ARTICLES

Site of Medical Care: Do Racial and Ethnic Differences Persist?

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Prior to the 1960s, Americans generally obtained health care in racially segregated facilities or from health providers of their own race or ethnicity. Racial, geographic, and economic factors influenced where minority Americans could get their health care. Minority Americans, who were disproportionately low income, relied on a combination of sources of care, such as public hospitals and private charity care, because they were unable to afford the cost of a private doctor. Even middle-income minority Americans largely relied upon racially segregated sources of care because these were the only options available to them.[1]

In the past four decades, substantial progress has been made in reducing differences in the major sources of health care used by whites and blacks, as well as other racial/ethnic minority groups. Nonetheless, striking racial/ethnic disparities in health care use and health outcomes persist. While these disparities are well documented,[2] factors underlying these differences are not well understood. The most frequently advanced explanations for current health care disparities focus on the characteristics of the patient (e.g., economic conditions or preferences) or the individual provider (e.g., competence or biases). However, it is conceivable that differences in the primary sources of care used by white patients and minority patients might explain some variations in the content of care. Structural or institutional factors—patient-provider relationships, referral

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networks, and the availability of resources such as highly trained staff and state-of-the-art technology—of varying sources of care may influence the care that patients obtain. Improving knowledge of the extent to which racial/ethnic differences persist in the site of medical care will inform future investigations of the causes of health care disparities.

This study, based on original research, examines whether the major sources of ambulatory medical care of whites, African Americans, and Latinos, given similar insurance coverage, differ substantially in the United States. The intent of the study is to assess whether, at the start of the twenty-first century, race/ethnicity continues to be a primary determinant of where medical care is obtained.

I. BACKGROUND

African Americans and Latinos are the two largest racial/ethnic minority groups in the United States, accounting for nearly 25% of the U.S. population and representing about 84% of the minority population in 1999.[3] Today, they represent nearly equal shares of the U.S. population. While the two population groups differ in a number of respects, particularly in their diversity of ethnic origins and language, they share a commonality of experiences in the United States. Both populations reside largely in racially segregated neighborhoods and have poverty rates three times those of whites. Both have cultural beliefs and practices that sometimes conflict with western medicine and, thus, may result in a lack of confidence in the medical system. Both have faced a history of discriminatory policies and practices that have limited their health care access and compromised their trust in the health system. In addition, changes in federal policy and large demographic shifts in our nation's cities have had direct effects on the medical care that is available to both population groups.[4]

Improving access to "mainstream" medical care was an implicit, if not explicit, goal of Medicaid and Medicare, programs enacted in 1965 to expand health insurance coverage to low-income and elderly Americans.[5] Since providers were required to comply with the 1964 Civil Rights Act, these new programs had the direct effect of reducing financial barriers to care, as well as indirectly reducing racial barriers to care. Title VI of the Act prohibits discrimination by any facility receiving federal funds. Numerous studies have documented the important role of Medicaid and Medicare in reducing differentials in care between low-income and upper-income Americans across racial and ethnic groups.[6]

Concurrent with federal efforts to reduce financial barriers to care were initiatives designed to expand the supply of health care resources in

low-income communities. The Community and Migrant Health Centers Program and the National Health Service Corps were among the major initiatives of the "War on Poverty" that helped to expand the supply of health providers in medically underserved areas.[7] Not surprisingly, most medically underserved areas were in low-income neighborhoods, and many were also in racial/ethnic minority communities. Additionally, as a result of litigation in the 1960s that explicitly defined the "free care" obligation of hospitals built with federally provided construction funds, access to private hospital-based sources of care improved for those unable to pay.[8]

In the 1970s another demographic shift occurred that also had an impact on the health care system. Many of the inner-city hospitals found that their mostly white, middle class patient-base had moved to suburban communities and a large, low-income, mostly minority patient-base remained in inner city communities.[9] In addition, many private physicians were reluctant to establish practices in low-income communities, thus increasing the importance of urban hospitals as sources of outpatient care for the poor.[10]

