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Health Care Reform and Efforts to Encourage Healthy Choices by Individuals

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HEALTH CARE REFORM AND EFFORTS TO ENCOURAGE HEALTHY CHOICES BY INDIVIDUALS*

DAVID ORENTLICHER**

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INTRODUCTION

While the Affordable Care Act (“ACA”)¹ will do much to improve access to health care,² it may do far less to address other problems in health care and health, generally. For example, scholars have questioned whether the ACA will have a big enough impact on health care costs.³ The United States spends far more on health care

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1. Patient Protection and Affordable Care Act, Pub. L. No. 111-148, 124 Stat. 119 (2010) (codified as amended in scattered sections of 25, 26, 29 and 42 U.S.C.).

2. By prohibiting premium surcharges for sicker individuals and providing greater funding for lower-income families, the ACA will ensure that millions more Americans can afford the medical care that they need. Funding for lower-income families takes two primary forms. First, millions more of the poor will be eligible for Medicaid under the ACA’s Medicaid expansion provisions, which provide for coverage to all persons whose family income does not exceed 138% of the federal poverty level. *See* 42 U.S.C. § 1396a(a)(10)(A)(i) (2012); Nicole Huberfeld, Elizabeth Weeks Leonard & Kevin Outterson, *Plunging into Endless Difficulties: Medicaid and Coercion in National Federation of Independent Business v. Sebelius*, 93 B.U. L. REV. 1, 6, 12 & n.55 (2013). *See generally* Mark A. Hall, *States’ Decisions not to Expand Medicaid*, 92 N.C. L. REV. 1459 (2014) (discussing the Medicaid gap). As a result of the Supreme Court’s decision in *National Federation of Independent Businesses v. Sebelius*, 132 S. Ct. 2566 (2012), states have the option whether to implement the expansion. Second, for persons with an income between 100% and 400% of the federal poverty level, federal subsidies will be available for the purchase of health care insurance on the ACA’s insurance exchanges. *See* 26 U.S.C. § 36B (2012).

3. *See, e.g.*, Jonathan Gruber, Perspective, *The Cost Implications of Health Care Reform*, 362 NEW ENG. J. MED. 2050, 2051 (2010) (questioning how much the ACA will

than other countries without noticeable benefits for the health of Americans from the much greater expenditures,⁴ and it does not appear that the ACA will solve this mismatch between costs and benefits.⁵

This Article considers another important defect in the ACA. Experts have recognized that health depends to a substantial extent on the choices that people make about diet, exercise, and other daily behaviors.⁶ Optimal health care reform not only would ensure that people receive medical care when they become sick. It also would reduce the need for medical care by promoting healthier behavior. Through a number of its provisions, the ACA tries to promote healthier choices by Americans. However, some of the key ACA provisions for encouraging healthy lifestyles may be ineffective at best and counterproductive at worst.

In particular, Congress came up short when it tried to improve individual decisions about nutrition, exercise, and other lifestyle choices that are important to personal health. The ACA tries to encourage better dietary decisions with its menu labeling requirements, but those are likely to have little impact. Moreover, the Act's promotion of employer wellness programs may actually undermine the ACA's efforts to improve access to health care.⁷

While the government should do more to encourage good decisions about health by the public, it needs to do a much better job of basing its policies on empirical evidence. To the extent that research studies indicate which kinds of wellness policies are likely to

slow the rate of growth in health care costs); David Orentlicher, *Cost Containment and the Patient Protection and Affordable Care Act*, 6 FLA. INT'L U. L. REV. 67, 67–68 (2010) (explaining that the ACA does more to increase access to health care than it does to cut health care costs).

4. See Orentlicher, *supra* note 3, at 68–69.

5. See *id.* at 84.

6. See J. Michael McGinnis, Pamela Williams-Russo & James R. Knickman, *The Case for More Active Policy Attention to Health Promotion*, 21 HEALTH AFF. 78, 82 (2002).

7. The menu labeling provisions require restaurants to disclose calorie information for the foods that they sell. See 21 U.S.C. § 343(q)(5)(H) (2012). The definition of “food” includes beverages. See *id.* § 321(f)(1). The wellness program provisions allow employers to impose a thirty percent surcharge on health insurance premiums for employees who fail to satisfy employer-specified health targets, such as a reduced weight or lower blood sugar. See 42 U.S.C. § 300gg-4(j)(3)(A) (2012). For further discussion of this provision, see generally Kristin M. Madison, Kevin G. Volpp & Scott D. Halpern, *The Law, Policy & Ethics of Employers' Use of Financial Incentives to Improve Health*, 39 J.L. MED. & ETHICS 450, 451 (2011). For further discussion on the menu labeling and employer wellness program provisions, see *infra* Parts II, III.

work and which are likely to fail,⁸ too many policies, including those in the ACA, fall into the likely-to-fail basket.

More importantly, the government needs to ensure that more empirical evidence is developed. While we know more than we did in the past about the effectiveness of different kinds of wellness policies, we have much more to learn if we want to identify policies that are likely to have a significant impact. As a committee of the Institute of Medicine recently observed, there are many potential policies to reduce obesity, but current knowledge does not tell us which policies can have the biggest impact.⁹

Proceeding in the face of contrary data or in the absence of adequate data wastes time and money. It also makes it more difficult for lawmakers to pass sensible policies. A history of ineffective or counterproductive mandates can provoke a backlash against good future mandates.

This Article continues in Part I with some background information on efforts to promote healthier behavior. Part II discusses the menu labeling requirements of the ACA and their insufficient potential for a meaningful impact. Part III considers the employer wellness provisions of the ACA and how they not only may be ineffective but also may compromise the ACA's goal of improving access to health care. The Article concludes with some final observations—we need more research on strategies to encourage healthier behavior, and we need policies for healthy behavior that better reflect scientific understanding.

I. BACKGROUND

Physicians and laypeople alike have long worried about the lifestyle decisions that individuals make.¹⁰ How much a person smokes, exercises, and eats or drinks can have a profound effect on

8. For example, simply providing more information to consumers has little effect on dietary habits, while financial incentives for a healthier diet appear to be more effective. See *infra* Parts II, III.

9. See INST. OF MED., EVALUATING OBESITY PREVENTION EFFORTS: A PLAN FOR MEASURING PROGRESS 1–3 (Lawrence W. Green et al. eds., 2013). Some scholars have proposed reporting requirements for employers who offer wellness programs so that better data are available to assess the effectiveness of wellness programs. See, e.g., Kristin Madison, Harald Schmidt & Kevin G. Volpp, *Using Reporting Requirements to Build an Evidence Base to Improve Employer Wellness Incentives and Their Regulation*, 39 J. HEALTH POL. POL'Y & L. (forthcoming Oct. 2014).

