

Access to Care Among Rural Minorities: Working Age Adults

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Executive Summary

Introduction

Data from the 1997 – 1998 National Health Interview Survey were used to examine health insurance coverage and recent physician visits among rural working age adults (persons aged 18 – 64). “Rural” was defined as “non-metro,” persons living in counties outside metropolitan statistical areas.

Findings

Lack of resources

Rural minority populations were handicapped by poverty and lack of education. Over half of non-metro working age African Americans (54%) and Hispanics (51%) were poor, as were over a third of non-metro residents of “other” racial / ethnic groups (38%). Half (50%) of non-metro Hispanic adults, and nearly a third of African American working age adults (31%), had not completed high school.

Health insurance

Low income and low education levels in non-metro areas translated into jobs that did not offer health insurance. Non-metro minorities were particularly disadvantaged, with rates of uninsurance ranging from 47% among the Hispanic population to 30% among non-metro African Americans.

Many circumstances, including rural residence, region of the country, age, sex, family size and health status, combined to influence whether an individual would be insured. Even holding these demographic considerations equal, rural residents were less likely to report having health insurance than persons from metropolitan areas. Minority status added further disadvantage. African Americans, Hispanics and persons of “other” race were all less likely to be insured than whites. The factors placing rural minority populations at greatest risk for being uninsured were low income, less than a high school education and being unmarried.

- All things being equal, rural African American women who lack a high school education and who have low family income (less than \$20,000 per year) have a less than an even chance of being insured throughout their entire working life.
- Non-metro Hispanic women who lacked a high school education and who had low family income also had a less than an even chance of being insured throughout their working life. Among Hispanics living in the West, even high income women without a high school diploma had less than a 50% chance of having health insurance for most of their working years.
- Rural women of “other” race (principally Native American) had less than a 50% chance of being insured if they lacked a high school education. Even if they had a high school diploma and a family income of \$20,000 or more, they still only had, at most, a 70% chance of having health insurance during their working years.
- Rural minorities who were currently married were significantly more likely to have health insurance. Having two potential workers in the household may increase the likelihood that one will have a job offering health benefits. The

implications of a “marriage effect” are strongest for rural African American women, the majority of whom are not currently married.

Rural minorities who were “high need,” that is, who reported that they were in poor health and suffered from limitations in activities of daily living, were not necessarily more likely to have health insurance than persons in good health.

Use of physician services

Although non-metro adults were less likely to have insurance than metropolitan residents, they were not less likely to have seen a physician. The proportion of working age adults who reported seeing a health care provider in the past two weeks was similar in both non-metro and metropolitan areas (13.6% and 13.5%, respectively). Racial disparities in utilization were less severe in non-metro areas, with rural whites (13.8%), persons of “other” race (13.8%) and African Americans (13.3%) having similar likelihood of a recent visit. Hispanic adults were less likely than others to report a recent health care visit (11.2%).

The overall finding that rural adults were likely to obtain health care did not imply that there were no pockets of need. Even with insurance status controlled, rural Hispanics were less likely to report a recent healthcare visit than other groups. Low education and low income, even controlling for insurance status, also reduced the probability of a recent physician visit. Most prominently, lack of health insurance nearly halved the likelihood of a recent visit. The effect was present even among high need rural minorities, those with poor health and limitations in daily activities. Lack of insurance reduces use of health care among working age adults, regardless of their health status.

Recommendations

In the short term, there are two possible approaches to ensuring that rural adults have financial access to health care: increasing the ability of rural minorities to obtain insurance, or increasing the number of practitioners in rural areas who accept indigent patients with a minimal financial requirement.

Recommendations for expanding insurance coverage:

- The Secretary of the Department of Health and Human Services should continue to promote Medicaid waiver demonstration programs that address low income adults, including both programs that promote employer buy-in to Medicaid for low income employees and programs that are marketed individually.
- The Secretary of the Department of Health and Human Services should work with State Offices of Rural Health to explore methods by which non-metro employers can obtain better “deals” on health insurance, with the possibility of expanding coverage among low-income employees.

Recommendations for expanding practitioners

- The Secretary of the Department of Health and Human Services should monitor the planned expansion of the Community Health Center program to ensure that geographic regions with a high concentration of low income and uninsured persons are appropriately targeted.

- The Secretary of the Department of Health and Human Services should evaluate the degree to which Community Health Center patients perceive sliding scale fees or co-pays as an obstacle to the receipt of care.
- The Secretary of the Department of Health and Human Services should provide Community Health Centers, particularly those in rural areas, with technical assistance in budgeting for care for uninsured adults and in helping reduce excess utilization among these adults through education and disease management.
- The Secretary of the Department of Health and Human Services should ensure adequate implementation of the “Kids into Health Careers” program in rural areas, as a means of both expanding the number of rural practitioners and of providing rural minority children with incentives to complete high school.