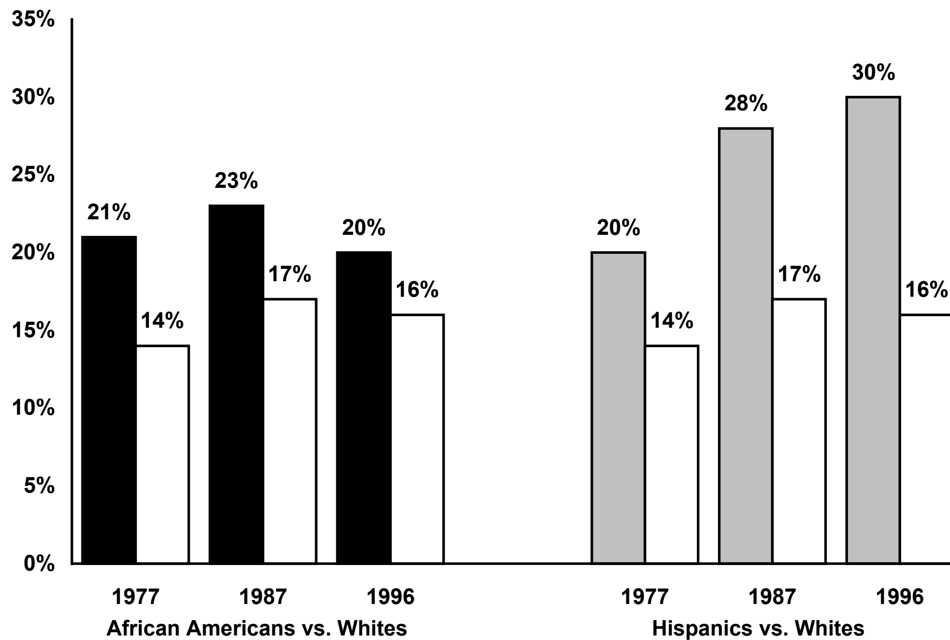
The rise of managed care in the late 1980s and throughout the 1990s produced another major shift in the health delivery system. Increasing health care costs were driving both public and private payers to search for alternatives to control the rate of growth in health spending and many believed that managed care was the solution. Reflecting national trends, nearly two-thirds of privately insured African Americans and Latinos were enrolled in a managed care plan by 1996.[11] Managed care enrollment among the publicly insured was slightly lower, but still approximately 45% of African Americans and 35% of Latinos covered by Medicaid were estimated to be enrolled in a managed care plan in 1996.[12] This shift to managed care likely increased the number of patients using private physicians rather than hospital-based providers and clinics for their care, particularly among the Medicaid population.

Health insurance, whether obtained through a managed care or fee-for-service plan, has become the primary means used to pay for medical care, and is an important determinant of an individual's ability to obtain care.[13] Compared to those with coverage, the uninsured face greater obstacles to receiving care and to developing an ongoing relationship with a health provider. In addition, studies have found that type of insurance is a strong determinant of whether individuals have a usual source of medical care.[14] People who lack insurance are significantly less likely to have a usual source of care and are more likely to rely on institutional providers such as hospitals or clinics for their care than persons who are insured.

A recent study by Weinick et al. provides evidence that racial/ethnic

differences persist in the share of the population lacking a usual source of care.[15] In 1996, roughly 16% of whites compared to 20% of African Americans and 30% of Latinos report not having a usual source of medical care. Especially troubling is that the gap between Latinos and whites without a usual source of medical care widened between 1977 and 1996 (figure 1). For African Americans and whites, the gap remained about the same.[16]

