



## CHAPTER THREE

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# DISPARITIES IN HEALTH CARE

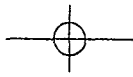
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Racial and ethnic disparities in health care pervade the American health care system. Several reviews of the scientific literature document the existence of racial and ethnic disparities in the processes and outcomes of care for a variety of diseases and clinical conditions, including cardiovascular disease, cancer, HIV/AIDS, and other chronic conditions as well as in delivery of preventive services.<sup>1</sup> Similarly, a recently published national report on health care disparities that draws on multiple data sources finds that blacks, Hispanics, Asians, and American Indians and Native Alaskans were more likely than whites to receive lower-quality care across a range of quality-of-care indicators.<sup>2</sup>

The Institute of Medicine's report on the quality of health care in the United States identifies six aims for improving performance of the health care system: safety, effectiveness, patient-centeredness, timeliness, efficiency, and equity.<sup>3</sup> Equity, as defined by the IOM, is the delivery of health services of equal quality to all individuals regardless of such personal characteristics as gender, socioeconomic status, geographic location, and race or ethnicity. Thus the existence of disparities in care represents a failure of the American health care system and signals the need for attention and reform.

Addressing racial and ethnic disparities in care is of growing importance because the population of the United States is more diverse than ever. Between 2000 and 2050 the Hispanic population is expected to increase as a percentage of the U.S. population from 13 to 24 percent, the Asian population is expected to grow



from 4 to 8 percent, and the black population is expected to grow from 13 to 15 percent. Over the same period, the non-Hispanic white population is expected to decrease as a percentage of the U.S. population from 69 percent to 50 percent. If racial and ethnic minorities continue to receive lower-quality care than the majority population, a substantial portion of the U.S. population will have suboptimal health status, which will in turn affect labor market productivity and national health care spending.<sup>4</sup>

We begin this chapter by defining our view of disparities in care. Next, we review some of the historical factors that have contributed to the patterns of disparities we observe today. In the following sections we summarize some of the evidence documenting racial and ethnic disparities in the treatment of some diseases. In the final sections of the chapter, we summarize a number of ongoing initiatives to reduce disparities in care.

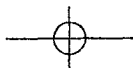
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## Definition of Disparity in Health Care

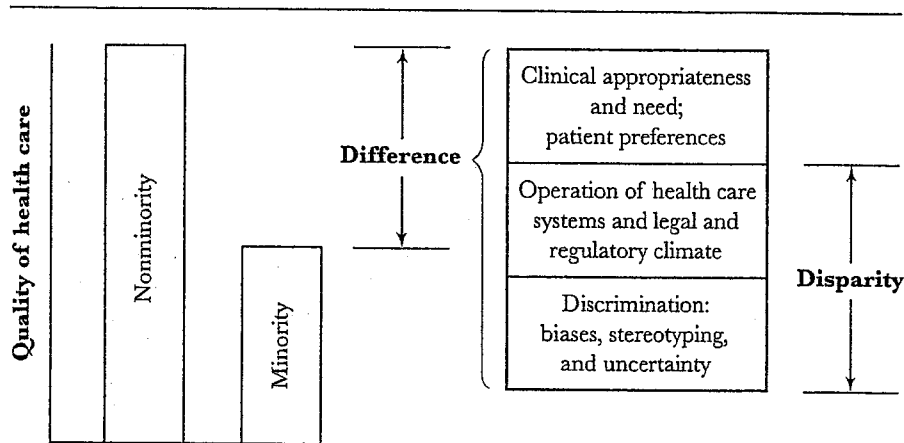
A distinction can be made between disparity in health and disparity in health care. The former refers to racial and ethnic differences in morbidity and mortality and is influenced by a variety of factors (social, environmental, behavioral, biological), only one of which is health care. With recent advances in human genomics, much more attention is being given to the genetic basis for racial and ethnic disparities in health.<sup>5</sup> Disparities in health per se are discussed in a separate chapter in this volume. In this chapter, we focus on disparities in health care.

Various perspectives on disparities in health care have been adopted by researchers over time. Some have viewed all differences in health care between racial and ethnic groups as constituting disparities. From this point of view, differences in the use of services are viewed as disparities regardless of coexistent differences in access to care, insurance coverage, personal preferences, clinical need, or clinical appropriateness. It has been suggested that in some cases lower use of services may constitute an advantage, in particular where overuse is thought to lead to excess morbidity or mortality.

Others have taken a narrower perspective, defining disparity as a difference in care not accounted for by a difference in access to care, personal preference, clinical need, or clinical appropriateness (see Figure 3.1). In this narrower view, two groups of factors are identified as responsible for disparities in care. The first is system-level factors such as the structure of health care systems and the legal and regulatory environment in which those systems operate. These may include structural factors such as underfunding of hospitals that predominantly serve minority patients or organizational characteristics such as inadequate workforce diversity or



**FIGURE 3.1. INSTITUTE OF MEDICINE MODEL OF DISPARITIES IN HEALTH CARE.**



Source: Institute of Medicine (IOM), *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, Washington, D.C.: National Academies Press, 2003.

the absence of policy and procedures that promote culturally competent care. The second group of factors is discrimination at the patient-provider level, whether it takes the form of bigotry and prejudice or unconscious stereotyping.

