NCMedJ**

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