Figure 1. No Usual Sources of Medical Care, 1977 to 1996

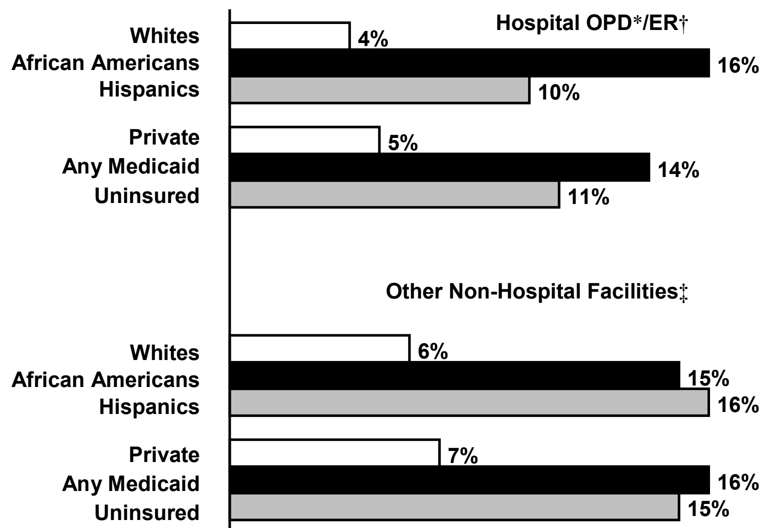


Data: NATIONAL MEDICAL CARE EXPENDITURE SURVEY 1977, NATIONAL MEDICAL EXPENDITURE SURVEY 1987, and MEDICAL EXPENDITURE PANEL SURVEY 1996.
Source: Robin M. Weinick et al., *Racial and Ethnic Differences in Access to and Use of Health Care Services*, 57 MED. CARE RES. & REV. 36, 42 (Supp. I 2000).

Factors related to type of insurance also influence where care is obtained. For example, Medicaid beneficiaries, regardless of race, have faced challenges in accessing “mainstream” sources of care such as private sector office-based physicians. In 1993, for example, Medicaid payment rates for private sector office-based physicians were 73% of Medicare rates and about 47% of private rates.[17] Low payment rates, concerns about practicing in high-poverty areas, and bureaucratic hassles have been cited as major reasons for low participation in Medicaid among private physicians.[18]

While we do know that insurance affects where individuals go for care, very little is known about whether race/ethnicity has an effect, independent from insurance status, on the site of care. Cornelius et al. documented that insurance status and race/ethnicity are separately associated with the usual sources of medical care.[19] African Americans and Latinos were more likely than whites to use hospital outpatient departments (OPDs), community-based clinics, and emergency rooms (ERs) as regular sources of care in the 1980s. Also, the publicly insured and the uninsured were more likely than the privately insured to obtain care from these sources (figure 2). What was unknown was whether the findings by race were largely a function of differences in the health insurance coverage of the population groups.

Figure 2. Site of Care: Findings from the 1980s by Race/Ethnicity and Insurance



* OPD: outpatient department; † ER: emergency room; ‡ Includes health centers, school clinics, and walk-in centers.
Data: NATIONAL MEDICAL EXPENDITURE SURVEY 1987.
Source: Llewellyn Cornelius et al., *Usual Sources of Medical Care and Their Characteristics*, *in* NATIONAL MEDICAL EXPENDITURE SURVEY (Agency for Health Care Policy and Research, U.S. Dep't Health & Human Serv. ed., 1991).

Given the role of insurance coverage today, a comparison of the major sources of medical care used by whites, African Americans, and Latinos, controlling for type of insurance, is a critical first step in understanding whether race is independently associated with where medical care is obtained. This is particularly important in light of the fact that minority Americans are more likely to be uninsured or covered by Medicaid than whites.[20] Thus, comparisons by race, unadjusted for differences in

insurance coverage or other population characteristics, such as age or income, can lead to a misinterpretation of the effects of race/ethnicity on the site of medical care.

II. METHODS AND DATA

To assess whether race/ethnicity continues to be a factor associated with where an individual obtains medical care, data are examined using two indicators stratified by insurance coverage: 1) the proportion of people with no usual source of care, and 2) the proportion of people whose usual source of care was an office-based provider, a hospital clinic or an OPD, or a hospital ER. We examine the likelihood of having a hospital-based provider as a usual source of care using descriptive and logistic regression analysis. The analysis compares the sources of care of whites, African Americans, and Latinos under age sixty-five. Findings are examined separately for children under age eighteen and adults ages eighteen to sixty-four because these groups differ greatly in their health needs and health insurance coverage.

This study analyzes data from the 1996 Medical Expenditure Panel Survey (MEPS), the third in a series of surveys conducted by the Agency for Healthcare Research and Quality of the U.S. Department of Health and Human Services. The MEPS is a nationally representative survey that collects detailed information on the financing and use of medical care by individuals and families in the United States. Data are collected during multiple interview rounds. The MEPS full-year consolidated data file is used for this analysis. Detailed information on the survey is available.[21] The unweighted sample size for this analysis was 18,603 persons under age sixty-five. Estimates presented in this analysis are weighted to represent the non-institutionalized U.S. population. The statistical package SUDAAN (professional software for SUrvey DAta ANalysis) was used to obtain weighted population estimates and standard errors. This package calculates weighted estimates to correct for the complex multistage sampling design of the MEPS.

