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Variation in Quality of Men's Health Care by Race/Ethnicity and Social Class

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Background: Until recently, minority and poor men have been characterized as “an invisible population,” overlooked by public and private efforts to improve the health status of women, children, and the elderly.

Objective: This study compares the health care experiences of racial and ethnic minority men with that of white men, and low socioeconomic status with those of higher status.

Measures/Subjects: Quality-of-care measures in multiple clinical domains are evaluated. The authors use data from several databases, including the National Health Interview Survey, Medical Expenditure Panel Survey, and Health Care Cost and Utilization Project State Inpatient Database. The relative difference between each racial/ethnic and socioeconomic group and a fixed reference group is used to assess differences in use of services. Statistical significance is assessed using z tests.

Results: Hispanic men were much less likely to receive colorectal cancer screening (relative risk [RR] range, 0.61–0.69), cardiovascular risk factor screening and management (RR, 0.84–0.88), and vaccinations (RR, 0.47–0.94). Black and Asian men were significantly less likely to have received selected preventive services (adult immunization and colorectal cancer screening). The differences in end-stage renal disease care that black and white men received were statistically significant (RR, 0.39–0.97), with black men consistently receiving worse care. For some measures of management of end-stage renal disease, Asian men received care that was similar to or better than that received by non-Hispanic whites.

Conclusion: Minority men are at a markedly elevated risk for the receipt of poor health care quality. However, generalizations about “minority” men are likely to be misleading and incomplete. There is

a considerable variation in the magnitude, direction, and significance of these risks.

Key Words: men's health, disparities, quality of care, racial and ethnic minorities, socioeconomic status

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Over the past decade there has been increasing awareness of unique dimensions of men's health. Throughout developed countries, men have a lower mean life expectancy than women, and this persistent longevity difference has prompted inquiry into the role of health care in decreasing avoidable mortality among men. Moreover, there are significant disparities in life expectancy among subgroups of men. Minority and poor men suffer from markedly elevated rates of morbidity, disability, and mortality compared with their white and economically better-off counterparts respectively.^{1–3} For example, while the life expectancy for white men in the United States is 74.5 years, black, Hispanic, and Native American men can expect to live 67.6 years, 69.6 years, and 66.1 years respectively. In addition, whereas 21% of white men die prematurely from heart disease, 40% of black, 37% of Hispanics, 31% of Native Americans, and 26% of Asian and Pacific Islander men die prematurely from this condition. Minority men are also more likely to be uninsured. Forty-six percent of Hispanic men and 28% of black men are uninsured compared with 17% of white men.¹

Minority and low-income men have been characterized as “an invisible population,” overlooked by public and private efforts to improve the health status of women, children, and the elderly.^{4,5} However, policy makers are increasingly addressing these men's health issues. For example, legislation was introduced in the US Congress that would establish a new Office of Men's Health in the Department of Health and Human Services (Men's Health Act of 2003). Last summer, the US Secretary of Health and Human Services convened a roundtable to highlight the challenges faced by minority men in achieving health and to explore opportunities to improve men's health.

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In the foreseeable future, the poor health status of minority and poor men will continue to challenge policy makers and researchers. Of the 138 million men counted in the 2000 US Census, 69% were identified as single-race non-Hispanic whites, and the remainder was identified as other races, more than one race, or Hispanic.⁶ By 2050, it is estimated that the proportion of non-Hispanic white men will fall to 53%, while the proportion of Hispanics, non-Hispanic blacks, American Indians or Alaska Natives, and Asians or Pacific Islanders will rise to 25%, 13%, 0.8%, and 8.6% respectively.⁷

Research suggests that gender-specific cultural values,^{3,8} risky living and working conditions,^{3,8} underemployment,^{2,3,8} underinsurance and its consequential limited opportunities to access care,^{1-3,5,9} and an unresponsive health care system^{1-3,5,9} contributes to the health disadvantage faced by minority and poor men. It has been suggested that men often view seeking health care as a display of weakness and try to reinforce their masculinity through engaging in high-risk behaviors.^{3,8} These men also tend to be employed at jobs that expose them to high-risk demands, high levels of stress, and do not offer health care benefits, such as health insurance.¹⁻³ Even when poor and minority men qualify for health insurance, many are not aware of this benefit, experience difficulty in getting medical appointments and long waiting times, or they face language or cultural barriers.^{2,3}