Future Research

Low income, minority adults, particularly women, have very low chances of being insured at different times across a working life. However, a survey conducted at a single point in time cannot describe any individual adult’s pattern of having, losing and regaining health insurance over time. Further research is needed to explore the effects of a history of extended periods of uninsurance on health as adults enter middle age, when chronic disease is likely to emerge and intensify.

Lack of a high school diploma presages a low income job; lack of an educated work force forestalls community economic development. Research is needed into effective programs that keep non-metro minority adolescents, particularly Hispanics, in school.

Recommendations:

- The Secretary of the Department of Health and Human Services should promote longitudinal research into the effects of extended periods without health insurance.
- The Secretary of the Department of Health and Human services should promote research and demonstration projects that attempt to enhance high school graduation rates among rural poor and minority adolescents. Linkages to health career planning through local Area Health Education Consortium facilities should be encouraged.

Chapter One

Background: Non-metro Adults and Access to Care

Review of previous research

Working age adults in non-metro areas face both geographic and economic barriers to health care. They are at greater risk of being uninsured than are other populations, largely because insurance for persons this age is so closely tied to employment. Not all working age persons are employed, not all employers provide health insurance, and safety net programs, such as Medicaid, target only restricted populations, such as pregnant women and children (Mills, 2000). The net result of these factors is lower insurance coverage. Minority adults are at particular risk. For example, Seccombe and Ameuy (1995), analyzing the 1987 National Medical Expenditures Survey, found that non-metro working age adults, as well as African Americans (OR 1.48) and other minority persons (OR 1.4), were less likely to have health insurance than are other adults (OR 1.42). Non-working poor persons were actually more likely to have health insurance than working poor persons, perhaps because the former include mothers or disabled persons covered by Medicaid (Seccombe and Ameuy 1995). Structural characteristics of non-metro areas (job types, lack of unionization, small employers) contribute to poorer insurance coverage among working age adults in these regions.

The situation for working age, non-metro adults may have worsened since the 1987 data examined by Seccombe and Ameuy (1995). Health insurance coverage through employers has been declining. Between 1979 and 1992, the proportion of working age, married men age 25 – 55 with health coverage decreased from 89% to 77% (Olson, 1995). In addition, medical insurance benefits are more common in medium & large establishments (77%) than in small establishments (66%; Herz, Meisenheimer and Weinstein, 2000). This creates particular problems for non-metro areas, which are more likely to contain small businesses. Absence of large employers may contribute to the finding of Mueller, Patil and Ullrich (1997) that non-metro and frontier county residents had longer stretches of uninsurance than their metropolitan counterparts (medians: non-metro: 16 months, frontier: 22 months, metropolitan: 6 months).

Health insurance coverage affects the decisions adults make about seeking care when experiencing illness. Baker, Shapiro & Shur (2000) analyzed the 1994 National Access to Care Survey, examining beliefs and behaviors of persons who reported developing serious or morbid symptoms. Having insurance was highly predictive of whether a person who believed care was necessary actually received that care (if uninsured, OR 0.28, CI 0.13-0.62).

Purpose of the present study

Information pertaining to access to and use of health services by non-metro, working age, *minority* adults is sparse. One of the few studies to look at race and rurality simultaneously was conducted by Mueller, Patil and Boilesen (1998). Using data from the 1992 NHIS, these researchers found that non-metro residents, regardless of race, were less likely to have visited a physician in the previous year than were metropolitan whites (Table 3, pp 606-607). In their analysis, race did not add explanatory power.

Mueller, Patil and Boilesen (1998) included all individuals under age 65 in their analysis. Inclusion of children, for whom frequent clinical preventive services are required, may have concealed potential issues affecting work age adults. The purpose of the analysis that follows is to explore levels of health insurance and health care utilization among working age adults, with particular attention to disparities experienced by non-metro, minority and poor populations.

All information presented in this report comes from an analysis of the 1997 and 1998 National Health Interview Surveys. Details concerning data elements and methods are presented in Appendix A, Overview of Method and Data Sources.

Findings are organized by topic. Chapter Two describes the characteristics of working age adults, presenting information relevant to race, rural residence, risk factors, resources and region. Chapter Three reports potential access to care among non-metro residents, as measured by health insurance status. Chapter Four illustrates actual access, measured by self-reported use of physician services. Conclusions and recommendations are presented in Chapter Five. To simplify presentation of findings, only summary statistics are presented in the body of the report; further information is provided in Appendix B, Detailed Tables.