Information on the usual source of care of each family member is obtained from the Access to Care Supplement of the MEPS. The usual source of care is defined from a question that asks: Is there a particular doctor's office, clinic, health center, or other place that (PERSON) usually goes if he/she is sick or needs advice about his/her health? Any family member who has a particular person or place they usually go for care or advice is considered to have a usual source of care. Three categories of a usual source or site of care were created: 1) office-based provider; 2) hospital clinic or OPD; and 3) ER. The categories are self-explanatory

except office-based provider, which reflects the health care system's evolving assortment of financing and service delivery arrangements. Included within office-based providers are physicians in solo practice, physicians or other providers in larger group practices, health maintenance organizations or other types of managed care plans, as well as private and public community health clinics. MEPS, unlike its predecessor the National Medical Expenditure Survey (NMES), categorizes persons whose usual source of care is a community clinic or health center as having an "office-based" provider.

Respondents' races/ethnicities are based on self-reported information. Three mutually exclusive racial/ethnic categories were created: white, African American or black, and Latino or Hispanic. All persons of Hispanic origin, regardless of race, are classified as Latino or Hispanic. People reporting their racial/ethnic identity solely as Asian, American Indian, Alaska Native, or "other" are excluded from this analysis. This decision was made, in large part, because there are too few individuals in MEPS who identify themselves as Asian, American Indian/Alaska Native, or "other" for reliable population-specific estimates.

Insurance coverage, one of the major independent variables in this study, is defined based on a series of questions. Since family members can have health coverage from multiple sources, a hierarchical variable was created to define insurance coverage that gave priority to private coverage (employment-based or privately purchased) and then Medicaid. Individuals without private or Medicaid coverage were classified as uninsured. Individuals with "other sources of public coverage," such as CHAMPUS or Medicare, were excluded from the analysis. Their numbers in the sample were too small for meaningful interpretation of the patterns of care.

Separate logistic regression models for children and adults are used to assess the effects of race/ethnicity on the likelihood of having a hospital-based provider as a usual source of medical care. In addition, two other models are run for each age group. One model evaluates the effects of including persons who identify the ER as a usual source of care, and the other evaluates the effects of excluding this population. Although the ER is not an appropriate usual source of care, we included this population in one of the models since some respondents identify the ER as serving this purpose. Finally, we also tested an interaction term for race and insurance to assess whether the findings observed by race/ethnicity are consistent across all of the insurance categories.

III. RESULTS

Consistent with national estimates, there are considerable racial/ethnic differences in the socio-demographic characteristics of African Americans, Latinos, and whites (table 1). Most notably, African Americans and Latinos are poorer than whites and a larger proportion are uninsured. Latinos have the highest uninsured rate among all racial and ethnic groups. Whites are more likely to be privately insured than African Americans or Latinos. African Americans are more likely to have Medicaid than Latinos or whites. Racial/ethnic differences in health coverage as well as differences in other factors are important to consider when comparing usual sources of care. For African Americans and Latinos, the sources of medical care of the publicly insured and uninsured are as important to examine as the sources of care of the privately insured. Moreover these

Table 1. Study Population by Race/Ethnicity: Persons Under Age 65, 1996 (weighted estimates)*

	All*	African Americans	Latinos	Whites
Total Population (numbers in millions)	218.7	28.6	25.9	154.2
Gender				
Female	50.5	53.2	49.6	50.2
Male	49.5	46.8	50.4	49.8
Insurance Status				
Private	70.4	51.9	43.9	78.3
Medicaid	10.5	23.9	20.0	6.4
Uninsured	19.1	24.2	36.1	15.3
Family Income				
Poor (≤ FPL)†	15.4	28.4	30.5	10.4
Near Poor (101-200 % FPL)†	17.6	24.8	25.0	14.9
Non Poor (> 200% FPL)†	74.7	46.8	44.6	74.7
Health				
Fair/Poor	7.9	11.6	10.6	6.7
Excellent/Good	92.1	88.4	89.4	93.3
Region				
South	35.1	54.6	31.4	32.1
West	21.2	9.0	45.7	19.3
Midwest	24.1	19.0	6.3	28.1
Northeast	19.6	17.3	16.6	20.5
Metropolitan Statistical Area (MSA)				
MSA	78.9	84.3	90.8	75.9
Non-MSA	21.1	15.7	9.2	24.1