The broader perspective of disparities in care is often taken by analysts because of data limitations. Few datasets include information on quality of care, race and ethnicity, or patient needs. It is also true that few datasets can differentiate between the effects of structural or legal and regulatory factors on the one hand and discrimination on the other. As we show in the following sections, the literature tends to support the view that all three sets of factors are operating to produce disparities in care.

### Historical Overview of Disparities in Medical Care

The Tuskegee Syphilis Study, a forty-year study by the U.S. Public Health Service of untreated syphilis in black men from Alabama, is typically cited as a central reason many black Americans do not participate in medical studies or seek needed health care, but the legacy of distrust of and mistreatment by the medical establishment toward minorities predates the Tuskegee study.<sup>6</sup> Minorities in the United States, in particular African Americans and Mexican Americans (the largest subgroup of Latinos), have a long history of segregation in medical care and of

receiving poor-quality care.<sup>7</sup> Inequity in medical care began with racial segregation and slavery in American history. Slaves were able to obtain care only in slave hospitals, which were typically staffed by other slaves, slave owners, and their family members.<sup>8</sup> After emancipation, the federal government set up more than ninety hospitals for the emancipated slaves, but only one remained as of the end of the 1800s: Howard University Medical Center.<sup>9</sup> In segregated America, no one took responsibility for the delivery of care for African Americans. Through considerable struggle, black medical professionals began taking charge of care for black Americans. But this transformation was difficult; in the early 1900s blacks were restricted from mainstream professional medical societies, as well as most medical schools.<sup>10</sup> In fact, in 1900 only seven medical schools were training blacks at all.<sup>11</sup> In the late 1800s, black physicians led efforts to establish black hospitals, starting with the Provident Medical Center in Chicago.<sup>12</sup> For both African Americans and Mexican Americans, public health and other medical societies did not begin taking responsibility for their health until they were deemed a threat to the health of whites<sup>13</sup>; thus the type of care delivered was generally in the form of hygiene control and treatment of infectious diseases.

### Factors Related to Disparities Among African Americans

African Americans in the United States experience on average excess morbidity and mortality across a range of chronic and infectious diseases compared with non-Latino whites. Researchers have identified a variety of risk factors that contribute to these disparities (recall Chapter Two). For example, African Americans in the United States are disproportionately represented among the poor and people who live in the inner city. Socioeconomic status and race are associated with a slew of disease risk factors, among them access to primary health care, behaviors (diet, smoking, physical activity), access to resources and social capital, and environmental and psychosocial stressors. Minority and low-income populations are also less likely to receive effective public health and prevention messages that could help prevent disease.

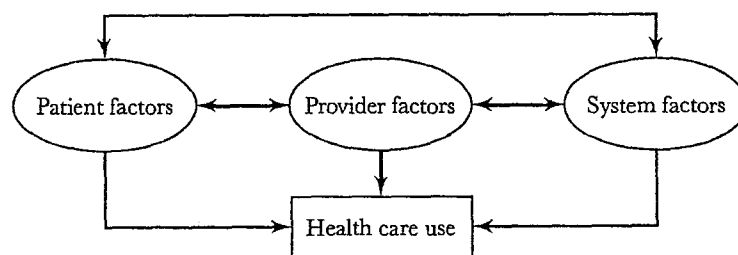
Studies have found that African Americans are less likely to have private insurance and more likely to be publicly insured, underinsured, or uninsured than whites.<sup>14</sup> This is an important risk factor because insurance coverage is related to access to primary care, continuity of care, site of care, and the type and quality of care received, where publicly and uninsured patients often receive less care and poorer quality. Site of care is also important; some studies assert that, for example, patients in community health clinics are less likely to receive high-quality care because such clinics tend to be understaffed and poorly resourced and cannot deliver highly effective care across a range of illnesses and health problems.

Some argue that racial disparities in medical treatment are rooted in discrimination on the part of providers and health care systems, while others disagree and posit that there is insufficient empirical evidence to support that the disparities are due to conscious or subconscious discrimination.<sup>15</sup> Nonetheless, there is abundant evidence to note that disparities in health care are persistent, are deeply seated, and exist across many medical disciplines, practices, and populations (children, adults, elderly). Most researchers would agree that disparities in treatment are a result of myriad factors including patient preferences and behaviors, provider constraints and practices, and system or institutional policies (See Figure 3.2).