While the research that explores difficulties minority and poor men face in accessing care has grown, we know little about these men's experiences within the health care system. Several recent studies have clarified that, in addition to access challenges, minority men are also significantly less likely to receive evidence-based, high quality cardiac care when they do seek health care.¹⁰⁻¹³ For example, a study of invasive cardiovascular procedures showed that even with similar types of access, black men were much less likely to undergo these procedures.¹² In addition to understanding men's experiences in cardiovascular care, we also need to understand their care experiences for other conditions, such as cancer and diabetes. Similarly, we need to study the experiences of Hispanic, Asian, and Native American men along with black men. Minority men represent a diverse group whose members have different social histories, job opportunities, and workplace experiences, and therefore may also have health care needs and experiences that are particular to their race and ethnic group. Providing high-quality care to men will be most efficiently achieved by identifying subgroups at the highest risk of poor care.

The recently released National Healthcare Disparities Report (NHDR) includes extensive data on men's access to and receipt of high-quality care, and provides a unique opportunity to understand men's health care issues better.¹⁴ This study compares the health care experiences of racial and ethnic minority men with that of white men, and the experi-

ence of men with low socioeconomic status with those of higher status.

METHODS

Conceptual Framework

This paper builds on the conceptual framework and methods of the first NHDR. General methods in the first NHDR are described in the article by Kelley et al in this issue.^{14a} Methodological issues unique to this paper are described here.

The first NHDR includes 4 dimensions of health care quality: effectiveness, safety, timeliness, and patient centeredness. Each of these dimensions corresponds to a goal of a high-quality health care system described by the Institute of Medicine (IOM) in their *Crossing the Quality Chasm* report.¹⁵ Due to limitations of data, this paper focuses on several aspects of quality of particular importance to men: preventive services, end-stage renal disease care, avoidable hospitalizations as a measure of the effectiveness of primary care,¹⁶ postoperative complication as a measure of patient safety, mental health and substance abuse treatment, and patient centeredness of care.

Data Sources

The first NHDR presents data from 3 dozen sources. The data sources are described by Kelley et al in this issue of *Medical Care*.^{14a} We present data from 7 data sources. Data on preventive services comes from the National Center for Health Statistics' 1998 and 2000 National Health Interview Survey (NHIS). Data on hemodialysis patients comes from the Centers for Medicare and Medicaid Services' 2001 End-Stage Renal Disease Clinical Performance Measures Project, and data on renal transplantation comes from the National Institutes of Health's 2000 US Renal Data System (USRDS). Data on avoidable hospitalizations and postoperative complications comes from a 16-state database created specifically for the NHDR from the Agency for Healthcare Research and Quality's 2000 Healthcare Cost and Utilization Project (HCUP) State Inpatient Database (SID). Data on mental health care and substance abuse treatment comes from the Substance Abuse and Mental Health Services Administration's 2001 National Household Survey on Drug Abuse (NHSDA). Data on patient centeredness comes from the 2001 Commonwealth Fund Health Care Quality Survey.

Race, Ethnicity, and Socioeconomic Status

Most of the databases collected information that permitted racial comparisons of blacks or African Americans, Asians, American Indians or Alaska natives, and whites; ethnic comparisons of Hispanics and non-Hispanic whites; and socioeconomic comparisons of persons with family incomes below federal poverty threshold (poor) and persons with family incomes 4 times or greater than the poverty

threshold (high income). However, some of the databases we used categorize race, ethnicity, and socioeconomic status in slightly different ways.

The USRDS does not collect information about Asians separately, but in aggregate with Pacific Islanders as Asian or Pacific Islanders. The NHSDA favors use of education rather than income as a measure of socioeconomic status, while the USRDS and the End-Stage Renal Disease Clinical Performance Measures Project do not collect information about income or education. The HCUP SID 16-state database is based on hospital administrative data that typically does not collect individual socioeconomic data, and it collects race and ethnicity as a single item: non-Hispanic white, non-Hispanic black, Hispanic, and Asian or Pacific Islander. In addition, reliable estimates are not possible for all groups. Unreliable estimates are not presented in the tables.