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Chapter Two

Characteristics of Non-Metro vs. Metro Working Age Adults

Non-Metro Adults

Approximately 33.0 million working age adults lived in non-metro America during 1997-1998.¹ Most of these non-metro residents were white (28.1 million, or 85.1%; see Table B-1). The largest minority group in non-metro areas was African Americans, estimated at 2.4 million persons of working age (7.4%). Hispanics were the next largest ethnic minority at 1.7 million working age persons (5.0%) followed by approximately 815,000 persons of other racial backgrounds (2.5%).²

Mean family size was the same among non-metro and metropolitan families, averaging 3.1 persons for both. Across non-metro adults, Hispanics reported the largest average family size, 3.7 persons, followed by African Americans at 3.3 persons. Working age non-metro whites had the smallest average family size, at 3.0 persons. Non-metro working age adults were slightly older than their metropolitan counterparts, averaging 39.4 years of age versus 38.8 years of age among metropolitan respondents ($p < 0.0046$; Table B-1).

Resources

Non-metro adults were slightly less educated than metropolitan residents, averaging 12.6 years of schooling, versus 13.2 years for metropolitan residents ($p < 0.0001$). The tendency of non-metro adults to be less well educated was consistent across ethnic groups. Nearly one in five non-metro adults (18.8%) did not have at least a high school education, compared to 15.1% of metropolitan adults (Table B-2). Education levels were particularly low among rural minorities. Approximately half (49.6%) of non-metro Hispanic adults lacked a high school education, as did nearly a third of African American working age adults (30.9%). Only 15.9% of white adults and 22.0% of adults of other racial / ethnic groups had not completed high school.

Income levels were lower in non-metro than in metropolitan areas. While fewer than one in five metropolitan working age adults (17.9%) lived below poverty, one in four non-metro adults were impoverished (25.4%; Table B-2). Poverty levels were highest among non-metro minorities. Over half of non-metro working age African Americans (53.7%, or 1.3M persons) and Hispanics (51.4%, or 870,000 persons) were poor. While non-metro whites were less likely to be poor than their minority counterparts, they had nearly twice the poverty rate of urban whites (20.5% versus 11.6%). Over a third of non-metro residents of other racial / ethnic groups were poor (38.3%).

Over one-half of all non-metro, working age African Americans and Hispanics fell below the poverty line.

¹ The NHIS defines any place of residence outside of a Metropolitan Statistical Area (MSA) as “rural.” MSA locations range in population from under 250,000 to 5,000,000 or more

² It would be most desirable to have separate analysis for Native Americans and Asian / Pacific Islanders, to identify any differences among these populations. However, too few observations were available for accurate estimates for these specific groups.

Health status, conditions, impairment

Fewer non-metro adults reported that they were in “good” to “excellent” health than did metropolitan working age adults (89.1%) versus 92.3%; Table B-3). Non-metro African Americans reported poorer overall health than did other ethnic groups. Only 80.3% of African-Americans described themselves as being in good to excellent health, versus 89.9% for whites, 88.1% for Hispanics, and 87.9% for others.

Chronic or acute conditions were reported more frequently by non-metro residents. In metropolitan areas, 9.3% of adults reported experiencing chronic or acute conditions at the time of the NHIS interview; in non-metro areas 12.4% of adults reported such problems (Table B-3). Non-metro African Americans were more likely to report chronic conditions (16.3%) than were members of other ethnic groups, while Hispanics were least likely to report them (9.5%).

Approximately 4.3 million working age adults in non-metro areas had limitations in their ability to carry out daily activities. A larger proportion of the adult population experienced limitations in non-metro areas, 13.1%, than in metropolitan areas, 10.0% ($p < 0.0001$). Limitations of activity included work limitations, the need for personal assistance with eating, bathing, dressing, and getting around inside the house, and the need for personal assistance with handling routine needs such as everyday household chores, doing necessary business, shopping, or running errands. Adults with reported limitations on their activity were older than other adults (mean of 45.3 versus 38.1 years, $p < 0.0001$) and averaged a year less educational attainment, 12.0 versus 13.2 years ($p < 0.0001$). The percentage of the working age persons reporting limitations was highest among non-metro African Americans, 17.2%, followed by 13.0% among white adults, 12.2% among non-metro adults of “other” race, and 10.4% among Hispanic adults ($p < 0.0001$).

In summary, non-metro adults, and minority adults in particular, were more likely to be poor, poorly educated, and in poor health than were their urban counterparts.

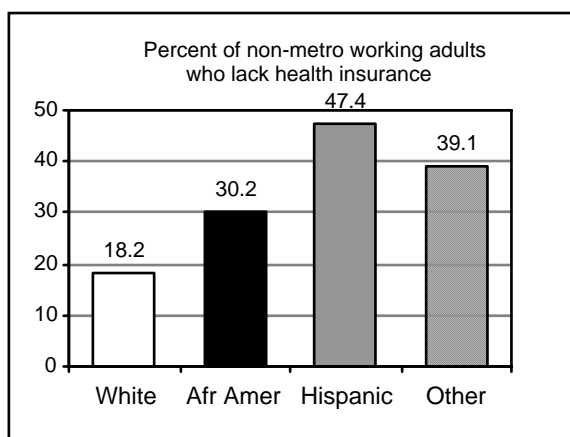
Chapter Three

Insurance Status

Rural Minorities and Health Insurance

Low income and low education levels in non-metro areas translated into jobs that did not offer health insurance. The non-metro/metropolitan disparity in the percent of the population lacking health insurance in 1997-1998 was not large: 18.0% metropolitan versus 21.1% non-metro working age adults were uninsured (Table B-4). However, non-metro minorities were severely disadvantaged, with rates of uninsurance ranging from 47.4% among the Hispanic population to 30.2% among non-metro African Americans.