**Patient Factors.** Many patient-related factors are associated with access to and use of health care. Some of these factors are more salient to African American patients than nonminority patients. Patient perception of health status and views of specific diseases and the patient's ability to accept and cope with illness are all associated with health care use. Psychosocial constructs such as readiness for change, perceived self-efficacy, self-reliance, and fatalism are all related to individual decision making.<sup>16</sup> Patient trust, level of comfort with medical providers, and satisfaction with care are all important factors for health care entry and retention.<sup>17</sup>

**Provider Factors.** A number of African Americans in the United States come from disadvantaged communities and households. High-income, well-educated, and empowered patients are able to demand, expect, and obtain high-quality health care and have positive health outcomes. These expectations come, in part, from having the resources, privileges, opportunities, state of mind, and prestige that advantaged individuals may expect.<sup>18</sup> The medical establishment remains dominated by white, upper-class, and middle-class men; accordingly, there exists

FIGURE 3.2. FACTORS RELATED TO HEALTH CARE USE AND THEIR SYNERGIES.



considerable discordance between patient and provider demographics. It is reasonable to believe that most providers feel more comfortable communicating with patients who share similar demographics and background. Researchers have asserted that how providers communicate and understand their patients is likely to influence the effectiveness and continuity of care. If the provider stereotypes or misunderstands the patients, then clinical decision making may be compromised. For instance, Schulman and colleagues,<sup>19</sup> who reported on a sample of more than seven hundred physicians who were surveyed to determine recommendations for managing chest pain during videotaped, scripted interviews, found that black women were less likely to be referred for cardiac catheterization than white men. This study suggested that race and gender play significant and synergistic roles in how providers manage their patients.

Provider communication is associated with patient satisfaction, adherence to recommendations, and health outcomes,<sup>20</sup> which may have consequential effects on the type of service sought (emergency versus primary care). Providers who communicate effectively with their patients and are sensitive to process tend to have patients who are satisfied and understand their health issues; even more important, they are more likely to follow through with treatment and continue to seek primary care services.<sup>21</sup> It is important to note that for low-income minority populations communication is mostly directed by medical providers, so examination of process needs to concentrate not only on patients but also on physicians. This also extends to the communication of office staff, nurses, and physician assistants.

In pediatrics, it has been observed that minority children tend to receive poor-quality care, which is usually delivered in a busy community-based ambulatory care center or a hospital-based clinic.<sup>22</sup> Underuse of clinical practice guidelines (CPG) among providers of minority and low-income patients has also been observed. A national study of pediatricians showed that participants reported using ten CPGs for asthma.<sup>23</sup> The study reported that CPG use was more common among pediatricians who practiced in an HMO. Surveyed pediatricians said they were more likely to use CPGs if they were easy-to-follow, feasible, logical, and evidence-based.

**System Factors.** System factors have also been implicated in health care disparities. For instance, it is important that systems promote and foster cultural competency not only for providers but also for office and administrative staff. A report by the Association for Clinicians for the Underserved entitled "Assessment of Childhood Asthma Management and Care in Region III's Indigent and Minority Populations"<sup>24</sup> detailed the major system barriers reported by fifty-one pediatric clinicians. The report was the result of an Office of Disease Prevention and Health Promotion (ODPHP) inquiry into the increased morbidity and mortality rates for asthmatic children that persist despite acceptance of "excellent" evidence-

based clinical practice guidelines. Of eight challenges identified, three predominated: (1) resources not available onsite to provide evidence-based care, (2) reimbursement practices, and (3) uncoordinated medical homes (primary care sites) that do not deliver effective asthma education materials. The clinicians reported resource deficits impede patient access to specialty care, trained case management educators, home health services, pharmaceuticals, and equipment. Poor coordination of services, as a result of the failure of the community-based system of care to serve as the "medical home" for underserved populations, and the lack of culturally appropriate patient and family education materials sensitive to the literacy, language, and cultural diversity of the populations served were major issues.

### Factors Related to Disparities Among Latinos

Latinos make up a diverse group of people who come from differing national origins and who have various histories and political ties with the United States. Much like other ethnic groups in the United States, Latinos have a range of immigration and migration patterns. For instance, many Latinos in the Southwest have a family history that can be traced in the region well before the colonization of the American Southwest following the Treaty of Guadalupe Hildalgo. Puerto Ricans have a history in the United States that goes back to the Jones Act in 1917 (almost twenty years after the Treaty of Paris ended the Spanish-American War), stipulating that Puerto Rico was a U.S. territory whose inhabitants were entitled to U.S. citizenship. Other Latino groups from the Americas and the Caribbean have an immigration history that is sometimes tied with refugee status, as with the Cubans who sought refuge in the United States after the Bay of Pigs fiasco.

Given the changing demographics of the United States, the significance of Latino health and health care access and use can be expected to increase. According to recent U.S. census data,<sup>25</sup> Latinos make up approximately 13 percent of the total population. Within the Latino population, those of Mexican and Puerto Rican descent make up the two largest groups, accounting for 58.5 percent and 9.6 percent, respectively, of the entire U.S. Latino population (not including the 3.5 million U.S. citizens in Puerto Rico). Latinos also make up the largest minority group of children and adolescents. Census<sup>26</sup> data show Latinos numbering 16 percent (11.6 million) of the U.S. population under the age of eighteen.

