

In the Literature

Highlights from Commonwealth Fund-Supported Studies in Professional Journals

Differences in Control of Cardiovascular Disease and Diabetes by Race, Ethnicity, and Education: U.S. Trends from 1999 to 2006 and Effects of Medicare Coverage

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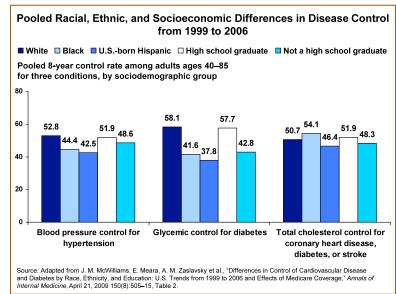
Authors: J. Michael McWilliams, M.D., Ph.D., Ellen Meara, Ph.D., Alan M. Zaslavsky, Ph.D., and John Z. Ayanian, M.D., M.P.P. Journal: Annals of Internal Medicine, April 21, 2009 150(8): 505–15

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Synopsis

Management of cardiovascular disease and diabetes improved considerably from 1999 to 2006, according to analysis of National Health and Nutrition Examination Survey data for those years. This improvement, however, did not lead to reduced disparities in disease control by race, ethnicity, or level of education. In fact, disparities in levels of glycemic control widened between white and Hispanic diabetics during this period. Such differences were substantially reduced in the 65-and-



older population, suggesting that the near-universal insurance coverage provided by Medicare plays a key role in reducing health disparities.

The Issue

While management of chronic disease in the U.S. population has been improving in recent years, these gains have not been evenly distributed among all patients. Compared with whites and adults with more education, racial and ethnic minorities and less-educated adults are much more likely to be uninsured, and therefore less likely to receive basic clinical services.

Key Findings

• From 1999 to 2006, control of blood pressure, hemoglobin A1c levels (a diabetes measure), and total cholesterol levels improved significantly among adults ages 40 to 85.

- Across the study period, black and Hispanic rates of blood pressure control were significantly lower than white rates. Compared with whites, mean systolic blood pressure among black and Hispanic adults was significantly higher.
- Among diabetics, rates of glycemic control were significantly lower for black and Hispanic adults than for white adults; mean hemoglobin A1c levels were significantly higher for blacks and Hispanics (lower is better). Differences in glycemic control between Hispanic and white adults grew substantially from 1999 to 2006.
- Compared with high school graduates, adults with no high school degree had significantly worse glycemic control (among diabetics) and significantly higher mean systolic blood pressure (among those with hypertension).

Addressing the Problem

Judging from the substantial improvement in disease control since 1999, efforts to improve the quality of chronic care have yielded tangible benefits. Still, persistent and, in some cases, growing disparities in disease control indicate that targeted efforts are needed to improve the quality of care for black and Hispanic adults, and patients with less education. Medicare coverage greatly ameliorated racial, ethnic, and socioeconomic disparities, suggesting that covering more of the under-65 population would improve health outcomes overall. "Expanding insurance coverage before age 65 years may reduce racial, ethnic, and socioeconomic differences in important health outcomes for cardiovascular disease and diabetes."

About the Study

The authors used data from the 1999–2006 National Health and Nutrition Examination Surveys to: 1) assess national trends in disease control; 2) analyze whether there were sociodemographic differences in disease control trends over this period; and 3) monitor how these trends were affected by eligibility for Medicare coverage. Their focus was on adults ages 40 to 85 with at least one of the following conditions: diabetes, hypertension, coronary heart disease, or stroke. The researchers tracked trends in blood pressure control among adults with hypertension, glycemic control and hemoglobin A1c levels among adults with diabetes, and cholesterol level control and total cholesterol levels among adults with coronary heart disease, stroke, or diabetes.

The Bottom Line

Ensuring that adults under age 65 have health coverage may reduce racial, ethnic, and socioeconomic differences in health outcomes for cardiovascular disease and diabetes.

Citation

J. M. McWilliams, E. Meara, A. M. Zaslavsky et al., "Differences in Control of Cardiovascular Disease and Diabetes by Race, Ethnicity, and Education: U.S. Trends from 1999 to 2006 and Effects of Medicare Coverage," *Annals of Internal Medicine*, April 21, 2009 150(8):505–15.

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