Many factors affected whether a specific person had insurance in addition to race and rural residence. Gender, region, marital status, family income, family size, education, health status and limitations in daily activities all influenced coverage (See table on the next page and Tables B-5 and B-6). Some of these factors operated differently in non-metro areas than in urban areas. For example, family income over \$20,000 generally increased the likelihood that a person would be insured, but this increase was smaller in non-metro than in metro areas.



To guide policy discussion, it is necessary to go from the very complex statistical model associated with insurance coverage to concrete answers to the key question: What characteristics of non-metro minorities place them at greatest risk for being uninsured? Multiple effects are explored in Tables B-7 through B-16. We limit our presentation to the differential between non-metro white and minority populations, and the effects of income, education and marital status.

Factors affecting the likelihood of health insurance coverage among adults

- **Race:** Minority adults were less likely to have health insurance than whites.
- **Rural residence:** Non-metro adults were less likely to have health insurance.
- **Sex:** In general, men were less likely to have health insurance than were women. However, differences between men and women were less severe in rural areas, in regions outside the Northeast, and among men age 50-64 versus younger men.
- **Region:** Compared to persons in the Northeast, residents in other areas had lower odds of being insured.
- **Age:** As persons get older, the probability that they will have health insurance increases. Among men, as noted earlier, this reduces the differential between men and women.
- **Family Income:** Persons with a family income above \$20,000 per year were considerably more likely to have insurance than their poorer peers. However, this effect was extremely complicated. The beneficial effects of high income were reduced among non-metro adults and among minorities in general, but the extent of the reduction was less among rural minorities.
- **Family size:** Each additional person in the family decreased the probability that the responding adult would have health insurance.
- **Health status:** Persons who described their health as poor to fair were less likely to have health insurance than healthier persons. On the other hand, persons who reported functional limitations to their daily activities were more likely to have health insurance than persons without limitations. Among persons with limitations and family income of \$20,000 or more, differences were reduced.
- **Education:** Adults who had not graduated from high school were significantly less likely to have insurance.
- **Marital status:** Persons who were not currently married (single, separated, divorced or widowed) were significantly less likely to report having health insurance.

Influence of Residence and Race on the Probability of Health Insurance Coverage

The chart below shows the influences of residence, sex and race on the probability of health insurance coverage among persons who report relatively high income and education.³ Non-metro residents were consistently less likely to report health insurance coverage. While men and women had similar probabilities for coverage in metro areas, in non-metro regions men were consistently more likely to be insured. Finally, African American and white non-metro residents had a similar probability of being insured, but Hispanics and persons of “other” race were less likely to be insured.