10. See generally SANDER L. GILMAN, OBESITY: THE BIOGRAPHY (2010) (discussing the dietary and other lifestyle prescriptions of Dr. John Henry Kellogg, Ellen G. White, Sylvester Graham, and Charles William Post in the late nineteenth and early twentieth centuries).

length and quality of life. Accordingly, many steps have been taken by lawmakers to discourage tobacco or alcohol use, promote exercise, and improve nutrition. The federal tax on cigarettes is now \$1.01 per pack,¹¹ the blood alcohol threshold for drunk driving charges has dropped to 0.08% in every state,¹² foods purchased at the grocery store come with a label that lists calories, vitamins, and fat content,¹³ and many states and cities have launched programs to encourage healthier lifestyles.¹⁴

But public policy is littered with wellness initiatives that seemed promising when enacted but have not panned out. Consider, for example, the federal Nutrition Labeling and Education Act of 1990.¹⁵ As a result of that statute, consumers can check the nutritional content of foods that they purchase in a grocery store and ensure that they are not unwittingly buying items that are high in calories, fat, or sugar.¹⁶ Yet identifying a meaningful impact on obesity rates is difficult. Some studies have found improvements in diet (e.g., higher fiber intake)¹⁷ and modest reductions in body weight¹⁸ from nutritional labeling, but other studies have found no impact on obesity.¹⁹ And while the increase in obesity rates in the United States

11. See CONG. BUDGET OFFICE, RAISING THE EXCISE TAX ON CIGARETTES: EFFECTS ON HEALTH AND THE FEDERAL BUDGET 2 (2012).

12. See, e.g., Linda C. Fentiman, *A New Form of WMD? Driving with Mobile Device and Other Weapons of Mass Destruction*, 81 UMKC L. REV. 133, 163–64 (2012). Early DUI laws set the blood alcohol threshold at 0.15%. See Neal Shover, William B. Bankston & J. William Gurley, *Responses of the Criminal Justice System to Legislation Providing More Severe Threatened Sanctions*, 14 CRIMINOLOGY 483, 484 (1977).

13. See Nutrition Labeling and Education Act of 1990, Pub. L. No. 101-535, 104 Stat. 2353 (codified at 21 U.S.C. § 343(q) (2012)).

14. See, e.g., INSHAPEINDIANA, <http://www.inshapeindiana.org> (last visited May 7, 2014); Sara Rimer, *Philadelphia's Mayor Puts His City on a Diet*, N.Y. TIMES (Mar. 12, 2001), <http://www.nytimes.com/2001/03/12/us/philadelphia-s-mayor-puts-his-city-on-a-diet.html?pagewanted=all&src=pm>.

15. Nutrition Labeling and Education Act of 1990, Pub. L. No. 101-535, 104 Stat. 2353 (codified at 21 U.S.C. § 343(q) (2012)).

16. See 21 U.S.C. § 343(q)(1)(C)–(D) (2012).

17. See Jayachandran N. Variyam, *Do Nutrition Labels Improve Dietary Outcomes?*, 17 HEALTH ECON. 695, 704 (2008).

18. See Maria L. Loureiro, Steven T. Yen & Rodolfo M. Nayga, Jr., *The Effects of Nutritional Labels on Obesity*, 43 AGRIC. ECON. 333, 340 (2012).

19. See, e.g., Andreas C. Drichoutis, Rodolfo M. Nayga, Jr. & Panagiotis Lazaridis, *Can Nutritional Label Use Influence Body Weight Outcomes?*, 62 KYKLOS 500, 522 (2009). While the overall impact of nutritional labeling is limited, labeling is more effective with some demographic groups than with other groups. See Samantha Goodman et al., *Use of Nutritional Information in Canada: National Trends Between 2004 and 2008*, 43 J. NUTRITION EDUC. & BEHAV. 356, 362 (2011) (finding greater impact for women and wealthier or better educated individuals).

slowed between 1999 and 2008,²⁰ it is difficult to attribute the slowing to the Nutrition Labeling and Education Act. Regulations implementing the Act took effect in 1992,²¹ and there was no slowing in the obesity rate between 1994 and 2000.²² If the Act has had an important impact, one would think it would have been observable by 2000.

Or consider school-based initiatives to reduce obesity by promoting more exercise and healthier diets.²³ Some interventions have shown mixed results, while others have not resulted in any decrease in obesity. For example, a two-year after-school exercise program in Spain reduced the percentage of girls who were overweight but not the percentage of boys who were overweight.²⁴ A two-year program in California of school-based nutrition and exercise led to more physical exercise and lower weight for boys but not for girls.²⁵ And a three-year nutrition and exercise program in four U.S. states led to reduced fat intake and more physical activity but had no effect on weight.²⁶ A recent Cochrane review²⁷ of school-based initiatives and other child obesity programs suggests some benefit, but

20. See Katherine M. Flegal et al., *Prevalence and Trends in Obesity Among US Adults, 1999–2008*, 303 JAMA 235, 240 (2010).

21. See M. Elizabeth Magill, Note, *Congressional Control over Agency Rulemaking: The Nutrition Labeling and Education Act's Hammer Provisions*, 50 FOOD & DRUG L.J. 149, 168 (1995).

22. See Cynthia L. Ogden & Martha D. Carroll, *Prevalence of Overweight, Obesity, and Extreme Obesity Among Adults: United States, Trends 1960–1962 Through 2007–2008*, NAT'L CTR. FOR HEALTH STATISTICS (June 2010), http://www.cdc.gov/nchs/data/hestat/obesity_adult_07_08/obesity_adult_07_08.htm.

23. These initiatives might include increases in physical activity for children during physical education classes or at other times during the school day and tasty, low-fat food items in school cafeterias. See James F. Sallis et al., *Environmental Interventions for Eating and Physical Activity: A Randomized Controlled Trial in Middle Schools*, 24 AM. J. PREVENTIVE MED. 209, 210 (2003).

24. See Fernando Salcedo Aguilar et al., *Impact of an After-School Physical Activity Program on Obesity in Children*, 157 J. PEDIATRICS 36, 38 (2010).

25. See Sallis et al., *supra* note 23, at 214–15. The weight data were based on student reporting and thus may not have been reliable. *Id.* at 213–14.

26. See Russell V. Luepker et al., *Outcomes of a Field Trial to Improve Children's Dietary Patterns and Physical Activity: The Child and Adolescent Trial for Cardiovascular Health (CATCH)*, 275 JAMA 768, 772 (1996).

27. The Cochrane Collaboration undertakes highly regarded reviews of research in health care and health policy to provide independent assessments of the research. *About Us*, COCHRANE COLLABORATION, <http://www.cochrane.org/about-us> (last updated Mar. 16, 2014). Their independence makes them more reliable than industry-funded reviews. See Anders W. Jørgensen, Jørgen Hilden & Peter C. Gøtzsche, *Cochrane Reviews Compared with Industry Supported Meta-Analyses and Other Meta-Analyses of the Same Drugs: Systematic Review*, 333 BMJ 782, 782 (2006).

the effects are modest—on average, the review found only about a one percent decrease in body mass index (“BMI”).²⁸

Unfortunately, while some provisions of the ACA try to encourage better lifestyle decisions by individuals, these provisions also are unlikely to succeed. The next two Parts of this Article consider the ACA’s menu labeling requirements and its incentives for employer wellness programs.