* Population estimates for "All" are based on the total sample under age sixty-five (n=18,603) in the Access to Care Supplement and thus, include persons with missing data on race/ethnicity. The site of care analysis excluded persons with missing race/ethnicity data and also persons with sources of public coverage other than Medicaid. The percents are based on this population (n=17,578) and may not sum to 100% due to rounding.
† FPL: federal poverty level.
Data: MEDICAL EXPENDITURE PANEL SURVEY 1996.

differences in health coverage highlight the importance of making racial comparisons among similarly insured population groups.

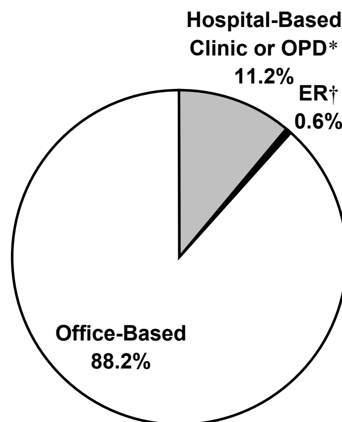
A. No Usual Source of Care

On average, the vast majority of white, African-American, and Latino children and adults have a usual source of medical care. However, a sizable share of the population, 18.5%, lack a usual source of medical care. Applying this percentage to the non-elderly population in 1996 yields approximately 40.4 million people without a usual source of medical care. The uninsured, regardless of race/ethnicity, are more likely to lack a usual source of care than persons with private coverage or Medicaid. However, striking racial/ethnic differences even exist among persons with similar insurance coverage. This analysis focuses on the site of care for individuals who identify a usual source of medical care.

B. Use of a Particular Site of Care

Among persons with a usual source of care, office-based providers (generally physicians) are clearly an important source of care, regardless of race/ethnicity and health coverage. Analysis of the MEPS data shows that office-based providers are the usual source of care for most (88.2%) persons under age sixty-five (figure 3). Only 11.2% of respondents under age sixty-five identify a hospital-based clinic or OPD as a usual source of care, and less than 1% (0.6%) identify an ER as a usual source of care.

Figure 3. Site of Care for Persons With a Usual Source of Care, Persons Under Age 65, 1996.



* OPD: outpatient department; † ER: emergency room.
Data: MEDICAL EXPENDITURE PANEL SURVEY 1996.

Despite the perception that ERs are widely misused by minority Americans, only a small fraction of respondents identify the ER as their usual source of care. Racial differences are observed when examining the usual sources of medical care for children and adults.

Health insurance does not appear to be a major factor affecting the use of an office-based provider as a usual source of care by white children, but it does appear to play a role for African-American and Latino children (table 2). About 90% of white children who are either covered by Medicaid or private insurance, or who are uninsured, have an office-based provider as a usual source of care. African-American and Latino children with private coverage report the use of an office-based provider at rates similar

Table 2. Site of Usual Source of Care by Insurance and Race/Ethnicity, Children 0-17, 1996

	Office-Based Provider % (SE)*	Hospital Clinic or OPD† % (SE)*	ER‡ % (SE)*
Private Health Insurance			
White	93.6 (0.8)	6.3 (0.8)	0.1 (0.1)
African American	89.5 (2.3)	10.1 (2.2)	0.4 (0.4)
Latino	85.9 (2.4)	13.7 (2.4)	0.4 (0.3)
Medicaid			
White	90.1 (2.3)	9.9 (2.3)	0.0 (0.0)
African American	74.6 (3.8)	22.8 (3.7)	2.7 (1.8)
Latino	80.3 (3.2)	18.8 (3.1)	0.9 (0.6)
Uninsured			
White	90.8 (2.3)	8.3 (2.1)	0.9 (0.6)
African American	73.7 (6.1)	24.1 (6.2)	2.2 (1.9)
Latino	81.6 (3.2)	17.2 (3.1)	1.2 (0.8)

