

The Preventing Diabetes in Medicare Act (H.R. 1686)

Overview

Diabetes is a tremendously costly illness, both in terms of health and in terms of our nation's escalating health care costs. Today, 29.1 million people, or 1 in 10 people in the U.S., have diabetes; an additional 86 million people are estimated to have prediabetes.¹ The prevalence of diabetes is even more staggering among those eligible for Medicare. In 2012, over one-quarter of U.S. residents aged 65 years and older (11.2 million) had diabetes.²

In other words, 7 out of 10 people eligible for Medicare are affected by diabetes or prediabetes. For half of these individuals, however, diabetes could be prevented if they had access to a diet and exercise lifestyle intervention.

The Costs of Diabetes

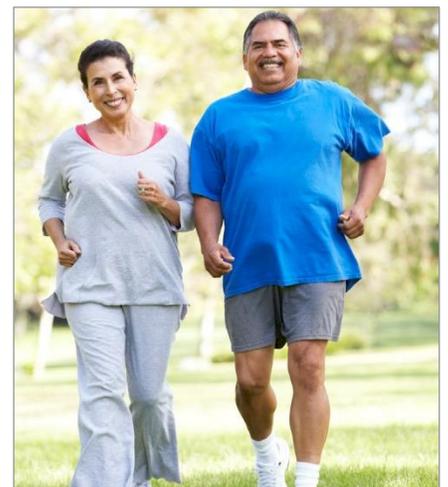
One out of every five federal health care dollars is spent treating people with diabetes.³ The total cost of diabetes to our health care system in 2012 was estimated to be \$322 billion, including \$244 billion in excess medical expenditures and \$78 billion in reduced national productivity.⁴ Combined, this amounts to an economic burden exceeding \$1,000 for each American in 2012. The average yearly health care costs for a person with diabetes is \$13,700, with \$7,900 due to diabetes alone.⁴ One out of every four federal health care dollars is spent treating people with diabetes.⁵

Cost-Effectiveness of Diabetes Prevention

In 2002, the National Diabetes Prevention Program (NDPP) showed that participation in a diet and exercise lifestyle intervention for three years could result in a 71% decrease in the number of new cases of diabetes compared to a control group for people age 60-85.⁶ Then in 2009, the NDPP showed that 10 years after the start of the program, there was still a 49% decrease in the number of new cases of diabetes compared to a control group.⁷ People participated in the program for only a few years, but the benefits extended for a decade.

Key Takeaways:

- Over one-quarter of the Medicare-eligible population (11.2 million over age 65) has diabetes.
- The total cost of diabetes to our health care system in 2012 was estimated to be \$322 billion.
- Medical nutrition therapy provided by a registered dietitian nutritionist is an effective, evidence-based program that can result in weight loss and improved blood glucose.
- The Preventing Diabetes in Medicare Act (H.R. 1686) will allow Medicare to reimburse registered dietitian nutritionists to provide medical nutrition therapy to patients at risk of prediabetes.



¹ Centers for Disease Control and Prevention. *National Diabetes Statistics Report: Estimates of Diabetes and its Burden in the US, 2014*. Atlanta, GA: U.S. Department of Health and Human Services; 2014.

² *Ibid.*

³ American Diabetes Association (2014). Economic cost of diabetes in the U.S. in 2012. *Diabetes Care*. Vol 37:3172-3179.

⁴ *Ibid.*

⁵ *Ibid.*

⁶ Diabetes Prevention Program Research Group (2002). Diabetes Prevention Program Research Group. Reduction in the incidence of Type 2 diabetes with lifestyle intervention or metformin. *New England Journal of Medicine*. Vol. 346:393-403.

⁷ Diabetes Prevention Program Research Group (2009). 10-year follow-up of diabetes incidence and weight-loss in the Diabetes Prevention Program Outcomes Study. *The Lancet*. Vol. 374(9702):1677-1686.

Medical Nutrition Therapy (MNT) is a part of successful diet and exercise lifestyle modification. Research shows that MNT provided by a registered dietitian nutritionist is an effective evidence-based practice that can result in weight loss, obesity prevention and improved prediabetes insulin markers which are the same essential outcomes of other diabetes prevention programs.^{8,9}

There are many ways to estimate cost-effectiveness, but one common method is by measuring cost per quality adjusted life year (QALY), which is based on the number of years of life that would be added by the change or intervention. As a society, we often say a treatment is “cost-effective” if we have to pay less than \$50,000 per QALY. An intervention is said to be “cost-saving” if it will actually save money in the long run if it were implemented. Treatment of prediabetes with lifestyle interventions involving diet and exercise has consistently been shown to be cost-effective, and even cost-saving in some cases:

- A 2010 study concluded that screening and lifestyle intervention for prediabetes is cost-saving to a single payer over three years.¹⁰
- A 2007 study concluded that screening and lifestyle intervention for prediabetes is highly cost-effective, costing only \$8,181-\$9,511 per QALY.¹¹
- A 2006 study concluded that lifestyle intervention for prediabetes is highly cost-effective, costing only \$1,100 per QALY.¹²
- A 2005 study concluded that lifestyle intervention for prediabetes is highly cost-effective, costing only \$1,110 per QALY.¹³
- In an International Diabetes Federation summary of cost-effectiveness studies, seven out of eight studies showed lifestyle intervention for prediabetes to be cost saving or cost-effective.¹³

Bottom line: Research shows diet and exercise lifestyle interventions are cost-effective or even cost-saving treatments for people with prediabetes.

Benefits of the Preventing Diabetes in Medicare Act (H.R. 1686)

The Preventing Diabetes in Medicare Act will help to prevent cases of diabetes in the Medicare population by allowing medical nutrition therapy to be provided by a registered dietitian nutritionist or nutrition professional *for individuals with diabetes, prediabetes, or a renal disease, or an individual at risk for diabetes.*

H.R. 1686 is a bi-partisan bill that was introduced in the 114th Congress by Rep. Diana DeGette (D-Colo.) and Rep. Ed Whitfield (R-Ky).

Estimated Diabetes Costs in the United States, 2012

Total (Direct and Indirect)
\$322 billion

Direct Medical Costs
\$244 billion
After adjusting for population age and sex differences, average medical expenditures among people with diagnosed diabetes were 2.3 times higher than people without diabetes.

Indirect Costs
\$78 billion
(disability, work loss, premature death).



8 Redmon JB, et al. (2005). Two-year outcome of a combination of weight-loss therapies for Type 2 diabetes. *Diabetes Care*. Vol. 28(6):1311-1315.

9 Corpeleign E, et al. (2006). Improvements in glucose tolerance and insulin sensitivity after lifestyle intervention are related to changes in serum fatty acid profile and desaturase activities: the SLM study. *Diabetologia*. 49(10):2392-2401.

10 Chatterjee R, et al. (2010). Screening adults for prediabetes and diabetes may be cost-saving. *Diabetes Care*. Vol 33(7):1484-1490.

11 Hoerger T, et al. (2007). Cost-effectiveness of screening for prediabetes among overweight and obese US adults. *Diabetes Care*. Vol 30(11): 2874-9.

12 Wylie-Rosett J., et al (2006). Lifestyle intervention to prevent diabetes: intensive and cost effective. *Curr Opin Lipidol*. Vol 17:37-44

13 International Diabetes Federation. Health economics of diabetes prevention. Accessed March 26, 2015 at <http://www.idf.org/diabetes-prevention-health-economics>.