Studies document that Latinos tend to have worse access to health care, worse morbidity as a result of lack of care or treatment, and poorer quality of care than nonminorities. Many factors have been implicated in disparities in access to and quality of care for Latinos. For instance, studies have reported that Latinos, compared with nonminorities, have a low rate of insurance coverage, usually as a result of noncitizen status or low-wage or migrant employment; have worse geographic

access to care, usually because of migration or living in a farm area; and receive low-quality care, usually because of language discordance between them and their medical providers. Disparities in insurance and access differ, however, with the group. For instance, Puerto Ricans born on the island are citizens by birth, facilitating circular migration and enabling them to qualify for certain federal and state health programs (Medicaid, S-CHIP, and Medicare).

If insured, Latinos have a high presence in public insurance programs,<sup>27</sup> mainly Medicaid. Medicaid is characterized by higher per capita resource constraints and stricter limits on covered services, variables that relate to poor access and quality of care. Low Medicaid capitation payments have been linked to restricted provider networks for health care organizations enrolling minority beneficiaries,<sup>28</sup> thus limiting the pool of available providers.

For Spanish-speaking populations in the United States, the language barrier can affect the quality of care through poor communication exchanged with physicians. As a result, there can be deficient transfer of important information such as details of disease, consequences of treatment or lack of treatment, and medication regimens, all of which can lead to ineffective disease management or prevention. Many Latinos delay seeking care until their condition is severe. Delay coupled with the need for effective medical interpreters and providers make Latinos more vulnerable and potentially more expensive to treat and more complicated to manage than other ethnic groups who speak English well.<sup>29</sup>

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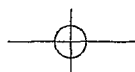
## Scientific Evidence of Disparities in Health Care

In the following six sections, we review some of the evidence supporting the existence of disparities in health care. Because the literature on disparities in care is extensive, spanning several decades, we selected six condition-specific areas of research for our review: cardiovascular disease, cancer, renal disease and transplantation, HIV/AIDS, asthma, and mental health. These areas were selected for a variety of reasons. Cardiovascular disease, cancer, renal disease and transplantation, and HIV/AIDS were selected because they are among the most studied areas of racial and ethnic disparities in care. Asthma was selected because African Americans and some Hispanic subgroups (Puerto Ricans, for instance) are disproportionately affected. Finally, because the other areas included in this review focus on physical domains of health status, we elected to include mental health.

### Cardiovascular Disease

Coronary artery disease (CAD) and acute myocardial infarction (AMI) are the most analyzed topics among studies of racial and ethnic disparities in care. Although blood pressure and cholesterol screening are generally common for both





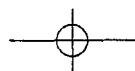
blacks and whites, one study using seven federal datasets found that hospitalization rates for hypertension, angina, and congestive heart failure were higher for blacks than whites across almost all age groups—suggesting that screening is insufficient to prevent heart disease in blacks.<sup>30</sup>

Studies of racial and ethnic disparities in cardiovascular disease have become increasingly sophisticated in their control and adjustment for confounders.<sup>31</sup> An examination of their results indicates that, barring a few exceptions (usually because samples were small), African Americans with CAD or AMI are significantly less likely to receive appropriate cardiac procedures or therapies than whites.<sup>32</sup>

African Americans are less likely than whites to be catheterized; when it is done, they are 20–50 percent less likely to undergo a revascularization procedure. They are also less likely to receive beta blockers, thrombolytic drugs, or aspirin when indicated.<sup>33</sup> There are similar, though less consistent, findings for Hispanics.<sup>34</sup> In one study of AMIs based on the Corpus Christi heart study, Mexican Americans were 40 percent less likely to receive thrombolytic therapy than comparable whites.<sup>35</sup> In a Veterans Administration study, Hispanics were 70 percent less likely than whites to receive thrombolytic therapy. These results held in both teaching and nonteaching hospitals after controlling for age, sex, disease severity, symptom expression, comorbidity, health insurance or payor, and physician specialty.<sup>36</sup>

A significantly lower rate of coronary artery bypass graft surgery (CABG) among African Americans were found in a large study at Duke Medical Center. Included among those who did not receive treatment were patients at highest risk, who would have been expected to have the highest benefit. In the same study, the five-year mortality rate was significantly higher for blacks than for whites.<sup>37</sup> A study of revascularization procedures at major medical centers in New York State found that rates for angioplasty and CABG among African Americans were lower than those for comparable whites. This study examined patients who had been categorized by widely accepted criteria as “inappropriate,” “appropriate,” or “necessary” for revascularization. For those for whom revascularization was classified as necessary, African Americans were 37 percent less likely to undergo angioplasty or CABG compared to whites.<sup>38</sup> No difference was found between Hispanics and whites in the same category. In another study, blacks were less likely than whites to undergo cardiac catheterization and revascularization, less likely to be given newer antiplatelet agents during hospitalization, and less likely to receive lipid-lowering agents and smoking cessation counseling at time of hospital discharge.<sup>39</sup>