* Standard error (SE) is given in parentheses; † OPD: outpatient department; ‡ ER: emergency room.
Data: MEDICAL EXPENDITURE PANEL SURVEY 1996.

to those of white children. However, minority children who are covered by Medicaid or who are uninsured are far more reliant on a hospital clinic or OPD as a usual source of care than are white children. Among Medicaid beneficiaries, more than twice as many African-American children (22.8%) as white children (9.9%) use a hospital-based provider as their usual source of care. Similarly, almost twice as many Latino children (18.8%) as white children rely on a hospital-based provider. As for the uninsured, African-American (24.1%) and Latino (17.2%) children are at least twice as likely as their white counterparts (8.3%) to use a hospital-based clinic or OPD as their usual source of care.

Findings on the usual sources of medical care of adults parallel those of children (table 3). Racial/ethnic differences are largest among adults enrolled in Medicaid and among the uninsured. A hospital-based clinic or OPD is the usual source of care for approximately twice as many African-American (29%) and Latino (25%) adults with Medicaid as their white

Table 3. Site of Usual Source of Care by Insurance and Race/Ethnicity, Adults 18-64, 1996

	Office-Based Provider % (SE)*	Hospital Clinic or OPD† % (SE)*	ER‡ % (SE)*
Private Health Insurance			
White	91.5 (0.7)	8.3 (0.7)	0.1 (0.0)
African American	85.6 (1.9)	13.7 (1.8)	0.7 (0.4)
Latino	84.1 (1.9)	15.4 (1.9)	0.5 (0.3)
Medicaid			
White	85.7 (2.5)	12.5 (2.3)	1.8 (0.9)
African American	68.6 (3.7)	29.0 (3.6)	2.3 (1.1)
Latino	74.2 (3.7)	25.0 (3.7)	0.8 (0.6)
Uninsured			
White	86.7 (1.7)	11.2 (1.5)	2.1 (0.7)
African American	72.7 (3.7)	23.7 (2.9)	3.6 (1.8)
Latino	78.8 (3.3)	20.1 (3.2)	1.1 (0.6)

* Standard error (SE) is given in parentheses; † OPD: outpatient department; ‡ ER: emergency room.
Data: MEDICAL EXPENDITURE PANEL SURVEY 1996.

counterparts (12.5%). Similar findings are observed for the uninsured, with uninsured African Americans and Latinos being nearly twice as likely to obtain care from a hospital clinic or OPD as whites. Also, the percentages who identify an ER as a usual source of care are small and are not statistically different by race/ethnicity.

C. Multivariate Analysis

When holding measures of socio-demographic and health status constant, race/ethnicity persists as a factor significantly and strongly associated with the use of a hospital-based provider as a usual source of medical care. Findings are strikingly similar for children and adults (tables 4 and 5), and excluding those who identify the ER as a usual source of care does not appreciably change these results.

African Americans and Latinos, regardless of insurance coverage, are more likely than whites to have a hospital-based provider as a usual source of medical care. For example, African-American children are 2.5 times as likely as their white counterparts, and Latino children are twice as likely as their white counterparts, to have a usual source of medical care that is not an office-based provider. The racial differential persists for adults as well, although the effect is modestly diminished. The lack of a statistically significant interaction term for race and insurance coverage provides evidence that these findings consistently apply across racial/ethnic groups and insurance categories. Thus, privately insured African Americans and Latinos are more likely than their privately insured white counterparts to use hospital-based providers as a usual source of medical care. Similarly, African Americans and Latinos with Medicaid are more likely than their

Table 4. Likelihood (Relative Odds) That Usual Source of Care is a Hospital-Based Provider: Children 0-17

