



AMY GREEN
Amy has type 1 diabetes

In This Issue:

- Academy of Nutrition and Dietetics drafts diabetes prevention recommendations
- Study models lifetime medical costs of treating type 2 diabetes and complications
- Study supports broader screening of people at high risk for diabetes

Academy of Nutrition and Dietetics drafts diabetes prevention recommendations

According to draft recommendations from a working group of the Academy of Nutrition and Dietetics discussed at the August 2013 American Association of Diabetes Educators Annual Meeting, weight loss is the cornerstone of lifestyle measures to prevent people with prediabetes from progressing to type 2 diabetes.¹ Another important dietary step is for a registered dietician nutritionist to provide medical nutrition therapy to people with prediabetes.¹ The final draft recommendations will be published later in 2013.

Diabetes increases disability risk

Diabetes is associated with a significant increase in the risk of physical disability, according to research published online in the journal *Lancet Diabetes and Endocrinology*.² The authors examined 26 studies on diabetes and disability and found a "roughly 50 to 80 percent increased risk of disability with diabetes compared to people without diabetes."²

The study concludes that: "The possibility that the risk of disability increases in a graded manner from impaired glucose tolerance to diabetes and might be moderated by duration of diabetes further **emphasizes the need for more effective prevention of diabetes, particularly in middle-aged people.**"²

Access the study abstract [here](#).

"We know that good control of diabetes decreases the risk of known major complications and those complications are, in turn, associated with future disability. It is therefore highly likely that good diabetes control will decrease one's risk of disability."³

– Anna Peeters, study co-author

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Study models lifetime medical costs of treating type 2 diabetes and complications

According to research by a team of investigators from the Centers for Disease Control and Prevention (CDC), the *lifetime* direct medical costs of treating type 2 diabetes and its complications in people newly diagnosed with type 2 diabetes at ages 25-44 are \$124,700 for men and \$130,800 for women.⁴ Overall, the average lifetime medical cost of treating diabetes is \$85,200, and 53% of this cost is due to treating the complications of diabetes.⁴ The lifetime medical costs of individuals diagnosed at older ages are lower.

The authors' estimates were derived using a simulation model that was based on published research and a study sample of newly diagnosed patients with type 2 diabetes based on data from the 2009-2010 National Health and Nutrition Examination Survey (NHANES). You can link to the full study published in the September 2013 *American Journal of Preventive Medicine* [here](#).

A prevalence-based [study](#) by the American Diabetes Association published in March 2013 in *Diabetes Care* estimated that people with diabetes incur an average *annual* medical cost of \$13,700, and approximately \$7,900 of that is attributed to diabetes.⁵ The CDC study, in comparison, is incidence based and examines the long-term economic costs of a new case of type 2 diabetes.

According to the CDC authors: "The current estimates indicate that **the financial burden of a new case of type 2 diabetes imposed on the health care system is substantial, and this financial burden is particularly high in people diagnosed with type 2 diabetes at younger ages**...The current lifetime cost estimates clearly show that, if type 2 diabetes and diabetic complications could be prevented, a substantial downstream cost could be potentially saved. This finding reinforces earlier evidence that clinical and community-based interventions to prevent type 2 diabetes could be highly cost effective."⁴

Study supports broader screening of people at high risk for diabetes

A study published in the August issue of the *American Journal of Preventive Medicine* by researchers from the CDC and the National Institutes of Health (NIH) found that current federal screening guidelines from the United States Preventive Services Task Force (USPSTF) **identify only 44% of people with undiagnosed diabetes**.⁶ USPSTF guidelines recommend screening only asymptomatic patients with diagnosed hypertension.

The investigators applied the USPSTF screening guideline to over 7000 adults who participated in the 2003-2010 National Health and Nutrition Examination Survey. The authors note that the USPSTF screening guideline was especially poor at detecting type 2 diabetes among younger adults "who may have more to gain from glucose control than older adults with limited life expectancy."⁶ In addition, 27% of adults with prediabetes would not be screened under current USPSTF screening guidelines.⁶ The authors conclude: "Since screening for diabetes is noninvasive and can be easily and quickly performed, screening criteria should include the strongest risk factors for developing diabetes, specifically obesity, age, and family history, in order to identify as many people with undiagnosed diabetes as possible."⁶

Access the study abstract [here](#).