Measures

Measures used come from the NHDR measure set. Prevention includes measures of cancer screening, cardiovascular risk factor screening, and adult vaccinations. Measures for the quality of end-stage renal disease include measures of the adequacy of hemodialysis, anemia management, rates of referral for renal transplant, and receipt of organ. Avoidable hospitalizations are hospitalizations for conditions that are sensitive to comprehensive, effective primary care.¹⁶ These include hospitalization for uncontrolled diabetes without complication, diabetes with short- or long-term complications, diabetes-related lower extremity amputation, chronic obstructive pulmonary disease, bacterial pneumonia, and angina. Postoperative complications measures are included. Mental health care and substance abuse treatment are differentiated. The patient centeredness domain includes indicators of poor doctor-patient communication, the patient's ability to understand health information, use of the Web, involvement in decision making, and perception of disrespect.

Many of the measures in this paper come from Healthy People 2010. To be consistent with this initiative, measures from the NHIS and HCUP are adjusted for age and gender, while measures from other data sources are not adjusted.

Analysis

The relative difference between each racial, ethnic, or socioeconomic group, and a fixed reference group is used to assess differences in use of services. Reference groups represent the largest group for each type of comparison: whites for racial comparisons, non-Hispanic whites for ethnic comparisons, high income for income comparisons, and any college for education comparisons. Statistical significance was assessed using *z* tests.¹⁷

RESULTS

Prevention

Table 1 shows the magnitude and pattern of variation in preventive services among different racial and ethnic men. Hispanic men experienced disparities in all the preventive services examined. When compared with white men, Hispanic men were much less likely to receive colon cancer screening, cardiovascular risk factor screening and management, and vaccinations. For example, Hispanic men were 40% and 30% less likely to get a fecal occult blood test and undergo flexible sigmoidoscopy respectively. Likewise, Hispanic men age 18 to 64 years are about half as likely as whites to get a pneumococcal vaccine.

Black and Asian men had disparities in some preventive services, but not in others. For example, black men were just as likely as whites to have flexible sigmoidoscopy (relative risk [RR], 0.95) and blood pressure screening (RR, 1.02), and black and white men younger than 65 years had similar rates of adult vaccinations. However, black men 65 years and older were almost half as likely as white men of similar age to get a pneumococcal vaccine. Similarly, Asian men were less likely to have a flexible sigmoidoscopy, but were more likely to have their blood cholesterol checked than white men.

Socioeconomic disparities were large, statistically significant, and occurred across most of the services examined. Poor men were almost half as likely as high-income men to receive a fecal occult blood test (RR, 0.55), and they were almost 40% less likely to ever receive a pneumococcal vaccine (RR, 0.62) if they were elderly.

End-Stage Renal Disease

In general, racial and ethnic minority men are much less likely to receive optimum end-stage renal care than white men (Table 2). Black men were 7% less likely to have adequate hemodialysis (urea reduction ration of 65% or higher), 45% as likely to be placed on a kidney waiting transplant list, and 61% less likely to receive a transplant within 3 years on the waiting list. For other minority men, significant variation occurred only in transplant-related measures, but in one instance the direction of the difference favored Asian Americans. While Asian men were much more likely (RR, 1.27) to be placed on a waiting list for transplants, they were less likely to receive a transplant.

Avoidable Hospitalizations

Table 3 shows that rates in potentially avoidable hospitalization varied among men. Black men were much more likely than whites to be admitted for complicated and uncomplicated diabetes, chronic obstructive pulmonary disease, hypertension, and angina (RR, 1.28–5.10). However, Asian men were much less likely to be admitted for these conditions

