



December 1999

Drew E. Altman, Ph.D.
PRESIDENT AND CHIEF EXECUTIVE OFFICER

Dear Interested Party,

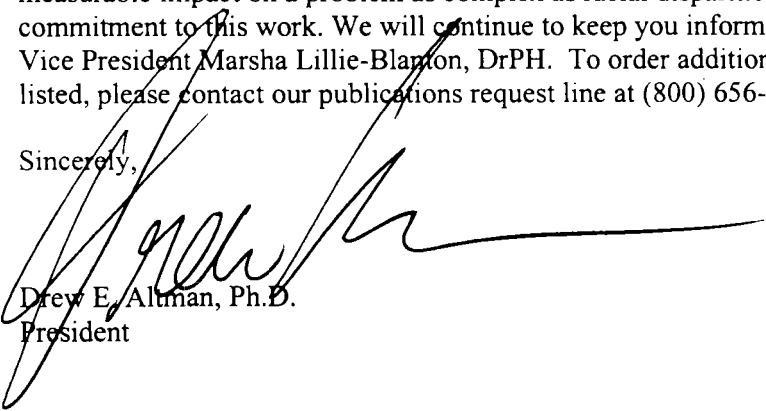
While remarkable progress has been made in reducing barriers to care facing racial and ethnic minority Americans, these populations continue to experience unequal access to the many advances made in medical technology and basic health services. As part of our commitment to on-going research in the area of access to care for vulnerable populations, the Kaiser Family Foundation hosted a forum this Fall entitled, *Race, Ethnicity, and Medical Care: Improving Access in a Diverse Society*. The forum offered an opportunity for leaders in health care, research, education and civil rights to collectively review the latest evidence about race and medical care and to begin the discussion of what next steps could be taken to address inequities.

We are pleased to provide you with materials presented at the forum including:

- *Key Facts: Race Ethnicity & Medical Care* (publication #1523) which provides facts with corresponding charts describing racial and ethnic disparities in 1) health; 2) health coverage; 3) access to preventive and primary care; and 4) the use of medical care for specific conditions including heart disease, cancer, asthma, and HIV/AIDS.
- *A Synthesis of the Literature* (#1526) which summarizes research conducted between 1985 and 1999 on racial and ethnic differences in medical care, including research on racial differences in heart disease and stroke, cancer, diabetes, HIV/AIDS, mental health, and maternal and child health. Sentinel articles are identified and tabled in an appendix.
- *Perceptions of How Race & Ethnic Background Affect Medical Care: Highlights from Focus Groups* (#1524) which is a summary of the findings from twelve separate focus groups conducted to better understand how race and ethnic background affect medical care. Seven of the focus groups were minority health care consumers and the other five focus groups were health care professionals and hospital administrators.

The forum laid important groundwork for our long-term efforts in this area. We are clear that having a measurable impact on a problem as complex as racial disparities in medical care will require continued commitment to this work. We will continue to keep you informed of these efforts under the direction of Vice President Marsha Lillie-Blanton, DrPH. To order additional free copies of any of the publications listed, please contact our publications request line at (800) 656-4533, or visit our website at www.kff.org.

Sincerely,



Drew E. Altman, Ph.D.
President

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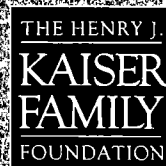
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Key Facts

Race, Ethnicity & Medical Care

October 1999



A Synthesis of the Literature

Racial & Ethnic Differences in Access to Medical Care

Prepared by the Morehouse Medical Treatment
Effectiveness Center (MMEDTEC)
For The Henry J. Kaiser Family Foundation

October 1999



Racial and Ethnic Differences in Access to Medical Care

A Synthesis of the Literature

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Executive Summary

This paper provides a comprehensive review of the literature on racial and ethnic differences in access to health services from 1985 to the present. We chose 1985 as our starting point to coincide with the release of the landmark *Report of the Secretary's Task Force on Black and Minority Health*, conducted by the Department of Health and Human Services (sometimes referred to herein as the "*Task Force Report*"). The *Task Force Report* documented disparities in selected health conditions between whites and various racial and ethnic minority groups, and resulted in a proliferation of studies and reports attempting to further investigate racial and ethnic differences in health status, access, services, and outcomes.

Our review of the literature revealed significant differences in access to medical care by race and ethnicity within certain disease categories and types of health services. Many studies have reported crude or unadjusted differences in health care access by race and ethnicity. In recent years, studies have attempted to control for possible explanatory variables, most importantly, socioeconomic status, insurance coverage, and stage of disease. When these variables are controlled, racial and ethnic disparities in access are often reduced, and may even disappear under certain circumstances. Nonetheless, the literature shows that racial and ethnic inequalities persist in significant measure for several disease categories and service types, even after controlling for important confounding variables.

The reasons for these disparities are complex, vary depending upon health condition, and remain poorly understood. Indeed, the literature still contains significant gaps and limitations, and many of the results obtained thus far need to be clarified and validated in future research. A brief summary of the findings from the literature by type of disease or health service follows.

Heart Disease and Stroke: Numerous studies have repeatedly documented that African Americans were significantly less likely than whites to receive diagnostic and surgical interventions for heart disease and stroke, with disparities ranging from 13 to 70 percent; similar gaps have been documented for Hispanics. Reasons for racial disparities in access to services for heart disease and stroke are not well understood, but may include overuse among whites of certain surgical interventions, as well as greater aversion to surgery among African Americans.

Cancer: African American women have achieved equivalent, and in some cases, superior access to screening services compared to white women for breast and cervical cancer; Hispanic women lag behind both groups. On the other hand, numerous studies have found that racial and ethnic minorities were more likely than whites to be diagnosed with cancer at advanced stages, and less likely to receive major therapeutic interventions. Study results have been inconsistent, however, and must be interpreted with caution due to significant data limitations and researchers' reliance on crude measures of "cancer treatment".

Diabetes: Study results with respect to diabetes have also been inconsistent, but racial differences have been documented in degree and method of diabetes control, attention to patient education, rate of eye care visits, and treatment for end stage renal disease (which can be a consequence of severe and uncontrolled diabetes).

HIV/AIDS: Race appears to be a strong predictor of receipt of drug therapy for this condition, with African Americans 41 to 73 percent less likely than whites to receive particular drug agents, even after adjusting for age, sex, mode of HIV transmission, insurance, residence, income, and education. In addition, racial and ethnic groups have typically had extremely low participation rates in clinical trials. Despite government intervention, barriers continue to exist.

Mental Health: Various researchers have shown that African Americans and Asians were more likely than whites to be diagnosed with an organic or psychotic disorder (e.g. schizophrenia), and more than six times as likely as whites to be diagnosed with alcohol or substance abuse. African Americans with high socioeconomic status were more than three times as likely as similar whites to be tested for such abuse, even though abuse rates were similar. Racial and ethnic differences have also been found in access to and utilization of various mental health services, including physician visits, outpatient visits, inpatient admissions and lengths of stay. In addition, African Americans were more likely than whites to receive higher doses of anti-psychotic medication, and whites were more likely to use antidepressant medication.

Maternal and Child Health: White females entered prenatal care earlier than African Americans and Hispanics, and were more likely to receive better advice regarding their pregnancies. African American women were more likely to be hospitalized for antenatal and pregnancy loss complications and to have longer lengths of stay. African American infants were admitted to neonatal intensive care units more than two and a half times as frequently as white infants; this disparity was not driven by the greater frequency of low birth weight among

African American infants. In addition, African American children typically had poorer access to all types of health care services than white children, a finding that is both exacerbated by and independent of socioeconomic status. Although the immunization gap between ethnic minority children and white children has narrowed in recent years, African American children in urban areas continue to be less well vaccinated than Hispanic children.

Access to Health Services (in general): Adolescent and adult African Americans and Hispanics were less likely to have any physician contact over the course of a year than whites, even after adjusting for health status. Minorities were also less likely to receive a wide range of inpatient and outpatient procedures, even after adjusting for various confounding variables. In addition, African Americans were less likely to use nursing home services than whites, perhaps due in part to cultural preferences. However, when African Americans did request a nursing home placement following hospitalization, they experienced longer waiting times, regardless of clinical and demographic characteristics.

In considering the existing body of research, the complex challenge facing current and future researchers is to understand the basis for such disparities, and to determine why disparities are apparent in some, but not other disease categories and service types. Many studies currently in progress are attempting to more consistently control for confounding variables, and seek to determine the extent to which racial and ethnic disparities in access to medical services are linked to systemic and financial barriers as opposed to cultural preferences and attitudes. Findings from these studies will help us to understand why racial and ethnic disparities exist, and may assist policy makers in devising strategies to improve access for vulnerable populations.

Introduction

This paper describes our comprehensive review of the literature on racial and ethnic differences in health and health services from 1985 to the present. We chose 1985 as our starting point to coincide with the release of the landmark *Report of the Secretary's Task Force on Black and Minority Health*,¹⁻⁸ conducted by the Department of Health and Human Services (sometimes referred to herein as the *Task Force Report*). The Department of Health and Human Services (DHHS) assembled the Task Force to study the health status of African, Hispanic, Native, and Asian Americans, their ability to access and utilize the health care system, and factors which contribute to disparities in health status between minority and majority populations.

At the time the Task Force was assigned, national statistics indicated continuing improvement in the health of Americans as a whole. However, it was apparent that African Americans, Hispanics, Native Americans, and some Asian/Pacific Islander groups, relative to white Americans, were not benefiting equally from the vast scientific knowledge and advanced medical capacity to diagnose, treat, and cure disease. The assemblage of the Task Force represented the first time DHHS turned its attention to minority health concerns, and made an effort to document the persistent disparities in selected health conditions between whites and various racial and ethnic minority groups. The *Task Force Report* acknowledged that health status is "influenced by the interaction of physiological, cultural, psychological, and societal factors that are poorly understood for the general population and even less so for minorities."

The *Task Force Report* identified six causes of death which accounted for the excess mortality among blacks and other minority groups relative to whites: cancer, cardiovascular disease and stroke, cirrhosis, diabetes, homicide and accidents, and infant mortality. The primary emphasis of the *Report* was health status differences by race and ethnicity. Access, availability, and utilization of health services received only a limited treatise. While noting that the gap in access and utilization of services was narrowing as a result of the major insurance programs of Medicaid and Medicare, the Report indicated that racial and ethnic groups continued to have poorer access to quality health care services and different patterns of utilization relative to white Americans.

Since the release of the *Task Force Report*, along with its recommendations for eliminating disparities in health status, there has been an increased awareness and sensitivity to minority health issues and a proliferation of studies and reports attempting to further investigate racial and ethnic differences in health status, access to services, and outcomes. We critically

reviewed the published research since 1985 to further describe the nature of racial and ethnic differences in access to preventive, diagnostic, and therapeutic services, and how far research in these areas in the intervening years has advanced our understanding of these disparities.

Findings

Our review of the health services literature over the past decade and half since the release of the *Task Force Report* revealed significant differences in access to medical care by race and ethnicity within certain disease categories and types of health services. Many studies have reported crude or unadjusted differences in health care access by race and ethnicity.⁹⁻¹⁹ In recent years, studies have attempted to control for possible explanatory variables, most importantly, socioeconomic status, insurance coverage, and stage of disease.²⁰⁻²⁴ Not surprisingly, when these variables are controlled, racial and ethnic disparities in access are often reduced, and may even disappear under certain circumstances.²⁵⁻³⁰ Nonetheless, the literature shows that racial and ethnic inequalities persist in significant measure for several disease categories and service types. The complex challenge facing current and future researchers is to understand the basis for such disparities, and to determine why disparities are apparent in some, but not other disease categories and service types.

Review By Health Condition

Heart Disease and Stroke

The 1985 *Report of the Secretary's Task Force on Black and Minority Health* documented the excess cardiovascular disease mortality burden, especially for stroke, among African Americans relative to whites, as well as the higher rate among African Americans of non-fatal stroke.⁴ Death rates from coronary heart disease were similar among black and white men, but among women, blacks had a higher mortality as well as incidence rate. While the data was more sparse for other ethnic groups, the *Task Force Report* indicated lower death rates for heart disease among Hispanic, Native American and some Asian Americans compared to white and African Americans. The *Task Force Report* also noted the importance of access to care for cardiovascular disease and documented that African Americans made fewer physician office visits, were more likely to be seen in hospital clinics and emergency rooms, were less likely to be seen by a cardiovascular specialist, and were less likely to undergo coronary arteriography and coronary bypass surgery than white Americans.

Since that time, researchers have repeatedly documented racial and ethnic differences in access to screening, diagnostic and therapeutic interventions for heart disease and stroke. For example, a study of the cholesterol screening practices in an office based family medicine residency program over an 18-month period revealed that African Americans and Hispanics were 16 percent less likely than whites to be screened, even after controlling for insurance coverage, socioeconomic status, and number of visits.³¹

In addition, numerous studies have documented differences in access to diagnostic and therapeutic interventions for cardiac and stroke patients by race and ethnicity.^{10, 12-14, 19, 22, 32-41} For instance, one of the earlier studies by Maynard, et al. in 1986 found that 58 percent of whites in the Coronary Artery Surgery Study were recommended for surgery, compared to 38 percent of African Americans, even after adjusting for clinical characteristics and diagnostic findings.¹⁰ Such disparities have been replicated by others who have found African Americans to be 13 to 40 percent less likely to receive coronary angioplasty, and 32 to 70 percent less likely to receive bypass surgery than their white counterparts.^{42, 43}

Although the majority of studies have focused on black-white disparities, one study showed that Hispanic Americans had similar rates of bypass surgery as non-Hispanic whites, but were 18 percent less likely to receive catheterization and 35 percent less likely to receive angioplasty.³⁷ In a study of myocardial infarction patients, Hispanic and Native Americans were equally as likely as whites to receive thrombolytic therapy and undergo coronary arteriography and revascularization procedures; the results indicated a different pattern of treatment for Asian Americans.⁴⁴

Among stroke patients, African Americans were significantly less likely than whites to receive diagnostic (i.e. cerebral arteriography) and therapeutic (i.e. carotid endarterectomy) interventions.³⁸ With respect to pharmacologic interventions for hypertension and heart disease, racial and ethnic differences have also been repeatedly reported.⁴⁵⁻⁴⁷ Racial differences in access to heart transplantation have also been documented, with African Americans less likely to receive transplants even after controlling for prognosis following transplantation, clinical and demographic factors, income, and distance to a transplant center.^{48,}

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The degree to which racial and ethnic disparities exist is influenced by insurance status, with the greatest differences found among the uninsured and Medicaid populations, and the smallest disparities among the privately insured. Among the uninsured, African Americans

were half as likely to undergo angiography, and one third as likely to undergo bypass surgery compared to uninsured whites, even after adjusting for comorbidities.¹⁸

Moreover, even within the Veterans Affairs (VA) medical system which is mandated to provide inpatient care to all eligible veterans free-of-charge, investigators have found racial differences in the treatment of cardiac and stroke patients.* Among patients seeking care for acute myocardial infarction in the VA system, African Americans were 33 percent less likely to undergo cardiac catheterization, and 64 percent less likely to undergo revascularization.¹⁵ These findings were replicated by another investigator who also found that African Americans were more likely to refuse an optional invasive procedure than whites.⁵⁰ Among veterans diagnosed with stroke, African Americans were 53 percent less likely to undergo carotid angiography and 72 percent less likely to receive endarterectomy, even after adjusting for age, degree of eligibility for VA care, socioeconomic status, and geographic region.³⁹

A few studies attempting to understand the reasons for racial variations in access to interventions for heart disease and stroke have found disparities to be due, in part, to an overuse of cardiac procedures among whites (rather than underuse by African Americans),¹⁹ as well as a greater degree of aversion to certain interventions and a greater willingness to risk death to avoid surgery among African Americans.⁵¹ On the other hand, Mirvis and Graney found that the likelihood of cardiac catheterization and bypass surgery among VA patients with coronary diseases was greater for African Americans than whites if a cardiac catheterization laboratory and cardiac surgical program were present at the local VA facility.⁵²

Finally, in contrast, one study showed that racial and ethnic differences in access can be mitigated by a universally accessible system. Specifically, Taylor, et al.⁵³ studied 1441 military

* To minimize the effect of insurance status, many studies in our review confined their study populations to individuals covered by specific health care programs, in this case, the U.S. Department of Veterans Affairs (VA). About 10 percent of 27 million veterans use the VA's system of inpatient, outpatient, and community-based services each year, where if eligible for services, the care is free. Compared to other hospitals, VA facilities are more likely to be large, located in urban areas, and serve more chronic psychiatric patients. VA users are more likely to be African American, male, older, poorer, less educated, underemployed, without family support, and more likely to have worse health conditions, besides lacking other health insurance coverage.

The Department of Defense likewise guarantees free access to health care services to all active duty and retired military personnel and their dependents. Approximately nine million people are served through a large, nationwide, staff-model managed care plan which operates military hospitals and free-standing clinics and directly employs physicians and other providers. Care at these facilities is free to beneficiaries.

patients seeking care for acute myocardial infarction in the Department of Defense (DoD) health care system and found no racial differences in the rate of cardiac catheterization or revascularization, after controlling for age, gender, cardiovascular risk factors, and clinical characteristics. However, whites were more likely than non-whites to be considered for cardiac catheterization within six months of hospital discharge, but no racial difference in mortality from acute myocardial infarction was observed.

In sum, our review of the literature on racial and ethnic differences in access to medical care for heart disease and stroke found that significant disparities exist even after controlling for insurance status and socioeconomic status. New research now underway is attempting to understand the reasons such disparities occur. One recently completed study examined the contribution of physician decision-making on race and gender differences in referral patterns for cardiac catheterizations. In an experimental design where volunteer physicians watched videotapes of actor-patients with significant symptoms of heart disease being interviewed by a doctor and then were asked to prescribe further interventions -- black women were referred for cardiac catheterizations 60 percent less often than white women, white men, and black men. Besides having the same scripted medical history, all of the "patients" had the same insurance coverage and occupations. The researchers concluded that the combination of the patient's race and sex did affect the physicians' decisions to refer patients with chest pain for a more definitive diagnostic work-up.¹⁸⁰

Cancer

The *Task Force Report on Black and Minority Health* indicated that the poorer cancer survival rates observed for racial and ethnic Americans, particularly African Americans, may be due, in part, to delay in the detection of cancer, and differences in the availability of various treatment options.³ The data available to the Task Force was generally limited to cancer mortality and incidence rates; data on access to medical care by race and ethnicity was scarce, and virtually unavailable for Asian, Hispanic, and Native Americans. Since the release of the *Task Force Report*, numerous investigators have attempted to confirm the Task Force findings, and to determine the extent to which race and ethnicity affect access to screening, diagnostic and therapeutic interventions for various types of cancer. The results have been inconsistent.

With respect to breast cancer screening, earlier surveys showed racial disparities, but the gap appears to be narrowing,^{54, 55} at least for women under age 65.⁵⁶ National survey results

from 1992 indicate that white and African American women had similar rates of mammography and clinical breast exams,⁵⁶⁻⁵⁸ but also that Hispanic women were screened far less frequently for breast and other cancers.⁵⁹⁻⁶¹ Also, it appeared that elderly African American women had lower mammography use rates than their white counterparts, despite the initiation of Medicare reimbursement for screening mammograms in 1991.^{62, 63} As for follow-up of women after screening, one study found significant variation by race and ethnicity; however, further analysis revealed that all of the variation was explained by differences in age distributions among the various racial and ethnic groups, with age being inversely related to the rate of follow-up visits.⁶⁴

Similarly, African American women were not disadvantaged in screening for cervical cancer, with similar rates among whites and African Americans (92%), but a somewhat lower rate among Hispanics (84%).²⁴ Indeed, after controlling for socioeconomic factors including age, income, education, marital status, urbanicity, and source of care, African American women were 2.7 times more likely than white women to have had a Pap test, and Hispanic women were equally as likely as white women to have had a Pap test. The higher rate of Pap testing among African Americans was previously documented.⁶⁵

In contrast, many studies, though not all, have documented racial and ethnic differences in the stage of cancer at diagnosis, with African Americans and Hispanics more likely to be diagnosed at advanced stages.⁶⁶⁻⁷⁶ For example, with respect to breast cancer in women under 40 years of age, a study of over 17,000 women from the Metropolitan Detroit Cancer Surveillance System over a nine year period found that African Americans were more likely to be diagnosed with remote disease than whites (5.7% vs. 4.5%, respectively);⁶⁶ the difference was even greater for women over age 80 (21% vs. 13%, respectively). In addition, African American women were at increased risk for being diagnosed with the most advanced form of breast cancer. On the other hand, a study of patients with cervical cancer found that racial differences in disease stage at diagnosis decreased significantly after controlling for socioeconomic and demographic variables.⁷² Significantly, a study of prostate cancer within the DoD health system, which ensures universal access for all beneficiaries, found no racial differences in stage at diagnosis.⁷⁵ Similarly, several studies have documented a higher risk of advanced prostate cancer at diagnosis for African American and Hispanic males,^{68, 70} but other studies,⁷⁴ including a study of the DoD tumor registry, found no racial or ethnic disparities.⁷⁵

Studies of racial and ethnic disparities in the use of various therapeutic interventions in cancer treatment have been similarly inconsistent. Early studies of breast cancer patients from the mid-1980s using data from the Surveillance, Epidemiology, and End Results (SEER)

Program of the National Cancer Institute reported crude, or unadjusted racial differences in surgical treatment of breast cancer.^{77, 78} Later SEER studies, however, revealed that African American, Hispanic and white breast cancer patients received various treatments at similar rates.^{79,80}

On the other hand, a study of women with ovarian cancer revealed that white women were more likely to receive a combination of chemotherapy and surgical intervention, while African Americans were more often treated with chemotherapy alone.⁸¹ Moreover, African American women were twice as likely as whites to receive inappropriate treatment and had poorer survival rates, even after controlling for age, residential area, income, and cancer care facility.

Numerous investigations of racial differences in the treatment of prostate cancer, bladder cancer, colorectal cancer, and leukemia have also repeatedly documented significant disparities, with African Americans less likely to receive major surgical treatments, and in some cases, any treatment at all.^{68, 70, 74, 82-87} In a study of Arizona and New Mexico residents, non-Hispanic whites were more like to receive appropriate treatment for prostate cancer than Hispanic and Native Americans.⁸⁸ Some of these studies controlled for one or more confounding variables, including insurance status, age, comorbidities, and stage of disease. These studies relied on SEER data sets, as well as Medicare data, and hospital registries.

Perhaps one of the most disturbing study results of cancer patients found significant racial differences in the adequacy of pain management.⁸⁹ Specifically, in a study of over 4,000 elderly nursing home residents with cancer with daily pain, African Americans were 63 percent more likely than whites to receive no pain medication.

In contrast, once again, studies of patients with prostate cancer in the universally accessible DoD health care system revealed no racial disparities in waiting time for treatment, treatment methods, or survival rates.⁷⁵ In addition, racial disparities in access to treatment for colorectal cancer were not observed among veterans treated nationwide at VA medical centers.^{90, 91}

In sum, the results of the literature on access to cancer services are inconsistent and inconclusive. While African American women appear to have achieved equivalent, or even superior access to certain screening services, Hispanic women continue to lag behind. On the other hand, whites appear to receive better cancer care compared to minorities when looking at

access to diagnostic and therapeutic interventions, but these results are not consistent.