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Further analysis of Diabetes Prevention Program data shows that early weight loss is key

A study published in the August issue of the *Journal of General Internal Medicine* provides further follow-up on the Diabetes Prevention Program (DPP), looking at early changes in weight and glucose levels and their impact on diabetes risk reduction. The analysis of the DPP data shows that early weight loss—in the first 6 months of diagnosis of prediabetes—plays a big role in reducing the risk of developing diabetes.⁷ The research team's intent with the study was to better understand participants' response to diabetes prevention programs and identify which patients should have their intervention altered or intensified.

- For participants in the intensive lifestyle intervention group, >10% weight loss at 6 months was associated with an 85% reduction in diabetes incidence at 3-year follow-up.⁷
- Early weight loss in the lifestyle arm predicted maintenance of weight loss over the course of the study.⁷
- Diabetes risk decreased by 10% for each percentage point of weight loss at 6 months in the lifestyle arm independent of glucose levels that were achieved.⁷
- Achievement of fasting glucose <100 mg/dL at 6 months was beneficial regardless of weight loss.⁷
- Few participants receiving metformin lost >7% of their baseline weight at 6 months with many gaining weight, and more than 80% of participants in the placebo arm either gained weight or lost little weight at 6 months.⁷

According to the authors: "Our results suggest that both the weight loss and glycemic status achieved at 6 months are indicators of long-term success in diabetes prevention."⁷

Study shows family history increases risk of diabetes

Findings from a study published in *Diabetologia* show that for people who have a family history of diabetes, their risk of prediabetes increases significantly. A research team from the German Center for Diabetes Research examined data on more than 8000 adults without known diabetes and found that having at least one first-degree relative with diabetes increases the risk of prediabetes by 26%, taking into account the age, gender and BMI of the individual.⁸ This association was only seen in non-obese individuals with a BMI <30 kg/m².⁸

According to the study authors: "We found that family history is an important risk factor for prediabetes, especially for combined impaired glucose tolerance and impaired fasting glucose. Its relevance seems to be more evident in the non-obese."⁸

You can access the study abstract [here](#).



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Glucose levels and risk of dementia

Research funded by the NIH and published in the *New England Journal of Medicine* shows an association between high glucose levels and risk of dementia. According to the authors, as glucose levels increase above normal, there is a steady increase in risk of dementia.⁹

The researchers examined 35,264 measures of glucose levels and 10,208 measures of A1C levels from 2067 individuals without dementia whom they followed for nearly 7 years. They found that among people with and without diabetes, high average glucose levels in the preceding 5 years were associated with an increased risk of dementia. They conclude: "Our results suggest that higher glucose levels may be a risk factor for dementia."⁹

Access the study abstract [here](#).

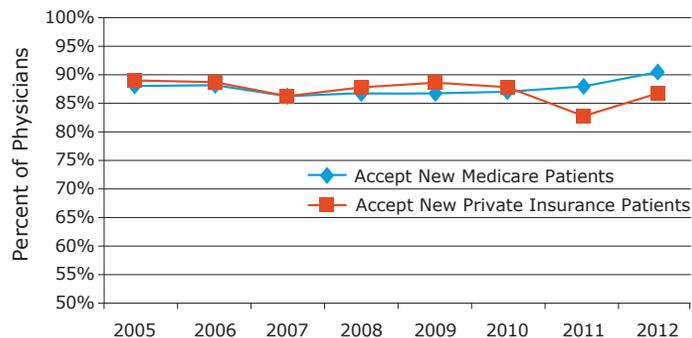
Report: More physicians are accepting Medicare patients

The number of physicians accepting new Medicare patients rose between 2007 and 2011 and is now higher than the number of physicians accepting new private insurance patients, according to a report from the US Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation.¹⁰

In 2007, about 925,000 doctors billed Medicare for their services. In 2011, that number had risen to approximately 1.25 million (see chart from report).¹⁰