II. MENU LABELING REQUIREMENTS

It is not surprising that Congress would want restaurants to disclose calorie information on their menus.²⁹ Americans eat more of their meals away from home than they did in the past, and restaurant meals typically are higher in calories and fat than are meals eaten at home.³⁰ Disclosure of calorie content allows consumers to identify healthier options and choose them instead of meals that are more likely to make them obese. In addition, if calorie disclosures encourage consumers to seek healthier options, restaurants should respond by offering a wider range of healthier meals.³¹

But menu labeling requirements rest on some inaccurate assumptions. Such requirements assume that people choose higher calorie options out of misunderstanding or inattention and that full information will lead them to pick lower calorie options.³² For example, diners view salads as healthy, low-calorie options and may not realize that a Jack in the Box Chicken Club Salad can contain more than 700 calories³³ or that the Chicken Caesar Salad with “lightly breaded” chicken at Boston’s The Gourmet Pizza weighs in at

28. See Elizabeth Waters et al., *Interventions for Preventing Obesity in Children*, COCHRANE DATABASE OF SYSTEMATIC REVIEWS, Dec. 2011, at 32–33, available at <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD001871.pub3/full>. For a thoughtful discussion of ways to improve school-based programs, see Lindsay F. Wiley, “No Body Left Behind”: *Re-Orienting School-Based Childhood Obesity Interventions*, 5 DUKE F. FOR L. & SOC. CHANGE 97 (2013).

29. See 21 U.S.C. § 343(q)(5)(H) (2012).

30. See Sara N. Bleich & Lainie Rutkow, *Improving Obesity Prevention at the Local Level—Emerging Opportunities*, 368 NEW ENG. J. MED. 1761, 1761 (2013).

31. See Tamara Schulman, Note, *Menu Labeling: Knowledge for a Healthier America*, 47 HARV. J. ON LEGIS. 587, 602–03 (2010).

32. See Marion Nestle, *Health Care Reform in Action—Calorie Labeling Goes National*, 362 NEW ENG. J. MED. 2343, 2345 (2010); Brent Bernell, Note, *The History and Impact of the New York City Menu Labeling Law*, 65 FOOD & DRUG L.J. 839, 842–43 (2010).

33. See *17 Best and Worst Fast-Food Salads*, WEBMD, <http://www.webmd.com/food-recipes/features/best-and-worst-fast-food-salads?page=2> (last updated Aug. 1, 2011).

1550 calories.³⁴ With accurate nutritional information, diners could avoid high-calorie salads and choose low-calorie salads instead. In other words, labeling requirements assume that people act rationally when it comes to their own interests and that policy should address the problem of imperfect understanding that compromises rational decision making.

However, dietary decisions are more complicated than that.³⁵ For example, too much information can compromise decision making (the information “overload” problem).³⁶ In addition, it often is difficult for people to exercise self-control when weighing present costs and benefits with future costs and benefits.³⁷ On one hand, people may have trouble delaying gratification; on the other hand, they may be quick to postpone pain. As a result, people tend to “over-indulge” in activities that have immediate benefits and delayed costs and to “under-indulge” in activities that have immediate costs and delayed benefits.³⁸ In the dietary context, the current gratification of a decadent dessert may overwhelm the distant pain of obesity-related illness. Similarly, the current pain of a low-fat diet may overwhelm the distant benefit of a lowered risk for a heart attack or stroke. In short, anti-obesity policies will not work unless they respond to the ways in which decision making is less than rational.³⁹

Indeed, studies have demonstrated that placing calorie information on menus has little to no effect on the meal choices of diners. Some studies have found modest effects from calorie information, but the results are mixed. In one study, diners at a fast food sandwich shop were given calorie information about menu options as well as information about recommended daily calorie intake.⁴⁰ The information did not influence the choice between a low-

34. BOSTON PIZZA RESTAURANTS, 2012 ALLERGY & NUTRITION GUIDE 23 (Nov. 2012), available at http://bostons-media.s3.amazonaws.com/Menu_Nutritional_Information.pdf.

35. See Julie S. Downs, George Loewenstein & Jessica Wisdom, *Strategies for Promoting Healthier Food Choices*, 99 AM. ECON. REV.: PAPERS & PROC. 159, 159 (2009).

36. See Martin J. Eppler and Jeanne Mengis, *The Concept of Information Overload: A Review of Literature from Organization Science, Accounting, Marketing, MIS, and Related Disciplines*, 20 INFO. SOC'Y 325, 326 (2004).

37. See Kristin M. Madison, Kevin G. Volpp & Scott D. Halpern, *The Law, Policy & Ethics of Employers' Use of Financial Incentives to Improve Health*, 39 J.L. MED. & ETHICS 450, 452–54 (2011); Ted O'Donoghue & Matthew Rabin, *The Economics of Immediate Gratification*, 13 J. BEHAV. DECISION MAKING 233, 234 (2000).

38. See O'Donoghue & Rabin, *supra* note 37, at 234.

39. Tobacco taxes respond to the problem of short- and long-term thinking by giving smokers a short-term pain to compensate for the short-term benefit of a cigarette.

40. See Downs et al., *supra* note 35, at 160.

calorie and high-calorie sandwich, but it did influence choices about side orders so that total calorie intake decreased by about fifty calories.⁴¹ Other studies have not found a reduction in calorie intake. For example, in a study at a Chinese fast food restaurant in North Carolina, some customers were given calorie counts while others were not.⁴² The information about caloric content did not affect ordering behavior.⁴³

More importantly, while some experimental studies have yielded positive results from calorie disclosure, legislative requirements have not. For example, after Seattle passed a calorie disclosure mandate for restaurants, researchers observed meal choices at a Mexican fast food chain.⁴⁴ Customers did not reduce their caloric intake as a result of the requirement.⁴⁵ In a study of fast food dining in New York City before and after the implementation of the city's calorie disclosure mandate,⁴⁶ there was no overall change in caloric intake,⁴⁷ though there were decreases at some restaurant chains and increases at another.⁴⁸

Might calorie disclosure fail because diners do not have a benchmark for comparison? That is, if consumers overestimate the number of calories they can eat without gaining weight, they may be too willing to order a high-calorie meal at a restaurant. And some experimental studies have found a benefit from information about recommended daily calorie intake.⁴⁹

41. *Id.* at 161; see also Christina A. Roberto et al., *Evaluating the Impact of Menu Labeling on Food Choices and Intake*, 100 AM. J. PUB. HEALTH 312, 316 (2010) (finding that calorie information on a menu led to diners ordering meals with fewer calories).

42. See Janet Schwartz et al., *Inviting Consumers to Downsize Fast-Food Portions Significantly Reduces Calorie Consumption*, 31 HEALTH AFF. 399, 400 (2012).

43. See *id.* at 404.

44. See Eric A. Finkelstein et al., *Mandatory Menu Labeling in One Fast-Food Chain in King County, Washington*, 40 AM. J. PREVENTIVE MED. 122, 122–23 (2011) (studying meal choices at seven of the chain's locations in Seattle and seven locations in the suburbs).

45. See *id.* at 124–25.

46. See N.Y.C., N.Y., HEALTH CODE § 81.50 (2013).

47. See Tamara Dumanovsky et al., *Changes in Energy Content of Lunchtime Purchases from Fast Food Restaurants After Introduction of Calorie Labelling: Cross Sectional Customer Surveys 1*, BMJ (July 26, 2011), <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3144313/> (studying menu choices at 168 locations for eleven fast food chains); Brian Elbel et al., *Calorie Labeling and Food Choices: A First Look at the Effects on Low-Income People in New York City*, 28 HEALTH AFF. w1110, w1110 (2009), available at <http://content.healthaffairs.org/content/28/6/w1110.full.html> (studying menu choices at fourteen fast food locations in New York City and five in Newark).

