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Obesity and Managed Care: A Role for Activism and Advocacy?

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Poor diet and physical inactivity contribute to ill health and deteriorating quality of life in such important ways that few institutions or individuals are unaffected. Diabetes, hypertension, stroke, heart disease, and cancer begin the list of complications of these components of modern lifestyle, but obesity is the most evident.

Two thirds of the population is now overweight or obese. Joining direct healthcare costs with lost productivity and other work-related variables, obesity is estimated to cost the nation \$75-\$112 billion annually. Hidden behind these numbers is tremendous human suffering, in both adults and children. Children under age 10 suffer from Type 2 diabetes, making "adult onset diabetes" an obsolete term. Children so affected could have advanced coronary disease, be blind, or die by age 30.^{1,2} The question has now been raised whether our children will be the first generation in the nation's history to lead shorter lives than their parents. Under such conditions, it is natural to ask whether the best course of action is treatment, prevention, or both.

It is essential that obese individuals receive compassionate and effective treatment. Two papers in this issue of the *Journal* reflect nicely on what can be expected from state-of-the art approaches to obesity. Porter et al offer a more "real world" test of pharmacotherapy than what is seen typically in controlled clinical trials, testing a lifestyle change program with and without medication in a health maintenance organization.³ Sibutramine, a serotonin and norepinephrine re-uptake inhibitor, produced a modest but significant advantage for the group taking the drug (3.1 kg average weight loss for the no-drug group vs. 6.8 kg for those receiving drug). Those taking the drug lost about 6% of their initial body weight. Weight losses of this magnitude are helpful in that even small losses can affect risk factors, but of course leave patients far from their desired weight (a 6% loss in a 200 pound woman would leave her at 188 pounds). The cost per pound lost to the patients and the HMO were not reported.

The Porter et al study is typical of drug studies for obesity, although typical weight losses are generally higher. Patients lose 5% to 15% of initial body weight, risk factors improve on average, but relapse becomes an issue when drugs are withdrawn. Pharmacotherapy is now considered a viable treatment for helping reduce risk in overweight individuals.

The paper by Jeffery et al is an important product of the fruitful collaboration by Jeffery and colleagues at the University of Minnesota and Pronk and colleagues at HealthPartners in Minneapolis.⁴ The authors used clinic fliers, mailings, and physician referral in hopes of recruiting a cross section of members of a managed care organization (MCO) for a weight management program. Members who expressed interest, compared to members in general, were more likely to be minority and female, to have poorer diets, and have higher levels of binge eating. They were also heavier, but reported more physical activity. The authors expressed disappointment at not recruiting a true cross section of the membership, but rightfully noted the impressive number of people willing to be enrolled in a program. This paper helps define recruitment strategies, which will be central to delivering treatment.

Still, treating obesity is a challenging enterprise. In order to produce weight losses of medical consequence, treatment is typically intensive and expensive. An argument can be made that intervening by any method is cost effective (costs are justified by improved health outcomes), but treatment is costly nonetheless. The question, then, is whether treatment can reduce the prevalence of obesity in a population or whether prevention must become a priority.

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Treatment is not now, and may never be, a means of reducing the impact of obesity as a public health problem. For every "case" removed by treatment from the population of overweight individuals, thousands more may be joining the obese population because of the toxic food and physical inactivity environment. Stated simply, the environment all Americans face produces obesity at record rates and treatment is not powerful or inexpensive enough to keep up.

Managed care organizations, therefore, have a clear stake in preventing obesity. Preventive services offered to members might be a start. If those at risk for weight gain can be identified and be recruited into a lifestyle coaching program, perhaps some obesity can be prevented. Work with children and with groups like pregnant mothers might be especially important in this regard. Sadly, there is not much research to help guide such efforts.