The role of race in clinical decision making regarding cardiovascular disease has also been investigated. In one study where a committee of cardiologists and cardiothoracic surgeons made decisions about CABG versus angioplasty for 938 patients after catheterization—decisions based only on a presentation by a cardiology fellow, and thus effectively blinded to the patient’s race—the rate of revascularization



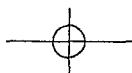
was similar for blacks and whites, though blacks were more likely to receive angioplasty and whites more likely to receive CABG.<sup>40</sup> A study that included Medicare patients treated for myocardial infarction in 4,609 hospitals found that on average blacks were treated at "hospitals with lower-quality medical treatment but higher-quality surgical treatment." Nevertheless "blacks received fewer surgical treatments than whites admitted to the same hospital."<sup>41</sup> A study that examined six-month outcomes among patients who underwent diagnostic cardiac catheterization found that blacks, compared to whites, had significantly higher incidence of angina and worse outcomes in five of eight functional status domains after adjustment for baseline characteristics. This study found that a lower rate of revascularization for blacks appeared to be responsible for the outcome differences.

## Cancer

Studies of racial and ethnic disparities in cancer incidence and prevalence, screening, stage at diagnosis, as well as treatment and survival have been attributed to a range of factors, among them differences in tumor biology, genetics, cultural differences and folk beliefs, socioeconomic status, problems of access to continuity of care, physician practice style and communication with patients, and interaction among all of these factors.<sup>42</sup> Racial bias is used less often to explain disparities, though some studies have found an unexplained effect of race after accounting for other variables.<sup>43</sup>

Whereas black and Hispanic females have a lower incidence of breast cancer compared to whites, they also tend to present to their doctors with more advanced disease and thus have poorer prognosis and shorter survival time compared to whites.<sup>44</sup> Differences in prognosis and survival time among white, African American, and Hispanic women were found by early studies to be attributable almost entirely to racial and ethnic differences in socioeconomic status,<sup>45</sup> though biological factors and cultural beliefs were also suggested as factors. Data from National Health Interview Surveys reported similarly on having a screening mammogram among black, Hispanic, and white women in 1990.<sup>46</sup> Mammography and Pap smear rates differed, though, among ethnic subgroups (Colombian, Dominican, Ecuadorian, Puerto Rican, Caribbean, Haitian, and U.S.-born black women).<sup>47</sup>

Racial variation in diagnosis was found in some studies. One of them found that older black women were consistently less likely than comparable white women to receive a mammogram, perhaps because physicians were unable or unwilling to spend the additional time necessary to educate black women about the importance of the procedure.<sup>48</sup> Suggested explanations for a finding that indicated African American, Hispanic, and Asian women had less timely follow-ups than whites after an abnormal finding on a screening mammogram included patient



preferences, insurance coverage, and discriminatory practices among providers.<sup>49</sup> A more recent study indicates that there is significant variation in mammography screening within racial and ethnic groups, with immigrants having a substantially lower mammography rate than nonimmigrants within the same racial and ethnic group, and that limitations in the national survey databases lead to overestimation of mammogram use, particularly for low-income racial and ethnic minorities due to higher survey nonresponse in these groups.<sup>50</sup>

Variation in treatment was also found in some studies, though not all. One study found that black patients received "significantly different care" than whites for four out of ten treatment procedures for breast cancer, although they were not the most clinically important.<sup>51</sup> Shavers and Brown found that, after controlling for clinical factors, black women are less likely than white women to receive breast conserving surgery (BCS) and radiation. After undergoing BCS, black women and women from other racial and ethnic minority groups are less likely than whites to have radiation therapy.<sup>52</sup> In addition, black women also receive lower chemotherapy dosage than white women.<sup>53</sup> Other studies found similar rates and types of treatment among African American, Hispanic, and white women.<sup>54</sup>

Similar patterns according to race and ethnicity were found for men and women with colorectal cancer. In one study, blacks were treated less aggressively than whites with similar disease, even after adjusting for insurance coverage, hospital type, and comorbidities. The authors were unable to determine if the differences were attributable to social, cultural, or economic differences. In contrast, no differences were found in treatment or survival in a study in the free-care VA system<sup>55</sup> or in the equal-access Department of Defense health care system.<sup>56</sup> A study of elderly Tennesseans enrolled in both Medicaid and Medicare found no significant difference in overall outcomes for black and white patients, though blacks were less likely to have surgery.<sup>57</sup>

A notable difference was found for early stage nonsmall-cell lung cancer. After controlling for variables, researchers found that blacks were only about half as likely as whites to undergo surgery that can substantially increase the likelihood of surviving for five years or longer. This difference was suggested as attributable to either patient preference or physician's decision.<sup>58</sup>

### Renal Disease and Transplantation

African Americans and Native Americans have the highest incidence of risk of illness and death from end-stage renal disease (ESRD) among minorities. Among Native Americans, for example, the rate is four times that for whites. This is due to more hypertension, diabetes, and sickle cell disease among blacks, diabetes among Native Americans, and less access to or use of early primary care intervention for



both groups. The two main treatments for ESRD are dialysis and renal transplantation. Although ESRD treatment is specifically supported by a Medicare program, kidney transplantation varies by race.