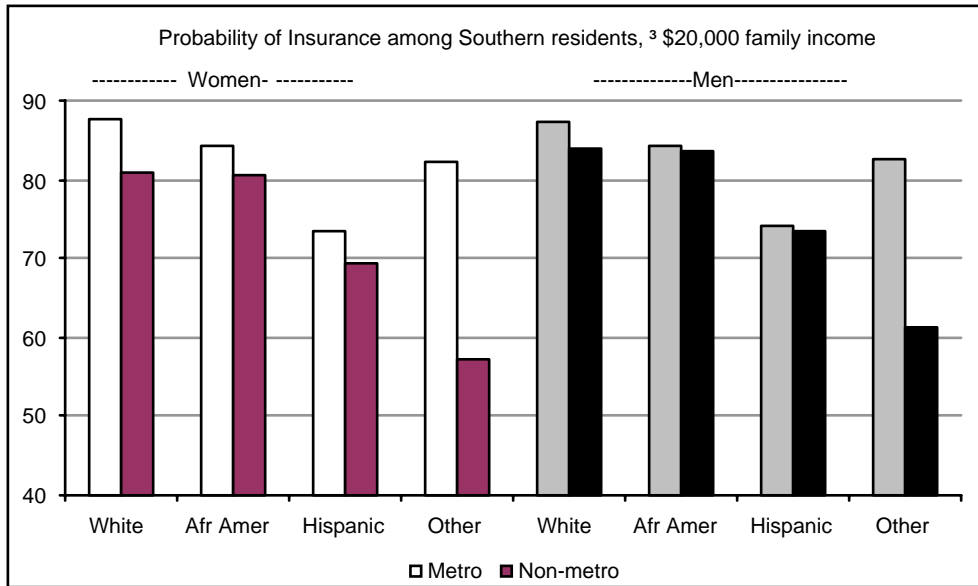


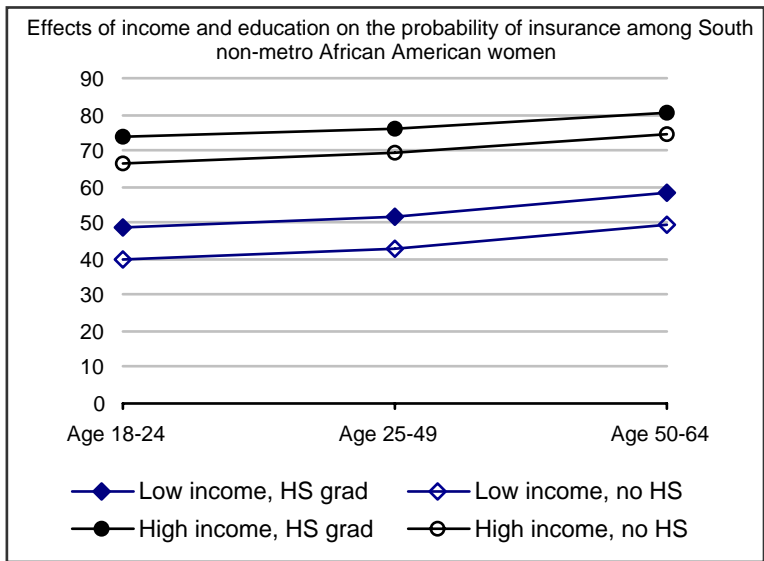
Chart limited to persons age 50 – 64 who live in the South, have family incomes of \$20,000 or higher, have graduated from high school, are married, and are in good health with no limitations in activities of daily living

Effects of Race, Age and Education on Health Insurance

African Americans

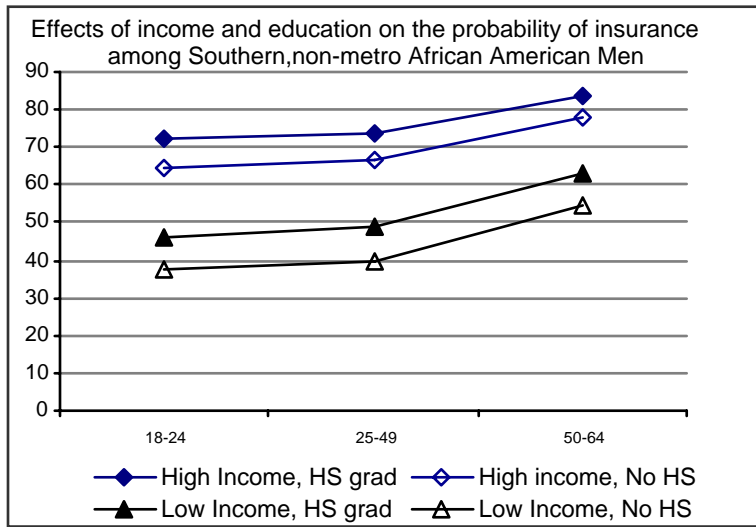
The chart at the top of the next page describes the effects of income and education on the probability that high resource non-metro African American women will have health insurance at different ages. “High resource” women were defined as those who were married and in good health, without physical limitations. The incremental effects of additional education and additional resources are illustrated clearly. Non-metro African American women who lack a high school education and who have a low family income (less than \$20,000 per year) have a less than an even chance of being insured throughout their entire working life.

³ Because probabilities must be calculated based on all factors in the model, each chart must pertain to persons with a specific set of characteristics. These are noted below the chart.



Women in this chart live in the South, are in good to excellent health, have complete high school, have a family income of \$20,000 or more, and experience no physical limitations. The South is used because most rural African Americans live in that region.

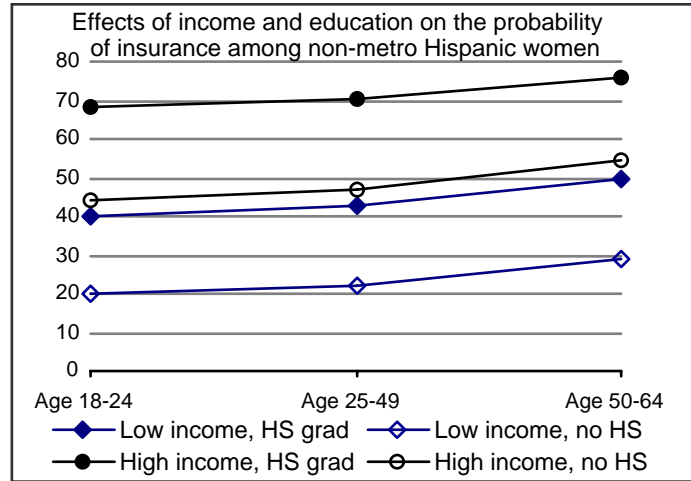
The effects of income and education were similar among high resource non-metro African American men. The differing effects of increased age among men and women are visible if this chart is compared to the one above. For women, the increase in the probability of having health insurance was gradual across the working life, while among men there was a marked increase in the probability of having insurance in middle age.



