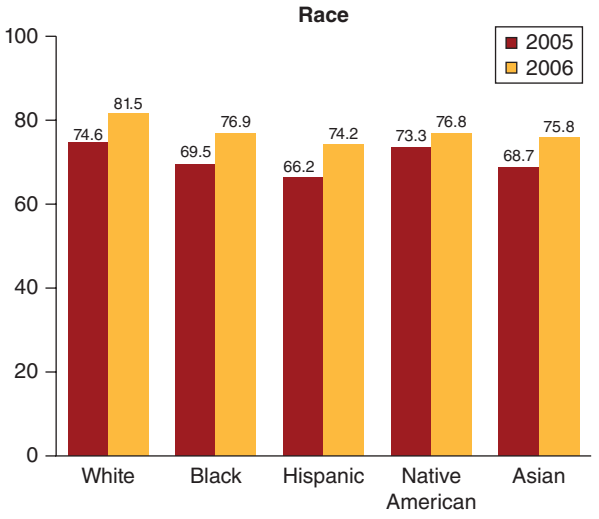

FIGURE 16e-2 Recommended hospital care received by Medicare patients with pneumonia, by race/ethnicity, 2006. The reference population consisted of Medicare beneficiaries with pneumonia who were hospitalized. The composite was calculated by averaging the percentage of the population that received each of the five incorporated components of care. *(Adapted from Agency for Healthcare Research and Quality: The 2008 National Health Care Disparities Report.)*

Little progress has been made in addressing racial/ethnic disparities in cardiovascular procedures and other advanced surgical procedures, whereas some progress has been made in eliminating disparities in primary-care process measures. Data from the National Registry of Myocardial Infarction found evidence of continued disparities in guideline-based admission, procedural, and discharge therapy use from 1994 to 2006. Black patients were less likely than white patients to receive percutaneous coronary intervention/coronary artery bypass grafting (PCI/CABG), a disparity that has improved little since 1994. Further, compared with whites, black patients were less likely to receive lipid-lowering medications at discharge, with a gap that has widened since 1998 **(Fig. 16e-4)**. A 2009 study showed that blacks had worse post–myocardial infarction outcomes than whites but that the difference could be explained by site of care and patient factors (such as socioeconomic status and comorbid conditions).

The Centers for Disease Control and Prevention (CDC) analyzed national and state rates of total knee replacement (TKR) for Medicare enrollees for the period 2000–2006, with patients stratified by sex, age, and black or white race. TKR rates overall in the United States

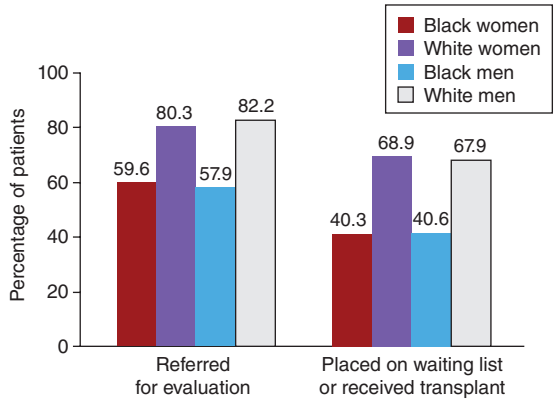

FIGURE 16e-3 Referral for evaluation at a transplantation center or placement on a waiting list/receipt of a renal transplant within 18 months after the start of dialysis among patients who wanted a transplant, according to race and sex. The reference population consisted of 239 black women, 280 white women, 271 black men, and 271 white men. Racial differences were statistically significant among both the women and the men ($p<.0001$ for each comparison). *(From JZ Ayanian et al: N Engl J Med 341:1661, 1999.)*

increased 58%, with similar increases among whites (61%) and blacks (56%). However, the TKR rate for blacks was 37% lower than the rate for whites in 2000 and 39% lower in 2006; i.e., the disparity not only did not improve but even worsened slightly **(Fig. 16e-5)**. More recent data (up to 2010) show no apparent change in these figures. Data for enrollees in Medicare managed-care plans provides evidence for a narrowing in racial disparities between 1997 and 2003 in several "report card" preventive care measures, such as mammography and glucose and cholesterol testing. However, racial disparities in more complex measures, such as glucose control in diabetic patients and cholesterol levels in patients after a heart attack, actually worsened during that interval.

The 2012 National Healthcare Disparities Report, released by the Agency for Healthcare Research and Quality, found little improvement in disparities for core measures of quality over the previous decade. In fact, for blacks, Asians, Native Americans/Alaskan Natives, Hispanics, and poor people, the vast majority of core quality measures (87–92%) stayed the same, and a small proportion (2–8%) got worse, including measures of effectiveness, patient safety, and timeliness of care. While a small number of these measures improved, disparities were eliminated in no measured area. This annual report is particularly important, given that most studies of disparities have not been repeated with the same methodology used to document possible trends. Some studies have tracked disparities using specific disease and treatment registries. For example, by 2008, the use of acute and discharge medications for myocardial infarction had largely been equalized among racial and ethnic groups; however, African-American and Hispanic patients still experienced longer delays before reperfusion, with door-to-balloon times of <90 min for 83% of white patients as opposed to 75% and 76% of black and Hispanic patients, respectively.

ROOT CAUSES OF DISPARITIES

The Institute of Medicine (IOM) report *Unequal Treatment*, released in March 2002, remains the preeminent study of racial and ethnic disparities in health care in the United States. The IOM was charged with assessing the extent of racial/ethnic differences in health care that are not otherwise attributable to known factors, such as access to care. To provide recommendations regarding interventions aimed at eliminating health care disparities, the IOM studied health system, provider, and patient factors. The study found the following:

- Racial and ethnic disparities in health care exist and, because they are associated with worse health outcomes, are unacceptable.
- Racial and ethnic disparities in health care occur in the context of (1) broader historic and contemporary social and economic inequality and (2) evidence of persistent racial and ethnic discrimination in many sectors of American life.
- Many sources—including health systems, health care providers, patients, and utilization managers—may contribute to racial and ethnic disparities in health care.
- Bias, stereotyping, prejudice, and clinical uncertainty on the part of health care providers may contribute to racial and ethnic disparities in health care.
- A small number of studies suggest that minority patients may be more likely to refuse treatments, yet these refusal rates are generally small and do not fully explain health care disparities.

Unequal Treatment went on to identify a set of root causes that included the following:

- *Health system factors:* These include issues related to the complexity of the health care system, the difficulty that minority patients may have in navigating this complex system, and the lack of availability of interpreter services to assist patients with limited English proficiency. In addition, health care systems are generally ill prepared to identify and address disparities.
- *Provider-level factors:* These include issues related to the health care provider, including stereotyping, the impact of race/ethnicity on clinical decision-making, and clinical uncertainty due to poor communication.