One study found that time from renal failure to transplantation, time from renal failure to wait listing, and time from wait listing to transplantation were all longer for blacks than for whites, Asian Americans, and Native Americans.<sup>59</sup> Another study, using a telephone survey of a representative national sample of ESRD patients, found that within the first year on dialysis 30 percent of white respondents but only 13.5 percent of black respondents were placed on a waiting list, and three times as many whites as blacks received a kidney.<sup>60</sup> Additionally, a cohort study of more than forty-one thousand ESRD patients on the waiting lists of all 238 renal transplant centers in the United Network for Organ Sharing from 1994 to 1996 showed that blacks, Hispanics, and Asians, patients of any race or ethnicity who were less well educated, and those with limited financial resources were much less likely to receive a transplant.<sup>61</sup> Another study reported that even though American Indians were more likely than whites to be identified as potential transplant candidates and referred to a transplant center, and there were no significant differences for the same between Hispanics and whites, both American Indians and Hispanics were less likely to be placed on a waiting list and were much less likely than whites to undergo renal transplantation.<sup>62</sup>

Reasons for these differences are debated and may involve numerous factors. One study attributed 60 percent of the difference in rate of waiting list entry for blacks and whites, and about half of the difference in transplantation rate, to race-related differences in socioeconomic status, biologic factors associated with the complicated immunologic problems of donor-recipient matching by human leukocyte antigens, disease severity and the presence of contraindications, and patient preferences or choices.<sup>63</sup> Yet another study found that differences in socioeconomic status were only a minor contributor.<sup>64</sup>

Many studies showed that African American patient preferences, including refusal of and disinterest in transplantation, is an important contributing factor.<sup>65</sup> A large sample of ESRD patients in four regions of the United States showed that black patients were less likely than whites to want a transplant.<sup>66</sup> A larger difference was apparent in the rate at which blacks and whites were fully informed of the options and referred for evaluation of a transplant. A study that examined physicians' beliefs about racial differences in referral for renal transplantation related that whereas physicians did not view patient-physician communication and trust as important reasons for racial differences in care, black patients were less likely than white patients to report receiving some or a lot of information about transplantation (55 percent versus 74 percent).<sup>67</sup> Another study found that one of

the contributors associated with black disinterest in transplantation was fatalism, based on lifelong experience of perceived racial discrimination.<sup>68</sup>

## HIV/AIDS

Over the past two decades, infection with HIV and progression to AIDS have disproportionately affected African Americans and Hispanics. For example, in 2002 HIV/AIDS was the sixth leading cause of death among African Americans and tenth leading cause of death among Hispanic males, whereas it did not place among the ten leading causes of death for white males.<sup>69</sup> Relatively few studies have examined racial variation in diagnosis or treatment. Evidence from those that have examined these differences indicate that African Americans and Hispanics are less likely than whites to receive various medications or to undergo some diagnostic procedures, though they vary by source of care.<sup>70</sup> A study of the relative risk of six-year mortality among ethnic groups found Hispanics to have a significantly shorter median of survival (15.5 months) than whites (23.8 months) and blacks (35.1 months).<sup>71</sup> One study found that blacks and Latinos, compared to whites, had an inferior pattern of care in many measures that examined service and medication utilization.<sup>72</sup> Another study showed that blacks (and to a lesser degree Hispanics) were less likely to undergo bronchoscopy and tended to receive less timely administration of prophylaxis against opportunistic infection in many hospitals, but these disparities did not exist in the free-care VA hospital system.<sup>73</sup>

Among gay and bisexual men with HIV, another study found that whites were about 60 percent more likely than blacks to be taking antiretroviral drugs, after adjusting for access to care and insurance status.<sup>74</sup> Among patients appearing at a teaching hospital for treatment, blacks were found to be 40 percent less likely than whites to have previously received antiretroviral drugs or prophylaxis against opportunistic infection, regardless of income and insurance status.<sup>75</sup> Possible reasons for the difference were misconceptions about HIV/AIDS among blacks, distrust of health authorities, and "prescribing habits" of providers.