Men in this chart are married, in good health, experience no physical limitations, and live in the South.

Hispanics

On average, 47% of non-metro Hispanic adults reported having health insurance in 1997-1998. Non-metro Hispanic women who lacked a high school education and who had low family income (less than \$20,000 per year) had a less than an even chance of being insured throughout their entire working life. Even high-income women without a high school diploma had less than a 50% chance of having health insurance for most of their working years.



The chart above applies to Hispanic women who are in good health, are married, have no physical limitations, and live in the West. This locale is used because the non-metro Hispanic population is concentrated in this region.

Even the best financial situation for high-resource (married, good health) Hispanic men—that is, family income above \$20,000 and a high school diploma—still resulted in health insurance coverage that lagged behind that of white or African American non-metro residents. Fewer than one in five non-metro Hispanic men under 50 with family incomes below \$20,000 had health insurance.

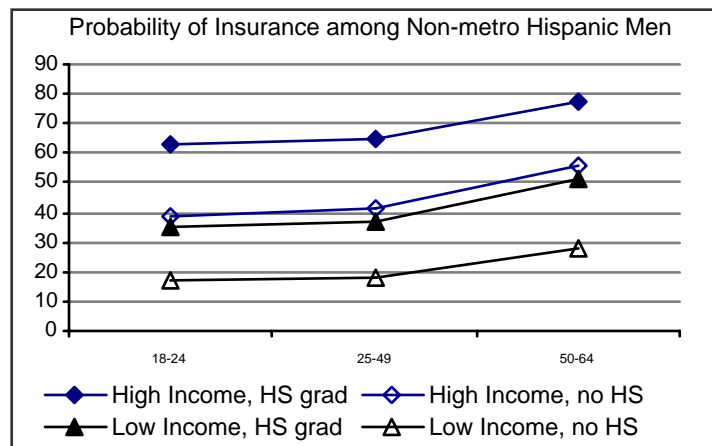
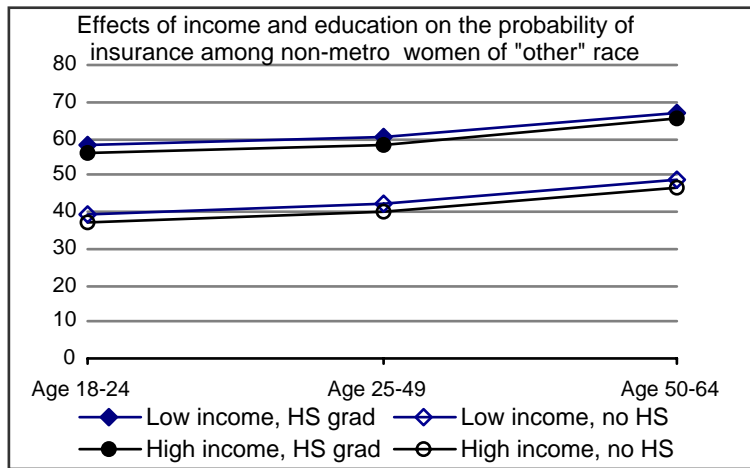


Chart applies to non-metro Hispanic men who were married, in good health, with no physical limitations, and who lived in the West.

“Other” Race

Discussing non-metro adults of “other” race is difficult. The majority of non-metro adults of “other” race surveyed were Native American, but other ethnicities were present as well.

The chart below illustrates the probability that a married, healthy non-metro woman of other race will be insured. For non-metro persons of “other” race, additional family income (less than \$20,000 per year versus higher) did not convey the advantages in terms of insurance coverage that were found among other minority groups. For this set of persons, education was the principal factor influencing the probability of coverage, with high school graduation making an important difference. Women who had not graduated from high school had less than an even chance of being insured at any age. Results for men were similar.



Model assumes that the woman is in good health without physical limitations, family of 3 persons, married, living in the West.

Effects of Race, Income and Marital Status

African Americans

In every income / education, category, non-metro African American women who were married were more likely to be insured than those who were divorced (this status was used for modeling; results for single, widowed or never married persons would be similar). Less than a third of low-income, divorced women reported having health insurance, regardless of their education level. Effects

were similar for non-metro African American men. This effect is logical: marriage increases the possibility that one partner will be insured and able to secure benefits for the family.