Many of the cancer studies must be viewed with caution due to significant data limitations. The details of these limitations are explained further in the Discussion section below. In short, cancer studies to date have relied on crude and incomplete measures of the types of treatment provided, and do not take into account comorbidities and other factors that influence treatment decisions. In addition, several of the data sets used in the cancer (and other) studies often lack important information, potentially biasing results. At best, the current research provides a general indication that African Americans may have lower access to diagnostic tests and may be less likely to receive major therapeutic interventions on a timely basis. Significantly, as noted above, this general pattern of racial disparity has not been observed in universally accessible health care systems (e.g., DoD).

Moreover, the reasons ethnic minorities may be diagnosed with cancer at more advanced stages are poorly understood and seldom explored in the current literature. Researchers beginning to investigate this issue have found that patient delay in seeking treatment as well as certain cultural beliefs that discourage women from seeking care may play an important role in the stage at which breast cancer is diagnosed.^{23, 92} Whatever the bases for the disparity, however, stage of cancer at diagnosis is the primary explanatory factor for racial differences in cancer survival rates.^{69, 71} Consequently, further investigations aimed at understanding racial and ethnic disparities in timeliness of diagnosis hold great potential for improving cancer survival rates for minorities.

Current research is attempting to expand our understanding of the impact of race and ethnicity on access to cancer services. Several projects are studying barriers to breast and cervical cancer screening by Hispanic women as well as for colorectal and prostate cancer screening by various racial and ethnic groups.

Diabetes

Racial and ethnic differences in medical care for diabetes have not been consistently documented since the release of the *Task Force Report*. In one study of an HMO population in 1996, no racial disparities were found in patient and physician adherence to accepted diabetes management guidelines.⁹³ Another HMO study from 1997 found no racial differences in laboratory test frequency or results, but after adjusting for insulin use and socioeconomic

variables, African Americans were found to have poorer glycemic control than whites.²⁸

A study from the National Health Interview Survey found no racial or ethnic variation in numerous aspects of diabetes care, but did reveal differences in methods of diabetes control and patient education.⁹⁴ Specifically, African Americans were more likely to be treated with insulin but less likely to receive daily injections or to self-monitor their blood glucose levels. Also, while African Americans were more likely than other groups to receive patient education, the median number of hours of instruction was lower. The implications of the racial and ethnic differences revealed by this study are unclear. In studies looking at complications from diabetes, analyses of Medicare data revealed that African American diabetics were 30 percent less likely than their white counterparts to have an eye care visit,⁹⁵ a disparity potentially related to quality of care. On other hand, African American diabetics were more likely to be treated for end stage renal disease than whites,⁹⁶ perhaps due to the greater disease burden and its consequences.

HIV/AIDS

Our review of the HIV/AIDS literature of the past 14 years reveals the existence of significant racial and ethnic disparities in access to HIV/AIDS treatment, although these disparities are not consistently found. For example, Moore et al. found that race was the strongest predictor of the receipt of drug therapy, with African Americans 41 to 73 percent less likely than whites to receive particular drug agents.⁹⁷ Racial differences remained even after controlling for age, sex, mode of HIV transmission, insurance, residence, income, and education. Another study demonstrated that receipt of drug therapy was positively related to being white, having insurance, and a college education.⁹⁸

Bennet et al. studied in-hospital AIDS mortality and treatment among African and Hispanic American and white veterans and nonveterans in five major cities. In contrast to the studies referenced above, Bennet found no racial or ethnic differences among VA patients in-hospital mortality rates, use and timing of bronchoscopy, or receipt of timely drug therapy.⁹⁹ Among non-VA patients, racial differences appeared, with African Americans and Hispanics more likely than whites to die in the hospital and less likely to receive a timely diagnostic bronchoscopy. However, after controlling for insurance and admitting hospital characteristics, these racial differences lacked statistical significance for African Americans, and were smaller for Hispanics. Nonetheless, a recent national survey of adults infected with HIV indicated that

African Americans and Latinos (Hispanics) were less likely to receive adequate care for their disease relative to whites based on several measures including antiviral therapy, after adjusting for potential multiple confounding variables including age, gender, education and insurance coverage.¹⁰⁰

Diaz et al., among others, documented the under-representation of minorities in clinical trials for experimental AIDS drugs.^{101,102} Previously, ethnic minority populations were either under-represented, or not represented at all in most large multi-center drug trials,¹⁰³ limiting application of trial results beyond well-educated, middle-class white males. Accordingly, the National Institutes of Health Revitalization Act of 1993 mandated inclusion of ethnic minorities and women in federally funded trials.¹⁰³ Despite this government intervention, however, barriers to recruitment and participation of racial and ethnic minorities in clinical trials persist for several reasons including fear, mistrust, and lack of awareness.¹⁰⁴⁻¹⁰⁹

Maternal and Child Health Services

Prenatal Care

The Task Force noted racial differences in rates of infant mortality and low birth weight and highlighted the importance of assuring early and continuous prenatal care for ethnic Americans.⁶ Since the release of the *Task Force Report*, these disparities in health outcomes persist, and racial and ethnic gaps in prenatal care continue. Numerous researchers have documented racial and ethnic disparities in the receipt and sufficiency of prenatal care, even after controlling for socio-demographic variables and pregnancy characteristics. For example, studies of national data sets indicate that white women enter prenatal care earlier than Hispanic and African American women, and are more likely to receive health behavior advice regarding their pregnancies.^{110, 111} Further analyses have shown differences within the Hispanic population, with Cuban American women more likely to obtain adequate prenatal care than Puerto Ricans and Hispanic women of Mexican and Central/South American origin.¹¹²

Studies have been inconsistent with respect to receipt of ultrasound and amniocentesis among racial and ethnic groups. One study indicated that African American women were less likely to receive these services,¹¹⁰ but another investigator found that whites treated at a major teaching hospital were less likely to receive a prenatal ultrasound than their African American counterparts.¹¹³ The results of a study of practice variation in high risk pregnancies showed no racial differences in receipt of tocolysis, a widely accepted treatment for premature labor, but

also found that African American and Latino women were significantly less likely than white women to receive corticosteroid therapy, a less accepted treatment for this condition.¹¹⁴

Research projects on maternal and child health currently underway or which recently ended are focusing on barriers to prenatal care for low and moderate income minority women and rural women on Medicaid. One of these projects attempted to identify how personal, systemic, and financial barriers act individually or in combination to prevent low-income women in different insurance and ethnic groups from obtaining adequate prenatal care. Another ongoing project is investigating the problems of access and lack of community infrastructure to support services for a population of predominately Hispanic-American children.

Infant and Child Care

Studies indicate that African American infants were admitted to neonatal intensive care units (NICU) more than two and a half times as frequently as white infants,¹¹⁵ and that this disparity was not driven by the greater frequency of low birth weight among African American infants. Hence, higher infant mortality rates among African Americans do not appear linked to limited access to NICU services.

Immunization rates among racial and ethnic groups have improved in recent years and the gap between ethnic minority and white children has narrowed. Several studies from the early and mid-1990s documented low immunization rates among minority children. For example, one study of low-income children in Los Angeles found that only 70 percent of Latino children and 53 percent of African American children were up-to-date for vaccinations at three months, and even fewer, only 43 percent of Latino and 26 percent of African American children, were up-to-date at two years.¹¹⁶ In 1994-95, the National Immunization Survey found similar disparities in racial and ethnic immunization rates in 28 urban centers.¹¹⁷ However, by 1996, another study showed that immunization rates for minority children age 19-35 months approached or exceeded the 90 percent national objective for coverage, and the gap between white children and African American and Hispanic children had narrowed.¹¹⁸ Moreover, researchers have found that disparities in vaccination rates are linked to socioeconomic variables such as insurance status and family characteristics rather than to race or ethnicity per se, with urban areas less well vaccinated.^{119,120}

In general, minority children appear to have poorer access to health care services than white children -- but this pattern is also highly linked to economic status. For example, poor

non-white children had longer waiting times, fewer visits, and were more likely to use the emergency room for primary care.^{121,122} However, another study found that African American and Hispanic children were less likely to receive prescription medications and had fewer medications in general than white children, even after adjusting for socioeconomic factors, including mother's education, insurance coverage, usual source of medical care, health conditions, and number of physician visits.¹²³

Racial differences in patterns of care for children with asthma have also been observed. Among Medicaid beneficiaries, African American children with asthma were more likely to make emergency room visits for care and less likely to make primary care office visits relative to white children.¹²⁴ Another study of Medicaid enrollees found that African American children who had been hospitalized for asthma had significantly fewer primary care visits following the hospitalization than their white counterparts, even after adjusting for urban residence, family income, and Medicaid eligibility for more than 10 months.¹²⁵ Incidentally, similar patterns of care have also been observed for African Americans and white adults with asthma.^{126,127}

We did not find any ongoing research in our search of on-line databases which addressed the issues of racial differences in access to maternal and child health care. An interesting project which was recently completed, assessed the communication between providers and Latinos seeking pediatric care. The project specifically addresses the important issue of "cultural discordance" between urban Latinos and non-Latino providers.

Mental Health

As with some other disease categories, studies of the use of mental health services by racial and ethnic minorities have yielded mixed results. Racial and ethnic disparities have been noted in outpatient services, inpatient admissions, and drug therapy, although the findings have not been consistent and their implications are not understood. For example, one study of outpatient mental health services found that African Americans have lower utilization rates than whites,¹²⁸ while others have determined that African Americans may over-utilize outpatient services,^{129, 130} and finally another study found equal utilization.¹³¹ Other investigators found a higher use of emergency and crisis mental health services among African Americans than among whites, Asians, Hispanics, and Native Americans.^{132, 133} Study results have been similarly inconsistent for outpatient mental health visits by Hispanics.^{129, 131, 134, 135}

With respect to inpatient mental health services, studies have shown the highest rates of hospitalization among Native Americans and Alaska Natives.¹³⁶ Other studies have found an over-representation of African Americans and an under-representation of Hispanics compared to whites for inpatient mental health services.^{136, 137} Non-psychotic African Americans were discharged much earlier than similar whites.¹³⁷ Such early discharge may have resulted from more rapid improvement among patients with psychoactive substance-induced mental disorders. In addition, there is evidence that African Americans were more likely to receive higher doses of antipsychotic medication than whites,¹³⁸ and that whites were more likely to use antidepressant medication, even after controlling for confounders.¹³⁹

Finally, numerous studies have documented racial and ethnic differences in the types of diagnoses received and the likelihood of testing for substance and alcohol abuse.^{137,138} For example, various researchers have shown that African Americans and Asians were more likely than whites to be diagnosed with an organic or psychotic disorder such as schizophrenia, while Hispanics were less likely to be so diagnosed.^{139, 140} In addition, the prevalence of inpatient diagnoses also varied; African Americans were more than six times as likely as whites to receive a diagnosis of alcohol or substance abuse, whereas whites were nearly four times as likely to receive a diagnosis of a personality disorder.¹³⁹ Interestingly noted in this same study, African Americans with high socioeconomic status were more than three times as likely as their white counterparts to be tested for alcohol or substance abuse, perhaps due to perceived higher rate of abuse, even though actual abuse rates were similar.

Current research on mental health services is attempting to understand how ethnicity and cultural experiences may influence patients' health seeking behavior, diagnosis, and treatment decisions, as well as mental health needs by ethnicity.

Review By Health Service

In addition to reviewing the literature on access to medical services by health condition, we also reviewed studies that looked at access to particular types of services, specifically, primary, rehabilitative, and long-term services. There is obviously a good deal of overlap in the two bodies of literature, and herein we discuss only those significant works that did not fit within our "health condition" structure above.

In general, studies of access to health services find health insurance and poverty status to be the strongest determinants,¹⁴¹⁻¹⁴³ but often, race and ethnicity were found to have an independent effect as well. For example, numerous studies have found that adolescent and adult African Americans and Hispanics were less likely to have any physician contact than whites, even after adjusting for income and health status.^{144,153} African Americans who did have physician contact reported fewer visits than whites and less satisfaction with the physicians' treatment.¹⁴⁴ Moreover, in one study limited to Medicare beneficiaries, African Americans were found to have lower use of ambulatory and preventive services than whites, even after adjusting for income.¹⁵¹

In looking at hospital services, studies have documented lower access among African Americans and other minorities even after taking into account differences in health status, source of payment, and site of hospitalization.¹⁵²⁻¹⁵⁴ For example, racial and ethnic minorities were less likely than whites to receive a wide range of procedures, including dialysis, arterial catheterization and cardiac bypass, endoscopy, bronchoscopy, Caesarian section and organ transplantation.¹⁵¹⁻¹⁶⁵ Moreover, studies of Medicare beneficiaries found that African Americans had less access to technologically advanced procedures and rehabilitation services than whites,¹⁶⁶⁻¹⁶⁹ these differences persisted even among elders who had dual Medicare and Medicaid coverage and increased among rural elders.¹⁶⁷

Many studies have examined the relationship between race and ethnicity and the routine use of emergency rooms. One study found that African American children used emergency departments as their usual source of care at twice the frequency of white children.¹⁷⁰ Besides ethnicity, significant demographic risk factors for routine use of emergency departments by children included having a single-parent, mother with less than a high school education, poverty, and living in an urban setting. Polynesian children (i.e., Hawaiian, Samoan, and other Pacific Islanders) were more likely to seek emergency care at pediatric emergency departments than whites and African Americans.¹⁷¹ Frequent users of emergency departments did not appear to lack medical care resources as measured by immunization rates, insurance, and a primary care physician, suggesting that sociocultural factors are related to the use of emergency services for routine care.

Disparities in use of the emergency care department among African American, white, and Hispanic ambulatory adult patients have been explained by differences in age, health insurance coverage, regular source of care, and barriers to health care.¹⁷² Although African Americans and whites were observed to use hospital emergency rooms at the same rate,

marital status was a unique determinant of use for African Americans and gender, education, insurance, employment status, and region of residence were unique determinants for whites.¹⁷³

Racial and ethnic disparities have also been documented in the use and types of post-hospital services. For example, discharge planning for African American patients compared to whites was less likely to involve a nursing home placement, and more likely to use formal services in the home, which the authors attributed to differences in cultural preference.¹⁷⁴⁻¹⁷⁸ In addition, for those African Americans who did seek nursing home placement, discharge delays from the hospital were longer than for whites, regardless of clinical and demographic characteristics.¹⁷⁹

One ongoing study of health care utilization is identifying economic, physical, perceptual and cultural barriers to access to care for vulnerable groups, including racial and ethnic minorities. Another project is assessing the continuity of care received by ethnic minority populations. Finally, studies looking at long term care utilization are seeking to understand the reasons for different use rates among various ethnic groups, and to determine how choices are made between informal care, formal community-based services, and nursing home placement by ethnic minority patients. One study which may be particularly important in our understanding of racial differences in access to care is investigating black-white differences in satisfaction with care and how health care options may contribute to differences in satisfaction.

Discussion

General Critique of the Literature

Our review of the literature revealed that racial and ethnic minorities often do not have access to health services at the same rate as whites. The reasons for these disparities are varied, complex, and poorly understood at this point. Indeed, much of the literature must be interpreted with caution due to limitations in the available data, and also because potentially significant confounding variables were often not considered.

Specifically, many of the studies we reviewed relied on hospital databases which frequently contain inaccuracies in coding, omit "race" data in a substantial number of cases, and generally lack information on treatment dose and frequency, follow-up evaluations, and outpatient care. Similarly, studies using chart review to assess physician practices may underestimate interventions that are not systematically recorded in the medical record, such as

prevention advice and health education provided through informal discussions. Further, studies relying on Medicare claims data may underestimate the provision of certain medical services because the data do not include information on services not covered by Medicare. Finally, findings from studies using large population-based data sets in a specific area may not be generalizable to other locales.

In addition, there are specific limitations found in the studies of access to cancer services. For example, cancer treatment data are often measured in crude terms, i.e. “received” vs. “not received” for surgery, radiation, or chemotherapy. The specific procedures or agents are not evaluated, nor is the stage-specific indication for treatment often considered.^{80,82,91} Also, certain treatments such as radiation therapy are provided on an outpatient basis, for which documentation may not be readily available. Moreover, SEER data, the source for numerous cancer studies, do not provide information on co-existing medical conditions that may influence treatment choice options.

In addition to limitations in the data, racial and ethnic variation in access to health services may be affected by numerous other variables that were not consistently considered in the existing literature. Many studies tended to report crude or unadjusted differences by race and ethnicity;⁹⁻¹² studies quantifying the contribution of other explanatory variables are more recent.²⁰⁻²⁴ For example, numerous investigators have found that health insurance and socioeconomic status are the greatest predictors of access to health care, but often, do not fully account for the observed disparities by race and ethnicity. Other important factors include the age of onset and duration of disease,^{14, 45} severity of disease and symptoms,^{16,66, 70, 71, 97, 119,122} coexisting conditions, physical and psychological characteristics, geographic location, family and social supports, and the type of hospital where care is received.^{70,71,119,122} Because studies of racial and ethnic disparities in access to care have not consistently adjusted for these important factors, it is difficult to assess the unique role that race and ethnicity may play in access to medical treatment and other health services.

Conclusions from the Literature

Despite the limitations described above, the literature well documents poorer access to medical care among racial and ethnic minorities for several disease groups and types of health services. Such disparities have been best documented in the areas of heart disease and stroke, with researchers repeatedly documenting less access to diagnostic and surgical interventions by racial and ethnic minorities, often after controlling for significant confounding variables.^{20-24,32-35,38-40,45,46,48,49} Also, with respect to treatment for HIV/AIDS, African Americans

have been shown to be significantly less likely to receive particular drug agents, even after controlling for various socioeconomic factors.^{98,99,102} Indeed, the literature has generally documented racial differences in access to primary care services,¹⁴⁰⁻¹⁵⁴ prenatal care,¹²³⁻¹²⁶ and various high tech diagnostic and therapeutic procedures.^{149-151,154,166-169} In addition, racial differences in the receipt of mental health services have been repeatedly documented, although the implications of such differences are not understood.

On the other hand, the literature with respect to cancer services is inconclusive. Although there is some evidence that minorities have reduced access to diagnostic and therapeutic interventions,^{67-69, 71, 73, 75, 84-88} results have been inconsistent and must be interpreted with caution due to significant data limitations and crude measures of treatment.

In addition, it is also significant that several studies showed that racial and ethnic differences in access are reduced or absent under equal access systems such as the DoD health care system,^{53, 75} the VA medical system (for some disease conditions) and in certain prepaid HMOs.^{29-30,93} Nonetheless, even under the theoretically universal access system offered by the VA, other studies have shown that racial and ethnic disparities persist.^{15, 50}

Indeed, while socioeconomic and insurance status appear to be the strongest predictors of access to care, race and ethnicity often exhibit a cumulative and independent effect as well. The DoD health system and certain HMOs aside, racial and ethnic disparities were often documented even after controlling for differences in insurance, socioeconomic status, and even health status, among other factors. The reasons for these disparities are largely unknown at this point, and surely vary by the type of service and health condition in question. For example, provider bias may impact the lower quality prenatal care rendered to minority women,^{123,124} but cultural preferences and beliefs may account for lower surgical rates in minority stroke and cardiac patients.⁵⁰⁻⁵²

Many of the studies currently in progress seek to determine to what extent racial and ethnic disparities in access are linked to systemic and financial barriers as opposed to cultural preferences and attitudes. Findings from these studies will help us to understand why racial and ethnic disparities exist, and may assist policy makers in devising strategies to improve access for vulnerable populations.*

* A full list of research projects in progress related to racial and ethnic disparities in medical care is available from the authors.

In sum, the literature shows that racial and ethnic minorities frequently do not have the same access to health care services as the majority white population. These disparities are caused by differences in socioeconomic and insurance status, but also by other factors that are ill-defined and difficult to quantify. Nonetheless, in a nation that prides itself on having the best health care system in the world, racial and ethnic disparities in access to medical care require greater public attention and further scrutiny to correct the critical injustice they create.

Recommendations for Future Research

Additional research is needed to further document and explore the reasons for racial and ethnic disparities in access to health services. In addition, much of the current literature has focused on African American vs. white comparisons, and to a much lesser degree on Hispanics and other minority groups. Future work should attempt to discern the particular factors important to improving access for these groups as well.

Future research should include in-depth analyses of the impact of financial barriers, organizational barriers, and physician and patient decision-making on racial and ethnic differences in access to specific health services. Intra-group versus inter-group comparisons may be a productive approach to discern why, for instance, some African Americans achieve access similar to whites, while others do not. The intra-group comparison study approach is particularly important because it seems apparent that some, if not most, persons within an ethnic group have access to quality care. The effort to distinguish why some members of a particular ethnic group have access to services while others do not may reveal some of the sociocultural factors that distinguish the ethnic minority group from the white majority population, and may provide the opportunity to identify unique within-group factors that could lead to improved access for these populations.

Specific recommendations by disease category and service type follow:

Heart Disease and Stroke

One study which found greater racial/ethnic disparities among the uninsured and Medicaid populations compared to privately insured groups indicated that financial factors modify the effect of race/ethnicity on medical care access and suggest areas of research which may be very productive. Investigations which distinguish the features of health care systems that diminish or eliminate racial and ethnic differences in access to care (DoD, HMOs) relative

to others (e.g. VA) would significantly advance our understanding of these disparities in regard to organizational and financial structures, since these systems also differ in accessibility (e.g. universal or equal), care management, and, perhaps, quality. Studies focusing on decision-making by patients and physicians regarding cardiac diagnostic and therapeutic procedures would also be helpful. Such studies may reveal racial and ethnic differences in patients' and physicians' preferences for various cardiac procedures as well as the impact of physician-patient interactions on patients' decisions whether to receive such interventions.

Further research on stroke should evaluate racial disparities in the use of surgical intervention, i.e., carotid endarterectomy. Further work is needed to determine whether lower use of this intervention among African Americans is associated with a lower or equivalent prevalence of severe carotid lesions. Additional studies should attempt to understand the psychosocial basis for higher aversion rates to carotid endarterectomy in African Americans, even if patients risk death, and focus on why some African Americans decide to undergo the procedure. Future studies should also evaluate racial disparities in the use of noninvasive and invasive procedures for stroke among non-African American minority patients.

Cancer

Observations of racial differences in access to cancer treatment in previous studies may be explained by specific indications for cancer treatment (such as stage at cancer diagnosis, tumor histology, co-existing medical conditions, hospital characteristics), information that was not available to those researchers. Future studies should focus on the quality and appropriateness of cancer treatments to further explore possible disparities in cancer treatment. Racial differences in stage at diagnosis is another unexplored area which may be partially explained by access to advanced cancer diagnostic services. Cultural factors which may delay diagnosis and treatment for some ethnic groups should also be explored.

Diabetes Mellitus

Future research should attempt to improve diabetes control by targeting ethnic minority groups as well as their health care providers. Emphasis should be given to identifying factors among ethnic groups which may improve the effectiveness of glycemic control efforts.

HIV/AIDS

Further studies are needed to identify barriers to HIV/AIDS therapy. Specifically, studies

should attempt to understand the relationship between lower access to drug therapy by minorities, and physician decisions, patient preferences, insurance status, and other sociodemographic factors. Studies should attempt to discern the contribution of patient reluctance and organizational barriers to the low minority representation in drug trials.