Additionally, many studies have found difficulty in physician-patient communication in HIV/AIDS cases, particularly in discussing decisions about end-of-life care and resuscitation<sup>76</sup> and when there was racial or ethnic discordance between patient and physician. One study found that physicians at a teaching hospital were more comfortable discussing the results of clinical trials with white patients than racial and ethnic minorities.<sup>77</sup> Patient mistrust and conspiracy beliefs are also a factor. One study found that 27 percent of 520 black adults in ten randomly selected census tracts agreed with the statement "HIV/AIDS is

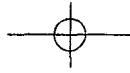
a man-made virus that the federal government made to kill and wipe out black people," and an additional 23 percent were undecided.<sup>78</sup>

Suggesting that more information beyond risk behavior and partner type distinctions are needed to understand racial and ethnic disparities in HIV risk, one study concluded that blacks and Latinos had a higher prevalence of HIV compared to whites even though whites most frequently reported potentially risky sex and drug-using behaviors.<sup>79</sup> This multisite venue-based survey of fifteen-to-twenty-two-year-old males found black and multiethnic black men experienced nine times, and Latinos about twice, the fully adjusted odds of infection compared to whites.<sup>80</sup>

## Asthma

Asthma is a major health problem across many socioeconomic and racial and ethnic categories. However, blacks and Latinos, especially Puerto Ricans, share a disproportionate burden from asthma.<sup>81</sup> Asthma is the most common chronic condition afflicting children in the United States. Among children, blacks and Latinos have worse morbidity and blacks have more mortality due to asthma than all other racial or ethnic groups of children.<sup>82</sup> The asthma death rate among U.S. blacks is approximately three times more than for whites.<sup>83</sup> Between the ages of five and thirty-four (when asthma is easier to distinguish from other causes of ventilatory impairment), blacks experience an asthma mortality rate approximately three to five times higher than that of whites.<sup>84</sup> Multiple risk factors have been implicated for asthma morbidity and mortality for minorities: tobacco smoke exposure, obesity, air pollution, house dust mite allergen, cockroaches, and cat hair.<sup>85</sup> An elevated level of severe asthma and related hospitalization among inner-city minority children is associated with features of health care and treatment, such as inadequate use of long-term controller steroid medications and overuse of quick-acting reliever drugs such as albuterol.<sup>86</sup> Researchers have observed that poor asthma management and control among racial and ethnic minorities is associated with a slew of factors, including poor provider-patient communication, deficient access to and use of high-quality and effective primary care, poor perceived patient and family efficacy to manage asthma, and perceived inadequate treatment efficacy by patients and their families.<sup>87</sup>

Studies have reported that mismanagement of asthma for minority children is partly attributable to such provider factors as inadequate knowledge or use of national asthma clinical guidelines.<sup>88</sup> Evidence shows that Latino children are less likely than white children to be prescribed inhaled corticosteroids and other maintenance medications, regardless of insurance coverage, severity of asthma, and other determinants such as site of care or primary care contacts.<sup>89</sup> One study of children in three managed care organizations found a difference in dispensing of



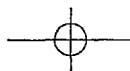
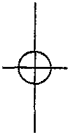
controller agents but similar rates of prescription,<sup>90</sup> and in a separate study the same group of researchers found that medication was prescribed less to Latinos in five health care organizations in Massachusetts.<sup>91</sup> The researchers reported that reduced use of corticosteroids and controller medication by minorities may have been due to a combination of lower adherence and prescription by physicians compared to whites. Minority children with asthma are also less likely than white children to receive preventive therapy or obtain equipment that helps them manage their asthma.<sup>92</sup>

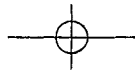
## Mental Health

Improving mental health services access and utilization has been a top health policy priority in the United States. The attention to mental health care comes from increasing awareness that many people who meet diagnostic criteria for mental illness do not seek or obtain needed care. Several studies have demonstrated that minorities, particularly blacks and Latinos, are less likely to use mental health services than whites. In the U.S. Surgeon General's Supplement *Mental Health: Culture, Race, and Ethnicity*, it is noted that ethnic and racial minorities have less access to mental health care than whites, and that they are less likely to receive needed care and stay in care.<sup>93</sup> The disparities in mental health care use seem to persist even after accounting for variation in psychopathology across groups.<sup>94</sup>

The reasons minorities underuse mental health services are multifactorial. Considerable attention in mental health services research has focused on the role of payment and insurance. Many people in the United States lack sufficient insurance coverage to cover mental health; many health plans also limit the number of visits people may have over time. Further, some plans require costly copay or do not allow people to go out of plan to find a suitable provider. Other barriers include lack of access to providers who speak the same language, especially for low-aculturated Latinos.<sup>95</sup> There are also accessibility factors, such as location and awareness of available services.

Growing awareness of other factors that might account for disparity in mental health service use that go beyond payment mechanisms has been occurring in the literature. For example, researchers are focusing on factors such as health beliefs, knowledge of mental health problems, and coping mechanisms such as self-reliance and social networks.<sup>96</sup> For example, two reports of island Puerto Ricans demonstrated a high level of psychiatric disorder but also high denial and self-reliance.<sup>97</sup> Denial can be a maladaptive coping strategy, especially if it results in little or no usage of needed mental health care. The extent to which denial is more or less prevalent in minority populations relative to nonminority populations is unknown. For Latinos, some researchers have focused on the role of families and





social networks in both protecting members from morbidity and being part of the pathway to mental health care.<sup>98</sup> Other factors that have been examined as potential determinants of mental health care disparities for all minorities include stigma, discrimination, and racism.<sup>99</sup>

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## Reducing Disparities in Care

In response to the ever-growing body of literature documenting the existence of racial and ethnic disparities in care, there have been and continue to be numerous efforts to address racial and ethnic disparities in care. Examples of these efforts exist in the public and private sectors of U.S. society. In the public sector, for example, the Department of Health and Human Services has convened a council on disparities. This group assembles leaders across HHS under the assistant secretary for health to coordinate and maximize the effectiveness of the many federal efforts to eliminate disparities and to identify and evaluate new opportunities for eliminating disparities.