TABLE 1. Preventive Services by Race, Ethnicity, and Income

	Black	Asian	AI/AN	White	Black-White RR	Asian-White RR	AI/AN-White RR	Hispanic	Non-Hispanic White	Hispanic-Non-Hispanic White RR	< 100% Poverty Level	400% + Poverty Level	< 100% - 400% + RR
Cancer screening[†]													
% of men (50 and over) who ever had a flexible sigmoidoscopy	40.3	29.5	*	42.6	0.95	0.69	*	29.7	43.3	0.69	30.6	51.5	0.59
% of men (50 and over) who had a fecal occult blood test (FOBT) in the past 2 years	30.2	43.2	*	32.4	0.93	1.33	*	20.3	33.2	0.61	21.7	39.8	0.55
Cardiovascular risk factor screening and management													
% of men who had their blood pressure measured in the past 2 years and can state whether their pressure was normal or high [†]	89.4	83.1	88.0	87.6	1.02	0.95	1.00	78.0	88.9	0.88	79.2	92.3	0.86
% of men who had their blood cholesterol checked in the past 5 years [†]	62.8	70.1	57.9	64.3	0.98	1.09	0.90	54.7	65.5	0.84	48.9	72.5	0.67
% of smokers receiving advice to quit smoking [§]	54.5	*	*	59.9	0.91	*	*	*	60.8	*	*	63.0	*
Adult vaccinations[†]													
% of high risk men 18–64 who received influenza vaccine in past year	25.6	*	*	26.9	0.95	*	*	25.3	27.0	0.94	25.3	28.5	0.89
% of men 65 and over who received influenza vaccine in the past year	48.2	*	*	68.2	0.71	*	*	51.9	68.9	0.75	53.9	71.2	0.76
% of high risk men 18–64 who ever received pneumococcal vaccine	15.4	*	*	16.2	0.95	*	*	8.0	17.0	0.47	17.5	14.5	1.21
% of men 65 and over who ever received pneumococcal vaccine	29.9	*	*	55.1	0.54	*	*	31.9	56.3	0.57	36.6	58.7	0.62

*Data statistically unreliable.

Bold indicates difference is significant with $P < 0.05$.

AI/AN indicates American Indian and Alaska Native; RR, relative rate.

Sources:

[†]CDC-NCHS, NHIS, 2000.

(RR, 0.39–0.75). Hispanic men had worse indicators in some instances and better in others.

Postoperative Complications

Table 3 also shows that minority men were more likely to experience postoperative complications. For example, racial and ethnic minority men are 38 to 75% more likely to have postoperative septicemia, and 31 to 42% are more likely to have respiratory failure than whites. Rates of postoperative abdominal wound dehiscence and complications of anesthesia for minority men were the same as or better than rates for white men.

Mental Health and Substance Abuse

Hispanic men were less likely than whites to receive outpatient mental health services, counseling, and prescription medication (Table 4). For example, for every 10 white men who received outpatient mental health treatment or counseling, only 7 Hispanic men got these services. In addition, Hispanic and black men were more likely to receive inpatient mental health services. Differences in substance abuse services were not statistically significant.

There were large socioeconomic disparities, as measured by educational achievement, for mental health and

TABLE 2. Endstage Renal Disease Management by Race and Ethnicity

Management of End-Stage Renal Disease	Black	Asian	AI/AN	White	Black-White RR	Asian-White RR	AI/AN-White RR	Hispanic	Non-Hispanic White	Hispanic-Non-Hispanic White RR
% of men on hemodialysis with urea reduction ratio 65% or higher*	75.0	85.0	80.0	81.0	0.93	1.05	0.99	83.0	81.0	1.02
% of men on hemodialysis with hemoglobin 11 or higher*	77.0	78.0	81.0	79.0	0.97	0.99	1.03	79.0	78.0	1.01
% of men on dialysis registered on the waiting list for transplantation [†]	14.6	34.0 [§]	13.8	26.7	0.55	1.27	0.52	18.1	28.7	0.63
% of men with treated chronic kidney failure who receive a transplant within 3 years of registration on the waiting list [‡]	10.8	14.2 [§]	21.0	27.4	0.39	0.52	0.77	18.5	29.4	0.63

Bold indicates difference is significant with $P < 0.05$.

AI/AN indicates American Indian and Alaska Native; RR, relative rate.

Sources:

*CMS, End Stage Renal Disease Clinical Performance Measures Project, 2001.

[†]NIH, USRDS, 2000.

[‡]NIH, USRDS, 1997–2000.

[§]Note: This source did not collect information on Asians but in aggregate as Asian or Pacific Islanders.

substance abuse services. Compared with men who attended college, men with less than a high school diploma were more than 4 times likely to receive inpatient mental health treatment or counseling and were almost 3 times as likely to receive illicit drug or alcohol abuse treatment.

Patient-Centeredness: Communication and Partnership

Hispanic, black, and Asian men mostly had reports of worse communication and partnership with their health care providers than white men. For example, Hispanic men were almost 3 times as likely to have 1 or more indicators of poor communication at their last visit (RR, 2.6) and were almost 7 times as likely to believe that their care would be better if they were of a different race (Table 5). A similar pattern emerged for Asian men, except for the use of the Web for health information.

Poor men were 3 times as likely to have poor communication during the medical visit; and, the lower the socioeconomic position, the higher the risk for poor communication (Data not shown.). A similar pattern of socioeconomic disparities is seen with the other communication and partnership measures.