Mental Health

Future research should focus on the higher frequency of psychotic (especially schizophrenic) diagnoses among African Americans to determine if misdiagnoses are occurring. Studies also need to understand the differential treatment of whites and African Americans, and to develop culturally specific interventions. Future studies should determine whether variation in in-patient and outpatient services exists and for what reasons, as well as the appropriateness of service utilization.

Maternal and Child Health

Studies should focus on causes of adverse pregnancy outcomes and evaluate prenatal care quality and content of services, as well as attempt to explain the reasons for lower quality prenatal care rendered to minority women. Identifying social and cultural determinants of early initiation of prenatal care, especially among low-income women, would improve the effectiveness of intervention programs. Evaluation of previous and ongoing programs to improve immunization coverage for inner-city communities would enhance future interventions.

Health Care Services

Studies are needed to understand the racial and ethnic disparities in access to various health care services. Studies should assess ethnic differences in patient preferences, medical level, health beliefs and perceptions of illness, satisfaction with health care, compliance with prescribed medication, and availability of social, economic, and caregiving support. Studies should also examine whether patients are provided with appropriate care according to presenting signs and symptoms, and whether barriers exist such as physician shortages, lack of financial resources and/or insurance, language, discrimination, and cultural attitudes and expectations of medical care. Also, future studies should attempt to understand the bases for racial differences in patients' use of specialty care providers and utilization of specialized procedures. Finally, future research should also focus on the level of cultural competency of providers, physicians' attitudes toward minority patients, effect of race on physicians' treatment decisions, racial/ethnic concordance or discordance in clinical decisions, and institutional decision-making policies.

Literature Cited

1. U.S. Department of Health and Human Services. Report of the Secretary's Task Force on Black & Minority Health. Volume I: Executive Summary. Washington, DC. 1986.
2. U.S. Department of Health and Human Services. Report of the Secretary's Task Force on Black & Minority Health. Volume II: Crosscutting Issues in Minority Health: Perspectives on National Health Data for Minorities, Minority Access to Health Care, Health Education and Information, Minority and other Health Professionals Serving Minority Communities. Washington, DC. 1986.
3. U.S. Department of Health and Human Services. Report of the Secretary's Task Force on Black & Minority Health. Volume III: Cancer. Washington, DC. 1986
4. U.S. Department of Health and Human Services. Report of the Secretary's Task Force on Black & Minority Health. Volume IV: Cardiovascular and Cerebrovascular Diseases. Washington, DC. 1986.
5. U.S. Department of Health and Human Services. Report of the Secretary's Task Force on Black & Minority Health. Volume V: Homicide, Suicide, and Unintentional Injuries. Washington, DC. 1986.
6. U.S. Department of Health and Human Services. Report of the Secretary's Task Force on Black & Minority Health. Volume VI: Infant Mortality and Low Birthweight. Washington, DC. 1986.
7. U.S. Department of Health and Human Services. Report of the Secretary's Task Force on Black & Minority Health. Volume VII: Chemical Dependency, Diabetes. Washington, DC. 1986.
8. U.S. Department of Health and Human Services. Report of the Secretary's Task Force on Black & Minority Health. Volume VIII: Hispanic Health Issues, Survey of the Non-Federal Community, Inventory of DHHS Program Efforts in Minority Health. Washington, DC. 1986.
9. Centers for Disease Control. Report of the Secretary's Task Force on Black and Minority

Health. MMWR. 1986;35:109-112.

10. Maynard C, Fisher LD, Passamani ER, Pullum T. Blacks in the coronary artery study (CASS): race and clinical decision making. Am J Public Health. 1986;76:1446-1448.

11. Maynard C, Fisher LD, Passamani ER. Survival of black persons compared with white persons in the Coronary Artery Surgery Study (CASS). Am J Cardiol. 1987;60:513-518.

12. Maynard C, Litwin PE, Martin JS, et al. Characteristics of black patients admitted to coronary care units in metropolitan Seattle: results from the Myocardial Infarction Triage and Intervention Registry (MITI). Am J Cardiol. 1991;67:18-23.

13. Johnson PA, Lee TH, Cook EF, Rouan GW, Goldman L. Effect of race on the presentation and management of patients with acute chest pain. Ann Intern Med. 1993;118:593-601.

14. Mirvis DM, Burns R, Gaschen L, Cloar FT, Graney M. Variation in utilization of cardiac procedures in the Department of Veterans Affairs health care system: effect of race. J Am Col Cardiol. 1994;24:1297-1304.

15. Peterson ED, Wright SM, Daley J, Thibault GE. Racial variation in cardiac procedure use and survival following acute myocardial infarction in the Department of Veterans Affairs. JAMA. 1994;271:1175-1180.

16. Allison JJ, Kiefe CI, Centor RM, Box JB, Farmer RM. Racial differences in the medical treatment of elderly Medicare patients with acute myocardial infarction. J Gen Intern Med. 1996;11:736-743.

17. Stone PH, Thompson B, Anderson HV, et al. Influence of race, sex, and age on management of unstable angina and non-Q-wave myocardial infarction: The TIMI III registry. JAMA. 1996;275:1104-1112.

18. Carlisle DM, Leake BD, Shapiro MF. Racial and ethnic disparities in the use of cardiovascular procedures: associations with type of health insurance. Am J Public Health. 1997;87:263-267.

19. Philbin EF, DiSalvo TG. Influence of race and gender on care process, resource use, and

hospital-based outcomes in congestive heart failure. Am J Cardiol. 1998;82:76-81.

20. Blustein J, Weitzman BC. Access to hospitals with high-technology cardiac services: how is race important? Am J Public Health. 1995;85:345-351.

21. Carlisle DM, Leake BD, Shapiro MF. Racial and ethnic differences in the use of invasive cardiac procedures among cardiac patients in Los Angeles County, 1986 through 1988. Am J Public Health. 1995;85:352-356.

22. Giles WH, Anda RF, Casper ML, Escobedo LG, Taylor HA. Race and sex differences in rates of invasive cardiac procedures in US hospitals. Data from the National Hospital Discharge Survey. Arch Intern Med. 1995;155:318-324.

23. Hunter CP, Redmond CK, Chen VW, et al. Breast cancer: factors associated with stage at diagnosis in black and white women. Black/White Cancer Survival Study Group. J Natl Cancer Inst. 1993;85:1129-1137.

24. Martin LM, Calle EE, Wingo PA, Heath CWJ. Comparison of mammography and Pap test use from the 1987 and 1992 National Health Interview Surveys: are we closing the gaps? Am J Prev Med. 1996;12:82-90.

25. Raczynski JM, Taylor H, Cutter G, Hardin M, Rappaport N, Oberman A. Diagnoses, symptoms, and attribution of symptoms among black and white inpatients admitted for coronary heart disease. Am J Public Health. 1994;84:951-956.

26. Mort EA, Weissman JS, Epstein AM. Physician discretion and racial variation in the use of surgical procedures. Arch Intern Med. 1994;154:761-767.

27. Blustein J, Arons RR, Shea S. Sequential events contributing to variations in cardiac revascularization rates. Med Care. 1995;33:864-880.

28. Wisdom K, Fryzek JP, Havstad SL, Anderson RM, Dreiling MC, Tilley BC. Comparison of laboratory test frequency and test results between African-Americans and Caucasians with diabetes: opportunity for improvement. Diabetes Care. 1997;20:971-977.

29. Tambor ES, Bernhardt BA, Chase GA, et al. Offering cystic fibrosis carrier screening to an

HMO population: factors associated with utilization. Am J Human Genet. 1994;55:626-637.

30. Clancy CM, Franks P. Utilization of specialty and primary care: The impact of HMO insurance and patient-related factors. J Fam Pract. 1997;45:500-508.

31. Naumburg EH, Franks P, Bell B, Gold M, Engerman J. Racial differentials in the identification of hypercholesterolemia. J Fam Pract. 1993;36:425-430.

32. Ford E, Cooper R, Castaner A, Simmons B, Mar M. Coronary arteriography and coronary bypass survey among whites and other racial groups relative to hospital-based incidence rates for coronary artery disease: findings from NHDS. Am J Public Health. 1989;79:437-440.

33. Wenneker MB, Epstein AM. Racial inequalities in the use of procedures for patients with ischemic heart disease in Massachusetts. JAMA. 1989;261:253-257.

34. Hannan EL, Kilburn HJ, O'Donnell JF, Lukacik G, Shields EP. Interracial access to selected cardiac procedures for patients hospitalized with coronary artery disease in New York State. Med Care. 1991;29:430-441.

35. Whittle J, Conigliaro J, Good CB, Lofgren RP. Racial differences in the use of invasive cardiovascular procedures in the Department of Veterans Affairs medical system. N Engl J Med. 1993;329:656-658.

36. Gillum RF, Gillum BS, Francis CK. Coronary revascularization and cardiac catheterization in the United States: trends in racial differences. J Am Coll Cardiol. 1997;29:1557-1562.

37. Ramsey DJ, Goff DC, Wear ML, Labarthe DR, Nichaman MZ. Sex and ethnic differences in use of myocardial revascularization procedures in Mexican Americans and non-Hispanic whites: the Corpus Christi Heart Project. J Clin Epidemiol. 1997;50:603-609.

38. Maxwell JG, Rutherford EJ, Covington D, et al. Infrequency of blacks among patients having carotid endarterectomy. Stroke. 1989;20:22-26.

39. Oddone EZ, Horner RD, Monger ME, Matchar DB. Racial variations in the rates of carotid angiography and endarterectomy in patients with stroke and transient ischemic attack. Arch Intern Med. 1993;153:2781-2786.

40. Gillum RF. Epidemiology of carotid endarterectomy and cerebral arteriography in the United States. Stroke. 1995;26:1724-1728.
41. Hsia DC, Moscoe LM, Krushat WM. Epidemiology of carotid endarterectomy among Medicare beneficiaries. 1985-1996 update. Stroke. 1998;29:346-350.
42. Peterson ED, Shaw LK, DeLong ER, Pryor DB, Califf RM, Mark DB. Racial variation in the use of coronary-revascularization procedures. Are the differences real? Do they matter? N Engl J Med (Ref 47). 1997;336:480-486.
43. Weitzman S, Cooper L, Chambless L, et al. Gender, racial, and geographic differences in the performance of cardiac diagnostic and therapeutic procedures for hospitalized acute myocardial infarction in four states. Am J Cardiol. 1997;79:722-726.
44. Canto JG, Taylor HA, Rogers WJ, Sanderson B, Hilbe J, Barron HV. Presenting characteristics, treatment patterns, and clinical outcomes of non-black minorities in the National Registry of Myocardial Infarction 2. Am J Cardiol. 1998;82:1013-1018.
45. Goff DCJ, Nichaman MZ, Ramsey DJ, Meyer PS, Labarthe DR. A population-based assessment of the use and effectiveness of thrombolytic therapy. The Corpus Christi Heart Project. Ann Epidemiol. 1995;5:171-178.
46. Franco LJ, Stern MP, Rosenthal M, Haffner SM, Hazuda HP, Comeaux PJ. Prevalence, detection, and control of hypertension in a biethnic community. The San Antonio Heart Study. Am J Epidemiol. 1985;121:684-696.
47. Espeland MA, Kumanyika S, Kostis JB, et al. Antihypertensive medication use among recruits for the Trial of Nonpharmacologic Interventions in the Elderly (TONE). J Am Geriatr Soc. 1996;44:1183-1189.
48. Gonwa TA, Morris CA, Mai ML, Husberg BS, Goldstein RM, Klintmalm GB. Race and liver transplantation. Arch Surg. 1991;126(9):1141-1143.
49. Ozminkowski RJ, Friedman B, Taylor Z. Access to heart and liver transplantation in the late 1980's. Med Care. 1993;3(11):1027-42.

50. Sedlis SP, Fisher VJ, Tice D, Esposito R, Madmon L, Steinberg EH. Racial differences in performance of invasive cardiac procedures in a Department of Veterans Affairs Medical Center. J Clin Epidemiol. 1997;50:899-901.
51. Oddone EZ, Horner RD, Diers T, et al. Understanding racial variation in the use of carotid endarterectomy: the role of aversion to surgery. J Natl Med Assoc. 1998;90:25-33.
52. Mirvis DM, Graney MJ. Impact of race and age on the effects of regionalization of cardiac procedures in the Department of Veterans Affairs Health Care System. Am J Cardiol. 1998;81:982-987.
53. Taylor AJ, Meyer GS, Morse RW, Pearson CE. Can characteristics of a health care system mitigate ethnic bias in access to cardiovascular procedures? Experience from the Military Health Services System. J Am Coll Cardiol. 1997;30:901-907.
54. Ackermann SP, Brackbill RM, Bewerse BA, Cheal NE, Sanderson LM. Cancer screening behaviors among U.S. women: breast cancer, 1987-1989, and cervical cancer, 1988-1989. MMWR CDC Surveill Summ. 1992;41:17-25.
55. Breen N, Kessler L. Changes in the use of screening mammography: evidence from the 1987 and 1990 National Health Interview Surveys. Am J Public Health. 1994;84:62-67.
56. Burns RB, McCarthy EP, Freund KM, et al. Black women receive less mammography even with similar use of primary care. Ann Intern Med. 1996;125:173-182.
57. Frazier EL, Jiles RB, Mayberry R. Use of screening mammography and clinical breast examinations among black, Hispanic, and white women. Prev Med. 1996;25:118-125.
58. Martin LM, Calle EE, Wingo PA, Heath CWJ. Comparison of mammography and Pap test use from the 1987 and 1992 National Health Interview Surveys: are we closing the gaps? Am J Prev Med. 1996;12:82-90.
59. Perez-Stable EJ, Sabogal F, Otero-Sabogal R. Use of cancer-screening tests in the San Francisco Bay area: comparison of Latinos and Anglos. J Natl Cancer Inst Monogr. 1995;147-153.

60. Tortolero-Luna G, Globler GA, Villarreal R, Palos G, Linares A. Screening practices and knowledge, attitudes, and beliefs about cancer among Hispanic and non-Hispanic white women 35 years old or older in Nueces County, Texas. J Natl Cancer Inst Monogr. 1995;49-56.
61. Arbes SJ, Slade GD. Racial differences in stage at diagnosis of screenable oral cancers in North Carolina. J Public Health Dent. 1996;56:352-354.
62. Preston JA, Scinto JD, Ni W, et al. Mammography underutilization among older women in Connecticut. J Am Geriatr Soc. 1997;45:1310-1314.
63. Hoffman-Goetz L, Breen NL, Meissner H. The impact of social class on the use of cancer screening within three racial/ethnic groups in the United States. Ethnicity Dis. 1998;8:43-51.
64. Webber PA, Fox P, Zhang X, Pond M. An examination of differential follow-up rates in breast cancer screening. J Community Health. 1996;21:123-132.
65. Harlan LC, Bernstein AB, Kessler LG. Cervical cancer screening: who is not screened and why? Am J Public Health. 1991;81:885-890.
66. Satariano WA, Belle SH, Swanson GM. The severity of breast cancer at diagnosis: a comparison of age and extent of disease in black and white women. Am J Public Health. 1986;76:779-782.
67. Swanson GM, Satariano ER, Satariano WA, Threatt BA. Racial differences in the early detection of breast cancer in metropolitan Detroit, 1978 to 1987. Cancer. 1990;66:1297-1301.
68. Polednak AP, Flannery JT. Black versus white racial differences in clinical stage at diagnosis and treatment of prostatic cancer in Connecticut. Cancer. 1992;70:2152-2158.
69. Eley JW, Hill HA, Chen VW, et al. Racial differences in survival from breast cancer. Results of the National Cancer Institute Black/White Cancer Survival Study. JAMA. 1994;272:947-954.
70. Mettlin CJ, Murphy G. The National Cancer Data Base report on prostate cancer. Cancer. 1994;74:1640-1648.

71. Mayberry RM, Coates RJ, Hill HA, et al. Determinants of black/white differences in colon cancer survival. J Natl Cancer Inst. 1995;87:1686-1693.
72. Mitchell JB, McCormack LA. Time trends in late-stage diagnosis of cervical cancer. Differences by race/ethnicity and income. Med Care. 1997;35:1220-1224.
73. Zaloznik AJ. Breast cancer stage at diagnosis: Caucasians versus Afro-Americans. Breast Cancer Res Treat. 1995;34:195-198.
74. Mettlin CJ, Murphy GP, Cunningham MP, Menck HR. The National Cancer Data Base report on race, age, and region variations in prostate cancer treatment. Cancer. 1997;80:1261-1266.
75. Optenberg SA, Thompson IM, Friedrichs P, Wojcik B, Stein CR, Kramer B. Race, treatment, and long-term survival from prostate cancer in an equal-access medical care delivery system. JAMA. 1995;274:1599-1605.
76. Bentley JR, Delfino RJ, Taylor TH, Stowe S, Anton-Culver H. Differences in breast cancer stage at diagnosis between non-Hispanic white and Hispanic populations. Breast Cancer Research and Treatment. 1998;50:1-9.
77. Bain RP, Greenberg RS, Whitaker JP. Racial differences in survival of women with breast cancer. J Chronic Dis. 1986;39:631-642.
78. Bain RP, Greenberg RS, Chung KC. Racial differences in survival of women with endometrial cancer. Am J Obstet Gynecol. 1987;157:914-923.
79. Farrow DC, Hunt WC, Samet JM. Geographic variation in the treatment of localized breast cancer. N Engl J Med. 1992;326:1097-1101.
80. Satariano ER, Swanson GM, Moll PP. Nonclinical factors associated with surgery received for treatment of early-stage breast cancer. Am J Public Health. 1992;82:195-198.
81. Parham G, Phillips JL, Hicks ML, Andrews N, Jones WB, Shingleton HM, Menck HR. The National Cancer Data Base report on malignant epithelial ovarian carcinoma in African-American women. Cancer. 1997;80:816-826.

82. Harlan L, Brawley O, Pommerenke F, Wali P, Kramer B. Geographic, age, and racial variation in the treatment of local/regional carcinoma of the prostate. J Clin Oncol. 1995;13:93-100.
83. Ball JK, Elixhauser A. Treatment differences between blacks and whites with colorectal cancer. Med Care. 1996;34:970-984.
84. Klabunde CN, Potosky AL, Harlan LC, Kramer BS. Trends and black/white differences in treatment for nonmetastatic prostate cancer. Med Care. 1998;36:1337-1348.
85. Imperato PJ, Nenner RP, Will TO. Radical prostatectomy: lower rates among African-American men. J Natl Med Assoc. 1996;88:589-594.
86. Mitchell JM, Meehan KR, Kong J, Schulman KA. Access to bone marrow transplantation for leukemia and lymphoma: The role of sociodemographic factors. J Clin Oncol. 1997;15:2644-2651.
87. Greenwald HP, Polissar NL, Borgatta EF, McCorkle R, Goodman G. Social factors, treatment, and survival in early-stage non-small cell lung cancer. Am J Public Health. 1998;88:1681-1684.
88. Gilliland, FD, Hunt WC, Key CR. Trends in the survival of American Indian, Hispanic, and non-Hispanic white cancer patients in New Mexico and Arizona, 1969-1994. Cancer. 1998;82:1769-83.
89. Bernabei R, Gambassi G, Lapane K, et al. Management of pain in elderly patients with cancer. JAMA. 1998;279:1877-1882.
90. Dominitz JA, Samsa GP, Landsman P, Provenzale D. Race, treatment, and survival among colorectal carcinoma patients in an equal-access medical system. Cancer. 1998;82:2312-2320.
91. Mayer WJ, McWhorter WP. Black/white differences in non-treatment of bladder cancer patients and implications for survival. Am J Public Health. 1989;79:772-775.

92. Lannin Dr, Mathews HF, Mitchell J, Swanson MS, Swanson FH, Edwards MS. Influence of socioeconomic and cultural factors on racial differences in late-stage presentation of breast cancer. JAMA. 1998;27:1801-1807.
93. Martin TL, Selby JV, Zhang D. Physician and patient prevention practices in NIDDM in a large urban managed-care organization. Diabetes Care. 1995;18:1124-1132.
94. Cowie CC, Harris MI. Ambulatory medical care for non-Hispanic whites, African-Americans, and Mexican-Americans with NIDDM in the U.S. Diabetes Care. 1997;20:142-147.
95. Wang F, Javitt JC. Eye care for elderly Americans with diabetes mellitus. Failure to meet current guidelines. Ophthalmology. 1996;103:1744-1750.
96. Centers for Disease Control. Incidence of treatment for end-stage renal disease attributed to diabetes mellitus--United States, 1980-1989. MMWR. 1992;41:834-837.
97. Moore RD, Stanton D, Gopalan R, Chaisson RE. Racial differences in the use of drug therapy for HIV disease in an urban community. N Engl J Med. 1994;330:763-768.
98. Graham NM, Jacobson LP, Kuo V, Chmiel JS, Morgenstern H, Zucconi SL. Access to therapy in the Multicenter AIDS Cohort Study, 1989-1992. J Clin Epidemiol. 1994;47:1003-1012.
99. Bennett CL, Horner RD, Weinstein RA, et al. Racial differences in care among hospitalized patients with *Pneumocystis carinii* pneumonia in Chicago, New York, Los Angeles, Miami, and Raleigh-Durham. Arch Intern Med. 1995;155:1586-1592.
100. Shapiro Martin F, Morton SC, McCaffrey DF, Senterfitt JW, Fleishman JA, Perlman JF, et al. Variations in the Care of HIV-Infected Adults in the United States: results from the HIV Cost and Services Utilization Study. JAMA. 1999;281:2305-2375.
101. Diaz T, Chu SY, Sorvillo F, et al. Differences in participation in experimental drug trials among persons with AIDS. J Acquir Immune Defic Syndr Hum Retrovirol. 1995;10:562-568.

102. Svensson CK. Representation of American blacks in clinical trials of new drugs. JAMA. 1989;261:263-265.
103. Freedman LS, Simon R, Foulkes MA, Friedman L, Geller NL, Gordon DJ, Mowery R. Inclusion of women and minorities in clinical trials and the NIH Revitalization Act of 1993 -- The perspective of NIH clinical trialists. Controlled Clinical Trials. 1995;16:277-285.
104. Thomas CR, Pinto HA, Roach M, III, Vaughn CB. Participation in clinical trials: is it state-of-the-art treatment for African Americans and other people of color? J Natl Med Assoc. 1994;86:177-182.
105. Gavaghan H. Clinical trials face lack of minority group volunteers. Nature. 1995;373:178.
106. Stoy DB, Curtis RC, Dameworth KS, Dowdy AA, Hegland J, Levin JA, Sousoulas BG. The successful recruitment of elderly black subjects in a clinical trial: the CRISP experience. J Natl Med Assoc. 1995;87:280-287.
107. Swanson GM, Ward AJ. Recruiting minorities into clinical trials: toward a participant-friendly system. J Natl Cancer Inst. 1995;87:1747-1759.
108. Harris Y, Gorelick PB, Samuels P, Bempong I. Why African Americans may not be participating in clinical trials. J Natl Med Assoc. 1996;88:630-634.
109. Paskett ED, Degraffinreid C, Tatum CM, Margitic SE. The recruitment of African-Americans to cancer prevention and control studies. Prev Med. 1996;25:547-553.
110. Brett KM, Schoendorf KC, Kiely JL. Differences between black and white women in the use of prenatal care technologies. Am J Obstet Gynecol. 1994;170:41-46.
111. Clarke LL, Bono CA, Miller MK, Malone SC. Prenatal care use in nonmetropolitan and metropolitan America: racial/ethnic differences. J Health Care Poor Underserved. 1995;6:410-433.
112. Albrecht SL, Miller MK. Hispanic subgroup differences in prenatal care. Soc Biol. 1996;43:38-58.