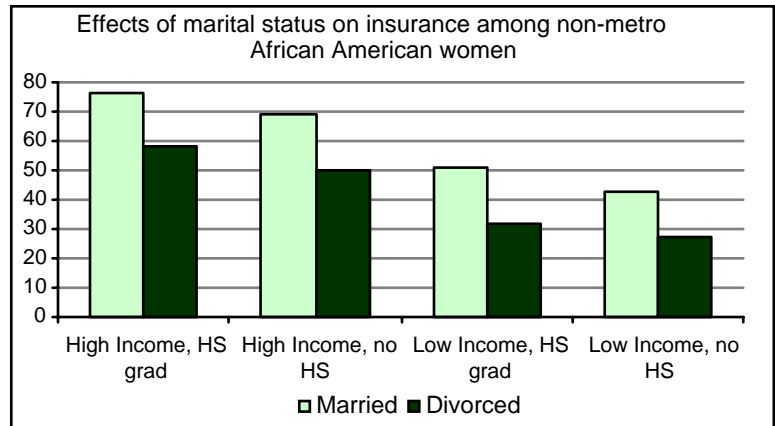


Chart shows probabilities for Southern women aged 25-50 who are in good health, and have no physical limitations.

Hispanics

Non-metro Hispanic women were at particularly high risk for being uninsured. Only Hispanic women with family incomes above \$20,000 and a high school education had better than a 50% chance of being insured.

Across each income / education combination, however, being married conveyed some level of protection. Even at the lowest resource level (low income, no high school), married Hispanic women were more than twice as likely to have insurance as those who were not (25% versus 11%). The pattern among Hispanic men was similar.

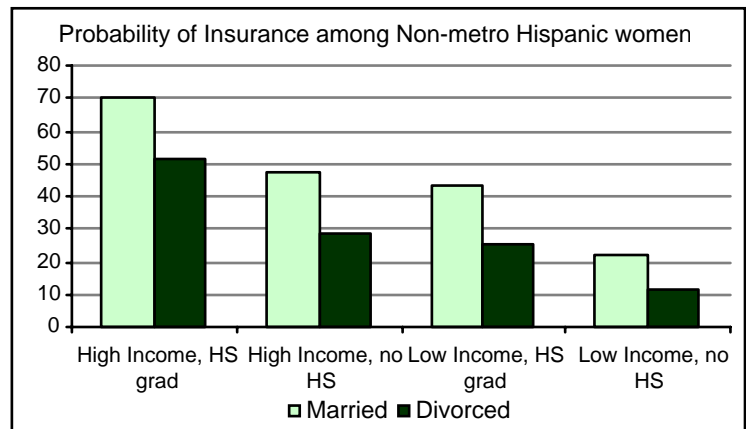


Chart pertains to 25-49 year old non-metro women in good health, with no physical limitations, living in the West.

Other race

The differential in insurance probability associated with marriage was similar among non-metro residents of “other” race. Among both men and women (men not shown), only persons who were married and had graduated from high school had a better than 50% chance of being insured.

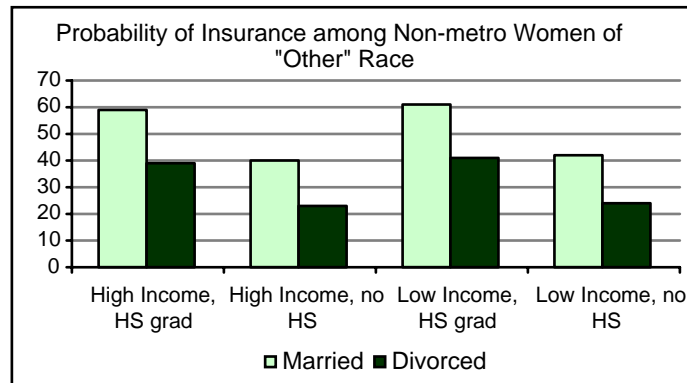


Chart pertains to a 25-49 year old non-metro woman in good health, with no physical limitations, in a family of 3 persons, living in the West.

Health Insurance among High Need Non-Metro Residents

The preceding analyses applied only to persons who reported themselves to be in good health, without physical limitations. In general, persons who stated they were in poor health were less likely to have health insurance, while persons who reported limitations in the activities of daily living were more likely to report that they were insured. These dual factors played out differently across different rural populations. For illustrative purposes, rates of insurance coverage among these high need persons are displayed in the chart at the top of the next page.

High-resource non-metro men (income over \$20,000 and a high school education) were likely to have health insurance, whether or not they suffered from poor health and limited activities. Among low resource men (low income and less than high school education), high need persons were more likely to be insured than others. However, the proportion of low resource men having insurance was very low, with only African Americans having better than a 50% probability of being insured.