48. See Dumanovsky et al., *supra* note 47, at 4.

49. See, e.g., Roberto et al., *supra* note 41, at 316. Other studies have not found a benefit when diners have been given recommended levels for calorie intake and even have

Unfortunately, providing information about recommended daily or per meal calorie intake does not seem to be very effective in real-world settings. In one study, researchers studied menu choices at two McDonald's franchises in New York City to test the impact of calorie information that was supplemented by recommended calorie intakes per meal and per day.⁵⁰ The study was conducted both before and after New York City implemented its menu labeling requirements.⁵¹ Consistent with the previously mentioned study in New York, the calorie information did not lead to a reduction in caloric intake.⁵² In fact, overweight persons increased their calorie intake after the menu labeling ordinance went into effect.⁵³ Moreover, providing recommended calorie intakes resulted in a modest increase in calories consumed.⁵⁴ However, the increase from the recommended calorie intakes fell slightly short of statistical significance.⁵⁵

While calorie disclosures appear to generate little benefit as a tool for combating obesity, other policies may have greater impact. In a study of food purchasing decisions, researchers compared a "tax" on high-calorie foods with a "subsidy" for low-calorie foods.⁵⁶ They found that while the subsidy resulted in the purchase of foods with a higher total calorie content—study subjects apparently used their subsidies to buy more food—the tax resulted in the purchase of foods with a lower total calorie content.⁵⁷ This study provides support for policy proposals such as a tax on sugary soft drinks, which is consistent with the previously discussed realities of individual

found a perverse effect, with diners eating more when informed about recommended calorie intake. See Downs et al., *supra* note 35, at 162.

50. See Julie S. Downs et al., *Supplementing Menu Labeling with Calorie Recommendations to Test for Facilitation Effects*, 103 AM. J. PUB. HEALTH 1604, 1605 (2013).

51. The part of the study that was conducted after implementation of the New York City ordinance took place before the city supplemented its calorie labeling mandate with an advertisement campaign to inform New Yorkers about recommended daily calorie intake. See *id.*

52. *Id.* at 1606–07.

53. *Id.* at 1607.

54. *Id.*

55. *Id.* While studies have not found a meaningful impact from menu labeling requirements, a significant impact is still possible. It may take time for consumers to adjust their dietary habits or larger studies may be needed to provide an accurate reflection of the requirements' impact. In addition, it may be that calorie disclosures are important but need to be supplemented by additional measures. Perhaps people need both accurate information about their food options and incentives to choose wisely among the options.

56. See Leonard H. Epstein et al., *The Influence of Taxes and Subsidies on Energy Purchased in an Experimental Purchasing Study*, 21 PSYCHOL. SCI. 406, 406 (2010).

57. *Id.* at 412–13.

decision making.⁵⁸ Imposing a tax on unhealthy foods supplies an immediate disincentive to the consumption of those foods and can overcome the difficulty people have in postponing the gratification that they enjoy from the foods. That said, more data are needed before we can come to a firm conclusion about the benefits of food taxes—a tax on some unhealthy foods could simply cause people to substitute other unhealthy foods.⁵⁹

Studies also have found good results from efforts to exploit consumer responses to “nudges.”⁶⁰ In the North Carolina Chinese fast food restaurant study, researchers found that diners rarely would ask for a half serving of rice to go with their entrée.⁶¹ However, if servers invited diners to choose a half serving of the rice, then many chose it, and they did not compensate for the smaller serving by eating more calories from other foods at the meal.⁶² In the fast food sandwich study, dining choices often were influenced by the arrangement of sandwich options on the menu.⁶³ Research subjects were given a one-page “featured subs” menu, along with a larger menu with more

58. For further discussion of taxes on less healthy foods, see James G. Hodge, Jr. et al., *New Frontiers in Obesity Control: Innovative Public Health Legal Interventions*, 5 DUKE F. FOR L. & SOC. CHANGE 1, 4–12 (2013); Jennifer L. Pomeranz, *A Conditional Funding Strategy to Address the Modern Food Environment: From Public Health Prevention to State and Local Preemption*, 5 DUKE F. FOR L. & SOC. CHANGE 39, 63 (2013) (proposing that revenues raised from the taxes be used to fund health-promoting programs).

59. Indeed, there are studies that suggest such a substitution effect. See Jason M. Fletcher, David E. Frisvold & Nathan Tefft, *The Effects of Soft Drink Taxes on Child and Adolescent Consumption and Weight Outcomes*, 94 J. PUB. ECON. 967, 968 (2010). If substitution effects occur, the taxes would not improve health but would carry the disadvantage that taxes on foods and beverages are regressive and have a disproportionate effect on the poor. Other studies also suggest that the effects of taxes are complicated. For example, in a study of dining at a restaurant, a “tax” in the form of higher prices for less healthy choices did not make a difference, but a tax plus information about fat content did. See Avni M. Shah et al., *Will a Fat Tax be an Effective ‘Nudge’?: Evidence that Normative Signals Augment the Impact of Financial Incentives to Eat Healthy Food* (Apr. 16, 2014) (unpublished manuscript) (on file with the North Carolina Law Review). The absence of an effect from the higher pricing alone may reflect the fact that higher prices sometimes are interpreted as representing higher quality. Research also suggests that taxes should be imposed at the wholesale level rather than the retail level. Consumers typically are more sensitive to the posted price of a product rather than the price they will pay once a sales tax is added. Raj Chetty, Adam Looney & Kory Kroft, *Salience and Taxation: Theory and Evidence*, 99 AM. ECON. REV. 1145, 1146 (2009).

60. For a general discussion of nudges, see RICHARD H. THALER & CASS R. SUNSTEIN, *NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, AND HAPPINESS* (rev. ed. 2009).

61. See Schwartz et al., *supra* note 42, at 402.

62. See *id.* When servers offered the half serving, they also informed customers that the half serving came with 200 fewer calories. *Id.* at 401.

63. See Downs et al., *supra* note 35, at 160.

sandwich choices.⁶⁴ There were three versions of the featured subs menu.⁶⁵ One had all low-calorie choices, one had all high-calorie choices, and the third had a mix of low- and high-calorie choices.⁶⁶ Compared to diners who received the mixed menu, diners who received the low-calorie menu were forty-eight percent more likely to choose a low-calorie sandwich while diners who received the high-calorie menu were forty-seven percent less likely to choose a low-calorie sandwich.⁶⁷

What do we learn from our understanding of individual decision making, the studies of anti-obesity policies, and other information? This is a very complicated issue. It is not a simple matter to find effective anti-obesity programs. Indeed, even when overweight people lose weight on a diet, no more than about twenty percent are able to maintain the lower weight for at least one year.⁶⁸ And even for the policies that seem to work, we do not know whether they actually have a meaningful impact. For example, consider the Chinese fast food restaurant study that found a reduction in calorie intake when customers were offered a one-half serving of the rice.⁶⁹ Researchers found that the diners consumed fewer calories at the restaurant, but we do not know whether the diners compensated for the caloric reduction by consuming more calories at snacks or meals later in the day.

Given the uncertainties, a couple of strategies make sense. First, funding for obesity research is critical. We know much more about correlations than about cause and effect. Are people obese because they are sedentary, or are people sedentary because they are obese?⁷⁰ We simply do not have a good handle on the reliability of our understanding of obesity. And this is typical of medical problems.

64. *Id.*

65. *Id.*

66. *Id.*

67. *Id.* at 161.