Prevention at the national level, while seemingly best left to politicians and public health experts, may well be an important priority for those in the world of managed care. Here's why. Only so much can be done in the clinical setting, and when daily life for Americans involves a tidal wave of food advertisements, high-calorie food available as never before, soft drinks, snack foods, and declining physical education in schools, few children walking or biking to school, and hundreds of other environmental "toxins," high levels of obesity are the likely consequence.

Changing the environment through public policy may be the most effective means of preventing obesity, and such changes could benefit the healthcare system in general and MCOs in particular. It remains to be seen whether managed care will mobilize nationally, locally, or both, to address public policy in ways that will improve the environment and prevent obesity.

Why would mobilization even be necessary for such a widely recognized problem? Bias and stigma directed at overweight people is a first possible explanation.⁵ Because obesity is blamed on the people who have it, and the condition itself is stigmatized, attention to obesity has lagged far behind what would be expected given its public health impact.

A second barrier is a thorny issue that confronts the food industry. If the American population were to reduce to normal weight, the number of calories, and hence the amount of food sold every day must decline significantly.^{6,7} The industry could recoup the loss to some extent by shifting to production of healthy foods, but if total intake declines, the bare fact is that less food will be sold. In order to protect profits, it is understandable that the industry defends practices that are coming under increasing scrutiny.

The average American child sees 10 000 food advertisements per year on television alone, nearly all for fast foods, soft drinks, candy, sugared cereals, etc.⁷ Children are a multi-billion dollar target group themselves, and of course, grow to be adult consumers. Soft drink and snack food companies have worked for years to offer their products in schools. The industry defends both practices, saying that food advertising affects only brand choice and not consumption of foods like soft drinks, and that offering soft drinks and snack foods helps education (a vice president of Coca Cola sits on the Board of Directors of the National PTA). It is against this backdrop that health institutions, including MCOs, must pick up the pieces when the population falls ill.

In addition to offering and supporting treatment and care for obese individuals, organizations like MCOs might consider supporting and even initiating social changes that could aid in the prevention of obesity. Among the opportunities would be to support local, state, and federal efforts to:

- 1) Decrease or eliminate soft drinks and snack foods in schools
- 2) Improve school lunches and integrate education on nutrition and physical activity into classes, into the cafeteria experience, etc.
- 3) Increase physical education at schools
- 4) Foster the design of communities to encourage and permit physical activity
- 5) Regulate food advertising aimed at children

Additional ideas might also be considered,^{6,7} but the first step is to emphasize prevention, understand that children may be the most important group to address initially, and advocate for changes in the interest of public health. There might then be hope we can dampen the toll obesity takes on the health and well-being of the nation.

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REFERENCES

1. **Ebbeling CB, Pawlak DB, Ludwig DS.** Childhood obesity: public health crisis, common sense cure. *Lancet.* 2002;360:473-482.
2. **Dean H, Flett B.** Natural history of Type 2 diabetes diagnosed in childhood; long-term follow-up in young adult years. Paper presented at: Annual Meeting of the American Diabetes Association, June 2002; San Francisco, Calif.
3. **Porter JA, Raebel MA, Conner DA, et al.** The Long-term Outcomes of Sibutramine Effectiveness on Weight (LOSE Weight) Study: Evaluating the role of drug therapy within a weight management program in a group-model health maintenance organization. *Am J Manag Care.* 2004;10(6):369-376.
4. **Jeffrey RW, McGuire MT, Brelje KL, et al.** Recruitment to mail and telephone interventions for obesity in a managed care environment: The Weigh-to-Be Project. *Am J Manag Care.* 2004;10(6):378-382.
5. **Puhl R, Brownell KD.** Bias, discrimination, and obesity. *Obes Res.* 2001;9:788-805.
6. **Nestle M.** *Food Politics: How the Food Industry Influences Nutrition and Health.* Berkeley, Calif: University of California Press, 2002.
7. **Brownell KD, Horgen KB.** *Food Fight.* New York: Contemporary Books (McGraw Hill), 2004.