DISCUSSION

This study provides several different snapshots of the clinical care that American men receive by applying well-

established quality measures to national databases. Furthermore, it shows that differences in care associated with race and ethnicity and socioeconomic status are prevalent and complex. To our knowledge, the NHDR and the results presented here represent the first effort to monitor quality of care and differences in clinical domains for men. While these differences observed in this study are often statistically significant and are likely to be clinically important, the magnitude and direction of the differences varied among racial and ethnic groups. While prior studies show that opportunities to improve quality of care are highly prevalent and vary by specific condition and dimension of quality,^{13,15,18–23} the findings here suggest that that sociodemographic subgroups of American men may also present significant opportunities to improve quality.

There were statistically significant differences in preventive services associated with race, ethnicity, and socioeconomic status. Hispanic and Asian men experienced larger disparities than blacks. Interestingly, while the Hispanic–white difference occurred in the expected direction, with Hispanic men receiving worse care than whites, the Asian–white difference sometimes occurred in the opposite direction.

The size of the differences in quality of end-stage renal disease care, which were associated with race and ethnicity, ranged from 3 to 41%. These findings are consistent with

TABLE 3. Avoidable Hospitalizations and Postoperative Complications by Race and Ethnicity

	Non-Hispanic Black	Hispanic	Non-Hispanic API	Non-Hispanic White	Black-White RR	Hispanic-White RR	API-White RR
Avoidable hospitalizations (per 100,000 population)							
Hospitalizations for uncontrolled diabetes without complications	88	39	11	17	5.10	2.28	0.61
Hospitalizations for diabetes with short-term complications	146	43	13	38	3.80	1.13	0.35
Hospitalizations for diabetes with long-term complications	298	195	57	106	2.81	1.84	0.54
Hospitalizations for diabetes-related lower extremity amputation	129	81	17	44	2.97	1.86	0.39
Hospitalizations for chronic obstructive pulmonary disease	345	186	157	264	1.31	0.70	0.59
Hospitalizations for bacterial pneumonia	548	329	239	384	1.43	0.86	0.62
Hospitalizations for hypertension	112	34	17	23	4.95	1.52	0.75
Hospitalizations for angina	77	54	34	60	1.28	0.90	0.57
Patient safety events (per 1000 relevant surgeries)							
Rates of postoperative hemorrhage	2.71	2.13	3.28	2.30	1.18	0.93	1.43
Rates of postoperative physiologic and metabolic derangements	2.02	2.19	2.14	1.57	1.29	1.39	1.36
Rates of postoperative respiratory failure	5.25	4.98	5.41	3.81	1.38	1.31	1.42
Rates of postoperative pulmonary embolus or deep vein thrombosis	11.20	7.20	5.60	8.90	1.26	0.81	0.63
Rates of postoperative septicemia	19.42	15.25	16.56	11.08	1.75	1.38	1.49
Rates of postoperative abdominal wound dehiscence	2.02	1.76	1.25	2.37	0.85	0.74	0.53
Rates of complications of anesthesia	0.64	0.65	0.63	0.74	0.86	0.88	0.85

Bold indicates difference is significant with $P < 0.05$.
 API indicates Asian and Pacific Islander; RR, relative rate.
 Source: AHRQ, HCUP SID 16-state database, 2000.

findings from a longitudinal, national evaluation of end-stage kidney disease care. A study by Sehgal²⁴ showed that for adequacy of hemodialysis, the difference between whites and blacks decreased from 10% to 3% from 1993 to 2000. In our study, black men had poorer end-stage renal disease care than whites; the difference in quality increased as the intensity of the technology increased. Variations were much larger for transplant-related quality measures. This finding is consistent with the finding that disparities are large for relatively new and rapidly diffusing technologies, but small for more established technologies or technologies with newer alternatives.²⁵ The experience of Asian men is notable because they generally received the same or better quality of end-stage renal disease care than whites, except for the receipt of a kidney transplant. Asian men's poor quality with respect to the receipt of a transplant may be due to the limited availability of compatible organs.

As expected, there were significant differences in avoidable hospitalization and postoperative complications,

but the direction of the difference was not always predictable. Sometimes race and ethnic subgroups received lower quality care than whites, and other times their care was the same as or better than that of whites. For example, whereas blacks had much higher rates of avoidable hospitalization than whites, presumed to be due to poorer quality primary care, Asian, and to a lesser extent Hispanic, men had much lower rates of avoidable hospitalizations.²⁶ A similar pattern of disparities is seen for postoperative complications. Minority men were at an elevated risk for most measures, but at similar or markedly reduced risk for postoperative wound dehiscence or complications of anesthesia.