68. The twenty percent figure is based on maintaining a weight loss of at least ten percent of body weight for at least one year. See Rena R. Wing & Suzanne Phelan, *Long-Term Weight Loss Maintenance*, 82 AM. J. CLINICAL NUTRITION 222S, 222S (2005).

69. See Schwartz et al., *supra* note 42, at 402.

70. There is good reason to believe that a sedentary lifestyle causes obesity, but we do not have enough data to exclude the possibility that obesity leads to a sedentary lifestyle. See Frank B. Hu et al., *Television Watching and Other Sedentary Behaviors in Relation to Risk of Obesity and Type 2 Diabetes Mellitus in Women*, 289 JAMA 1785, 1790–91 (2003). And there are examples in medicine where correlations have resulted in mistaken inferences about cause and effect. See, e.g., Earl S. Ford & Carl J. Caspersen, *Sedentary Behaviour and Cardiovascular Disease: A Review of Prospective Studies*, 41 INT'L J. EPIDEMIOLOGY 1338, 1348 (2012) (discussing mistaken beliefs about the health benefits of vitamins).

Recall that as late as the 1980s, medical experts believed that ulcers in the stomach and small intestine were caused by stress, smoking, alcohol, and a variety of other factors.⁷¹ Then, researchers discovered the bacterial cause for ulcers.⁷² Recent research also suggests an important role for intestinal bacteria in contributing to obesity.⁷³ Policymakers can design more effective programs if they better understand the reasons why people become and remain obese.

In addition to promoting more research, anti-obesity programs should take advantage of the “laboratory of state experimentation.”⁷⁴ In an environment in which scientific understanding is imperfect and optimal policies are uncertain, it makes a good deal of sense to let states (and cities) try a variety of approaches before having the federal government impose a standard approach across the country.⁷⁵ For example, rather than having Congress impose a national tax on junk food, a few cities or states could experiment with such a tax. Or rather than having Congress enact a national ban on the sale of sugar-sweetened beverages to children, a few cities or states could enact such bans.⁷⁶

III. EMPLOYER WELLNESS PROGRAMS

While the ACA’s menu labeling requirements will probably have little or no effect on obesity rates, the Act’s employer-wellness provisions⁷⁷ hold more promise for benefit. Well-designed wellness programs can reduce obesity, as well as smoking and other unhealthy

71. See James McGuigan, *Peptic Ulcer*, in HARRISON’S PRINCIPLES OF INTERNAL MEDICINE 1371, 1374, 1377 (Kurt J. Isselbacher et al. eds., 9th ed. 1980).

72. See David Y. Graham et al., *Effect of Treatment of Helicobacter Pylori Infection on the Long-Term Recurrence of Gastric or Duodenal Ulcer: A Randomized, Controlled Study*, 116 ANNALS INTERNAL MED. 705, 708 (1992).

73. It seems that obese people have a different range of bacteria in their intestinal tract than normal weight individuals and that weight reduction may follow from changing the range of bacteria in the intestines of obese persons. See, e.g., Judith Aron-Wisniewsky, Joel Doré & Karine Clement, *The Importance of the Gut Microbiota After Bariatric Surgery*, 9 NATURE REV. GASTROENTEROLOGY HEPATOLOGY 590, 590 (2012); Vanessa K. Ridaura et al., *Gut Microbiota from Twins Discordant for Obesity Modulate Metabolism in Mice*, 341 SCI. 1079, 1079 (2013).

74. Cf. *New State Ice Co. v. Liebmann*, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting) (discussing the importance of state experimentation in social and economic science).

75. For a helpful discussion of a range of anti-obesity policies, see Hodge, Jr. et al., *supra* note 58. An important consideration in choosing among different policies is whether they can be converted into legal requirements. Some policies are difficult to mandate; others arouse strong political opposition.

76. For discussion of such a ban, see *id.* at 30–37.

77. 42 U.S.C. § 300gg-4(j)(3)(A) (2012).

behaviors.⁷⁸ However, if implemented poorly, the wellness provisions may not only fail to improve health; they also could compromise the ACA's goal of making health care coverage more affordable.

Wellness programs include both screening and intervention initiatives.⁷⁹ Screening activities include (a) questionnaires that ask about exercise, nutrition, and other factors that affect individual health and (b) clinical measurements of weight, blood pressure, blood glucose levels, and other data that provide information about an employee's health risks.⁸⁰ Intervention activities include counseling to encourage more exercise and better diet, smoking cessation programs, free immunizations in the workplace, free or subsidized gym memberships, and healthy food options in workplace cafeterias or vending machines.⁸¹

To encourage enrollment in employer wellness programs, the ACA extends provisions in the Health Insurance Portability and Accountability Act⁸² that allow employers to promote program participation with financial incentives.⁸³ For incentives that are tied simply to participation, there are no limits on the magnitude of the incentives. Employers can reward their employees with \$50, \$500, or \$5,000 if they sign up for workplace wellness programs.⁸⁴ Thus, a company could impose a \$5,000 premium surcharge on employees who do not participate or offer a \$5,000 premium cut to employees who do participate. On the other hand, if employers want to base financial incentives on the satisfaction of health targets (e.g., loss of weight or lowering of blood glucose level), then premium surcharges, premium reductions, or other financial incentives are permitted only up to thirty percent of the total cost of employee-only coverage (or for smoking cessation targets, up to fifty percent of the total cost of coverage).⁸⁵

78. See SOEREN MATTHE ET AL., WORKPLACE WELLNESS PROGRAMS STUDY: FINAL REPORT xvii, 43–51 (RAND 2013).

79. See *id.* at 21.

80. *Id.*

81. *Id.* at 22–23.

82. Health Insurance Portability and Accountability Act, Pub. L. 104-191, 110 Stat. 1936 (1996); Incentives for Nondiscriminatory Wellness Programs in Group Health Plans, 78 Fed. Reg. 33,158, 33,158–59, 33,166–67 (June 3, 2013).

83. See Jill R. Horwitz, Brenna D. Kelly & John E. DiNardo, *Wellness Incentives in the Workplace: Cost Savings Through Cost Shifting to Unhealthy Workers*, 32 HEALTH AFF. 468, 469–70 (2013).

84. Incentives for Nondiscriminatory Wellness Programs in Group Health Plans, 78 Fed. Reg. at 33,166–67.

85. *Id.* at 33,167. Thus if the total cost of coverage (including employer and employee contributions) is \$5,000, an employer could employ financial incentives up to \$1,500. If

There are protections in the ACA for employees who may not be able to meet a wellness program's targets. For instance, if it would be medically inadvisable for the employee to try to meet the standard, or if a medical condition would make satisfaction of a target unreasonably difficult, the employee must be exempted from the financial incentive or be given reasonable alternative standards.⁸⁶ If the program sets a BMI below the obesity threshold of thirty as a target,⁸⁷ employees might be given an alternative standard of losing a certain percentage or amount of their weight.⁸⁸ That way, the employee with a BMI of forty would not be greatly disadvantaged compared to an employee with a BMI of thirty-one and also would not be expected to accomplish an unrealistic goal.⁸⁹

The wellness program provisions raise two important concerns. First, employers may link financial incentives to wellness programs that are not effective. An employee might make a good faith effort and still not meet the program's goal for weight loss, blood sugar control, or other health metric. To be sure, the ACA requires that when employers implement wellness programs with financial incentives tied to the meeting of health status targets, the programs must be "reasonably designed to promote health or prevent disease."⁹⁰ But many employer wellness programs may do little to improve the health status of employees,⁹¹ and it is not clear that the

family members are eligible for the financial incentives, then the maximum incentive would be thirty percent of the cost of family coverage. In addition to capping the amount of financial incentives, the ACA includes other protections for employees. For example, proposed ACA regulations "require that health-contingent wellness programs be reasonably designed to promote health or prevent disease, not be overly burdensome, not be a subterfuge for discrimination based on a health factor, and not be highly suspect in the method chosen to promote health or prevent disease." Horwitz et al., *supra* note 83, at 470 (internal quotation marks omitted). The ACA also allows the Secretaries of Labor, Health and Human Services, and the Treasury to raise the incentive cap from thirty percent to fifty percent. Madison et al., *supra* note 37, at 451 (citing 42 U.S.C. § 300gg-4(j)(3)(A) (2012)).