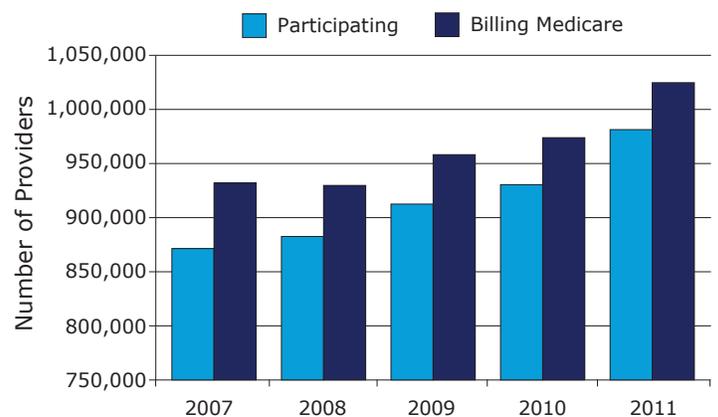
"Overall, Medicare beneficiary access to care has been consistently high over the last decade and continues to be high today," the report concludes.¹⁰ Access the full report [here](#).

Percentage of Physicians Accepting New Patients With Medicare and Private Insurance, 2005-2012¹⁰



Source: CMS Data Compendium, 2007-2011 editions, table V1.6
Note: Providers include MDs, DOs, limited license practitioners, and nonphysician providers.

Number of Providers Participating in and Billing Medicare, 2007-2011¹⁰



Source: NCHS analysis of the 2005-2012 National Ambulatory Medical Care Survey (NAMCS)

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Physicians see others as having more responsibility for reducing health care costs

A recent study by a research team from the Mayo Clinic polled more than 2500 physicians to assess their attitudes toward health care costs in the US and their perceived role in addressing rising costs. The findings, published in the *Journal of the American Medical Association*, show that more than half of the physicians polled believe that trial lawyers, health insurance companies, hospitals and health systems, pharmaceutical and device manufacturers, and patients have a “major responsibility” for reducing health care costs.¹³ In comparison, only 36% of practicing physicians believe that they themselves have a “major responsibility” for holding down costs.¹¹

When asked about potential ways to reduce health care costs, physicians were “very enthusiastic” about promoting continuity of care and chronic disease care coordination.¹¹ They were far less enthusiastic about making changes

to how they get paid: only 7% of physicians were very enthusiastic about eliminating fee-for-service payment models; 6% were very enthusiastic about penalizing physicians for avoidable readmissions; and 6% were very enthusiastic about bundled payments for managing all care for a defined patient population.¹¹

Access the study abstract [here](#).



JAYA PRAKASH
Jaya has type 2 diabetes

Self-Reported Responsibility and Enthusiasm for Various Means of Reducing Health Care Costs Among 2556 US Physician Survey Respondents¹¹

Potential means of reducing health care costs	No. (%)		
	Very Enthusiastic	Somewhat Enthusiastic	Not Enthusiastic
Improving quality and efficiency of care			
Promoting continuity of care (n = 2484)	1872 (75)	580 (23)	32 (1)
Promoting chronic disease care coordination (n = 2487)	1723 (69)	715 (29)	49 (2)
Changing how care gets paid for			
Paying a network of practices a fixed, bundled price for managing all care for a defined population (n = 2467)	160 (6)	696 (28)	1611 (65)
Penalizing providers for avoidable readmissions (n = 2472)	138 (6)	869 (35)	1465 (59)
Cutting payment to physicians directly			
Eliminating fee-for-service payment models (n = 2443)	175 (7)	550 (23)	1718 (70)

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Miscommunication and poor follow-up result in care delays

A recent analysis in *Health Affairs* examined the factors that contribute to delays in diagnosis and treatment of patients in outpatient settings. The research team analyzed 111 reports on treatment delays that resulted in patient harm submitted to the Veterans Affairs National Center for Patient Safety from 2005 to 2012.¹² They found that the most common factors that contributed to delays in diagnosis and treatment among patients include:

- Inadequate follow-up plans;
- Delayed scheduling;
- Inadequate tracking of test results; and
- Lack of a system to track patients who need short-term follow-up.¹²

Other contributing factors include the providers' lack of awareness or knowledge of the patient's situation, and miscommunication among providers, patients, health care team members, and families.¹² Access the study abstract [here](#).

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