113. Moore RMJ, Kaczmarek RG, Hamburger S. Prenatal ultrasound: are socially disadvantaged groups afforded equal access? J Health Care Poor Underserved. 1990;1:229-236.
114. Bronstein JM, Cliver SP, Goldenberg RL. Practice variation in the use of interventions in high-risk obstetrics. Health Services Research. 1997;825-839.
115. Langkamp DL, Foye HR, Roghmann KJ. Does limited access to NICU services account for higher neonatal mortality rates among blacks? Am J Perinatol. 1990;7:227-231.
116. Wood D, Donald-Sherbourne C, Halfon N, Tucker MB, Ortiz V, Hamlin JS, Duan N, Mazel RM, Grabowsky M, Brunell P, et al. Factors related to immunization status among inner-city Latino and African American preschoolers. Pediatrics. 1995;96:295-301.
117. Centers for Disease Control and Prevention. National, state, and urban area vaccination coverage levels among children aged 19-35 months – United States July 1994-June 1995. MMWR. 1996;45:608-613.
118. Centers for Disease Control and Prevention. Vaccination coverage by race/ethnicity and poverty level among children aged 19-35 months--United States, 1996. MMWR 1997;46:963-968.
119. Wood D, Donald-Sherbourne C, Halfon N, Tucker MB, Ortiz V, Hamlin JS, Duan Nmazel RM, Grabowsky M, Brunell P, Freeman H. Factors related to immunization status among inner-city Latino and African-American preschoolers. Pediatrics. 1995;96:295-301.
120. Moore P, Hepworth JT, Fenlon N. Indicators of differences in immunization rates of Mexican American and white non-Hispanic infants in a Medicaid managed care system. Public Health Nurs. 1996;13:21-30.
121. Wood DL, Hayward RA, Corey CR, Freeman HE, Shapiro MF. Access to medical care for children and adolescents in the United States. Pediatrics. 1990;86:666-673.
122. Moore P, Hepworth JT. Use of perinatal and infant health services by Mexican-American Medicaid enrollees. JAMA. 1994;272:297-304.

123. Hahn BA. Children's health: racial and ethnic differences in the use of prescription medications. Pediatrics. 1995;95:727-732.
124. Lozano P, Connell FA, Koepsell TD. Use of health services by African-American children with asthma on Medicaid. JAMA. 1995;274:469-473.
125. Ali S, Osberg JS. Differences in follow-up visits between African American and white Medicaid children hospitalized with asthma. J Health Care Poor Underserved. 1997;8:83-98.
126. Blixen CE, Havstad S, Tilley BC, Zoratti E. A comparison of asthma-related healthcare use between African Americans and Caucasians belonging to a health maintenance organization (HMO). Asthma. 1999;36:195-204.
127. Murray MD, Stang P, Tierney WM. Health care use by inner-city patients with asthma. J Clin Epidemiol. 1997;50:167-174.
128. Bui KV, Takeuchi DT. Ethnic minority adolescents and the use of community mental health care services. Am J Community Psychol. 1992;20:403-417.
129. Blank MB, Tetrack FL, Brinkley DF, Smith HO, Doheny V. Racial matching and service utilization among seriously mentally ill consumers in the rural South. Community Ment Health J. 1994;30:271-281.
130. Sue S, Fujino DC, Hu LT, Takeuchi DT, Zane NW. Community mental health services for ethnic minority groups: a test of the cultural responsiveness hypothesis. J Consult Clin Psychol. 1991;59:533-540.
131. Padgett DK, Patrick C, Burns BJ, Schlesinger HJ. Ethnic differences in use of inpatient mental health services by blacks, whites, and Hispanics in a national insured population. Health Serv Res. 1994;29:135-153.
132. Flaskerud JH, Hu LT. Racial/ethnic identity and amount and type of psychiatric treatment. Am J Psychiatry. 1992;149:379-384.
133. Hu TW, Snowden LR, Jerrell JM, Nguyen TD. Ethnic populations in public mental health: services choice and level of use. Am J Public Health. 1991;81:1429-1434.

134. Wells KB, Hough RL, Golding JM, Burnam MA, Karno M. Which Mexican-Americans underutilize health services? Am J Psychiatry. 1987;144:918-922.
135. Norquist G, Wells K. Mental health needs of the uninsured. Arch Gen Psychiatry. 1991;48:475-478.
136. Snowden LR, Cheung FK. Use of inpatient mental health services by members of ethnic minority groups. Am Psychol. 1990;45:347-355.
137. Strakowski SM, Shelton RC, Kolbrener ML. The effects of race and comorbidity on clinical diagnosis in patients with psychosis. J Clin Psychiatry. 1993;54:96-102.
138. Collazo Y, Tam R, Sramek J, Herrera J. Neuroleptic dosing in Hispanic and Asian inpatients with schizophrenia. Mt Sinai J Med. 1996;63:310-313.
139. Chung H, Mahler JC, Kakuma T. Racial differences in treatment of psychiatric inpatients. Psychiatr Serv. 1995;46:586-591.
140. Leo RJ, Narayan DA, Sherry C, Michalek C, Pollock D. Geopsychiatric consultation for African-American and Caucasian patients. Gen Hosp Psychiatry. 1997;19(3):216-222.
141. Trevino FM, Moyer ME, Valdez RB, Stroup-Benham CA. Health insurance coverage and utilization of health services by Mexican Americans, mainland Puerto Ricans, and Cuban Americans. JAMA. 1991;265:233-237.
142. Guendelman S, Schwalbe J. Medical care utilization by Hispanic children. How does it differ from black and white peers? Med Care. 1986;24:925-940.
143. Newacheck PW, Hughes DC, Stoddard JJ. Children's access to primary care: differences by race, income, and insurance status. Pediatrics. 1996;97:26-32.
144. Blendon RJ, Aiken LH, Freeman HE, Corey CR. Access to medical care for black and white Americans. A matter of continuing concern. JAMA. 1989;261:278-281.
145. Hubbell FA, Waitzkin H, Mishra SI, Dombrink J. Evaluating health-care needs of the poor: a community-oriented approach. Am J Med. 1989;87:127-131.

146. Mutchler JE, Burr JA. Racial differences in health and health care service utilization in later life: the effect of socioeconomic status. J Health Soc Behav. 1991;32:342-356.
147. Lieu TA, Newacheck PW, McManus MA. Race, ethnicity, and access to ambulatory care among US adolescents. Am J Public Health. 1993;83:960-965.
148. Cornelius LJ, Altman BM. Have we succeeded in reducing barriers to medical care for African and Hispanic Americans with disabilities? Soc Work Health Care. 1995;22:1.
149. Bartman BA, Moy E, D'Angelo LJ. Access to ambulatory care for adolescents: the role of a usual source of care. J Health Care Poor Underserved. 1997;8:214-226.
150. Osmond DH, Vranizan K, Schillinger D, Stewart AL, Bindman AB. Measuring the need for medical care in an ethnically diverse population. Health Serv Res. 1996;31:551-571.
151. Gornick ME, Eggers PW, Reilly TW, et al. Effects of race and income on mortality and use of services among Medicare beneficiaries. N Engl J Med. 1996;335:791-799.
152. Carlisle DM, Valdez RB, Shapiro MF, Brook RH. Geographic variation in rates of selected surgical procedures within Los Angeles County. Health Serv Res. 1995;30:27-42.
153. Velebil P, Wingo PA, Xia Z, Wilcox LS, Peterson HB. Rate of hospitalization for gynecologic disorders among reproductive-age women in the United States. Obstet Gynecol. 1995;86:764-769.
154. Giacomini MK. Gender and ethnic differences in hospital-based procedure utilization in California. Arch Intern Med. 1996;156:1217-1224.
155. Carlisle DM, Leake BD, Brook RH, Shapiro MF. The effect of race and ethnicity on the use of selected health care procedures: a comparison of south central Los Angeles and the remainder of Los Angeles county. J Health Care Poor Underserved. 1996;7:308-322.
156. Phillips RS, Hamel MB, Teno JM, et al. Race, resource use, and survival in seriously ill hospitalized adults. The SUPPORT Investigators. J Gen Intern Med. 1996;11:387-396.

157. Kallich JD, Wyant T, Krushat M. The effect of DR antigens, race, sex, and peak PRA on estimated median waiting time for a first cadaver kidney transplant. Clin Transpl. 1990;311-318.
158. Zhou YC, Cecka JM, Terasaki PI. Effect of race on kidney transplants. Clin Transpl. 1990;447-459.
159. Kallich JD, Wyant T, Krushat M. The effect of DR antigens, race, sex, and peak PRA on estimated median waiting time for a first cadaver kidney transplant. Clin Transpl. 1990;311-318.
160. Ojo A, Port FK. Influence of race and gender on related donor renal transplantation rates. Am J Kidney Dis. 1993;22:835-841.
161. Zachary AA, Braun WE, Hayes JM, et al. Effect of HLA matching on organ distribution among whites and African-Americans. Transplantation. 1994;57:1115-1119.
162. McClelland J, Steidler K, Cecka JM, et al. Kidney allocation under the UNOS point system: an update. Clin Transpl. 1992;405-411.
163. Goldberg KC, Hartz AJ, Jacobsen SJ, Krakauer H, Rimm AA. Racial and community factors influencing coronary artery by bypass graft surgery rates for all 1986 Medicare patients. JAMA. 1992;267:1473-1477.
164. Alexander GC, Sehgal AR. Barriers to cadaveric renal transplantation among blacks, women, and the poor. JAMA. 1998;280:1148-1152.
165. Rosenberg PS, Gail MH, Schrager LK, et al. National AIDS incidence trends and the extent of zidovudine therapy in selected demographic and transmission groups. J Acquir Immune Defic Syndr. 1991;4:392-401.
166. Mayer-Oakes SA, Hoenig H, Atchison KA, Lubben JE, De JF, Schweitzer SO. Patient-related predictors of rehabilitation use for community-dwelling older Americans. J Am Geriatr Soc. 1992;40:336-342.
167. Escarce JJ, Epstein KR, Colby DC, Schwartz JS. Racial differences in the elderly's use of medical procedures and diagnostic tests. Am J Public Health. 1993;83:948-954.

168. Wilson MG, May DS, Kelly JJ. Racial differences in the use of total knee arthroplasty for osteoarthritis among older Americans. Ethn Dis. 1994;4:57-67.
169. Baron JA, Barrett J, Katz JN, Liang MH. Total hip arthroplasty: use and select complications in the US Medicare population. Am J Public Health. 1996;86:70-72.
170. Halfon N, Newacheck PW, Wood DL, St PRF. Routine emergency department use for sick care by children in the United States. Pediatrics. 1996;98:28-34.
171. Yamamoto LG, Zimmerman KR, Butts RJ, et al. Characteristics of frequent pediatric emergency department users. Pediatr Emerg Care. 1995;11:340-346.
172. Baker DW, Stevens CD, Brook RH. Determinants of emergency department use: are race and ethnicity important? Ann Emerg Med. 1996;28:677-682.
173. White-Means SI, Thornton MC. Nonemergency visits to hospital emergency rooms: a comparison of blacks and whites. Milbank Q. 1989;67:35-57.
174. Morrow-Howell N, Chadiha LA, Proctor EK, Hourd-Bryant M, Dore P. Racial differences in discharge planning. Health Soc Work. 1996;21:131-139.
175. Norgard TM, Rodgers WL. Patterns of in-home care among elderly black and white Americans. J Gerontol. 1997;52B:93-101.
176. Kissinger P, Cohen D, Brandon W, Rice J, Morse A, Clark R. Compliance with public sector HIV medical care. J Natl Med Assoc. 1995;87:19-24.
177. Wallace SP, Levy-Storms L, Kington RS, Andersen RM. The persistence of race and ethnicity in the use of long-term care. J Gerontol. 1998;53:S104-S112.
178. Falcone D, Broyles R. Access to long-term care: race as a barrier. J Health Polit Policy Law. 1994;19:583-595.
179. LaVeist TA, Keith VM, Gutierrez ML. Black/white differences in prenatal care utilization an assessment of predisposing and enabling factors. Health Serv Res. 1995;30:43-58.

180. Schulman, KA, et al. The effect of race and sex on physicians' recommendations for cardiac catheterization. New Engl Journal of Med. 1999; 340(8):618-626.

Appendix

Selected Sentinel Studies

Our search of the literature included published works from 1985 to the present. All the abstracts gathered were reviewed by at least two health outcomes research scientists for relevance to the topic. Articles selected for full review and final inclusion in this review were those which:

- indicated a primary purpose of comparing racial and/or ethnic groups;
- contained original findings;
- presented quantitative and comparative data; and
- met general and acceptable principles of basic scientific research.

Certain articles we considered to be sentinel because they reported original findings of disparities in access to medical care (or a lack thereof) or they provided unique insights that helped to explain previously published findings. These sentinel articles are annotated here and organized alphabetically by type of disease or health service.

Appendix Selected Sentinel Studies

Asthma		
Citation	Study Population	Major Findings
Lozano P, Connell FA, Koepsell TD "Use of Health Services by African American Children with Asthma on Medicaid" <i>JAMA</i> 1995;274:469-473	Medicaid claims data were used to study white (N=1369) and African American (N=576) children, age 3 to 17 years, in Seattle-Tacoma metropolitan area (Washington State) between June 1988 and December 1992.	Although African American children with asthma were less likely than white children to make an office visit, they were more likely to make an emergency department visit. African Americans were also more likely than whites to be hospitalized for asthma. No racial differences were observed in the rate for filling prescriptions or making well-child visits.
Murray MD, Stang P, Tierny WM. "Health Care Use by Inner-City Patients with Asthma" <i>J Clin Epidemiol</i> 1997;50(2):167-174	Retrospective cohort study conducted on patients with asthma (N=1788), age 5 to 34 years, at a large hospital-based-multi-specialty practice in inner-city Indianapolis (1985 to 1992).	African Americans consistently had fewer urgent care visits to emergency departments, primary care visits, as well as fewer prescription refills. Urgent care visits were fewer for African Americans than whites across all age groups and among both genders with the exception of 15-19 year old females.
Ray NF, Thamer M, Fadillioglu B, Gegen PJ. "Race, Income, Urbanicity, and Asthma Hospitalizations in California" <i>Chest</i> 1998;113:1277-84	All asthma hospitalizations in California were identified using the 1993 California Hospital Discharge file.	In 1993, the age-adjusted asthma hospitalization rate in California for non-elderly blacks was 43/10,000 -- approximately four times higher than other populations. Rates for blacks remained fourfold higher after controlling for age, income, and urbanicity.

<i>(Asthma continued)</i>		
Zoratti EM, Havstad S, Rodrigues J, Roben-Paradise Y, Lafata JE, McCarthy B. "Health Service Use by African Americans and Caucasians with Asthma in a Managed Care Setting" <i>Am J Respir Crit Care Med</i> 1998;158:371-77.	The population included 1,609 Caucasians, 464 African-Americans enrolled in a HMO plan for the calendar year of 1993.	Of the 193 patients in the cohort, 65% were African American and 35% were Caucasian. African Americans were younger, had a lower median household income, and made more asthma-related emergency department visits (45% vs. 22%) while Caucasians made more asthma-related primary care (70%) and allergy/pulmonary visits (39%) than African Americans (48% and 27%, respectively). African American Medicaid contract patients had more re-hospitalizations for asthma (32%) than African American regular contract patients (16%).
Cancer		
Citation	Study Population	Major Findings
Bentley JR, Delfino RJ, Taylor TH, Howe S, Anton-Culver H. "Differences in Breast Cancer Stage at Diagnosis Between Non-Hispanic White and Hispanic Populations, San Diego County 1998-1993" <i>Breast Cancer Research and Treatment</i> 1998;50:1-9	Information obtained from the San Diego/Imperial Organization for Cancer Control (SANDIOCC), a population-based, regional registry in the California Cancer Reporting System.	Annual average age-adjusted incidence rates for early and late stage disease were significantly higher for non-Hispanic whites (89/100,000 and 42/100,000, respectively) than Hispanic women (47/100,000 and 27/100,000, respectively). There was also an association between increasing census tract per capita income and higher rates of early stage disease among non-Hispanic whites, but not among Hispanics.
Burns RB, McCarthy EP, Freund, KM, et al. "Black Women Receive Less Mammography Even with Similar Use of Primary Care" <i>Ann Intern Med</i> 1996;125:173-182	Data obtained from 10 states using Health Care Financing Administration billing files on Medicare part B (1990).	Approximately the same percentage of African Americans and whites (67% and 69%, respectively) made at least one visit to a primary care physician. White women had mammography more often than African American women (15% and 9%, respectively), at every visit level (1 visit, 2 visits, 3 or more visits) and even after adjusting for income.

<i>(Cancer continued)</i>		
Cooper GS, Yuan Z, Landefeld CS, et al. "Surgery for Colorectal Cancer: Race-Related Differences in Rates and Survival among Medicare Beneficiaries" <i>Am J Public Health</i> 1996;86:582-586	Colorectal surgery among Medicare beneficiaries (> 65 years of age) who received their initial diagnosis in 1987 (N=81,579).	A higher proportion of white patients (78%) underwent surgical resection than their African American counterparts (68%), even after adjusting for age, comorbidity, location of tumor, and extent of tumor.
Denmark-Wahnefried W, Schildkraut JM, Iselin CE, et al. "Treatment Options, Selection, and Satisfaction among African-American and White Men with Prostate Carcinoma in North Carolina" <i>Cancer</i> 1998;83:320-30	Cases were selected from 16 institutions within a region comprising 63 contiguous counties where the overall population was >20% African American N=231.	All measures related to treatment were consistently associated with stage at diagnosis rather than other variables measured. Most subjects reported that their physicians presented several treatment options (65%), that they were satisfied with the options presented (90%), and that the physician was the most important factor influencing their treatment decision (57%).
Dominitz JA, Samasa GP, Landsman P, Provenzale D. "Race, Treatment, and Survival Among Colorectal Carcinoma Patients in an Equal-Access Medical System" <i>Cancer</i> 1998;88:16966-1699	A retrospective cohort study of 3176 veterans; 569 (18%) were black.	Race was not associated with the use of surgery, chemotherapy, or radiation therapy in the treatment of colorectal carcinoma among veterans seeking health care at Veterans Affairs Medical Centers. Mortality from all causes was higher among black veterans compared with white veterans over the five year study period.
Farrow DC, Hunt WC, Smet JM, et al. "Geographic Variation in the Treatment of Localized Cancer" <i>N Engl J Med</i> 1992;326:1097-1101	National Cancer Institute's epidemiological surveillance data from 1983 to 1986 including women (Non-Hispanic white, Hispanic, African American) in 9 areas of the United States.	African American and Hispanic women with localized breast cancer were treated with breast-conserving surgery (i.e. partial or less-than-total mastectomy) at the same rates as whites. African American women in Atlanta (54%) and Detroit (66%), however, were less likely than white women (70% and 75% in each city, respectively) to receive radiation after breast-conserving surgery.
Frazier EL, Jiles B, Mayberry R. "Use of Screening Mammography and Clinical Breast Examinations among Black, Hispanic, and White Women" <i>Prev Med</i> 1996;25:118-125	Behavioral Risk Factor Surveillance state-based telephone survey (1990) (N=22,657).	African American (68%) and white women had similar rates of recent clinical breast examination. The rate for Hispanic women was lower (59%).

<i>(Cancer continued)</i>		
Gilliand FD, Hunt WC, Key CR. "Trends in the Survival of American Indian, Hispanic, and Non-Hispanic White Cancer Patients in New Mexico and Arizona, 1969-1994" <i>Cancer</i> 1998;82:1769-83	Data was collected by the New Mexico Tumor Registry, a member organization of the Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute (1969-1994).	Although the proportion of early stage cancers did not increase, the proportion of distant cancers decreased from 21% to 18% for Hispanics and from 23% to 22% for American Indians, suggesting a modest trend toward diagnosis at a potentially curable stage.
Harlan LC, Bernstein AB, Kessler LG, et al. "Cervical Cancer Screening: Who is Not Screened and Why?" <i>Am J Public Health</i> 1991;81:885-891	National Health Interview Survey (1987).	Screening rates for cervical cancer were similar among African Americans and whites up to the age of 69 years (in some case African Americans screening rates were slightly higher than whites). Hispanics were the least likely to have received a Pap smear within the last three years.
Harlan L, Brawley O, Pammerenke F. "Geographic, Age, and Racial Variation in the Treatment of Local/Regional Carcinoma of the Prostate" <i>J Clin Oncol</i> 1995;13:93-100	Data from the National Cancer Institute's Surveillance, Epidemiology, and End-Results Program (SEER) from 1984 to 1991.	Although African American men had higher rates of prostate cancer than white men, they were less likely to receive radical prostatectomy or radiation therapy for clinically localized or regional disease. Almost twice as many African Americans (12%) as whites (7%) received no treatment for prostate cancer.
Hicks ML, Phillips JL, Parham G, et al. "The National Cancer Data Base Report on Endometrial Carcinoma in African-American Women" <i>Cancer</i> 1998;83:2629-37	Data was obtained from hospital registry reports collected by the National Cancer Data Base. N = 52,307 Non-Hispanic white and N= 3,226 African American women.	More African American patients were diagnosed with less favorable histologies than white patients, at more advanced stages of disease, and with less tumor differentiation.
Hunter CP, Redmond CK, Chen VW, et al. "Breast Cancer: Factors Associated with Stage at Diagnosis in Black and White Women" <i>J Natl Cancer Inst</i> 1993;85:1129-1137	Cohort study using data from National Cancer Institute's African American/White Cancer Survival study. Sample of patients (N=1222) with breast cancer interviewed (first diagnosed from 1985 to 1986) in metropolitan Atlanta, Ga., New Orleans, La., San Francisco/Oakland, CA.	Results showed racial differences in factors associated with cancer staging. Variables controlled for included socioeconomic status, smoking history, body mass index, parity, history of oral contraception use, history of clinical breast exam, self breast exam and mammography, and type of health insurance.
Imperato PJ, Nenner RP, Will TO, et al. "Radical Prostatectomy: Lower Rates Among African American Men" <i>J Natl Med Assoc</i> 1996;88:589-594	Claims data for Medicare patients in New York City (1991 to 1993).	Despite an overall increase in rates of radical prostatectomy, African Americans continued to have significantly lower annual rates of radical prostatectomy than whites for all age groups over 65 years of age.