86. See Incentives for Nondiscriminatory Wellness Programs in Group Health Plans, 78 Fed. Reg. at 33,177, 33,182.

87. While persons with a BMI of thirty or more are considered obese, persons with a BMI of at least twenty-five but less than thirty are considered overweight. See MATTKE ET AL., *supra* note 78, at 15.

88. See Incentives for Nondiscriminatory Wellness Programs in Group Health Plans, 78 Fed. Reg. at 33,166, 33,178, 33,184, 33,189.

89. See Madison et al., *supra* note 37, at 457.

90. 42 U.S.C. § 300gg-4(j)(3)(B) (2012).

91. See Karen Chan Osilla et al., *Systematic Review of the Impact of Worksite Wellness Programs*, 18 AM. J. MANAGED CARE e68, e78 (2012) (finding positive outcomes only one half of the time for wellness programs that were studied with a randomized controlled trial).

ACA's reasonable design requirement will weed out those programs.⁹²

Moreover, even when programs are effective, their results may be modest. Researchers like to see a reduction of at least five to ten percent of body weight from an anti-obesity program,⁹³ and some participants in some programs reach that goal. For example, a RAND study of wellness programs at five employers found that continuous participation in a weight control program for five years would result in cumulative weight loss of six to seven percent of body weight for the average participant (about thirteen pounds for someone who starts out at 200 pounds).⁹⁴ However, many programs have fallen short of the five to ten percent weight loss goal. Consider some illustrative examples:

In a New Zealand study, researchers tested a "small-changes" intervention for overweight or obese employees in two workplaces.⁹⁵ Small change interventions promote relatively modest changes in lifestyle on the theory that individuals are more likely to make small changes than large ones and that the impact of small changes can accumulate over time to create substantial long-term impacts.⁹⁶ In the study, participants submitted food and exercise diaries, and a team of health professionals selected a set of health behavior changes tailored to each participant's needs.⁹⁷ Changes might include replacement of sugar-containing drinks with water or diet drinks, brushing teeth after dinner to signal the end of eating for the evening, or taking "snacktivity" breaks (breaks that involve brief periods of physical exercise instead of eating a snack).⁹⁸ At four-week intervals during the first twelve weeks of the intervention, more small changes were added to each participant's program.⁹⁹ For some of the participants, the twelve-week small changes segment of the intervention was

92. Enforcement will depend on how strictly the "reasonably designed" requirement is interpreted, the enthusiasm of particular presidential administrations for enforcement of the requirement, and the extent to which Republicans in Congress continue their efforts to limit funding for the enforcement of the ACA.

93. Weight losses of at least five to ten percent can yield a meaningful improvement in health. See Rena R. Wing & James O. Hill, *Successful Weight Loss Maintenance*, 21 ANN. REV. NUTRITION 323, 325 (2001).

94. See MATTKE ET AL., *supra* note 78, at 47–50.

95. Caryn Zinn et al., *A "Small-Changes" Workplace Weight Loss and Maintenance Program: Examination of Weight and Health Outcomes*, 54 J. OCCUPATIONAL & ENVTL. MED. 1230, 1230 (2012).

96. See *id.*

97. See *id.* at 1231.

98. *Id.* at 1232.

99. See *id.* at 1231.

followed by a nine-month maintenance segment.¹⁰⁰ At the end of the year, only one-third of the participants had lost at least five percent of their weight (compared to no workers in the control group), with the average worker losing three and one-half percent of weight.¹⁰¹

Another study yielded even smaller changes in weight. The study involved employees at a medical center in Missouri, with employees at one worksite undergoing a health assessment only, while employees at a second worksite underwent the same health assessment plus an array of interventions over a year's time. The interventions included nutrition components (e.g., healthy foods snack carts and on-site Weight Watchers meetings), exercise components (e.g., pedometers and on-site exercise programs), and participation rewards (e.g., kitchen gadgets and exercise gear).¹⁰² While all employees were eligible for the study,¹⁰³ the average participant had a BMI in the obese range (i.e., BMI of 30 or more).¹⁰⁴ The changes in weight between the two sites were statistically significant,¹⁰⁵ but the magnitude of change was small—participants at the intervention site lost on average just under one percent of their weight, while participants at the assessment-only site gained on average less than one percent of their weight.¹⁰⁶

Even these modest results may be skewed by a selection bias. When wellness programs are voluntary and lack financial incentives for participation, enrollment tends to be low. According to a RAND study, fewer than one in two employees participate in wellness screening programs, fewer than one in five participate in wellness interventions, and fewer than one in nine participate in weight management programs.¹⁰⁷ The employees who do enroll are likely to be especially motivated, and their experiences may not be representative of what the wellness programs can achieve when expanded to all employees.

100. *See id.*

101. *Id.* at 1234–35.

102. *See* Susan B. Racette et al., *Worksite Opportunities for Wellness (WOW): Effects on Cardiovascular Disease Risk Factors After 1 Year*, 49 PREVENTIVE MED. 108, 110–11 (2009).

103. *Id.* at 109.

104. The average BMI at the assessment-only site was 31.1 at the beginning of the study, while the average BMI at the intervention site was 34.5 at the beginning of the study. *Id.* at 110.

105. *See id.* at 110 tbl.2, 111.

106. *See id.* at 110 tbl.2. The intervention did result in more substantial reductions in risk factors for heart disease compared to the reductions in weight. *See id.* at 112.

107. *See* MATTKE ET AL., *supra* note 78, at 37–38 (discussing data from a national survey of employers).

Indeed, randomized controlled trials of wellness programs have yielded weaker results than have other kinds of studies. Consider, for example, the results of a review of studies measuring the effectiveness of workplace wellness programs.¹⁰⁸ There were thirteen studies that evaluated exercise programs, and sixty-two percent of the studies found a positive effect from the programs.¹⁰⁹ However, a positive effect was found in only forty-three percent of the studies that employed a randomized controlled trial.¹¹⁰ Among weight management programs, only three out of the six with a randomized controlled trial design found a positive impact on weight, and none of the positive three had more than 100 participants.¹¹¹

While employer wellness programs to date have not delivered as much benefit as we might hope, researchers have identified certain features of programs that are more likely than alternative strategies to show success. For example, financial or other incentives may be able to encourage successful outcomes. In addition, incentives are more effective when implemented on a frequent basis. A weekly penalty or reward of \$10 has a greater impact than an annual penalty or reward of \$500.¹¹² As discussed earlier, people respond more readily to immediate rewards and penalties than to delayed rewards and penalties.¹¹³ Frequent financial rewards and penalties can help overcome the tendency to over-indulge in the immediate gratification of unhealthy food whose harms materialize only in the future. And financial incentives need to be salient—a separate check is more effective than an insurance premium rebate that is buried in a reduced payroll deduction.¹¹⁴

One important question about wellness programs lies in their long-term effectiveness. While some programs have had good short-term results, the beneficial effects tend not to persist over the longer term. In one study, for example, participants enrolled in a wellness initiative to promote a healthy diet, physical activity, and stress

108. See Osilla et al., *supra* note 91, at e69.

109. *Id.*

110. *See id.*

111. *See id.* at e70.

