

Simple, common BMI data stored in e-records can identify patients with heart disease risk

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Electronic medical records provide new opportunities to monitor and improve patients' health. New research released online in the *American Journal of Preventive Medicine* shows that body mass index (BMI) data, commonly available in electronic medical records, can accurately identify adults between 30 and 74 years-old at risk for cardiovascular (heart) disease, the leading cause of death in the U.S.

Previously, calculating [heart disease risk](#) relied on access to information on [cholesterol](#) and blood pressure levels, tobacco use, and the presence of diabetes. These risk factors are frequently associated with a famous long-term study of heart disease known as the “Framingham” study.

This is the first study to compare using electronic BMI data only or using cholesterol screening results to identify patients in a large health care system that were at moderate and high risk for heart disease.

Researchers looked at electronic health data for 122,270 patients without heart disease. Risk scores calculated using only BMI data were similar to patients with lab-based cholesterol data for nearly 80 percent of the patients. In low risk patients, BMI correctly classified risk 99 percent of the time.

“BMI can predict whether a person is likely to be categorized as moderate or high risk for cardiovascular disease and possibly need medications to lower cholesterol,” said Beverly B. Green, M.D., lead author of the Group Health Research Institute at the University of Washington in Seattle.

Green points out not every adult who is at risk for heart disease has had a cholesterol test. “Lack of laboratory data for cholesterol is the most common reason for not being able to calculate cardiovascular disease risk,” she said. In our research about 40 percent of adults 30-74 did not have a cholesterol test, however, most people had a BMI in their electronic records and this could be used instead of cholesterol to calculate CVD risk.”

“[Electronic medical records](#) are important in the assessment of [cardiovascular disease](#) risk factors because doctors can show the patient their trends to motivate them to start making lifestyle changes,” commented Niece Goldberg, M.D., cardiologist and director of the Joan Tisch Center for Women’s Health at New York University Medical Center.

Green added, “By using electronic health records, we can learn a lot about what really makes a difference in the lives and health of individual

patients. A patient might ask if they really need a screening test or treatment based on their risk factors. Electronic [medical records](#) can help identify [patients](#) who may really benefit from getting a lab or screening test or treatment as well as helping doctors better care for their entire patient population.”

More information: Green, B. B., et al. (2012). Using Body Mass Index Data in the Electronic Health Record to Calculate Cardiovascular Risk. *American Journal of Preventive Medicine*, In Press.

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