There were disparities in mental health services and patient-centeredness of care. Hispanic and, to a lesser extent, black men had worse mental health services than non-Hispanic white men. There were large socioeconomic disparities for most mental health and substance abuse services, with men with less than a high school education more likely to get inpatient treatment and less likely to receive outpatient ser-

TABLE 4. Mental Health and Substance Abuse Treatment Services by Race, Ethnicity, and Education

	Black	White	Black- White RR	Hispanic	Non- Hispanic White	Hispanic- Non-Hispanic White RR	< High School Education	Any College Education	< High School-Any College RR
Mental health									
% of men who received mental health treatment or counseling in the past year	7.2	8.6	0.84	6.0	8.9	0.67	9.3	8.3	1.12
% of men who received outpatient mental health treatment or counseling	3.8	4.8	0.79	3.3	4.9	0.67	4.4	5.1	0.86
% of men who received prescription medications for mental health treatment	5.0	6.5	0.77	4.1	6.8	0.60	6.9	6.1	1.13
% of men who received inpatient mental health treatment or counseling	1.2	0.7	1.71	*	0.6	*	1.7	0.4	4.25
Substance abuse									
% of males 12 and older who received illicit drug or alcohol abuse treatment in the past year	2.0	1.9	1.05	2.4	1.8	1.33	3.0	1.2	2.50

*Data statistically unreliable.

Bold indicates difference is significant with $P < 0.05$.

RR indicates relative rate.

Source: SAMHSA, NHSDA, 2001.

vices. Racial and ethnic minority men mostly had reports of worse communication and partnership in care. While the differences were not always statistically significant, they were almost always in the same direction, with minority men reporting worse communication and partnership.

Our study shows that racial and ethnic minority men may be at a markedly elevated risk for the receipt of poor health care quality in multiple, diverse clinical domains. However, there is a considerable variation in the magnitude, direction, and significance of these risks. For example, while Asian men had worse postoperative complication indicators than white men, they are consistently less likely to have an avoidable hospitalization. Overall, Hispanic and black men had significantly worse care on 25 of 37 and 22 of 40 measures assessed respectively. For the 28 measures studied, Asian men had significantly worse care for 8, but better for 12. For these 12 measures of quality, Asian men were the best performers among all men. The heterogeneity in quality-of-

care gaps among racial and ethnic groups is significant. While this study advances our understanding of the care received by Hispanic, black, and Asian American men, we know very little about the care received by American Indian men because data on American Indian men are very limited. Poor men were at an increased risk across all clinical domains in which socioeconomic disparities could be assessed: prevention, mental health, substance abuse, and patient-centeredness.

This work strengthens and refines our current understanding of disparities in health care.^{13,24,27-29} Because this study draws on multiple databases, the variation in size and direction of disparities seen among clinical domains confirms our understanding that differences in quality of care associated with race, ethnicity, and socioeconomic status are prevalent and complex. However, the results of these analyses are not adjusted for important covariates such as comorbid illnesses, patient preferences, or physician practices, and there-

TABLE 5. Patient Centeredness of Care by Race, Ethnicity, and Income

	Black	Asian	White	Black- White RR	Asian- White RR	Hispanic	Non- Hispanic White	Hispanic- Non- Hispanic White RR	< 100% Poverty Level	400% + Poverty Level	< 100% - 400% + RR
Communication											
% of men with 1 or more indicators of poor communication at their last visit	22.4	25.9	16.9	1.33	1.53	38.5	14.8	2.60	34.4	11.4	3.02
% of men who did not find information from doctor's office very easy to understand	54.0	62.6	46.3	1.17	1.35	59.3	45.4	1.31	64.4	41.7	1.54
% of men who do not use web for health information	62.8	46.3	56.9	1.10	0.81	70.6	55.1	1.28	71.3	40.6	1.76
Partnership											
% of men not involved as much as wanted in decision-making	28.6	37.5	22.4	1.28	1.67	36.9	21.3	1.73	40.9	18.6	2.20
% of men who believe they would have gotten better care if different race/ethnicity	16.5	12.5	2.9	5.69	4.31	13.1	2.0	6.55	6.0	3.1	1.94
% of men who felt treated with disrespect because of race/ethnicity	9.9	*	1.8	5.50	*	6.1	1.6	3.81	*	*	*

