Cardiovascular disease accounts for as much as one third of the differential in life expectancy between blacks and whites in the United States. A multifactorial process likely leads to these disparate outcomes (see the Figure), including differences in biology, differential awareness, knowledge, beliefs, and preferences for care for cardiovascular disease, and varying distribution of risk factors (including hypertension, obesity, and life stresses that include poverty and discrimination). Furthermore, blacks in the United States have a greater burden of cardiovascular disease and face greater challenges accessing health care, with lower rates of health insurance coverage, less access to a regular primary care doctor, and more frequent use of emergency departments for care. Then, once they have accessed the healthcare system, blacks often receive a poorer quality of care than do whites. Thus, it is no surprise that black patients’ outcomes, whether measured by functional status or mortality, are worse, and the study in this issue of Circulation by Skinner and colleagues adds further weight to this body of evidence.

The results from Skinner et al support the notion that segregated health care is not equal and that it has a negative impact on the life expectancy of all patients receiving care in facilities with high proportions of black patients. Their results indicate that patients (both white and black) hospitalized for acute myocardial infarction (AMI) between 1997 and 2001 at hospitals with the greatest proportion of black patients had worse subsequent mortality rates than those hospitalized in hospitals with the least proportion of black patients (23.7% versus 20.1%). The higher rates of death were not a function of the presence of comorbid conditions or the severity of the infarction, nor were they explained by income, hospital ownership status, hospital volume, Census region, urban status, or hospital-specific rates of CABG or PTCA.

In addition, more than two thirds of the black patients in this sample of more than 1.13 million patients were seen at 21% of hospitals, so during this 4-year period, more than 55,000 black patients with MI were vulnerable to increased mortality. This is a serious public health issue, with large numbers of people at risk. Although white AMI patients were also at greater risk for subsequent mortality if treated in the hospitals with a high proportion of black patients, black patients were especially vulnerable because they were concentrated in these settings. Thus, as is also emphasized in a new report from The Commonwealth Foundation, healthcare segregation is alive and well in the United States, and the differential mortality rates related to this segregation, as observed in Skinner and colleagues’ study, are deeply troubling.

Previous studies have thoroughly documented disparities in cardiac and other care by showing that white and black patients do not receive the same care in the same facilities or within the same healthcare systems, even when they have the same insurance coverage. More recent studies have demonstrated that blacks receive poorer-quality care in general—they are treated by physicians with less clinical training than those who attend whites, they have less access to high-quality cardiac surgeons, and they are treated at hospitals that provide a poor quality of care, where there is greater risk-adjusted surgical mortality and lower rates of reliance on evidence-based treatments and protocols. These studies have been primarily descriptive, however, documenting poorer-quality care rather than focusing on the consequences of receiving poor-quality care. It is critically important to understand the clinical impact of differential treatment. Although Skinner and associates’ study does not explicitly link poor treatment to outcomes, its results, taken together with the previous research, are suggestive of such an association.

These results highlight the important intersection between quality of care and racial disparities in care, which others, including The Robert Wood Johnson Foundation and The Commonwealth Fund, have argued represent a critical intervention point. The good news is that recent evidence indicates that hospital quality-improvement efforts, including a focus on care for AMI, have met with success. Additional good news from these studies is that the hospitals with the greatest need for improvement made the greatest strides, suggesting that concerted efforts toward quality improvement can make a difference where it is most needed. To adequately monitor racial equity in quality improvement, however, such monitoring needs to be an explicit goal of healthcare providers and payers, and accurate data on race needs to be collected. Thus, rather than employing methods such as steering patients away from poorly performing hospitals, a strategy that in fact seemed to backfire in New York state, when CABG report cards were implemented, this recent
success in quality-improvement efforts suggests that further investment in quality-improvement strategies is warranted.

The results from the study by Skinner et al do not allow us to fully tease out the relative contribution of the various components of the causal pathway that leads to worse outcomes for the patients treated in hospitals with high proportions of black patients. For example, there were no data available on the process of care experienced by patients in each different type of hospital, nor on patients’ varying beliefs about, preferences for, or adherence to treatment recommendations for cardiac care. Although recent findings did not support the notion of racial differences in patient beliefs as a contributing factor for disparities in cardiac care in Department of Veterans Affairs facilities,20 in the present study there may have been unmeasured differences in patient preferences, adherence to treatment recommendations, or communication with providers in the hospitals with the greatest proportion of black patients that were ultimately associated with poorer outcomes. As the authors acknowledge, their data also do not provide information on whether blacks and whites received similar or disparate care within each hospital, although a within-hospital trend was observed, indicating somewhat higher mortality rates for blacks as compared with whites.

The evidence to date suggests a discouraging picture of racial disparities in cardiovascular care, and Skinner and coworkers’ study documents disparate outcomes associated with segregated care. It is still not clear what proportion of the life expectancy gap in cardiovascular disease is explained by disparate care. Yet, as illustrated in the Figure, a multifactorial causal process offers multiple opportunities for intervention to interrupt this negative cycle. Thus, there are numerous corrective approaches that can be brought to bear on this problem, including a variety of pharmacotherapeutic, preventive, awareness and knowledge raising, health policy, and healthcare quality-improvement interventions. As the Institute of Medicine suggested in its report on unequal treatment, “Research must provide a better understanding of the contribution of patient, provider, and institutional characteristics on the quality of care for minorities”5 (p 22), so let us continue steadfastly on this path to disentangle the causal mechanisms and ultimately eliminate the racial differentials in cardiovascular disease, its care, and ultimately, the outcomes of such care.

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**References**


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Separate but Not Equal: The Consequences of Segregated Health Care
Nancy R. Kressin

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