(Cancer continued)		
Klabunde CN, Potosky AL, Harlan LC, et al. "Trends and Black/White Differences in Treatment for Nonmetastatic Prostate Cancer" <i>Med Care</i> 1998;36:1337-1348	Data from the linked SEER-Medicare data set from 1986 to 1993 including African American and white men who were in treatment for nonmetastatic prostate cancer (N=52,915).	Whites were less likely to have prostate cancer determined through transurethral resection as compared to African Americans (34% vs. 38%). Whites, however, were more likely to be recipients of aggressive therapy (62% vs. 51%).
Martin LM, Calle EE, Wingo PA, et al. "Comparison of Mammography and Pap Test Use from the 1987 and 1992 National Health Interview Surveys: Are We Closing the Gaps?" <i>Am J Prev Med</i> 1996;12:82-90	Data from National Health Interview Survey (NHIS) Cancer Control Supplements. (1987 to 1992) on Pap smear test screening. Demographic characteristics utilized were for 1992.	Results indicated that 91% of all women have ever had a Pap test, with similar rates among African American and white women (92%) and the lowest rates among Hispanics (84%). After adjusting for socio-economic factors such as age, income, education, marital status, urbanicity, and source of care, African Americans remained more likely to have ever had a Pap test compared to white women. Although African American women were more likely than whites to have had a Pap test in the last year, Hispanic and white women had similar adjusted rates. No racial differences were observed for the under-utilization of mammograms.
Mayberry RM, Coates RJ, Hill HA. "Determinants of Black/White Differences in Colon Cancer Survival" <i>J Natl Cancer Inst</i> 1995;87:1686-1693	Data from National Cancer Institute's African American/White Cancer Survival study. Stratified random sample of patients (N=975) with colon cancer from metropolitan Atlanta, Ga., New Orleans, La., San Francisco/Oakland, Ca.; 1/1/85 to 12/31/86.	African Americans were more likely to experience symptoms of colon cancer at diagnosis. Twenty two percent of African Americans and 15% of whites had metastasis at diagnosis. A larger proportion of African American patients than white patients had unknown extent of invasion and were somewhat more likely to have unknown nodal status. African Americans were less likely than whites to have undergone surgery.
Mayer WJ, McWhorter, WP. "Black/White Differences in Non-treatment of Bladder Cancer Patients and Implications for Survival" <i>Am J Public Health</i> 1989;79:772-774	Data on bladder cancer patients (N=21,564) from nine population-based tumor registries (1978 to 1985).	African Americans with bladder cancer were more likely than similar whites to be left untreated after diagnosis. These results remained true even after adjusting for sex, age, stage-at-diagnosis, and tumor histology. In the multivariate analysis, treatment status was a significant predictor of five-year survival rates.

<i>(Cancer continued)</i>		
McCarthy EP, Burns RB, Coughlin SS, et al. "Mammography Use Helps to Explain Difference in Breast Cancer Stage at Diagnosis between Older Black and White Women" <i>Ann Intern Med.</i> 1998;128:729-736.	A retrospective cohort study using the Linked-Medicare-Tumor Registry Database. Population-based data from three geographic areas of the United States.	Black women were less likely to undergo mammography than white women. When women were stratified by previous mammography use, the black-white difference in cancer stage occurred only among nonusers. Among regular users, cancer was diagnosed in black and white women at similar stages. In logistic modeling, previous mammography alone explained about 30% of the excess late-stage disease in black women.
Mettlin CJ, Murpy G. "The National Cancer Data Base Report on Prostate Cancer" <i>Cancer</i> 1994;74:1640-1648	Data from National Cancer Data Base (1990) using hospital registries across the United States (N=85,813).	African American patients were more likely than non-Hispanic white patients to be diagnosed with metastatic prostate cancer. A greater proportion of patients were being treated with prostatectomy in 1990 than in 1974. Data also indicated that African American patients were more likely to have received hormonal therapy and less likely to have received radiation therapy or prostatectomy. Non-Hispanic white men had a higher five-year prostate cancer survival rate than African American men.
Mettlin CJ, Murphy GP, Cunningham MP, Menck HR. "The National Cancer Data Base Report on Race, Age, and Region Variations in Prostate Cancer Treatment" <i>Cancer</i> 1997;80:1261-1266	Prostate cancer patients from the National Cancer Data Base Report - 1992 to 1994 (N=251,416).	Results did not reveal age differences or racial differences for stage and tumor grade of prostate cancer. At the time of diagnosis, African American patients were more likely than white patients to be diagnosed with stage IV prostate cancer. Racial differences were observed in the selection of radical prostatectomy over no treatment.

(Cancer continued)		
Optenberg SA, Thompson IA, Friedrichs P, et al. "Race, Treatment, and Long-term Survival from Prostate Cancer in an Equal-Access Medical Care Delivery System" <i>JAMA</i> 1995;274:1599-1605	Department of Defense Centralized Tumor Registry. Cases between 1973 and 1994 (N=1606).	No significant differences were observed among African American and white patients with prostate cancer in the time between initial diagnosis and initial treatment (wait time). In addition, no racial differences were observed for treatment options such as surgery, radiotherapy, hormone therapy, other treatments, or no treatment. The results remained true even after stratifying by tumor stage. African Americans entered active treatment in younger age groups and displayed a higher relative risk of cancer in these younger age groups. Stage and grade, however, did have an effect on survival. No differences in prostate cancer survival between African American and white patients were found in this universally accessible system of care.
Parker J, Gebretsadik T, Sabogal F, Newman J, Lawson HW. "Mammography Screening Among California Medicare Beneficiaries: 1993-1994" <i>Am J Prev Med</i> 1998;15:198-205	Health Care Financing Administration data from 1993 to 1994, and 1990 United States Census data were used to assess 800,000 California Medicare beneficiaries.	African-American and Caucasian women with Medicaid coverage had equally low mammography rates, while African-American women with and without Medicaid had similarly low mammography rates.
Polednak AP, Flannery JT. "Black Versus White Racial Differences in Clinical Stage at Diagnosis and Treatment of Prostatic Cancer in Connecticut" <i>Cancer</i> 1992;70:2152-2158	Data from population-based tumor registry from Connecticut (SEER) from 1985 to 1988.	African Americans patients with prostate cancer (35%) when compared with white patients (22%) had a higher proportion of cases diagnosed at the metastatic stage. Incidence rates (age-specific) for metastatic cancer were 1.5 to 3.3 times higher for African American patients. A lower use of prostatectomy was observed among African American men with localized disease than among their white counterparts (10% vs. 22%). This was only true for men under the age of 70 years. The use of radiation and hormonal therapies were common among African Americans in this age group. No racial differences were observed in the frequency of use of hormonal therapy.

(Cancer continued)		
Polednak AP. "Prostate Cancer Treatment in Black and White Men: The Need to Consider Both Stage at Diagnosis and Socioeconomic Status" <i>J Natl Med Assoc</i> 1998; 90:101-104	Data were obtained from the population-based Connecticut Tumor Registry for prostate cancers diagnosed from 1988 through 1992 by age at diagnosis, poverty rate of census tract of residence, and race.	Among local/regional stage patients, mean age at diagnosis was 68.8 years (median: 68.5 years) for the 330 black patients and 72 years (median: 72 years) for 6008 white patients, and radical prostatectomy declined with rising age
Pui C, Boyett JM, Hancock ML, et al. "Outcome of Treatment for Childhood Cancer in Black as Compared with White Children" <i>JAMA</i> 1995;273:633-637	St. Jude Children's Research Hospital data from 1962 to 1992 (N=5305).	Separate analyses were performed for "early" and "recent" treatment eras, defined by time points at which significantly improved outcome was demonstrated for specific tumor types. During the early treatment period, there was a significant difference between African American children and white children as reflected by the 10-year Kaplan-Meier estimates. For the recent treatment period, no racial differences were present for treatment outcome or all forms of cancer; the 10-year estimated survival rates were also equal.
Satarino WA, Belle SH, Swanson GM. "The Severity of Breast Cancer at Diagnosis: A Comparison of Age and Extent of Disease in Black and White Women" <i>Am J Public Health</i> 1986;76:779-782	Data on newly diagnosed breast cancer cases from Metropolitan Detroit Cancer Surveillance System between 1973 to 1982 (N=17,361).	For women under the age of 40 years, a greater proportion of African Americans (6%) were diagnosed with remote disease as compared with whites (5%). The differences, however, were greater for women aged 80 years or older (21% of African Americans vs. 13% of whites). African American women were at increased risk for being diagnosed with the most advanced form of breast cancer.
Satarino ER, Swanson GM, Moll PP. "Non-clinical Factors Associated with Surgery Received for Treatment of Early-Stage Breast Cancer" <i>Am J Prev Med</i> 1992;82:195-198	Data from Metropolitan Detroit Cancer Surveillance System including women who received partial mastectomies with radiation or modified radical mastectomies (N=2238).	There were no racial differences in receiving mastectomies among women who had node negative invasive breast cancer diagnosed between 1985 and 1987 (71% of whom receive modified radical mastectomy). While age and year of diagnosis were predictive, hospital size was the strongest predictor of partial mastectomy for African American women.

(Cancer continued)		
Serxner S, Chung CS. "Trend Analysis of Social and Economic Indicators of Mammography Use in Hawaii" <i>Am J Prev Med</i> 1992;8:303-308	Data from Behavioral Risk Factor Surveillance System (BRFSS) including women older than 34 years of age (N=1447), in Hawaii.	Women of Japanese ancestry were more likely to have had a mammogram (50%) than women of Hawaiian ancestry (39%). Results suggested a relationship between mammogram use (in the last two years) and age, income, and ethnicity.
Sidney S, Queensberry CP, Sadler MC. "Incidence of Surgically Treated Benign Prostatic Hypertrophy and of Prostate Cancer among Blacks and Whites in a Prepaid Health Care Plan" <i>Am J Epidemiol</i> 1991;134:825-829	Data from Kaiser Permanente Medical Program (San Francisco/Oakland) for patients receiving multiphasic health checkups (N=14897) during 1971 and 1972.	The incidence rate of surgically treated prostate cancer was much higher for African Americans than whites. This was true across all age groups. For persons under the age of 65 years, the incidence rate of surgically treated benign prostatic hypertrophy was slightly higher for African Americans than whites. For persons over the age of 65 years, the incidence rate was higher for whites. The age-adjusted risk of benign prostatic hypertrophy, however, was similar in whites and African Americans.
Tortolero-Luna G, Globler GA, Villarreal R. "Screening Practices and Knowledge, Attitudes, and Beliefs About Cancer Among Hispanic and Non-Hispanic White Women 35 Years Old or Older in Nueces County, Texas" <i>J Natl Cancer Inst Monogr</i> 1995;18:49-56	Telephone survey of cancer screening practices in Nueces County, Texas, using random sample of women age 35 years or older (N=565).	Compared to non-Hispanic white women, Hispanic women were less likely to have ever had a mammography (65% vs. 79%), had a mammography in the past year, had a clinical breast exam (86% vs. 96%), performed monthly breast self-exam (37% vs. 49%), and had fecal occult blood test (36% vs. 69%). Even after controlling for potential confounding factors, Hispanics remained less likely to have ever had a clinical breast exam or fecal occult blood test. No ethnic difference was found for having had a Pap smear.
Vernon SW, Vogel VG, Halabi S, et al. "Breast Cancer Screening Behaviors and Attitudes in Three Racial Ethnic Groups" <i>Cancer</i> 1992;69:165-174	Data from American Cancer Society Texas Breast Screening Project (1987).	No racial differences were observed in the reasons for not having had prior mammography. The most common reasons cited were cost and lack of physician referral. Hispanics were less likely than African Americans and whites to report mammography, breast cancer screening, clinical breast exam, and breast self-exam.

<i>(Cancer continued)</i>		
Wheat ME, Kunitz C, Fisher J. "Cancer Screening in Women: A Study of House Staff Behavior" <i>Am J Prev Med</i> 1990;6:130-136	Randomly selected charts (N=565) of 58 medical residents at two hospitals. Administered questionnaire to residents.	White patients received rectal exams with a greater frequency than patients from other ethnic backgrounds, and residents who endorsed the American Cancer Society's recommendation for screening were more likely to refer patients for mammograms. No other patient characteristics were associated with difference in screening.
Zaloznik AJ. "Breast Cancer Stage at Diagnosis: Caucasian versus African Americans" <i>Breast Cancer Res Treat</i> 1995;34:195-198	Data from Department of Defense on breast cancer cases (N=7160) from 1976 to 1992.	No racial differences were observed between African Americans and whites for stage of breast cancer at diagnosis. The African American population was younger than the white population by eight years (mean age, 50 years vs. 58 years), and approximately 25% of African Americans were less than 40 years of age versus only 9% of whites. African American women had fewer tumors (<1.0 cm) than whites. There were no racial differences in stage at diagnosis.
Cerebrovascular Disease		
Citation	Study Population	Major Findings
Gillium RF. "Epidemiology of Carotid Endarterectomy and Cerebral Arteriography in the United States" <i>Stroke</i> 1995;26:1724-1728	National Hospital Discharge Survey (1980 to 1993).	Disparities between white and African American stroke patients were observed in the use of cerebral arteriography and carotid endarterectomy. At the beginning and end of the 13 years period, rates for carotid endarterectomy were over 4 times higher in whites than African Americans. In the mid-1980=s, rates were 7 times higher in whites than African Americans. Rates for cerebral arteriography were also higher among whites but the disparity was not as great as for carotid endarterectomy. Rates in whites were over 50% higher than those in African Americans before 1988 and 20% higher from 1988 through 1992.

<i>(Cerebrovascular Disease continued)</i>		
Oddone EZ, Horner RD, Lipscomb J, et al. "Understanding Racial Variation in the Use of Carotid Endarterectomy: The Role of Aversion to Surgery" <i>J Natl Med Assoc</i> 1998;90:25-33	American and white patients (N=185) hospitalized for stroke or transient ischemic attack at four Veterans Affairs medical centers.	Among low income veterans with diagnoses of stroke or transient ischemic attack and those who were likely candidates for carotid angiography and endarterectomy, African American patients had a significantly lower likelihood than white patients of undergoing carotid angiography and subsequent endarterectomy after adjusting for patient's age, degree of eligibility for VA care, socio-economic status, and geographic region of the hospital. Among patients hospitalized for stroke or transient ischemic attack, African American patients expressed more aversion to a hypothetical carotid endarterectomy than whites. The likelihood of accepting more excess risk of death to avoid surgery was much higher for African Americans than whites.
Dental		
Citation	Study Population	Major Findings
Hayward RA, Meetz HK, Shapiro MF, et al. "Utilization of Dental Services: 1986 Patterns and Trends" <i>J Public Health Dent</i> 1989;49(3):147-152	Access to Health Care Survey (1986). Nationwide telephone survey. N=9352.	Older age, socioeconomic status, and African American race were significantly associated with fewer dental visits (independent risk factors). Fifty percent of African Americans and 55% of Hispanics reported making a dental visit within the past year as compared to 65% of the white population. African Americans (9%) and Hispanics (10%), however, were more likely to have dental emergencies than whites (5%)
Chisick MC. "Comparing Dental Utilization of U.S. Army Soldiers with their Employed Civilian Cohorts" <i>Community Dent Oral Epidemiol</i> 1995;23:222-225	Worldwide random sample of enlisted Army personnel (N=5474) and active duty Army personnel (N=4036) from the Survey of Military Personnel (SSMP) (1992).	No racial or gender differences were observed for dental visits. The results remained consistent even after adjusting for age, race, and gender. Among white male military personnel, 83% had seen a dentist in the past year as compared to 57% among white male civilian population. Among African American male military personnel, 84% had made a dental visit in the past year when compared to 39% of their African American civilian counterparts.

Diabetes Mellitus		
Citation	Study Population	Major Findings
Cowie CC, Harris MI. "Ambulatory Medical Care for Non-Hispanic Whites, African Americans, and Mexican Americans with NIDDM in the U.S." <i>Diabetes Care</i> 1995;20(2):142-147	Data from Medicare physician claims data for 1992 and 1993 on patients with physician diagnosed diabetes (N=175,015).	Physician visit rates in patients with diabetes did not vary by race. The rates of visits to specialists for diabetes complications, as well as physician testing of blood glucose and screening for hypertension, retinopathy, and foot problems were similar among non-Hispanic whites, African Americans, and Hispanics. The major differences, however, were related to methods of glycemic control and patient education. Specifically, African Americans were more likely to be treated with insulin but less likely to use daily insulin injections and self-monitor blood glucose (35% vs. 54% for non-Hispanic whites). Additionally, although higher proportions of African Americans (43%) than non-Hispanic whites (32%) had received patient education, the median number of hours of instruction was lower for African Americans.
Martin TL, Selby JV, Zhang D. "Physician and Patient Prevention Practices in NIDDM in a Large Urban Managed-Care Organization" <i>Diabetes Care</i> 1995;18(8):1124-1129	Questionnaires administered to representative sample on non-institutionalized adults with NIDDM (N=2170).	In a large urban managed-care organization, no racial/ethnic differences were noted in physician and patient adherence to prevention guidelines, such as recommended use of glucose, HbA1c, lipid measures, blood pressure and proteinuria testing, ophthalmology, foot examinations, and diabetes education. In addition, there were no differences by race/ethnicity in referrals to ophthalmology, weight reduction, or smoking cessation or in missed appointments or failure to keep referral visits.
Stern MP, Patterson JK, Haffner SM, Hazuda HP, Mitchell BD. "Lack of Awareness and Treatment of Hyperlipidemia in Type II Diabetes in a Community Survey" <i>JAMA</i> 1989;262(3):360-364	Cross-sectional study including patients with NIDDM for at least 5 years (N=378) from Kaiser Permanente Medical program in Oakland, California.	Even though 40% of diabetic subjects were hyperlipidemic, approximately 25% of non-Hispanic whites with diabetes were aware of their hyperlipidemia, and less than 10% were receiving treatment. Awareness and treatment were even less frequent among Hispanics.

<i>(Diabetes Mellitus continued)</i>		
Wang F, Javitt JC. "Eye Care for Elderly Americans with Diabetes Mellitus" <i>Ophthalmology</i> 1996;103:1744-1750	Mexican American (N=374) and non-Hispanic white (N=86) patients with Type II diabetes in San Antonio, Texas.	African Americans with diabetes were 30% less likely to have eye care visits than whites. Low rates of eye care use were also associated with younger age (ages < 75 years), male gender, high regional poverty, and lower ophthalmologist supply.
Emergency Care		
Citation	Study Population	Major Findings
Baker DW, Stevens CD, Brook RH, et al. "Determinants of Emergency Department Use: Are Race and Ethnicity Important" <i>Ann Emerg Med</i> 1996;28:677-682	Cross-sectional survey of consecutive ambulatory patients with non-emergency medical problems (N=1049) who self-reported emergency department visits during previous three months.	Whites, Hispanics, and African Americans were equally likely to report one or more visits. African Americans (19%) were more likely to report two or more visits, followed by whites (14%), and by Hispanics (11%).
Brookoff D, Kellermann AL, Hackman BB, et al. "Do Blacks Get Bystander Cardiopulmonary Resuscitation as Often as Whites" <i>Ann Emerg Med</i> 1994;24:1147-1150	Patients seen by municipal emergency medical services for non-traumatic cardiac arrest (N=1068) in Memphis, Tennessee, from 3/1/89 to 6/5/92.	African Americans received bystander CPR substantially less frequently than whites, and the difference was more pronounced when a person collapsed in a public place.
Eye Disease		
Citation	Study Population	Major Findings
Javitt JC, McBean MA, Nicholson GA, et al. "Under-treatment of Glaucoma among African Americans" <i>N Engl J Med</i> 1991;325:1418-1422	Random sample (5%) of African American and white patients undergoing laser and incisional surgery for open-angle glaucoma using Medicare claims data (1983 to 1986).	African Americans had more than double the rate of surgery for glaucoma as their white counterparts. An expected rate of treatment for glaucoma was calculated based on the conservative assumption that glaucoma is almost four times more prevalent among African Americans when compared with whites. The actual rate of treatment for glaucoma for African Americans was 45% lower than the expected rate.

<i>(Eye Disease continued)</i>		
Glynn RJ, Gurwitz JH, Bohn RL, et al. "Old Age and Race as Determinants of Initiation of Glaucoma Therapy" <i>Am J Epidemiol</i> 1993;138:395-406	Medicare enrollees, 65-69 years of age, with at least six months of documented eligibility before initial treatment (N=6173) (March 1981 to February 1990).	Findings suggested a continuous increase in the rate of new treatment of glaucoma from 1981 to 1990. In addition, the rate of new treatment of glaucoma was 1.6 times higher in African Americans than whites, even after adjusting for age. The rate of glaucoma, however, was significantly higher in African Americans as compared to whites, probably because many cases of glaucoma among African Americans remain untreated.
Heart Disease		
Citation	Study Population	Major Findings
Allison JJ, Kiefe CL, Centor RM, et al. "Racial Differences in the Medical Treatment of Elderly Medicare Patients with Acute Myocardial Infarction" <i>J Gen Intern Med</i> 1996;11:736-743	Medicare patients (N=4052) who received a principal discharge diagnosis of acute myocardial infarction from June 1992 to February 1993. Patients less than 65 years of age excluded.	Fewer African Americans received thrombolysis compared with whites (9% vs. 17%). The refusal rate for thrombolysis therapy did not differ by race nor did the rates of patients who received beta-adrenergic blockade and aspirin.
Ayanian JZ, Udvarhelyi SI, Gatsonis CA, et al. "Racial Differences in the Use of Revascularization Procedures After Coronary Angiography" <i>JAMA</i> 1993;269:2642-2646	Retrospective cohort study (N=1429) using HCFA data, for 1987 and 1988, on acute care hospitals that provide angiography.	Whites were significantly more likely to receive a revascularization procedure in all types of hospitals except for rural hospitals.
Blustein J, Weitzman BC. "Access to Hospitals with High-Technology Cardiac Services: How is Race Important" <i>Am J Public Health</i> 1995;85:345-351	Patients, in New York State hospitals, admitted with acute myocardial infarction during 1987 (N=11,410).	African Americans with acute myocardial infarction were more likely to present to a low technology hospital closer to their homes, while whites were more likely to travel longer distances from their home to present to a high technology hospital. Findings also suggested that African Americans who were more likely to choose the public ambulance versus private ambulance services were less frequently treated in high technology hospitals unless these hospitals were nearby.

<i>(Heart Disease continued)</i>		
Canto JG, Taylor HA, Rogers WJ, Sanderson B, Hilbe J, Barron HV. "Presenting Characteristics, Treatment Patterns, and Clinical Outcomes of Non-Black Minorities in the National Registry of Myocardial Infarction 2" <i>Am J Cardiol</i> 1998;82:1013-1018.	Data were obtained from a national registry of myocardial infarction, which enrolled 275,046 patients from June 1994 to April 1996.	Non-black minorities were younger, had a higher proportion of men, used the emergency medical services less frequently, and presented later to the hospital after the onset of symptoms (135 vs. 122 minutes) than whites. Non-black minorities were less likely to receive beta-blocker therapy at discharge.
Carlisle DM, Leake BD, Shapiro MF, et al. "Racial and Ethnic Disparities in the Use of Cardiovascular Procedures among Cardiac Patients in Los Angeles County, 1986 through 1988" <i>Am J Public Health</i> 1995;85:352-356	Cross-sectional study using hospital discharge data for adults with the diagnosis of possible ischemic heart disease at hospitals located in Los Angeles, California, from 1986 to 1988.	Analyses suggested that Asian and Pacific Islanders were just as likely as whites to receive bypass graft surgery and angioplasty. African Americans, however, were much less likely than whites to receive both of these procedures. Hispanics were also less likely than whites to receive bypass graft surgery and angiography.
Carlisle DM, Leake BD, Shapiro MF, et al. "Racial and Ethnic Disparities in the Use of Cardiovascular Procedures: Associations with Type of Health Insurance" <i>Am J Public Health</i> 1997;87:263-267	California residents from Los Angeles, with possible coronary artery disease (N=104,952).	After adjusting for comorbidities, uninsured African Americans were half as likely to undergo angiography and one third as likely to undergo bypass surgery compared with uninsured whites. The racial disparity in access to cardiac procedures was greatest for the uninsured as well as Medicare participants and smallest for privately insured patients. The racial disparities in cardiac interventions were present among Medicare enrollees across all hospital practices, suggesting reduced access even in a relatively uniform practice setting. Hispanics were also less likely to utilize cardiovascular procedures, even after adjusting for confounders. Asian Americans had the same odds as whites to utilize cardiovascular procedures.

