COMMENTARY

Is It Time to Prioritize Diabetes Prevention in Practice?

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Diabetes has reached epidemic proportions and can lead to serious complications, including heart disease, stroke, hypertension, blindness, kidney disease, diseases of the nervous system, amputations, and premature death. Consequently, diabetes prevention becomes critically important to stem the tide of increasing diabetes prevalence. Although there have been suggestions for general societal-wide strategies for prevention based on the adoption of a healthy lifestyle including diet and exercise goals the most effective strategy currently for diabetes prevention seems to be to identify and treat individuals at high risk, adolescents and adults with prediabetes. At this time, there are approximately 84 million Americans with prediabetes.[1] Prediabetes is a state of an increased risk of developing diabetes as well as an increased risk for cardiovascular disease and all-cause mortality. There has been some debate over the glucose level used to designate prediabetes in different countries and even some debate over the validity of the concept.[2-9] However, many guideline panels, including ones in the United States, Canada and the United Kingdom, in their evaluation of the contemporary evidence, have created recommendations promoting detection and treatment of prediabetes as a strategy to slow or prevent the progression to diabetes and associated outcomes.[4-9] These guideline committees and organizations include the US Preventive Services Taskforce and the American Diabetes Association.[4,5]

A study in the current issue of the *Journal of the American Board of Family Medicine* focused on screening and detection of prediabetes and referral for treatment to prevent diabetes.[10] The investigators surveyed clinicians about their prediabetes knowledge, attitudes and practices. They also reviewed electronic health records to assess prediabetes screening, diagnosis, and treatment coverage in the cohort of adults. The study found that no patients who screened positive for prediabetes were referred to the successful diabetes prevention strategy of participation in the National Diabetes Prevention Program (DPP). Consequently, the study showed a positive first step but also a gap in likely achieving diabetes prevention.

Data indicate that 1 in 4 health care dollars in 2017 were spent on caring for patients with diagnosed diabetes.[11] Moreover, patients with diagnosed diabetes have health care costs 2.3 times higher than patients without diabetes. Yet, between 75% and 90% of patients with prediabetes—the group without diabetes but at high risk for developing it—are not formally identified and do not know that they have it.[12,13] This is a missed opportunity for disease prevention. Since there are effective ways to prevent the development of diabetes it is disappointing that diabetes prevention is not on the mind of everyone who wants to improve medical care.

Major quality indicators for diabetes including both The Merit-based Incentive Payment System

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in Centers for Medicare and Medicaid Services (CMS's) Quality Payment Program and Health care Effectiveness Data and Information Set from the National Committee for Quality Assurance do not include diabetes prevention in their activities but only management of diabetes post diagnosis.[14,15]

Much of the emphasis on the care for diabetes seems to take as a given that any focus on diabetes starts with a patient with diagnosed diabetes. This position does not acknowledge the critical role of diabetes prevention in the delivery of high-quality health care. From a primary care perspective this seems to be a major missed opportunity for disease prevention. In primary care, better detection and treatment of patients at high risk for diabetes, care consistent with current recommendations, should be encouraged and even potentially incentivized. Better detection and treatment of prediabetes, could potentially help to alleviate health disparities in diabetes. It is clearly important that we effectively manage patients with diabetes but we may need to move diabetes prevention at least to be equal to diabetes management in the priorities of clinical activities in primary care. How might this be accomplished?

First, the US Preventive Services Task Force and the American Diabetes Association have already recommended screening for and treatment of prediabetes as a strategy for diabetes prevention. The screening strategies are relatively simple to implement and screening requires only knowing a patient's age and whether someone is overweight or obese. These evidence based measures they can be incentivized and easily tracked in the medical record. Further, the US Preventive Services Task Force recommendation on screening and treatment of abnormal glucose is a grade B and is therefore covered by the Affordable Care Act.

Moving beyond screening to a treatment plan for patients who screen positive with prediabetes is more challenging. The National Diabetes Prevention Program, is effective but is not universally available. That puts many family physicians in an awkward position being told to implement a treatment that is not available for implementation. Outside of the DPP, other providers and programs may be able to help the physician with programs for patient lifestyle change.

Second, a concerted effort needs to be made to educate physicians that diabetes prevention that follows the screening and treatment recommendations is not only worthwhile but necessary to stem the tide of the diabetes epidemic. Not all physicians agree on the value of detecting and treating prediabetes regardless of the recommendations of the numerous guideline panels. Consequently, in addition to incentivizing behaviors related to diabetes prevention better education and messaging about the effectiveness of the recommended strategies is necessary.

Third, patients will need to be brought into the mix so that they understand how diabetes prevention fits into good quality of care. Good patient physician communication and the conveyance of information about the patient's risk of developing diabetes and ways to slow or stop the progression need to be incentivized.

Disease prevention is a hallmark of an effective health care system. Making diabetes prevention a priority and is necessary so that we are not looking at a future where a primary purpose of the health care system is managing millions of patients with diabetes that could have been prevented.

To see this article online, please go to: http://jabfm.org/content/32/4/457.full.

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