112. See Kevin G. Volpp et al., *Redesigning Employee Health Incentives—Lessons from Behavioral Economics*, 365 NEW ENG. J. MED. 388, 389 (2011). Indeed, there is no firm evidence that charging higher health care premiums to persons who smoke or are overweight causes them to stop smoking or lose weight. *See id.* at 388.

113. *See supra* notes 37–39 and accompanying text; Madison et al., *supra* note 37, at 452–54 (2011).

114. It is usually more effective, for example, to send a reward check for \$100 than to provide a discount of \$100 in health care premiums that are deducted from a person's paycheck. *See Volpp et al., supra* note 112, at 389.

reduction.¹¹⁵ There were weekly meetings for three months followed by a monthly maintenance program.¹¹⁶ After three months, participants had lost about five pounds on average while members of the control group had gained about one and a half pounds.¹¹⁷ However, the weight loss was not sustained at a twelve-month follow-up.¹¹⁸ In another study that involved a wellness program for patients at a health care facility rather than employees in a workplace, researchers examined the effectiveness of two kinds of financial incentives—lotteries and deposit contracts¹¹⁹—at encouraging weight loss. Both incentives were effective at promoting weight loss during the four months of the study.¹²⁰ Once the intervention ended, however, the weight loss gradually dissipated.¹²¹ While study participants weighed significantly less at seven months than at the beginning of the study, their weight losses were not significantly different from the amount of weight lost by a control group in the study.¹²² A similar study conducted over an eight-month period yielded similar results.¹²³ Patients who participated in the lottery or deposit contract arms of the study lost significantly more weight during the eight months than did control patients, but there was no significant difference in weight loss between incentive patients and control patients nine months after the incentives ended.¹²⁴

An important question left open by these studies is whether an intervention needs to be maintained indefinitely or whether it just needs to be maintained for periods longer than a few months or a

115. See Kalleen Barham et al., *Diabetes Prevention and Control in the Workplace: A Pilot Project for County Employees*, 17(3) J. PUB. HEALTH MGMT. & PRAC. 233, 233 (2011).

116. *Id.* at 234.

117. *See id.* at 236.

118. *See id.* On the other hand, improvements in “waist circumference and healthy lifestyle behaviors” were sustained at the twelve-month follow-up. *Id.* at 240.

119. See Kevin G. Volpp et al., *Financial-Incentive Based Approaches for Weight Loss: A Randomized Trial*, 300 JAMA 2631, 2631 (2008). In the lottery part of the study, participants would be entered in a daily lottery if they had reached their weight loss goal. *Id.* at 2633. Lottery entrants had a twenty percent chance of winning \$10 and a one percent chance of winning \$100. In the deposit contract part of the study, participants contributed up to \$3 per day in a pool with an additional contribution from the study. *Id.* at 2632. For each day that participants met their weight loss goals, they would receive their deposit and the matching dollars back. *Id.* at 2633.

120. *Id.* at 2634–35.

121. *Id.*

122. *Id.* at 2635.

123. See Leslie K. John et al., *Financial Incentives for Extended Weight Loss: A Randomized, Controlled Trial*, 26 J. GEN. INTERNAL MED. 621, 621 (2011).

124. *Id.* at 625.

year to result in a long-term change in participant behavior.¹²⁵ Of course, we should not be surprised to learn that interventions might be needed indefinitely. Treatment of high blood pressure or diabetes also needs to be maintained indefinitely.¹²⁶

Another important question is how to balance the trade-offs with different kinds of incentives. For instance, principles of loss aversion tell us that “penalties” are more effective than “rewards.” The desire to avoid a loss is more powerful than the desire to realize a gain.¹²⁷ On the other hand, people generally believe that rewards for healthy behavior are fairer than penalties for unhealthy behavior.¹²⁸ Hence, efforts to implement penalties may result in disaffected employees. There also are considerations of efficiency. Penalty programs can be targeted at employees who would benefit from a change in behavior, while reward programs end up making payments to employees who do not need an incentive to engage in the desired behavior.¹²⁹

In addition to concerns about wellness program effectiveness and efficiency, there are important concerns about equity. In particular, the financial incentives for wellness programs may undermine the ACA’s goal of making sure that all Americans have access to affordable health care coverage, regardless of their health status.¹³⁰ A key achievement of the ACA was to prohibit insurers from charging higher premiums, or denying coverage altogether, to individuals with preexisting medical conditions.¹³¹ Discrimination on the basis of health status was to become a thing of the past. But consider the implications of a financial incentive for obese employees to lower their BMI below thirty or at least to lose a specified percentage or amount of weight. Assuming a \$5,000 cost of coverage, obese employees could face a surcharge of \$1,500 for their health care coverage.¹³² Similarly, employees with diabetes or hypertension could face an annual surcharge of \$1,500. Persons with health problems may lose much of the protection promised by the ACA and other federal

125. See Leslie K. John et al., *Empirical Observations on Longer-Term Use of Incentives for Weight Loss*, 55 PREVENTIVE MED. S68, S74 (2012).

126. There may be an important drawback to indefinite financial incentives—people may become dependent on incentives to adopt healthy behaviors. See Madison et al., *supra* note 37, at 453.

127. See *id.* at 454.

128. See *id.* at 458; Volpp et al., *supra* note 112, at 389–90.

129. See Volpp et al., *supra* note 112, at 390.

130. See *id.* at 389.

131. See 42 U.S.C. § 300gg–4(a) (2012).

132. See Matt Lamkin, *Health Care Reform, Wellness Programs, and the Erosion of Informed Consent*, 101 KY. L.J. 435, 444–45 (2013); Volpp et al., *supra* note 112, at 389.

statutes (e.g., the Americans with Disabilities Act).¹³³ In addition, health problems are more common in low-income persons for whom the surcharges will be especially burdensome.¹³⁴ Wellness programs also are likely to disproportionately affect minorities (who are more likely to be overweight).¹³⁵

A recent review of wellness programs confirms the concerns about the programs' equity. Jill Horwitz and colleagues considered claims by employers that their wellness programs reduced employer health care costs by promoting healthier employee behavior.¹³⁶ In fact, the reduction in employer costs may simply reflect the fact that workers with higher risks for illness paid more for their health care coverage.¹³⁷

This result is not surprising. When choosing among wellness program options, employers can choose between "positive"

133. See Jessica L. Roberts, *"Healthism": A Critique of the Antidiscrimination Approach to Health Insurance and Health-Care Reform*, 2012 U. ILL. L. REV. 1159, 1194–95. See generally Carrie Griffin Basas, *What's Bad About Wellness?: What the Disability Rights Perspective Offers About the Limitations of Wellness*, 39(5) J. HEALTH POL'Y, POL. & L. (forthcoming Oct. 2014) (describing how current wellness programs are biased against people with disabilities). The Americans with Disabilities Act ("ADA") can be found at 42 U.S.C. §§ 12101–12213 (2012). Individuals with a disability such as diabetes, hypertension, or severe obesity will be in a better position than individuals who are overweight but not obese to invoke the protections of the ADA. However, even individuals with disabilities may not receive much protection from the ADA because of the ADA's exemptions for insurance policies. See *Seff v. Broward Cnty.*, 691 F.3d 1221, 1223–24 (11th Cir. 2012); Michelle M. Mello & Meredith B. Rosenthal, *Wellness Programs and Lifestyle Discrimination—The Legal Limits*, 359 NEW ENG. J. MED. 192, 194–95 (2008). Lower-income persons also may find it more difficult to avoid penalties because they may not be able to afford healthier foods or pay for a babysitter while they work out at a gym. See Madison et al., *supra* note 37, at 456.