<i>(Heart Disease continued)</i>		
Carlisle DM, Leape LL, Bickel, et al. "Underuse and Overuse of Diagnostic Testing for Coronary Artery Disease in Patients Presenting with New-Onset Chest Pain" <i>Am J Med</i> 1999;106:391-398.	Five urban Los Angeles-area hospitals (two public, one private not-for-profit, one university medical center, and one not-for-profit health maintenance organization) facility. N=356.	Under-use rates were higher for patients without post-high school education than for patients with post-high school education (34% vs 15%). HMO enrollees, the privately insured, and Medicare beneficiaries had lower rates of under use (a weighted average of 11%) compared with Medicaid recipients (42%). Under use rates were higher among African-American (29%) and Latino patients (26%) than among whites (18%). After controlling for education, insurance status, minority status, gender, and age, only level of education was associated with under use, or inappropriate use of diagnostic testing.
Clark, LT, Bellam SV, Shah AH, et al. Analysis of Prehospital Delay Among Inner-City Patients With Symptoms of Myocardial Infarction: Implications for Therapeutic Intervention" <i>J Natl Med Assoc</i> 1992;84:931-934	Inner city patients hospitalized with suspected myocardial infarction.	Barriers to diagnosis and economic issues continue to play a role in treatment outcomes, as reflected by longer mean and median pre-hospitalization delay (defined as time from the onset of symptoms to patient arrival in the emergency department) for inner-city African Americans and Hispanics compared to whites. The most important reason for the observed delay was related to the time it took for patients to decide to seek medical care following the onset of symptoms.
Ford E, Cooper R, Castaner A, et al. "Coronary Arteriography and Coronary Bypass Survey Among Whites and Other Racial Groups Relative to Hospital-Based Incidence Rates for Coronary Artery Disease: Findings from NHDS" <i>Am J Public Health</i> 1989;79:437-440	National Hospital Discharge Survey (NHDS) from 1979 to 1984.	African American men were only one-third as likely to have a coronary artery bypass graft surgery and only half as likely to undergo a coronary arteriography as whites. The discharge rate for African American men with acute myocardial infarction was approximately three-fourths that of whites. African American women with acute myocardial infarction had a 52% lower rate of receiving coronary artery bypass graft procedures than white women. Although African American women had a higher hospitalization rate than white women, they had a 19% lower rate of coronary arteriography than white women.

<i>(Heart Disease continued)</i>		
Giles White, Anda RP, Casper ML, et al. "Race and Sex Differences in Rates of Invasive Cardiac Procedures in US Hospitals" <i>Arch Intern Med</i> 1995;155:318-324	National Hospital Discharge Survey (NHDS) on patients hospitalized for acute myocardial infarction (N=10,348).	White men consistently had the highest procedure rates, followed by white women, black men, and black women, even after adjusting for age, in-hospital mortality, health insurance, and hospital transfer rates.
Goff DC, Nichaman MZ, Ramsey DJ, et al. "A Population-Based Assessment of the Use and Effectiveness of Thrombolytic Therapy" <i>Ann Epidemiol</i> 1995;5:171-178	Corpus Christi Heart Project including patients identified with myocardial infarction who were hospitalized during a two year period (N=159).	Results documented differences in having received thrombolytic therapy for acute myocardial infarction between whites and African Americans and Hispanics after controlling for potential confounding variables such as age, clinical factors, ambulance use, and patient delay time.
Goldberg KC, Hartz AJ, Jacobsen SJ, et al. "Racial and Community Factors Influencing Coronary Artery Bypass Graft Surgery Rates for All 1986 Medicare Patients" <i>JAMA</i> 1992;267:1473-1477	Data obtained from HCFA claims records on Medicare patients (1986).	Nationally the rate of coronary artery bypass grafting was less than 8 per 10,000 for African Americans compared to 27 per 10,000 for whites. Medicare data suggested regional variations in observed racial disparities in cardiac interventions. African Americans in rural areas and in the Southeast were least likely to undergo cardiac revascularization than in other regions.
Johnson PA, Lee TH, Cook EF, et al. "Effect of Race on the Presentation and Management of Patients with Acute Chest Pain" <i>Ann Intern Med</i> 1993;118:593-601	Prospective follow-up study including patients (N=3031), 30 years or older, who utilized emergency department for acute chest pain, at two university medical centers (1984 to 1986).	Rates of acute myocardial infarction and ischemic heart disease were lower among African Americans than whites. The rates for major complications or mortality were also lower for African Americans than whites. In the adjusted analyses, African Americans had lower rates of hospital admission than whites. Once admitted, African Americans were also less likely to be triaged to the coronary care unit. After adjusting for the severity of coronary disease, African Americans were less likely to receive coronary artery bypass procedures. Whites and African Americans were equally likely to undergo cardiac catheterization procedures.

<i>(Heart Disease continued)</i>		
Maynard C, Fisher LD, Passamani ER, et al. "Blacks in the Coronary Artery Surgery (CASS): Race and Clinical Decision Making" <i>Am J Public Health</i> 1986;76:1446-1448	Patients enrolled in the Coronary Artery Surgery Study (CASS).	Results indicated that a greater percentage of whites were recommended for coronary artery surgery than African Americans (59% vs. 47%), even after adjusting for clinical and angiographic characteristics.
Maynard C, Fisher LD, and Passamani, ER. "Survival of Black Persons Compared with White Persons in the Coronary Artery Surgery Study (CASS)" <i>Am J Cardiol</i> 1987;60:513-518	African American persons (N=573) in the Coronary Artery Surgery Study (CASS).	The survival rate after coronary artery surgery was higher for whites (88%) than for African Americans (82%). A greater percentage of African Americans utilized angiography than whites. Whereas African American race was associated with poor survival rates in the medical group, African American race was associated with better survival rates in the surgical group.
Maynard C, Litwin PE, Martin JS, et al. "Characteristics of Black Patients Admitted to Coronary Care Units in Metropolitan Seattle: Results from the Myocardial Infarction Triage and Intervention Registry (Myocardial Infarction TI)" <i>Am J Cardiol</i> 1991;67:18-23	African American (N=641) and white patients (N=11892) with chest pain of cardiac origin admitted to coronary artery units in 19 metropolitan Seattle hospitals.	African Americans experienced much lower rates of coronary artery bypass surgery. During hospitalization, coronary artery bypass surgery and coronary angioplasty were performed at higher rates in whites than in African Americans. No racial differences were observed for cardiac catheterization, thrombolytic therapy, or hospitalization.
Maynard C, Every NR, Litwin PE, et al. "Outcomes in African-American Women with Suspected Acute Myocardial Infarction: The Myocardial Infarction Triage and Intervention Project" <i>J Natl Med Assoc</i> 1995;87:339-344	Females (N=554) admitted into coronary care units in metropolitan Seattle from January 1988 to December 1991.	Among women admitted to coronary care units for suspected acute myocardial infarction, African Americans were younger, more often single and unemployed, were more likely to have hypertension and diabetes mellitus than their white counterparts. In addition, African American women were more likely to be readmitted to coronary care units for suspected myocardial infarction, as well as to die in the hospital than white women.

<i>(Heart Disease continued)</i>		
Mickelson JK, Blum CM, Geraci JM. "Acute Myocardial Infarction: Clinical Characteristics, Management and Outcome in a Metropolitan Veterans Affairs Medical Center" <i>J Am Coll Cardiol</i> 1997;29:915-925	Patients with myocardial infarction from October 1993 to October 1995.	Data suggested that being Hispanic was associated with a decreased probability of use of thrombolytic agents. Although cardiac catheterization was utilized more often than thrombolytic agents, it was used less often for African American than for whites and for patients with heart failure.
Mirvis DM, Burns R, Gaschen L, et al. "Variation in the Utilization of Cardiac Procedures in the Department of Veterans Affairs Health Care System: Effect of Race" <i>J Am Coll Cardiol</i> 1994;24:1297-1304	Patients with coronary heart disease (N=30,300) and valvular heart disease (N=1335) discharged from any of 172 VA Medical Centers (10/1/90 to 9/30/91).	African American patients (433 per 1000) significantly underutilized cardiac catheterization procedures when compared to whites (503 per 1000). White patients with coronary artery disease (179 per 1000) had a greater rate of surgery than similar African American patients (125 per 1000). Among patients with valve disease, catheterization rates were significantly higher for Whites (575 per 1000) than African Americans (433 per 1000); surgery rates did not vary by race but did vary according to geographic region.
Mirvis DM, Granery MJ. "Impact of Race and Age on the Effects of Regionalization of Cardiac Procedures in the Department of Veterans Affairs Health Care System" <i>Am J Cardiol</i> 1998; 81:982-987.	Discharge medical records of 30,901 patients admitted to a Veterans Affairs (VA) medical center between October 1, 1993 and ending on September 30, 1994 were collected.	Results indicated that, within the VA health system, regionalization of cardiac procedures had a significant impact on utilization rates of tertiary cardiac procedures, with variation significantly greater for elderly and African Americans than for the general population.
Naumburg EH, Franks P, Bell B, et al. "Racial Differentials in the Identification of Hypercholesterolemia" <i>J Fam Prac</i> 1993;36:425-430	Prospective data on patients with complete records (N=4526) collected from an office-based family medicine residency program in Rochester, New York, from 10/15/88 to 4/15/90.	Findings indicated disparities in screening for hypercholesterolemia between whites and African Americans and Hispanics. The minorities were less likely to be screened for cholesterol than whites, independent of insurance coverage, socioeconomic status, and number of visits. The mean cholesterol level did not vary by race. Screening for hypercholesterolemia also varied by Medicaid status and lack of insurance. Minorities were less likely than whites to be diagnosed with hypercholesterolemia.

<i>(Heart Disease continued)</i>		
Peterson ED, Wright SM, Daly J, et al. "Racial Variation in Cardiac Procedure Use and Survival Following Acute Myocardial Infarction in the Department of Veterans Affairs" <i>JAMA</i> 1994;271:1175-1180	Retrospective observational study of male veterans (N=33641) using Veterans Health Administration discharge abstracts from 158 hospitals.	African Americans with acute myocardial infarction were 33% less likely to receive cardiac recatheterization and 42% less likely to receive a coronary angioplasty. African Americans were also 54% less likely to receive coronary bypass surgery. African Americans suffering from acute myocardial infarction were less likely to undergo revascularization within 90 days of the diagnosis of acute myocardial infarction.
Peterson ED, Shaw LK, DeLong ER, et al. "Racial Variation in the Use of Coronary-Revascularization Procedures" <i>N Engl J Med</i> 1997;336:480-486	Patients with coronary disease at Duke University Hospital (N=12,402).	African Americans were less likely to receive angioplasty or bypass surgery than their white counterparts. Rates for bypass surgery remained lower among African American patients with severe anginal symptoms relative to whites (31% vs. 45%) and among those for whom revascularization could have improved their survival (42% vs. 61%).
Philibin EF, DiSalvo TG. "Influence of Race and Gender on Care Process, Resource Use, and Hospital-Based Outcomes in Congestive Heart Failure" <i>Am J Cardiol</i> 1998;82:76-81	Information obtained from 1995 New York State hospital discharge assigned ICD-9-CM codes from the Statewide Planning and Research Cooperative System (SPARCS) database. N=45,894	After adjusting for other patient characteristics and hospital type and location, race was an important determinant of length of stay (black-10.4 days; white-9.3 days). Race and gender were shown to influence care and hospital-based outcome for congestive heart failure.
Ramsey DJ, Goff DC, Wear MI, et al. "Sex and Ethnic Differences in the Use of Myocardial Revascularization Procedures in Mexican Americans and Non-Hispanic Whites; The Corpus Christi Heart Project" <i>J Clin Epidemiol</i> 1997;50 (5):603-609	Corpus Christi Heart Project population based surveillance program including patients hospitalized for coronary heart disease.	Hispanics were less likely than non-Hispanic whites to receive percutaneous transluminal coronary angioplasty (13% vs. 23%). After adjusting for potential confounders and extent of disease, however, the difference was significant but marginal. No ethnic differences were observed for coronary bypass surgery.
Stone PH, Thompson B, Anderson HV, et al. "Influence of Race, Sex, and Age on the Management of Unstable Angina and Non-Q-Wave Myocardial Infarction" <i>JAMA</i> 1996;275(14):1104-1112	Prospective cohort study including patients with unstable angina or non-Q-wave myocardial infarction at referral hospitals or in primary care or in the general community (N=3318).	African Americans were less likely to undergo invasive procedures than whites. Furthermore, African Americans (with unstable angina) were less likely to be treated with intensive anti-ischemic therapy than whites. A smaller proportion of African Americans (45%) than whites (61%) had less extensive and severe coronary stenoses.

<i>(Heart Disease continued)</i>		
Whittle J, Conigliaro J, Good CB, et al. "Racial Differences in the Use of Invasive Cardiovascular Procedures in the Department of Veterans Affairs Medical System" <i>N Engl J Med</i> 1993;329:621-627	Retrospective cohort study including veterans discharged from a VA hospital with primary diagnosis of cardiovascular disease or chest pain (1987-1991).	White veterans were more likely than African American veterans to experience angioplasty, coronary artery bypass graft and cardiac catheterization.
HIV/AIDS		
Citation	Study Population	Major Findings
Bennett CL, Horner RD, Weinstein RA, et al. "Racial Differences in Care Among Hospitalized Patients With Pneumocystis carinii Pneumonia in Chicago, New York, Los Angeles, Miami, and Raleigh-Durham" <i>Arch Intern Med</i> 1995;155:1586-1592	Retrospective cohort study including VA patients (N=627) and non-VA patients (N=1547) hospitalized between 1987-1990.	No significant differences were found between African American and Hispanic and white VA patients with regard to in-hospital mortality rates, use and timing of a bronchoscopy, or receipt of timely anti-PCP medications. Among non-VA patients, African Americans and Hispanics were less likely to undergo diagnostic bronchoscopy in the first 2 days of hospitalization than whites. After controlling for health insurance and admitting hospital characteristics, however, these racial differences lacked statistical significance for African Americans and were smaller for Hispanics.
Diaz T, Chu SY, Sorvillo F, et al. "Differences in Participation in Experimental Drug Trials Among Persons with AIDS" <i>J Acquir Immune Defic Syndr Hum Retrovirol</i> 1995;10:562-568	Persons (N=4604) with HIV, 18 years or older, from eleven state and city health departments were interviewed.	Differences were statistically significant in enrollment according to race/ethnicity (5% African Americans, 15% whites, 15% Hispanics), exposure mode, annual household income, health care, and time since diagnosis. Even after adjusting for covariates, African Americans remained less likely to be in a trial.
Sharp MF, Morton SC, McCaffey DF. "Variations in the Care of HIV-infected Adults in the United States" <i>JAMA</i> 1999;281:2305-2315	Multistage probability sample with 2864 respondents	Blacks, Latinos, women, the uninsured, and Medicaid enrollees all had less desirable patterns of care. The difference in initial use of certain medications between blacks and whites declined from 24% in late 1996 to 8% in early 1998.

<i>(HIV/AIDS continued)</i>		
Wutoh AK, Hidalgo J, Bareta J, Rhee W, Bearsley R, Steidel S. "Race and the Treatment of a Cytomegalovirus Retinitis in a Cohort of Patients with Acquired Immunodeficiency Syndrome" <i>J Natl Med</i> 1998;90:214-220	This historical cohort consisted of 194 study subjects of AIDS patients over a 7-year period.	Results indicated a significant difference in the severity of CMV retinitis at diagnosis by race. White patients(14%) were more likely to be diagnosed early than blacks(10%).
Graham NMH, Jacobson LP, Kuo V, et al. "Access to Therapy in the Multicenter AIDS Cohort Study" <i>J Clin Epidemiol</i> 1994;47(9):1003-1012	Data collected from October 1990 to March 1992 on homosexual/bisexual men - HIV-1 seropositive (N=1415) in MACS.	Among patients without clinical AIDS, results indicated that being white, having insurance coverage, outpatient visits, and previous HIV-related hospitalizations were associated with receiving antiretroviral therapy, after adjusting for CD4+ lymphocyte count and HIV-1 symptoms.
Moore RD, Stanton D, Gopalan R, Chaisson RE. "Racial Differences in the Use of Drug Therapy for HIV Disease in an Urban Community" <i>N Engl J Med</i> 1994;330:763-768	First time patients (N=838) to HIV clinic from March 1990 to December 1992.	Results revealed that race (79% African Americans, 20% non-Hispanic whites, 2% Hispanics) was the strongest predictor of the receipt of antiretroviral therapy and prophylactic therapy for PCP. In particular, African Americans were less likely to receive an antiretroviral agent and PCP prophylaxis than similar white patients. Racial differences remained even after adjusting for age, sex, mode of HIV transmission, type of insurance, place of residence, income, and education.
Piette, JD, Mor V, Mayer K, Zierler S, Whitesachtel T. "The Effects of Immune Status and Race on Health Service Use among People with HIV Disease" <i>Am J Public Health</i> 1993;83(4):510-514	Medical records of HIV infected individuals (N=571); 219 of 571 were minorities.	Results indicated that across the three CD4+ lymphocyte count strata, minority patients with HIV disease (69% African Americans, 24% Hispanics, and 7% of other race) were more likely to be hospitalized and less likely to use outpatient care than similar white patients, after adjusting for risk group (drug-injecting men, other men, women) and calendar period.

Hypertension		
Citation	Study Population	Major Findings
Espeland MA, Kumanyika S, Kostis JB, et al. "Antihypertensive Medication Use Among Recruits for the Trial of Non-Pharmacologic Interventions in the Elderly (TONE)" <i>J Am Geriatr Soc</i> 1996;44:1183-1189	Volunteers in a clinical trial (N=2601).	The usage patterns of anti-hypertensive medications differed according to patient race and sex. African Americans were more likely than whites to use diuretics and calcium channel blockers and less likely to be prescribed beta-blockers and angiotensin-converting enzyme (ACE) inhibitors. Racial differences remained even after adjusting for socioeconomic status, age, and medical history.
Infectious Disease		
Citation	Study Population	Major Findings
Aral SO, Mosher WD, Horn MC, et al. "Screening for Sexually Transmitted Diseases By Family Planning Providers: Is it Adequate and Appropriate" <i>Fam Plann Perspect</i> 1986;18(6):255-258	Data from National Survey of Family Growth (1982) of women who made at least one family planning visit during the past year (N=3000).	African American women (67%) were significantly more likely than white women (47%) to have been screened for a sexually transmitted disease (STD). This difference remained even after controlling for potential confounding variables. Regardless of race, women who utilized private doctors were less likely to have been screened than those who attended clinics (43% vs. 62%). This difference was more pronounced in the white population as compared to the African American population (59% vs. 41% and 71% vs. 62%, respectively).
Mark TL, Paramore LC. "Pneumococcal Pneumonia and Influenza Vaccination: Access to and Use by US Hispanic Medicare Beneficiaries" <i>Am J Public Health</i> 1996;86:1545-1550	Medicare Current Beneficiary Survey (1992).	Elderly Hispanics were two times as likely as their non-Hispanic white counterparts to report that they were dissatisfied with the ease of obtaining a doctor. Non-Hispanic white Medicare beneficiaries were more likely to have received an influenza vaccine in the past year as compared to their Hispanic counterparts (51% vs. 35%). Hispanic Medicare beneficiaries were also less likely to have ever been immunized for pneumococcal pneumonia than non-white Hispanic Medicare beneficiaries (17% vs. 23%).

Maternal & Child Health		
Citation	Study Population	Major Findings
Albretch SL, Miller MK. "Hispanic Subgroup Differences in Prenatal Care" <i>Soc Biol</i> 1996;43:38-58	National linked birth/infant death files (1986 and 1987).	Findings indicated disparities in prenatal care utilization across Hispanic subgroups. Compared to Cuban American women, Puerto Rican women and Central/South American women were less likely to obtain adequate care after controlling for covariates such as marital status, age, education, parity, mother born outside U.S., and race of birth father.
Balcazar H, Hartner J, Cole G. "The Effects of Prenatal Care Utilization and Maternal Risk Factors on Pregnancy Outcome between Mexican Americans and Non-Hispanic Whites" <i>J Natl Med Assoc</i> 1993;85:195-202	Certificates of live births (N=101,206) from 1986 and 1987.	Hispanic mothers were more likely to have inadequate or no prenatal care as compared with non-Hispanic whites. In the Hispanic population, overall birth rate could be predicted through the independent effects of maternal risk status, prenatal care, maternal birthplace, and maternal age.
Barfield WD, Wise PH, Rust FP, et al. "Racial Disparities in Outcomes of Military and Civilian Births in California" <i>Arch Pediatr Adolesc Med</i> 1996;150:1062-1067	All white and African American births in California military hospitals from January 1, 1981 to December 31, 1985 using linked data files (birth, fetal death, and infant death certificates).	Initiation of prenatal care in the first trimester was much lower for both civilian and military African American populations than for their white counterparts.
Brett K, Schoendorf KC, Kiely JL. "Differences between Black and White Women in the Use of Prenatal Care Technologies" <i>Am J Obstet Gynecol</i> 1994;170:41-46	Birth certificates issued in the United States in 1990.	Data suggested less frequent use of amniocentesis and ultrasonography by African American women compared with white women. African American women with multiple births received tocolysis two-thirds as often as white women.