Selected Characteristics	Model 1 Hospital OPD*, Clinic, ER† (95% CI)‡	Model 2 Hospital OPD*, Clinic (95% CI)‡
Race/Ethnicity		
African American	2.55 (1.70-3.84)§	2.50 (1.63-3.82)§
Latino	1.97 (1.39-2.81)§	1.99 (1.38-2.86)§
White	1.00	1.00
Age		
0-12	0.88 (0.69-1.14)	0.87 (0.67-1.13)
13-17	1.00	1.00
Gender		
Female	0.91 (0.73-1.13)	0.90 (0.72-1.13)
Male	1.00	1.00
Family Income		
Poor (≤ FPL)**	1.31 (0.85-2.02)	1.30 (0.83-2.03)
Near Poor (101-200% FPL)**	1.33 (0.90-1.97)	1.23 (0.99-2.26)
Non Poor (≥ 201% FPL)**	1.00	1.00
Health		
Fair/Poor	1.44 (0.90-2.28)	1.48 (0.93-2.36)
Good/Excellent	1.00	1.00
Insurance Coverage		
Medicaid	1.55 (0.98-2.46)	1.51(0.93-2.44)
Uninsured	1.56 (1.05-2.33)§	1.50 (0.99-2.26)
Private	1.00	1.00
Region		
South	0.83 (0.51-1.33)	0.74 (0.45-1.22)
West	1.32 (0.91-1.91)	1.28 (0.88-1.87)
Northwest	1.15 (0.78-1.70)	1.13 (0.76-1.68)
Northeast	1.00	1.00
Metropolitan Statistical Area		
MSA	0.92 (0.61-1.39)	0.94 (0.62-1.42)
Non-MSA	1.00	1.00

* OPD: outpatient department; † ER: emergency room; ‡ 95% confidence intervals (95% CI) are given in parentheses; § $p < 0.05$; ** FPL: Federal Poverty Level.
Data: MEDICAL EXPENDITURE PANEL SURVEY 1996.

white counterparts with Medicaid to use hospital-based providers as a usual source of medical care.

Insurance status is also associated with where medical care is obtained. Uninsured children are roughly 1.5 times as likely as privately insured children to use a hospital-based provider as a usual source of care. Similarly, uninsured adults are at least 1.4 times as likely as privately insured adults to use a hospital-based provider as a usual source of care. There is some indication that Medicaid beneficiaries and the privately insured, other factors being equal, do not differ substantially in their major sources of health care. In other words, when comparing individuals, for example, of similar race/ethnicity or health status, those with Medicaid

Table 5. Likelihood (Relative Odds) That Usual Source of Care is a Hospital-Based Provider: Adults 18-64

Selected Characteristics	Model 1 Hospital OPD*, Clinic, ER† (95% CI)‡	Model 2 Hospital OPD*, Clinic (95% CI)‡
Race/Ethnicity		
African American	2.34 (1.79-3.06)§	2.35 (1.80-3.07)§
Latino	1.81 (1.36-2.41)§	1.89 (1.42-2.52)§
White	1.00	1.00
Age		
18-29	0.94 (0.77-1.14)	0.93 (0.77-1.13)
30-64	1.00	1.00
Gender		
Female	0.94 (0.83-1.05)	0.95 (0.84-1.07)
Male	1.00	1.00
Family Income		
Poor (≤ FPL)**	1.72 (1.24-2.38)§	1.59 (1.14-2.21)§
Near Poor (101-200% FPL)**	1.24 (0.96-1.62)	1.17 (0.88-1.55)
Non Poor (≥ 201% FPL)**	1.00	1.00
Health		
Fair/Poor	1.14 (0.89-1.47)	1.14 (0.89-1.46)
Good/Excellent	1.00	1.00
Insurance Coverage		
Medicaid	1.40 (1.00-1.97)	1.37 (0.97-1.93)
Uninsured	1.50 (1.20-1.87)§	1.37(1.09-1.73)
Private	1.00	1.00
Region		
South	1.08 (0.76-1.54)	1.04 (0.73-1.50)
West	2.09 (1.50-2.92)§	2.11 (1.51-2.94)§
Northwest	1.81 (1.27-2.57)§	1.85 (1.30-2.64)§
Northeast	1.00	1.00
Metropolitan Statistical Area		
MSA	1.07 (0.71-1.62)	1.07 (0.70-1.64)
Non-MSA	1.00	1.00

* OPD: outpatient department; † ER: emergency room; ‡ 95% confidence intervals (95% CI) are given in parentheses; § $p < 0.05$; ** FPL: Federal Poverty Level.
Data: MEDICAL EXPENDITURE PANEL SURVEY 1996.

and private coverage do not statistically differ in the likelihood of having a hospital-based provider as their usual source of care.