134. See Horwitz et al., *supra* note 83, at 473. Ironically, individuals who receive their insurance through their employer would be worse off than individuals who purchase their insurance on an exchange and who would not be subject to employer wellness program incentives. However, they could be subject to wellness programs sponsored by their insurers under the ACA's wellness program demonstration project. See 42 U.S.C. § 300gg-4(l) (2012). Cost savings may not even result from wellness programs. In a careful study of a wellness intervention by a major St. Louis-based hospital system, researchers found that the intervention yielded a twelve percent decrease in hospitalizations but no overall change in health care costs. See Gautam Gowrisankaran et al., *A Hospital System's Wellness Program Linked to Health Plan Enrollment Cut Hospitalizations but Not Overall Costs*, 32 HEALTH AFF. 477, 480 (2013). The reduction in inpatient spending was matched by an increase in outpatient spending plus the costs for the intervention. See *id.*

135. See Anna Kirkland, *Critical Perspectives on Wellness*, 39(5) J. HEALTH POL'Y, POL. & L. (forthcoming Oct. 2014). Wellness programs are difficult for women and lower-income persons because they may have less discretionary time for wellness initiatives—either because of child-rearing responsibilities or the need to work multiple jobs. See *id.*

136. See Horwitz et al., *supra* note 83, at 468–69.

137. See *id.* at 469.

investments in employee health and “negative” penalties for unhealthy workers, such as premium surcharges. If an employer chooses to invest in better employee health, there is no guarantee that the employer will reap any benefit. Healthier employees may leave for better job opportunities or demand higher wages because of their greater marketability, and the health benefits of wellness programs may not materialize for many years.¹³⁸ On the other hand, penalties for unhealthy workers can offset their higher health care costs in the short term and discourage unhealthy individuals from seeking or retaining jobs with the employer.¹³⁹

I mentioned at the outset of this Article that there is much more that we do not know than we do know about wellness policies, and that applies to the effects of employer wellness programs. Employer wellness programs reflect in large part the assumption that improvements in risk factors for poor health will result in improvements in health—people will suffer less from disease and live longer, it is thought, if they lose weight, lower their blood sugar, or control their blood pressure. But that is not necessarily true. Important trials of approaches to reduce blood sugar and other risk factors for complications of diabetes yielded meaningful improvements in the risk factors without improvements in overall health.¹⁴⁰ Indeed, greater control of risk factors can sometimes result in a worsening of health status.¹⁴¹

On the other hand, there may be unexpected benefits from wellness interventions. In the Missouri workplace study,¹⁴² small reductions in weight were accompanied by more substantial reductions in risk factors for heart disease.¹⁴³ Similarly, in a study that looked not only at objective measures of health status but also at how participants described their health status, there were benefits that

138. See generally Robert Fannion & Scott L. Greer, *I'll Be Gone, You'll Be Gone: Why American Employers Underinvest in Health*, 39(5) J. HEALTH POL'Y, POL. & L. (forthcoming Oct. 2014) (describing how wellness programs affect employers differently depending on the extent to which their workforce is stable or mobile).

139. *Id.*

140. See Horwitz et al., *supra* note 83, at 472 (citing a Cochrane review of diabetes studies, BIANCA HEMMINGSEN ET AL., TARGETING INTENSIVE GLYCAEMIC CONTROL VERSUS TARGETING CONVENTIONAL GLYCAEMIC CONTROL FOR TYPE 2 DIABETES MELLITUS, COCHRANE DATABASE OF SYSTEMATIC REVIEWS 2013, Issue 11. Art. No.: CD008143, available at <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD008143.pub3/abstract>).

141. *Id.* at 472.

142. See Racette et al., *supra* note 102.

143. See *id.* at 112.

exceeded what might be expected from the degree of weight loss.¹⁴⁴ The researchers collected participant self-reports of “health-related quality of life” (“HRQL”),¹⁴⁵ and they found that modest weight loss led to improvements in HRQL.¹⁴⁶ The participants reported that they were functioning more effectively, both physically and mentally.¹⁴⁷ Moreover, the improvements were sustained even for participants who were not able to maintain a weight loss of more than five percent of body weight.¹⁴⁸

There is much to be learned about the effects of employer wellness programs and how to best design them. We need more research and more pilot testing of wellness programs before we encourage broad implementation.

CONCLUSION

The drafters of the ACA and other policymakers are correct to encourage healthier lifestyle decisions. Many Americans would do well to exercise more, consume fewer calories, and eat more fruits and vegetables. However, our understanding of how we can effectively promote healthier lifestyle decisions is quite limited. As a result, many wellness policy initiatives have had little impact. The menu labeling and employer wellness program provisions in the ACA may not be effective either and, in the case of employer wellness provisions, may even be counterproductive.

Governments need to do a better job at making sure their interventions reflect current scientific understanding, and they need to ensure that more research is conducted to improve our understanding. Otherwise, much money and time will be wasted on ineffective interventions, many people may be penalized unfairly, and the public may become resistant to the adoption of interventions that are, in fact, effective.

While the specific provisions in the ACA may not pan out, another part of the ACA could do much to promote healthier lifestyle decisions. The ACA established a Patient-Centered

144. See Bryan Blissmer et al., *Health-Related Quality of Life Following a Clinical Weight Loss Intervention Among Overweight and Obese Adults: Intervention and 24 Month Follow-Up Effects* 1, HEALTH & QUALITY LIFE OUTCOMES (2006), <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1553435/>.

145. “Health-related quality of life” refers to self-reported assessments of the extent to which medical problems have physical, psychological, and social consequences. See *id.* at 2.

146. See *id.* at 4.

147. See *id.* at 5.

148. See *id.* at 1.

Outcomes Research Institute (“PCORI”)¹⁴⁹ to fund research that will identify effective ways to prevent (and treat) disease.¹⁵⁰ With well-targeted funding, PCORI could provide much-needed guidance to lawmakers, employers, and others who would like to implement effective policies for improving the daily health choices of the public.

149. Patient Protection and Affordable Care Act, Pub. L. No. 111-148, sec. 6301, § 1181(b), 124 Stat. 119, 728 (2010) (Codified at 42 U.S.C. § 1320e(b) (2012)).

150. See Joseph V. Selby & Steven H. Lipstein, *PCORI at 3 Years—Progress, Lessons, and Plans*, 370 NEW ENG. J. MED. 592, 592 (2014).