(Maternal and Child Health continued)

Cornelius LJ. "Barriers to Medical Care for White, Black, and Hispanic American Children" <i>J Natl Med Assoc</i> 1993;85:281-288	NMES (1987) of households (N=15000) using multistage probability sample.	Hispanic and African American children were more likely to experience longer waits to see a medical care provider than white children. Even after adjusting for insurance, however, the disparity in waiting times remained evident. A greater proportion of uninsured white children (18%) made at least one visit to a health care provider during 1987 compared to Hispanic (11%) and African American children (11%). Moreover, a greater proportion of African American (28%) and Hispanic (25%) children were without a usual source of care than white children (19%).
Henning KJ, Pollack DM, Friedman SM. "A Neonatal Hepatitis B Surveillance and Vaccination Program: New York City, 1987 to 1988" <i>Am J Public Health</i> 1992;82:885-888	Cohort of infants (N=832) born from pregnant women with hepatitis B in New York City (N=1030) followed from July 1987 to June 1988.	Uninsured minority infants (African American and Hispanic) and infants covered by Medicaid were less likely to be vaccinated for Hepatitis B Immune Globulin. Among all infants, the rates of coverage for Hepatitis B Immune Globulin Vaccine doses 1,2, and 3 were 84%, 77%, and 59%, respectively.
Kalmuss D, Fennelly K. "Barriers to Prenatal Care Among Low-Income Women in New York City" <i>Fam Plann Perspect</i> 1990;22(5):215-218	Interviews with low-income postpartum women in New York City.	Receipt of no or late prenatal care was significantly associated with "needing time and energy to deal with other problems," as well as cost of care. Furthermore, the association extended to ethnicity, lack of health insurance, negative attitudes toward prenatal care and substance abuse.
Moore P, Hepworth JT. "Use of Prenatal and Infant Health Services by Mexican-American Medicaid Enrollees" <i>JAMA</i> 1994;272(4):297-304	Mothers enrolled in Medicaid Program prior to the 6 month on pregnancy and continued until 60 days postpartum and infants enrolled through first year. Hispanic mother infant dyads (N=308) and non-Hispanic white mother infant dyads (N=312).	Among Medicaid enrollees, barriers to care such as transportation problems, child care, and a long waiting time to get appointment were more frequent among Hispanic women than non-Hispanic white women. Hispanic women averaged fewer prenatal visits than non-Hispanic whites (8.6 vs. 10.2 visits). Hispanic women were also less likely to receive "adequate" care as compared to non-Hispanic whites (41% vs. 53%). There was a strong association between ethnicity and number of prenatal visits and adequacy of prenatal care. Hispanic children averaged 8.2 visits for infant health care as compared to 9.8 visits for non-Hispanic white children. Hispanic infants averaged fewer well-baby visits than non-Hispanic whites (3.0 vs. 3.5 visits). Fewer Hispanic children complied with age-appropriate immunization schedules.

<i>(Maternal and Child Health continued)</i>		
Moore R, Kaczrek RG, Hamburger S. "Prenatal Ultrasound: Are Socially Disadvantaged Groups Afforded Equal Access?" <i>J Health Care Poor Underserved</i> 1990;2:229-236	Retrospective cohort study including live births (single) at a major teaching hospital during a one-year period (N=2542).	The increased probability of receiving a prenatal ultrasound examination was significantly associated with short duration of prenatal care, inadequate weight gain during pregnancy, and previous history of preterm delivery. In addition, there was an inverse correlation between probability of receiving a prenatal ultrasound examination and maternal education. Private patients were less likely to receive a prenatal ultrasound examination than clinic patients; whites were less likely to receive a prenatal ultrasound examination than African Americans.
Press N, Browner CH. "Characteristics of Women Who Refuse an Offer of Prenatal Diagnosis: Data from the California Maternal Serum Alpha Fetoprotein Blood Test Experience" <i>Am J Genet.</i> 1998;78:443-445	Data was obtained on sociodemographics and reproductive history from 595 obstetrical patient charts.	Results showed that women who had never terminated a pregnancy, Spanish-speaking Latinas, and women who scored high on a religiosity scale were significantly more likely to refuse testing.
Radecki SE, Bernstein GS. "Use of Clinic versus Private Family Planning Care by Low-Income Women: Access, Cost, and Patient Satisfaction" <i>Am J Public Health</i> 1989;79:692-697	Survey conducted in low income area of Los Angeles County.	Hispanic women visited federally subsidized family planning clinics more often than African American and white women. African Americans and whites were more likely to visit private physicians.
Wood D, Donal-Sherbourne D, Halfon N, et al. "Factors Related to Immunization Status Among Inner-City Latino and African American Preschoolers" <i>Pediatrics</i> 1995;96:295-301	Interviews with inner city Hispanic (N=817) and African American (N=387) families in South Central and East Los Angeles. Children ranging from 12 to 36 months old; cluster-sample design.	Data indicated that, at 36 months of age, 70% of Hispanic children were fully immunized or up-to-date compared to only 53% of African American children. Among children 24 months old, only 42% of Hispanic children and 26% of African American children were up-to-date in their immunizations.

Mental & Neurological Disorders		
Citation	Study Population	Major Findings
Brown, L, Salive ME, Guralnik JM, et al. "Antidepressant Use in the Elderly: Association with Demographic Characteristics, Health Related Factors, and Health Care Utilization" <i>J Clin Epidemiol</i> 1995;48(3):445-453	Established Populations for the Epidemiological Study of the Elderly (EPESE) (N=13074).	Female gender, race, poor self-perceived health and frequent contact with doctors (in the past year) were significantly associated with higher antidepressant use. Whites were 2.5 to 4.4 times more likely than African Americans to use antidepressant medication, even after controlling for potential confounders.
Chung H, Mahler JC, Kakuma T. "Racial Differences in Treatment of Psychiatric Inpatients" <i>Psychiatr Serv</i> 1995;46:586-591	African Americans (N=76) and whites (N=88) with principal axis I diagnosis of mood disorder in inpatient setting.	African American patients were more than 3 times as likely to be screened for drugs than their white counterparts even after controlling for socioeconomic status. In addition, non-psychotic African Americans were more likely to receive a diagnosis for alcohol or substance abuse as compared with whites, whereas whites were more likely to receive a diagnosis of personality disorder. Furthermore, non-psychotic white patients had longer lengths of stay than their African American counterparts (28 days and 16 days respectively). Whites were more likely to receive one on one observational status in the inpatient setting.
Flaskerud, JH. "Diagnostic and Treatment Differences among Five Ethnic Groups" <i>Psychol Rep</i> 1986;58:219-235	Public mental health agencies in metropolitan Southern California (N=293).	Ethnicity was significantly associated with a primary psychiatric diagnosis. The percentage of Filipinos, Vietnamese, Hispanics, whites and blacks who had received a psychotic diagnosis were 54%, 39%, 20%, 19%, and 4%, respectively. The mean number of outpatient visits for Filipinos, blacks, whites, Vietnamese, and Hispanics were 15.0, 14.7, 9.6, 8.98, and 8.7, respectively. Of those who were referred to inpatient treatment, only 13% were Vietnamese while whites comprised 40% of the total. Treatment modality was also significantly related to ethnicity as 79% of whites utilized individual therapy, more than any other group.

<i>(Mental & Neurological Disorders continued)</i>		
Flaskerud JH, Hu L. "Racial/Ethnic Identity and Amount and Type of Psychiatric Treatment" <i>Am J Psychiatry</i> 1992;149(3):379-384	All adult inpatients and outpatients from January 1983 to August 1988 in Los Angeles County Mental Health System (N=19,400).	Hispanics were more likely to be treated as outpatients than non-Hispanic whites. Furthermore, Asian Americans had significantly more outpatient sessions than whites, Hispanics or African Americans, and stayed in treatment longer than whites. Among outpatients who had visits with a primary therapist, Asian American patients had significantly more sessions than white patients, while African American patients had significantly fewer sessions and Hispanic patients had the same number of sessions.
Hough RL, Landaverk JA, Karno M, et al. "Utilization of Health and Mental Health Services by Los Angeles Mexican Americans and Non-Hispanic Whites" <i>Arch Gen Psychiatry</i> 1987;44:702-709	Respondents utilizing mental health services in the Los Angeles Epidemiological Catchment Area (ECA) compared with three other ECA sites.	Hispanics (48%) were less likely to make a medical or mental health visit when compared to non-Hispanic whites (71%), and averaged 3.2 visits as compared to 6.6 visits for their non-Hispanic white counterparts. Hispanics were only half as likely as non-Hispanic whites to make an ambulatory mental health visit (11% vs. 22% respectively), and were equally likely to be hospitalized as their non-Hispanic white counterparts. Hispanics, however, were considerably less likely to report the use of ambulatory health care.
Kosch SG, Burg MA, Podikuju S. "Patient Ethnicity and Diagnosis of Emotional Disorders in Women" <i>Fam Med</i> 1998;30:215-9.	A random sample of family practice patients records of office visits was reviewed from December 1993 through December 1995 (N=100 African Americans; N=100 Caucasians)	Ethnic background was significantly associated with a diagnosis of a psychiatric disorder. 44% of Caucasian patients were diagnosed compared with 24% of African Americans. Proportionately more Caucasians were prescribed psychotropic medications.
Leo RJ, Sherry C, Jones AW. "Referral Patterns and Recognition of Depression among African-American and Caucasian Patients" <i>General Hospital Psychiatry</i> 1998;20:175-182	The study was conducted at the Erie County Medical Center in Buffalo, New York. 7841=n African American; 12,678 N= Caucasians	Referrals for depression comprised 25% of all consults for Caucasian and African American inpatients. African Americans were referred for evaluation of depression slightly less than whites.

<i>(Mental & Neurological Disorders continued)</i>		
Padgett DK, Patrick C, Burns BJ, et al. "Ethnicity in the Use of Outpatient Mental Health Services in a National Insured Population" <i>Am J Public Health</i> 1994;84:222-226	Insurance claims data from federal employees insured by Blue Cross/Blue Shield (1983).	African Americans (9.7 visits) and Hispanics (8.6) made fewer outpatient mental health visits than whites (13.0 visits). These differences remained even after adjusting for socioeconomic status. Whites were almost twice as likely to make an outpatient visit than African Americans or Hispanics even after adjusting for covariates. The use of inpatient services was positively correlated to outpatients visits for Hispanics and whites but not for African Americans.
Purmariega AJ, Glover S, Holzer CE, Nguyen H. "Utilization of Mental Health Services in a Tri-Ethnic Sample of Adolescents" <i>Community Mental Health Journal</i> 1998;34:145-156	A tri-ethnic sample of 2528 junior and high school students.	Multiple regression analyses demonstrated that socioeconomic status and family composition had a greater relative impact on utilization than all other non-clinical factors. The mean number of mental health visits for Hispanics was significantly lower than for whites.
Rosencheck R, Fontana A, Cottrol C. "Effect of Clinician-Veteran Race Pairing in the Treatment of Post Traumatic Stress Disorder" <i>Am J Psychiatry</i> 1995;152:555-563	Department of Veteran Affairs data on African American and white patients (N=4726) and their primary clinicians (N=315). Measurements taken at 2, 4, 8, and 12 months.	African American veterans compared to white veterans had lower program participation ratings on 10 out of 24 measures, even after adjusting for several factors including socioeconomic status. Furthermore, the pairing of African American veterans with white clinicians was also associated with lower program participation. African American veterans had lower attendance rates than their white counterparts regardless of the race of the clinician. More African American veterans (41%) terminated treatment compared to white veterans (35%) after 3 months. African Americans compared with whites had 32% fewer sessions and were seen for 19% fewer months.

(Mental & Neurological Disorders continued)		
Snowden LR, Cheung FK. "Use of Inpatient Mental Health Services by Members of Ethnic Minority Groups" <i>Am Psychol</i> 1990;45(3):347-355	National data of psychiatric hospitalizations (1980).	Asian Americans had greater length of stays at county and state mental hospitals than whites, although initially they were less likely to be admitted to mental hospitals compared to whites. Native Americans and African Americans were more likely to be hospitalized than whites; African American were more likely to be diagnosed as schizophrenic and less likely to be diagnosed with an affective disorder. African Americans were over-represented in inpatient mental health services compared with whites. A moderate under-representation was noted among Hispanic inpatients when compared to whites.
Strakowski SM, Shelton RC, Kolbrener ML. "The Effects of Race and Comorbidity on Clinical Diagnosis in Patients With Psychosis" <i>J Clin Psychiatry</i> 1993;54:96-102	Retrospective cohort study using data on patients (N=173) with psychotic disorders discharged from large state psychiatric hospital in a seven month period.	African Americans were more likely to receive organic or psychotic diagnoses than whites, whereas whites were almost two times more likely to receive mood or anxiety diagnoses, independently of gender, type of admission, and comorbid diagnoses. Although African American patients with psychosis were less likely to be diagnosed with an affective disorder than similar white patients, African Americans were more likely to be hospitalized, and more likely to be admitted as schizophrenic patients. African American patients were also more likely to receive higher doses of antipsychotic medication while men were more likely than women to be diagnosed with schizophrenia.
Sue S, Fujino DC, Hu L, Takeuchi DT, et al. "Community Mental Health Services for Ethnic Minority Groups: A Test of the Cultural Responsiveness Hypothesis Elderly" <i>J Consult Clin Psychol</i> 1991;59(4):533-540	Patients from outpatient services of Los Angeles County Mental Health System, 1983 to 1988.	While African Americans overutilized mental health services, both Asian Americans and Hispanics underutilized such services. After receiving treatment as outpatients, African Americans were least likely to improve. For all groups, ethnic match was associated with the length of treatment while for Hispanics and non-English speaking persons it was also related to treatment outcomes.

<i>(Mental & Neurological Disorders continued)</i>		
Temkin-Greener H, Clark KT. "Ethnicity, Gender, and Utilization of Mental Health Services in a Medicaid Population" <i>Soc Sci Med</i> 1988;26:989-996	Medicaid eligible population in Monroe County, New York.	No significant relationship was observed between ethnicity and inpatient care. Ambulatory mental health services utilization, however, was significantly associated with ethnicity. Non-whites experienced much greater utilization of ambulatory services for alcohol use than whites. Overall, whites experienced significantly higher levels of ambulatory psychiatric care than their non-white counterparts.
Wells KB, Hough RL, Golding JM, et al. "Which Mexican Americans Underutilize Health Services?" <i>Am J Psychiatry</i> 1987;144:918-922	Patients (N=3132) from National Institute of Mental Health Epidemiological Catchment area in Los Angeles (1982 to 1983).	Less acculturated Hispanics had significantly lower utilization for outpatient care than their non-Hispanic white counterparts. Both low and high acculturated Hispanics were less likely than Non-Hispanic whites to have made an outpatient visit for physical health reasons in the past six months. Differences in the use of outpatient care between Hispanics and non-Hispanics whites were more noticeable for mental health services than physical health services. Non-Hispanic whites who were recently diagnosed with a psychiatric disorder were 7 times more likely to utilize outpatient mental health services than less acculturated Hispanics.
<i>Osteoporosis</i>		
Citation	Study Population	Major Findings
Hoenig H, Rubenstein L, Kahn K. "Rehabilitation After Hip Fracture: Equal Opportunity for All?" <i>Arch Phys Med Rehabil</i> 1996;77:58-63	Medicare patients (N=2762) from 297 randomly selected hospitals (5 states) hospitalized with a primary diagnosis of acute hip fracture between 1981-1982 and 1985-1986.	The intensity of and rate of receiving physical and occupational therapy were significantly affected by variables such as hospital size and race. After adjusting for patients' clinical characteristics, African Americans were more likely to receive low intensity therapy than non-African Americans (63% vs.43%).

Preventive & Therapeutic Services		
Citation	Study Population	Major Findings
Baron JA, Jane B, Katz JN, et al. "Total Hip Arthroplasty: Use and Select Complications in the US Medicare Population" <i>Am J Public Health</i> 1996;86:70-72	A 5% random sample of Medicare patients over 65 years of age was obtained from physician and hospital claim data for 1986 to 1989.	Hip arthroplasty rates were lower for African Americans than whites and higher for women than men.
Bartman BA, Moy E, D=Angelo LJ. "Access to Ambulatory Care for Adolescents: The Role of a Usual Source of Care" <i>J Health Care Poor Underserved</i> 1997;8(2):214-226	A sample of adolescents, 11 to 17 years of age, was selected from the 1987 National Medical Expenditure Care Survey (NMES) to study ambulatory service utilization in the adolescent population.	Risk for not receiving ambulatory care was associated with African American race, Hispanic ethnicity, middle income, lack of insurance, and a usual source of care.
Blendon RJ, Aiken, LH, Freeman HE, et al. "Access to Medical Care for African American and White Americans" <i>JAMA</i> 1989;261(2):271-281	National Telephone Survey B 1986 (approx. 25 min. interview).	Results indicated under-utilization of needed medical care by African Americans across income levels. African Americans also had less access to health care than whites, were less satisfied with physician treatment, hospitalization care, and duration of hospitalizations. African Americans who did have contact with physicians reported fewer visits than whites (6.9 visits to 10.1 visits) and less satisfaction with their physician's behavior toward them.
Carlisle DM, Vladez RB, Shapiro MF, et al. "Geographic Variation in the Rates of Selected Surgical Procedures within Los Angeles County" <i>Health Serv Res</i> 1995;30:27-42	California Discharge Dataset (1986 to 1988) in Los Angeles County.	Racial and ethnic differences were observed for all procedures (coronary artery angioplasty, carotid endarterectomy, hysterectomy) except for cardiac pacemaker implantation.
Cornelius LJ, Altman BM. "Have We Succeeded in Reducing Barriers to Medical Care for African and Hispanic Americans with Disabilities" <i>Soc Work Health Care</i> 1995;22:1-17	National Medical Care Expenditure Survey (1987).	African Americans and Hispanics disproportionately encountered barriers to care. Both African Americans and Hispanics were more likely than whites to not have health insurance or a regular health care provider, and were less likely to see a doctor during the year.

<i>(Preventive & Therapeutic Services continued)</i>		
Cox C. "Physician Utilization by Three Groups of Ethnic Elderly" <i>Med Care</i> 1986;24:667-676	Elderly from three ethnic populations were examined for the purposes of studying physician utilization in the Vietnamese, Portuguese, and Hispanic populations.	Marital status had different effects on utilization in Vietnamese, Portuguese, and Hispanic populations. For the three ethnic groups, the rates of chronic illnesses and the frequency of physician visits were similar. The perceptions of need differed among the groups and had an influence in predicting physician utilization.
Fleischer Jr. AB, Feldman SR, Bradham DD. "Office-Based Physician Services Provided by Dermatologists in the United States in 1990" <i>J Invest Dermatol</i> 1994;102:93-97	The 1990 National Ambulatory Medical Care Survey was used to study the descriptive aspects of visits to dermatologists.	Asians and whites frequented dermatologists more often than African Americans and Native Americans. Median income may be responsible for this disparity in visits.
Gittelsohn A, Powe NR. "Small Area Variations in Health Care Delivery in Maryland" <i>Health Serv Res</i> 1995;30(2):295-317	Patient discharge data were obtained from acute care hospitals in Maryland for 1985-1987. Population estimates by age, race, gender, and income were also utilized.	African American females had 40% lower rates of cholecystectomy than whites. Vascular procedure rates were 5 times higher among whites than among African Americans, although rates were not related to admissions for heart disease. Elective surgery rates were high among whites with high socioeconomic status and low among the poor.
Gornick ME, Eggers WE, Reilly WE, et al. "Effects of Race and Income on Mortality and Use of Services Among Medicare Beneficiaries" <i>N Engl J Med</i> 1996;335:791-799	Medicare Current Beneficiary Survey (1993) linked to census data (1990) by zip code were linked with Medicare administrative data (1993). The population studied was over 65 years of age (N=26.3 million).	Among Medicare beneficiaries, African Americans and those with low incomes had fewer immunizations against Influenza than whites. White women had higher rates of mammograms than African American women. Mammography rates were also associated with income level. African Americans were less likely to visit physicians for ambulatory care and had higher hospital discharge rates than whites. In addition, African Americans and low income beneficiaries had lower rates of hormonal therapy for prostate cancer as compared to the use of bilateral orchiectomy.

<i>(Preventive & Therapeutic Services continued)</i>		
Hahn B. "Children's Health: Racial and Ethnic Differences in the Use of Prescription Medications" <i>Pediatrics</i> 1995;95:727-732	Two samples were selected from the National Medical Expenditure Survey (NMES) data for 1987. One sample consisted of children 1-5 years old (N=1347) and the other sample consisted of children 6-10 years old (N=2155).	African American and Hispanic children were less likely to receive prescribed medication compared to white children, even after adjusting for socioeconomic status, health conditions, and physician visits.
Mort EA, Weissman JS, Epstein AM. "Physician Discretion and Racial Variation in the Use of Surgical Procedures" <i>Arch Intern Med</i> 1994;154:761-767	Discharge data were obtained for all Massachusetts residents for fiscal year 1988. Ten surgical procedures were identified for analysis.	Ethnic minorities and low income individuals were less likely to receive major medical and surgical procedures than whites. Utilization rates were higher for whites than for African Americans for 8 of 10 procedures, including abdominal, aortic aneurysm repair, appendectomy, cardiac valve replacement, cholecystectomy, carotid endarterectomy, lumbar disk procedures, and open reduction. Among African Americans, rates were considerably higher for hysterectomy, a high-discretion procedure.
Newacheck PW, Hughes DC, Stoddard, JJ. "Children's Access to Primary Care: Differences by Race, Income, and Insurance Status" <i>Pediatrics</i> 1996;97(1):26-32.	A sample of 7578 children ranging from 1 to 17 years old from children of families responding to the 1987 National Medical Expenditure Survey.	Access to and use of primary care among African American and Hispanic children were influenced by poverty and lack of insurance. Poor, minority, and under-insured children were twice as likely to lack usual resources of care, experience longer waits, and utilized half as many physician services. Multivariate analyses suggested that poverty, minority status, and absence of insurance exercise interdependent effects on primary care usage and accessibility.
Sichieri R, Everhart JE, Roth HP. "Low Incidence of Hospitalizations with Gallbladder Disease Among African Americans in the United States" <i>Am J Epidemiol</i> 1990;131:826-835	Follow-up to National Health and Nutrition Examination Survey (1971-1975) conducted from 1982-84. From 1971 to 1984, 368 gallbladder disease cases were identified based on hospital discharge data out of 10551 people (age 25 to 74 years).	After controlling for obesity, parity, ethanol consumption, use of diurestics, use of oral contraceptive, educational level, poverty index, and serum cholesterol, the results indicated that the risk of hospitalization with gallbladder disease increased with age for white women and decreased for black women. Blacks had a lower risk of hospitalization for gallbladder disease than whites. Hospitalization rates for all causes excluding pregnancy in the follow-up period were lower for black women.

<i>(Preventive & Therapeutic Services continued)</i>		
Trude S, Colby, DC "Monitoring the Impact of Medicare Fee Schedule on Access to Care for Vulnerable Populations" <i>J Health Polit Poli Law</i> 1997;22(1):49-71	Populations affected by Medicare Fee Schedule.	Utilization by very old and African Americans was lower before implementation of the Medicare Fee Schedule (MFS). Utilization was lower in areas where fees increased, whereas utilization was increased in areas where fees decreased (except for utilization by low income African Americans).
Velebil P, Wing PA, Xia Z, et al. "Rate of Hospitalization for Gynecologic Disorders Among Reproductive-Age Women in the United States" <i>Obstet Gynecol</i> 1995;86:764-9	Data from the National Hospital Discharge Survey (1988, 1989, 1990) including women 15-44 with gynecological diagnoses notations in their discharge summaries.	Annual rates of hospitalization for pelvic inflammatory disease were higher among women of races other than white than among white women even across age groups. Higher rates of hospitalization in women of races other than white were also observed for uterine leiomyomas and endometriosis.
Yergan, J, Flood AB, LoGerfo JP, et al. "Relationship Between Patient Race and the Intensity of Hospital Services" <i>Med Care</i> 1987;25:592-603	Patients with pneumonia studied at 16 randomly selected hospitals.	Based on their health characteristics, non-white pneumonia patients received fewer hospital services though the duration of their stay was longer. The results were consistent whether the hospitals were viewed as single entities or viewed as a group.
Renal Disease		
Citation	Study Population	Major Findings
Alexander GC, Sehgal AR. "Barriers to Cadaveric Renal Transplantation Among Blacks, Women, and the Poor" <i>JAMA</i> 1998;280:1148-1152	Patients beginning long-term dialysis from January 1993 and December 1994 (N=7125).	African Americans were less likely than whites to be definitely interested in transplantation and less likely than whites to move up a waiting list and receive a transplant. African Americans were also less likely than whites to complete the pre-transplant work-up. These results remained true even after adjusting for age, sex, median income, and other variables.
Barker-Cummings C, McClellan W, Soucie JM, et al. "Ethnic Differences in the Use of Peritoneal Dialysis as Initial Treatment for End Stage Renal Disease" <i>JAMA</i> 1995;274:1858-1862	African American and white patients (N=10726) who began treatment for ESRD at dialysis centers in Georgia, South Carolina, and North Carolina.	African Americans were almost half as likely as whites to utilize peritoneal dialysis. The differences remained even after adjusting for education, age, social support, home ownership, albumin level, functional status, history of myocardial infarction, hypertension, peripheral neuropathy, and comorbid diabetes.