Directed by the congress, the Agency for Healthcare Quality and Research has begun producing a yearly National Healthcare Disparities Report ([www.qualitytools.ahrq.gov/disparitiesreport](http://www.qualitytools.ahrq.gov/disparitiesreport)), documenting variations in quality of care by racial and ethnic groups. This reports draws on data from numerous national surveys, including the Medical Expenditure Panel Survey, the National Health Interview Survey, the National Immunization Survey, the National Ambulatory Care Survey, and many others. The purpose of this report is to illuminate areas of greatest need and track reduction in disparities over time.

In the private sector, the National Business Group on Health, a Washington D.C.-based private nonprofit organization representing more than two hundred large employers, health care companies, benefits consultants, and vendors, has developed an employer toolkit for reducing disparities ([www.businessgrouphealth.org](http://www.businessgrouphealth.org)). This toolkit is designed to give employers information and practical strategies to assess and reduce racial and ethnic health disparities within their workforce. It includes various summary papers covering topics such as making the business case for reducing disparities; it offers employee surveys that employers can use to assess and monitor disparities directly.

In a public-private effort, AHQR and the Robert Wood Johnson Foundation have launched a national health plan learning cooperative to reduce disparities and improve health. This effort includes ten of America's foremost health plans: Aetna, Anthem, Cigna, Harvard Pilgrim, HealthPartners, Highmark, Kaiser Permanente, Molina, UnitedHealth Group, and WellPoint. This group plans to collect health care quality data by racial and ethnic group and develop interventions







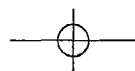
to reduce disparities in the treatment of diabetes and other chronic conditions. Lessons learned by the participating plans in the collaborative will be shared with the greater health care community.

To address language barriers faced by Spanish-speaking patients, the Robert Wood Johnson Foundation has also funded *Hablamos Juntos*, a four-year \$10 million effort to improve patient-provider communication ([www.hablamosjuntos.org](http://www.hablamosjuntos.org)). This project has funded ten sites to develop new (and improve existing) language interpretation programs, upgrade signage for non-English speaking patients, and enhance Spanish-translated health information materials, targeting regions of the United States that have seen rapid growth in the number of Hispanics over the last decade. Funded sites include many new destinations for Hispanic immigrants, notably Washington State, Alabama, Rhode Island, Nebraska, South Carolina, Tennessee, and Pennsylvania, as well as more established destinations such as California, Texas, and Virginia.

Various other efforts are in place to help address disparities. The National Committee for Quality Assurance, the largest accreditor of private health plans in the United States, is in the process of developing measures of quality to monitor racial and ethnic disparities in managed care settings ([www.ncqa.org](http://www.ncqa.org)). Once developed, these measures will be integrated into NCQA's Health Plan Employer Data and Information Set (HEDIS) measurement set. Although not yet used for accreditation, NCQA HEDIS measures have been applied to report racial and ethnic disparities in care. For example, according to four HEDIS measures collected by Medicare health plans, blacks were less likely than whites to receive breast cancer screening, eye examinations for patients with diabetes, beta-blocker medication after myocardial infarction, and follow-up after hospitalization for mental illness.<sup>100</sup> The Joint Commission on Accreditation of Healthcare Organizations is also in the process of developing and incorporating new measures for hospital accreditation that focus on racial and ethnic disparities in care ([www.jcaho.org](http://www.jcaho.org)). Like NCQA, JCAHO accredits health care organizations, focusing on hospitals rather than health ([www.jcaho.org](http://www.jcaho.org)).

## Summary

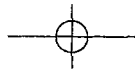
It is evident from the medical and public health literatures that disparities in health care are prevalent, with racial and ethnic minorities receiving lower-quality care in a variety of health care settings and across a range of medical conditions. A number of factors account for disparities in care, among them legal and structural factors as well as patient and provider factors. From a historical perspective, these findings are not surprising; racial and ethnic minorities have experienced



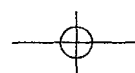
discrimination and segregation in health care settings since the founding of the United States. Although efforts to address racial and ethnic disparities in care are multiple and ongoing, if not overcome minority patients can be expected to continue to have suboptimal health status, which will in turn affect labor market productivity and national health care spending. With the growing size of minority populations in the United States, addressing disparities in care is a paramount health policy issue.

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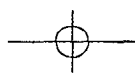
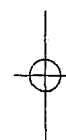
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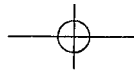


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