

Dear colleagues,

We have been using the HERON database to identify patients with prediabetes for a NIH-supported diabetes prevention study (D2d; d2dstudy.org).

We have searched over 364,000 records in the KU database and, surprisingly, *found only 150 patients, seen by KU Internal Medicine, who appear to qualify on the basis of a prediabetic HgbA1c of 5.6-6.4%*. This very low number of people with pre-diabetes is not consistent with the national statistics of one-third of American adults having pre-diabetes and suggests that we may not be adequately vigilant in assessing diabetes risk. The importance of screening for pre-diabetes is highlighted by the recent (November 2014) recommendations by the US Preventive Task Force to screen for diabetes among people at high risk.

The American Diabetes Association recommends that screening for prediabetes in asymptomatic individuals should begin no later than age 45 and should be repeated at 3-year intervals if previous results are normal. ***The ADA also suggests screening all adults before the age of 45 if they have a BMI $\geq$ 25 kg/m² and one of the risk factors below:***

- Have a first- or second-degree relative with diabetes
- Physically inactive
- Women with a history of gestational diabetes or babies > 9 lbs at birth.
- Belong to certain ethnic groups (American Indians, Hispanic Americans, Asians, and Pacific Islanders)
- Have signs of insulin resistance or conditions associated with insulin resistance, including acanthosis nigricans, hypertension, dyslipidemia, and polycystic ovarian syndrome.

Simple screening tests include a fasting (for at least 8 hours) plasma glucose measurement or hemoglobin A1c.

- An HgbA1c of 5.7-6.4% represents *prediabetes*. A value of 6.5% or higher is *diabetic*. The main advantage of the HgbA1c is that it may be done in a non-fasting individual.
- A fasting plasma glucose 100-125 mg/dL represents *pre-diabetes*. Fasting glucose of 126 mg/dL or higher is *diabetic*.

Most insurance will not reimburse the cost of an A1c unless the patient has a problem of “hyperglycemia” or “prediabetes.” To remedy this, the D2d study at KUMC purchased HgbA1c cartridges for the DCA fingerstick POC HgbA1c test in the Internal Medicine clinics. If you suspect that a patient may have prediabetes, the A1c screening test is free. Of course, we would love to have the prediabetic patient consider the D2d Study. Dr. Rebecca Opole is a co-investigator and she can provide you and the patient with a description of the D2d Study. If you have any questions about this, let us know.

Sincerely,

David C. Robbins, MD
Director, KU Diabetes Institute
Professor of Medicine

Rebecca Opole, MD
Assistant Professor of Medicine