*Data statistically unreliable.
Bold indicates difference is significant with $P < 0.05$.
 RR indicates relative rate.
 Source: Commonwealth Fund, Health Care Quality Survey, 2001.

fore do not increase our understanding of the underlying etiologies of variations seen among racial and ethnic groups. The pattern of gaps among these 3 different racial groups suggest that the factors that place specific racial and ethnic minority groups at risk for or protect them from poor quality of care may be different. In addition, while it is important to understand the pathways that contribute to disparities for Hispanics in preventive services and for blacks in end-stage renal disease and avoidable hospitalization, this study also highlights the need to understand why Asian and Hispanic men are less likely to be hospitalized for respiratory diseases such as bacterial pneumonia and chronic obstructive lung diseases. The interaction between social forces, public health, and clinical services may operate differently for different subgroups of men.³⁰ Moreover, this study suggests that men's health care experiences vary by racial and ethnic group, and generalizations about "minority" men are likely to be mis-

leading and incomplete. Further exploration of the differences between racial and ethnic minority groups can enhance our understanding of which factors (eg, lack of insurance, language barriers, adherence to recommendations, discrimination) are most important in generating significant differences and which ones protect—an understanding likely to help improve quality for all American men.

To our knowledge, this is the first comparative study that examines a variety of clinical experiences for multiple racial and ethnic minority and poor men. Most studies examine mixed gender populations without subgroup analyses focused on men or make comparisons between one racial and ethnic group and whites.^{16,24,26-28,31-34} This study shows that racial and ethnic subgroups of men represent a heterogeneous group for which subgroups may have specific vulnerabilities within the health care system. The study also supports the call for more work that disaggregates the experiences of minority

patients and suggests the need for interventions targeted at the specific race and ethnic group level. While this study is important first step in addressing critical gaps in knowledge about men's health services, it does not address several important issues and has several limitations.

An overarching issue is that these results should be considered in light of prevalent gaps between recommended care and what is provided to the general patient population,^{15,20} as documented in the companion National Healthcare Quality Report. Equality in care that is of poor quality is inconsistent with the goals articulated by the IOM and other health care leaders.¹⁵ Both reports will allow the nation to track progress over time and understand which interventions are most effective at improving quality, and for whom. In addition, these reports will help us assess whether innovations in care are associated with widening or decreasing differences associated with patient characteristics. These analyses may not provide a full picture of health care for US men because of the measures used.

A second issue relates to the lack of uniformity in measuring relevant patient characteristics. As discussed in Methods, each of the databases used in this study collects information about race, ethnicity, and socioeconomic status in slightly different ways. Third, sample sizes in databases limit the comparisons that can be made. For example, few databases could provide reliable estimates for American Indians or Alaska natives. Fourth, this study focuses on men of very low socioeconomic status, with incomes below federal poverty thresholds or less than a high school education. As presented in the NHDR, for many of the measures presented, there is a gradient relationship between socioeconomic status and health care.

Finally, and perhaps most important, this study does not adjust for other factors besides race, ethnicity, and socioeconomic status that influence health care, such as health status, comorbidities, severity of illness, patient preferences for care, health behavior and lifestyle, insurance status, and geographical location. It does not explain associations seen. While measures from NHIS and HCUP are age adjusted, measures from other databases are not. In addition, disparities related to race, ethnicity, and socioeconomic status are examined, but the interaction of these factors is not. However, findings from well-controlled studies that analyze the relationship between race, ethnicity, and socioeconomic status, and utilization of cardiovascular procedures bolster these findings. This paper, hopefully, will encourage additional work to confirm these findings and to uncover the factors that drive disparities in health care among men.

The finding that there are large, complex variations in minority men's health care experiences argues for added efforts to examine and report the quality of care received by subgroups defined by race, ethnic, and socioeconomic status. Future studies should examine the relationship between clin-

ical need, comorbid illness, patient preferences, physician decision making, community resources, and quality of care for men in America. In particular, the results presented here should prompt further examination of the independent impact of race and poverty on quality of care in men. Finally, the quest for enhanced analytic precision cannot obscure the urgent need to develop tests and replicate effective health care interventions to close the gap between evidence-based and actual care.

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