Finally, the regression results show that two factors, in addition to race and insurance, are associated with where adults obtain health care (table 5). Family income and geographic region also are related to the usual source of care for adults. Adults with family incomes at or below the federal poverty level are more likely to use a hospital-based clinic as a usual source of care than non-poor adults. Also, adults living in the West and Midwest are more likely than adults in the Northeast to use a hospital-based provider as a usual source of care.

IV. DISCUSSION

This study examines the progress achieved in reducing the racial divides in one of many possible indicators of health care access—the site of medical care. The study provides evidence that the vast majority of Americans, regardless of race/ethnicity, currently identify an office-based setting as a regular source of care. Moreover, only a small fraction of Americans rely on a hospital ER as a regular source of care. However, African Americans and Latinos, regardless of insurance status, continue to be far more reliant than whites on what some consider to be "non-mainstream" sources of care, with African Americans and Latinos being about twice as likely as whites to rely on a hospital-based provider as a regular source of care. The uninsured also were more likely than the insured to rely on a hospital-based provider as a regular source of care.

While the finding regarding the uninsured is consistent with other research,[22] the continuing role of race/ethnicity as a factor associated with where an individual obtains health care was a less predictable finding. Studies in the 1980s had shown that minority Americans were more likely to use community or hospital-based clinics, but these studies left unanswered whether utilization patterns were a function of racial/ethnic differences in insurance coverage or income. This study provides strong evidence that race—independent of insurance coverage and income—continues to be associated with where ambulatory health care is obtained. The study findings counter the perception that whites, African Americans, and Latinos obtain health care from the same types of providers. While that fact is true for the vast majority of the population, there is a sizable subset of African Americans and Latinos who show a pattern of accessing the health care system that is different from the patterns observed in most Americans.

These findings are consistent with those of a recent study by Gaskin, which examines use patterns of inpatient hospital care.[23] Analyzing 1994 hospital discharge data from nine states, Gaskin found that residents of racial and ethnic minority neighborhoods were more likely than the general population to use public hospitals and major teaching hospitals.[24] Taken together, the findings provide evidence that racial/ethnic background continues to shape choices regarding the site of medical care. It also is conceivable that the findings may understate racial differences in the sites of medical care since respondents who identify community health clinics (private or public) as a regular source of care are defined as having an office-based provider.

As previously noted, structural or institutional factors of varying settings of care may affect the content of care. These factors may explain some of the racial/ethnic differentials in care that have been observed. Research has shown that the organizational setting of care can affect the cost, quality, and patient satisfaction associated with care.[25] Other factors, however, such as an individual's health and social needs, should also be considered in evaluating the content and appropriateness of care provided by a health care setting. A physician's office, for example, may be more conducive to a satisfying doctor-patient relationship but less convenient for some diagnostic tests. A hospital-based outpatient clinic might provide more technically sophisticated care than a physician's office but may have less potential for the development of a strong provider-patient relationship. Questions about differences in the quality of care in various settings, including various types of office-based settings, deserve to be systematically explored in future research and the findings included in the dialogue on possible factors contributing to racial/ethnic differences in health care.

This study raises a number of other issues for further investigation. Perhaps most important among these issues is the question of what factors explain the effect that race/ethnicity continues to have on where an individual obtains health care. Race/ethnicity might be a proxy for any number of factors such as the availability of private physicians in minority communities, patterns of residential segregation, or financial barriers such as co-payment requirements. It also might reflect preferences of patients for the flexible hours or other conveniences of hospital-based sources of care, a possibility consistent with the findings of a study that compared the characteristics of regular users of hospital OPDs and regular users of private physicians.[26] The findings also might reflect historical patterns of utilization or choices made by patients because some sources of care may be perceived as more welcoming or culturally competent. These two factors may be linked since an individual may initially choose a source of care based on family tradition, but is unlikely to remain with that source of care solely for that reason. In sum, the finding could reflect barriers to care, patient preferences, or, of course, some combination of these factors.

The finding that race/ethnicity continues to exert strong influences on where individuals receive health care raises a multitude of questions. Further work is needed to explore the incentives and disincentives for obtaining care from different sites. It also will be important to assess whether there are systematic differences among the different sites in the content of care or the patient-provider relationship (e.g., communications

and trust), and whether these differences have implications for the health care outcomes of African Americans and Latinos.

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