<i>(Renal Disease continued)</i>		
Onyekachi I, Dawood M, Iofel Y, Valcourt JS, Friedman EA. "Delayed Referral of Black, Hispanic, and Older Patients with Chronic Renal Failure" <i>American Journal of Kidney Diseases</i> 1999;33:728-733.	A retrospective study examined 220 patients referred to an urban teaching hospital for evaluation of chronic renal failure from January 1987 to December 1994.	At referral, nonwhites (black and Hispanic patients) had a greater mean serum creatinine concentration than whites. Delayed referral was almost 6 times more likely in those age 55 years and older.



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Perceptions of How Race & Ethnic Background Affect Medical Care

Highlights from Focus Groups

Conducted by Frederick Schneiders Research
For The Henry J. Kaiser Family Foundation

October 1999



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Dr. Satcher
speech on
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Remarks by

DAVID SATCHER, M.D., PH.D.

Assistant Secretary for Health and Surgeon General

Office of Public Health and Science

Keynote Address

Edward C. Mazique, M.D. Symposium
1999 National Medical Association Annual Scientific Assembly
Las Vegas, NV

Sunday, August 8, 1999
1:00 p.m.

This text is the basis for the Assistant Secretary for Health and Surgeon General's oral remarks.
It should be used with the understanding that some material may be added or omitted during presentation.

Introductory Remarks

Acknowledgments

Thank you for that kind introduction. It's my pleasure in being with you. I bring you greetings from Washington, DC, the Department of Health and Human Services, which houses the Office of Public Health and Science.

Challenges of Being a Minority Physician

Minority physicians face several unique challenges. There are too few of us. Our patient base falls into any one or a number of the following categories: uninsured, underinsured, underserved, and uninspired. We are often left out of systems of care, like managed care, which while they are enrolling our patients are not enrolling our physicians.

The burden of despair placed on minority physicians is enormous but so too is our responsibility.

Beyond that, when we look around, we notice that too many Black physicians are dying young and too many are dying early. In your day-to-day challenge to care for patients, I'm here to remind you that your patients need you to take care of you. If you don't you may not be around to take care of them.

Call to Action to Improve the Nation's Health

For my part today, I want to call you to action. I want to call you to join us in the

fight to make communities healthier. I want to challenge you to become more involved with the community as the leader who is educating, motivating, and mobilizing its people. It's going to call for you to be the role model and the one that others look to for inspiration – and often you may be the only one. But be the one that makes the difference.

Healthy People Initiative

Our Healthy People Initiative is an example of our commitment to build healthy communities. In the 200-year history of the Public Health Service, I am only the 16th Surgeon General of the United States. And I am only the second person in the country to ever hold the Surgeon General's title simultaneously with the Assistant Secretary for Health's title.

As the Assistant Secretary for Health, I am responsible for administering the Healthy People Initiative, which sets the nation's health agenda every 10 years. In reviewing our progress over the past decade, our Healthy People 2000 initiative has revealed some hopeful news about the nation's top health concerns.

We have either met, exceeded or are moving in the right direction in 60 percent of our objectives, including such areas as nutrition, teenage pregnancy, maternal and child health, heart disease, mental health, child immunizations, breast feeding, STD reduction, homicides, cancer mortality, and oral health visits. For some objectives, such as the reduction in infant mortality, we are only a fraction away from their targets. But for some key objectives, such as reducing the number of

overweight individuals and increasing physical activity, and reducing the rates of diabetes, asthma and low birthweight babies, we have moved in the wrong direction. In addition, for all of the areas above, major disparities exist for different racial and ethnic groups.

In looking ahead to the next decade, we have established two goals for Healthy People 2010. One of them is "increasing the years and quality of healthy life." Since 1900, we have added 30 years to our life expectancy -- and African Americans have gained about 40 years -- so that we are now showing an average life expectancy of 75.8 years. Despite those gains, we recognize that living better is as important as living longer, so we also want to increase the quality of life by preventing disability, improving functioning and relieving the pain and distress caused by physical and emotional symptoms. We want people to live long and healthy lives.

Our second goal is to eliminate racial and ethnic disparities in health.

Eliminating Disparities in Health

About two years ago, during a commencement address at the University of California at San Diego, President Clinton introduced the concept of the Race Initiative. He said that America is the most diverse country in the world and that diversity is one of our major strengths. He went on to say that as other countries throughout the world become more diverse, they ought to be able to look to America as a model of positive diversity. He challenged us to educate ourselves

about each other and he challenged us to get to know people across racial and ethnic lines. And he appointed a national advisory board led by that great historian, John Hope Franklin. Their report to the President, "One America in the 21st Century: Forging a New Future," included their observations on what they saw and heard about race and its impact upon communities throughout the country. The Board report also offers recommendations on specific steps that should be taken to eliminate racial disparities experienced by people of color.

Following that, the President asked each cabinet head to develop some strategy supporting the Race Initiative. In the Department of Health and Human Services under the leadership of Secretary Donna Shalala, we adopted the commitment to work toward the elimination of disparities in health by the year 2010. President Clinton announced this initiative from the White House in February 1998.

We will focus on six key areas: infant mortality, cancer screening and management, cardiovascular disease, diabetes complications, HIV/AIDS infection rates and treatment, and child and adult immunizations.

What we have done through this initiative is to make a commitment -- really for the first time in the history of our government -- to *eliminate*, not just *reduce*, some of the health disparities between majority and minority populations. The current gaps are alarming...

- A baby born to an African-American mother has more than twice the risk of

dying in the first year than a white baby. An American Indian baby is 1.5 times more likely to die. Even from the beginning, we are behind.

- African-American men under 65 suffer from **prostate cancer** at nearly twice the rate of whites.
- African-American men suffer from **heart disease** at nearly twice the rate of whites.
- American Indians suffer from **diabetes** at nearly three times the average rate. For Hispanics, the rate is nearly double that of whites. And African Americans suffer 70 percent higher rates of diabetes than whites.
- Although the incidence of **breast cancer** is greater for white women, African American women are more likely to die from breast cancer.
- Asian Americans are 3 to 5 times as likely to die of **liver cancer**.
- The HIV/AIDS epidemic is increasingly becoming a disease of women, of the young, and of people of color.

Eliminating disparities is important for three reasons:

First, because not to do anything would be inconsistent with our national values and inconsistent with the driving principle of the Public Health Service -- to the extent we care for the most vulnerable among us, we do the most to protect the health of the nation.

Second, because eliminating disparities is not a zero-sum game. We are not taking anything from anyone when we focus on the health needs of those most at risk. History and science both have taught us that the entire nation benefits when we

protect the health of those most vulnerable and at risk.

Third, if we do nothing the gap increases and the entire nation suffers, our children, our elderly, and everyone in between.

One of my mentors, the late Benjamin Elijah Mays, who served as president of Morehouse College for 27 years, including the four years that I was there, had a saying that went like this: *If it falls your lot in life to touch the lives of others, then be sure to touch them in such a way that you leave them better than you found them.* That's still our challenge today.

Our Strategy: Balanced Community Health System

We realize that eliminating disparities in health will not be easy. We have adopted a strategy to help us achieve this enormous task.

The Baltimore Sun ran a cartoon a couple of weeks ago that showed a physician telling a bed-ridden patient: "Here's your new patient's bill of rights: You will receive top-of-the-line care, promptly and effectively, delivered in a compassionate and sensitive manner at no cost to you or anyone else." The patient replied anxiously, "Great! What's the catch?" And the physician said: "You died. This is heaven."

We realize that alleviating the problems of access, quality, and cost will not be easy; hopefully, we won't have to wait for heaven before we can make it happen.

We believe we must reform our health care system toward one that balances health promotion, disease prevention, early detection and universal access to care. We believe we need a more balanced community health system.

Removing the Barriers to Care

A balanced community health system must achieve several things, but first and foremost, it must remove the barriers to care. Access to quality, affordable care should not be out of reach for patients. But for millions of people, it is. We spend \$1.5 trillion on health care each year -- that's 15 percent of our gross national product; nevertheless, only 1 percent of that on population-based prevention and 16 percent of our population is uninsured.

We must remove the barriers to health care for the uninsured, the underserved, the underinsured, and the uninspired. Millions of the people not only lack the help they need to get well, they will also lack the hope they need to get well.

Today, nearly 33 million adults are uninsured. Added to that are 11 million children -- that's 1 out of every 7 children. The Department has recently stepped up our efforts to offer higher quality, more coordinated care with greater efficiency to the nation's uninsured workers. As for our children, the newly added Child Health Insurance Program, or CHIP, is the most significant program passed in this country since Medicaid and Medicare. It will provide insurance to 2.5 million of those children in low-income families over the next three years.

Healthy Start

And that's important, because we believe that every child should be given the opportunity for a healthy start in life and part of that is ensuring that they have access to care. But it also means ensuring that even before babies are born that their parents ready to be parents, that mothers eat nutritious meals and take Folic Acid prior to conception to reduce the chances of neural tubal defects, and that they have access to quality prenatal care. Once the baby arrives, a healthy start means ensuring a safe and nurturing environment, free from toxins and violence, and free from the hopelessness that stands in the way of a healthy start. It means breast feeding whenever possible and ensuring that babies are placed on their backs to sleep to avoid Sudden Infant Death Syndrome.

Mental Health

A balanced community health system must also adopt a new approach to mental health, one that is based on care and nurture and not blame and stigmatization. We are working on a new report on Mental Health, which will be released by the end of the year. And just recently, I was with the Second Lady, Tipper Gore, to announce the *Surgeon General's Call to Action to Prevent Suicide*. You may not be aware, but on average, 85 Americans die from suicide each day, mostly at the hand of firearms. In fact, suicide deaths outrank homicide deaths in this country. I have received more communication regarding the *Surgeon General's Call to Action to Prevent Suicide* than any other initiative to date.

In developing a mental health system, we also must address a number of other serious health problems that are often related to mental illness in this country,

including substance abuse, violence, incarceration, and homelessness, where, in some studies, it shows that our jails and prisons are being turned into *de facto* mental hospitals and that as many as 50 percent of the homeless are there because of mental illness. So we must adopt a new strategy for addressing mental illness in this country.

Promoting Healthy Lifestyles

Finally, a balanced community health system will promote healthy lifestyles. To do that, I have come up with a prescription for healthy living. So what is my Prescription for Healthy Living? My staff came up with the idea after they heard me talking about healthy lifestyles so much, they thought I needed a prescription to help get the message out. Since then, the prescriptions have become so handy that I carry them with me all the time. Remember that 50 percent of deaths in the country are due to human behavior, not genetics or environment or poor medical care.

Let me read one to you. It says (1) moderate physical activity at least five days a week, 30 minutes a day; (2) eat at least five servings of fruits and vegetables a day; (3) avoid toxins, such as tobacco; (4) and responsible sexual behavior, including abstinence where appropriate.

I was at Princeton, New Jersey, a few months ago, speaking to the Board of the Robert Wood Johnson Foundation. And since I am away from home so much I was determined that I wanted to get back to Washington to get back home that night. We rushed to the train station after I spoke to catch the last train from the

Trenton station. Even though we rushed down into the station, the train was a little late. As we were standing there, this young man looked over and he noticed me. He said: "You know, you look just like the Surgeon General." I was dressed in full uniform, just like I am now. I said: "There's a reason for that." Well, he discovered that I was so he started shouting, "The Surgeon General is here, the Surgeon General is here." So other people started coming around who were supposed to be working. The first guy got there and said to his friend: "You mean you are smoking in front of the Surgeon General?" So he threw his cigarette away and stomped it. And I wrote him a prescription that said "stop smoking." The other guys started laughing and he said: "Well you can't laugh, you're overweight." So I wrote him a prescription. Then there was another guy laughing, and one of them said to him, "You can't laugh, the way you mess around, you're going to get AIDS or something." So I wrote him one. By the time I left there, I had written about 10 prescriptions.

But we're serious about promoting healthy lifestyles. More important than our most sophisticated medical technology and our most medically advanced drugs, is promoting healthy lifestyles among the American people. If we can do that, we can make a difference.

So, let me elaborate on each of the four categories we have listed.

Nutrition

The first step toward adopting a healthy lifestyle is good nutrition. That means

eating at least five servings of fruits and vegetables every day. That may sound like a lot, but it's not. One serving could be 6 ounces of 100 percent fruit or vegetable juice. It could be a medium apple or pear; or it could be a half-cup of cut up fruit, a half-cup of cooked vegetables, or a full cup of leafy vegetables. So you see, there are many ways to get in a serving.

Good nutrition also means increasing your intake of calcium, grains and fibers and reducing fat and sweets from our diets. We know that dietary factors are associated with 4 of the 10 leading causes of death, including coronary heart disease, some types of cancer, stroke, and Type 2 diabetes, not to mention osteoporosis and bone fractures. These conditions result in undue pain and suffering and premature death, not to mention they cost society more than \$200 billion each year.

Physical Activity

Not only is nutrition important, but a healthy lifestyle should also include physical activity. That does not mean you have to be an all-star athlete to be healthy.

Physical activity can include walking, aerobic dancing, swimming, biking, washing the car, gardening, or jogging. We recommend at least 30 minutes of physical activity a day for five days a week. Some people have trouble fitting it into their schedules, but the good news is it does not have to be done at the same time -- you may need to do it intermittently through the day, but the goal is to get it done. I enjoy jogging so much that it has become almost an addiction for me. People notice that when I don't jog, I am not my usual self. But beyond just making you feel better, studies have shown that there are several other advantages

to physical activity -- from relieving stress to reducing hip fractures in the elderly to enhancing our sex lives, and now reducing the risk of Alzheimer's Disease.

Monitoring your food intake and staying physically active can prevent a number of health problems. Physical inactivity and poor nutrition have led to obesity levels in this country that have reached epidemic proportions for both children and adults. We know that people who are overweight or obese have a greater chance of developing high blood pressure, high blood cholesterol, Type 2 diabetes, heart disease, stroke, and certain cancers. Consider that in the United States today, 15 percent of children and 22 percent of adults are obese. Beyond that, when look at women alone, 50 percent of African American and Hispanic women are obese. These rates reflect serious public health challenges, but they are not without solutions.

We need families to adopt more active lifestyles and healthy meal choices, especially since schools by and large are not requiring physical activity for our children and since school lunches are often not nutritious.

So physical activity and nutrition are important, but there are two more healthy lifestyle areas I want to share with you.

Avoidance of Toxins

The third area of a healthy lifestyle is avoiding toxins. There are many problems associated with smoking and excessive use of alcohol, including cancer, SIDS, cardiovascular disease, unintentional injuries, irresponsible behavior, liver disease,

to name a few. Yet, we still glamorize these behaviors throughout our entertainment industry and market them to our children.

Responsible Sexual Behavior

And finally, a healthy lifestyle means promoting responsible sexual behavior. When we talk about responsible sexual behavior, we mean remaining abstinent until you're in a committed relationship.

Sex is nothing to play around with. I'm not just referring to the threat of AIDS, the disease from which more than 410,800 men, women, and children have lost their lives in this country alone. Added to that are 14 million AIDS-related deaths throughout the world. And another 650,000 to 900,000 Americans are estimated to be living with HIV, the virus that causes AIDS. But every year more than 12 million cases of sexually-transmitted diseases (STDs) are reported in the United States, resulting in billions of dollars in preventable health care spending, along with 850,000 teenage pregnancies, 90 percent of them unintended.

Recently, I traveled to Hollywood to speak to a group of producers and writers for prime time television. I asked them to be responsible in their programming and to take the time to not only show the glamorous side of sex, but to also show the consequences of irresponsible sexual behavior. Irresponsible sexual behavior can have life-changing consequences at best and can result in death at the worst.

But there's another side to sex. When speaking across the country, I often tell people that sex is wonderful and sex is beautiful, but when it is within the confines

of a committed relationship. Sex is a special part of a committed relationship. I recently finished reading the autobiography of Ossie Davis and Ruby Dee. In it, Ossie writes a letter to his children where he says to them, "Sex is great, but love is greater." We want our children (and really adults too) to understand that relationships do not begin with sex. Relationships should begin with communication, understanding, and appreciation. That's what responsible sexual behavior is all about.

Conclusion

Studies have proven that 50 percent of all the premature deaths in this country are directly related to human behavior, so I want to challenge you to remember to take time to talk with your patients. Ask them about their lifestyles. Query them about their physical activity routines and their eating habits. Promote responsible sexual behavior when you talk to them. Ask them about their use of tobacco and other toxins. Studies have shown that a significant percentage of patients said they would stop smoking if their physicians just asked them to. That's a tremendous impact when considering that nearly 450,000 people a year die from smoking in this country... that every day, 3,000 new teenagers become smokers... that half of them will be addicted before they are 18 years of age... and that one-third of them will die from some smoking-related disease.

I realize that this call to action is no short order. Every day, physicians witness the onset of chronic illnesses and life-threatening diseases that patients could have controlled or prevented had they chosen to adopt healthy behaviors. If our system

is going to work, it's going to call for physicians to start talking to their patients and asking them questions about their lifestyles so that they can begin to have an impact on their behavior. Together we can make the difference between life or death for our patients. Our reimbursement policy must change accordingly.

Let me leave you with this quote from Dr. Mays:

It must be borne in mind that the great tragedy of life is not in failing to reach one's goals, but in having no goal to reach. It is not calamity to die with dreams unfulfilled, but it is a calamity not to dream. It is not a disaster if you fail to achieve your highest ideals, but it is a disaster to have no ideals for which you are striving. It is not a disgrace to fail to reach the stars, but it is a disgrace to have no stars to reach. Not failure, but low aim is sin.

I look forward to your achievements in the future. Godspeed.

MEETING WITH CHRIS JENNINGS
March 24, 1999

Immigration

- Public Charge
- Medicaid restoration for immigrant kids and pregnant women
- Nurse shortage bill (HR 441)

One America - Constituency groups raise various health concerns. One America Initiative includes all medically unserved communities - including minority and rural communities.

- Health Disparities
- Healthy People 2010
- IOM study - Unequal burden of cancer - underrepresented in cancer research
- Unequal treatment in health services
- Data collection and application
- Education and outreach to underserved communities
- Asian American Pacific Islander Executive Order
- *Cultural Competency*

Civil Rights

- Limited English Proficiency (LEP) persons access to health services
- Victims of worker exploitation access to health and social services

Others?

limited-English proficient users to access both the criminal and the civil courts in their communities. Strategies that may be implemented include providing grants to community-based organizations for outreach and public education, providing training for law enforcement personnel (including judges) about the changing demographics in the communities they serve, and making available court-certified interpreters.

- **Support American Indian and Alaska Native law enforcement.**

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Edward W. Correia

04/15/99 05:52:23 PM

Record Type: Record

To: See the distribution list at the bottom of this message

cc:

Subject: CRCC Meeting

I can't be at the meeting on Friday afternoon. Here's a status report on the areas I'm working on.

Hate Crimes -- Hatch holds a hearing on April 28. He has signaled that he wants to come up with a "consensus" bill. We'll see.

Workforce Diversity -- We have scheduled a meeting on May 4th with representatives of high-tech firms who appear willing to help us with this effort. United Technologies, AT&T, Intel, AOL, GE, and a number of other firms have said they will come. We plan to present them with some ideas on what industry can do and to get their views as well. Sec. Richardson is interested in a similar effort at DOE, so perhaps we can coordinate them. ED and DOL will be involved in planning for the May 4th session.

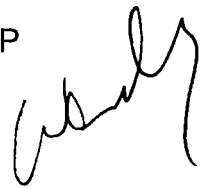
On a related matter, we are in the process of reviewing EEOC's draft management directive to federal agencies regarding permissible affirmative action in regard to race, gender and disability. DOJ and DPC are participating in that review. The draft would then go back to EEOC for preliminary approval and all agencies would have an opportunity to comment.

Environmental Justice -- DOJ, EPA and CEQ representatives will meet with the Counsel to the President and myself, probably the week of April 26th, regarding EPA's process for dealing with Title VI complaints. In the meantime, the Commerce Committee's oversight and investigations staff has become interested in how EPA handles these complaints.

Wage Gap -- DOL is in negotiations with OMB on their "scheduling request" -- collecting wage data at the first step in the audit process that is applied to about 5,000 firms. We will wait till that process is resolved before dealing with the broader proposal to collect wage data regularly from all federal contracts - the "60-2 proposal."

Health Disparities -- We met with Ben Johnson to discuss some ideas in this area. Here are two possibilities. First, OCR/ HHS is interested in a health care conference co-sponsored by Dr. Satcher and DOJ's Civil Rights Division. Such a conference could call attention to a variety of civil rights concern in health care, including provider behavior, language barrier issues, allocation of research dollars, and other issues. Second, it may make sense for OCR to develop a regulation, or at least clearer guidance, regarding the responsibilities of health care providers who receive federal funds to reduce language barriers. Such a regulation could be based on Title VI or perhaps other HHS regulatory authority. Although such a regulation has great potential benefits, it also raises difficult questions about our legal authority and the practical implementation of these responsibilities. We can also anticipate some objection from the health care industry about the burdens it might impose. Depending on the legal basis, it could also have implications for all types of recipients of federal funds. OCR/HHS is developing a more specific proposal for discussion.

To: Maria Echaveste/Charles Ruff
From: Irene Bueno
Date: June 14, 1999
Subject: STATUS REPORT ON WORKER EXPLOITATION GROUP



This is an update on the worker exploitation/trafficking group.

- Regional Task Forces – The DOJ/DOL Worker Exploitation Task Force (WETF) held their first conference call with the 15 regional task forces throughout the country. Assistant U.S. Attorneys are coordinating the 15 regional task forces to set time table on training with task force members. The Southern region has already completed their training. They have been using an existing INS video for training that addresses other issues in addition to worker exploitation issue however, the DOJ Office Victims Assistance is working on a new video that will focus on this issue that they expect to complete soon.
- Outreach – The WETF Task Force has an outreach coordinator who will work on this issue. *(Name?)*
- Worker Exploitation Hotline - DOJ is hoping to get their hotline going soon. They are working on the logistics.
- DOJ is sending attorneys to Saipan to work on case dealing with worker exploitation situation.
- The FBI has been become more involved in this issue. A staff person from the FBI victim witness community outreach unit is planning to go Saipan and Guam to do training on worker exploitation issues.
- We are still working to finalize the language on trafficking that is part of the President's proposed crime bill.

Note: Since Juliette Kayyaam has left DOJ/Civil Rights Division – Julie Fernandes will be my contact on this issue.

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