

Higher costs of diabetes start at least 5 years before diagnosis

APR 16, 2021

Sara Berg, MS

Senior News Writer

The health care cost of diabetes in the U.S. is about \$237 billion. But another \$90 billion can be added to that tally to account for reduced productivity. Moreover, type 2 diabetes is preceded by prediabetes, which may contribute to poorer health and higher medical spending prior to a diabetes diagnosis. These additional costs are attributed to greater use of health care services, medications and other health products, according to a recent study.

Published in the journal *Population Health Management*, "Trends in Medical Expenditures Prior to Diabetes Diagnosis: The Early Burden of Diabetes," was written by members of the AMA Improving Health Outcomes team: Tamkeen Khan, PhD, a senior economist, Jianing Yang, MS, a data analyst, and Gregory Wozniak, PhD, director of outcomes analytics at the AMA.

This study tracks trends in per capita annual spending for five years among a single panel of case and control subjects. The results show that newly diagnosed case subjects spent \$8,941 more than control subjects not diagnosed with diabetes over the span of five years. During that time, a cost of \$4,828 occurred in the first year of diagnosis.

Prediabetes has costs

The variation between compounded annual growth rates for those diagnosed with diabetes compared to those who were not diagnosed was 20.5% higher for inpatient services, says the study. For outpatient services, it was 7.6% higher. But the cost was only 0.5% higher for pharmaceuticals. This yielded an 8.6% differential for total medical spending.

While previous research shows that these costs are for conditions associated with type 2 diabetes or its complications, it also indicates that prediabetes may be associated with higher costs. Understanding the trends in costs among patients with a new diagnosis of type 2 diabetes compared to those without a diagnosis has economic implications for prevention efforts.



Discover three ways doctors can expand reach to help patients with prediabetes.

Turn to lifestyle-change programs

By identifying patients with prediabetes, physicians can promptly refer them to a Centers for Disease Control and Prevention (CDC) recognized diabetes prevention program lifestyle-change program. This early identification has health and economic benefits.

"Assuming individuals with prediabetes are able to maintain their health and prevent progression to diabetes, these individuals would expect to see a positive net savings and return on investment in health care expenditures over time," says the study. "Further, it is important to note that this net savings estimate of lifestyle interventions does not include the potential benefits from avoiding lost wages resulting from reduced productivity of the employed population."

Increases in medical spending associated with type 2 diabetes begin well in advance of a diagnosis. But once a diagnosis is made, those expenses rise drastically. This means it is important for physicians to identify people with prediabetes early while supporting preventive efforts such as a CDC-recognized lifestyle change program. Referral to a diabetes prevention program can help reduce incidence and economic costs associated with type 2 diabetes.

The AMA's?Diabetes Prevention Guide?supports physicians and health care organizations in defining and implementing evidence-based diabetes prevention strategies. This comprehensive and customized approach helps clinical practices and health care organizations identify patients with prediabetes and manage the risk of developing type 2 diabetes, including referring patients at risk to a National DPP lifestyle-change program based on their individual needs.