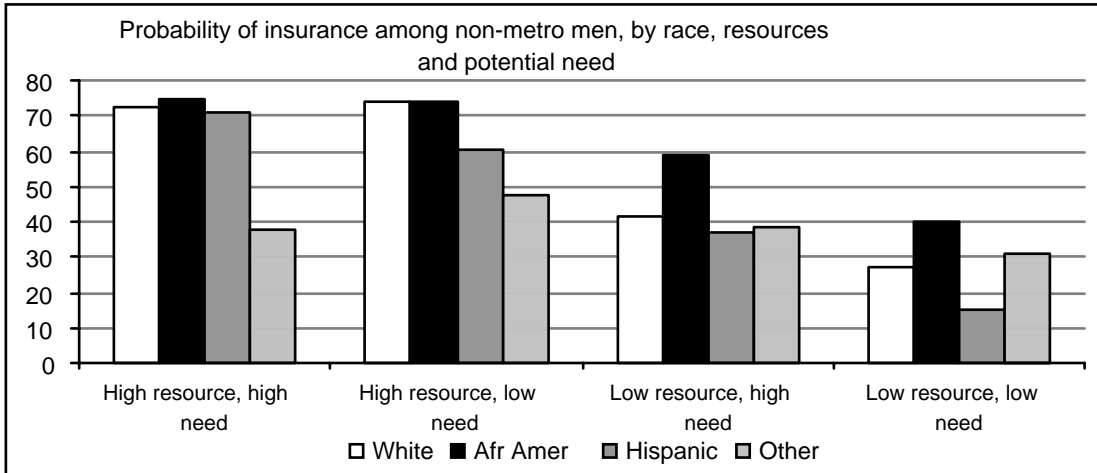


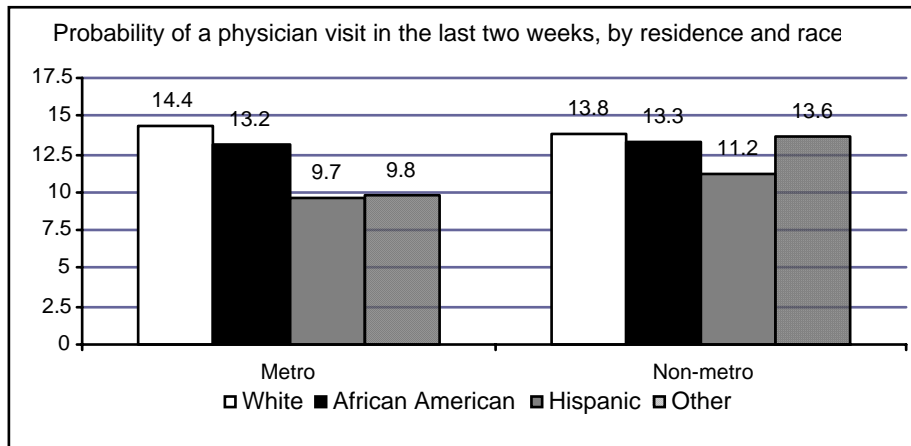
Chart applies to non-metro men age 25-49, who are married and come from a family of 3 persons. High resource men have income over \$20,000 per year and a high school education. High need persons report that they have poor health and limitations in activities of daily living; persons who are not limited report good health and no limitations.

Chapter Four

Physician Visits

A physician visit within the last two weeks was used as a measure of actual use of health services. While most adults do not need medical services in any given two week period, over a whole population a certain proportion of persons can be anticipated to need care for acute or chronic problems. Racial or other disparities should be evident if the proportion of persons visiting a physician varies for factors other than personal health status.

Although non-metro adults were less likely to have insurance, they were not less likely to have seen a physician than their urban peers. The proportion of working age adults who reported seeing a health care provider in the past two weeks was similar in both non-metro and metropolitan areas (13.6% and 13.5%, respectively; see Table B-17). Racial disparities in utilization were less severe in non-metro areas, as shown in the chart below.



Multivariate Analysis: Use of Physician Services

The overall finding that rural adults were likely to obtain health care did not imply that there were no pockets of need among non-metro populations. Accordingly, we examined the effects of specific factors, such as insurance, on the likelihood of a recent physician visit (see next page; details in Tables B-18 and B-19).

Rural residence, controlling for other factors, increased the probability that an adult would have seen a physician in the past two weeks. African Americans did not have lower visit rates than whites, all things held equal, but Hispanics and persons of “other” race were less likely to report a recent visit. These differences, however, were not present in the rural population. High need, caused by poor health or limitations in activities of daily living, increased the probability of a recent health care visit, as did increased education and income. The single

largest effect, however, was that caused by health insurance coverage; which roughly doubled the likelihood of a visit.

Several important factors affecting whether a person would have seen a physician affected different groups in different ways. For example, while Hispanics in general were less likely to have seen a physician, this effect was slightly ameliorated in non-metro areas. Thus, specific probabilities were calculated for various at-risk populations. These are detailed in Tables B-20 through B-25. Selected important findings are presented here.

Factors affecting the likelihood of a physician visit within the past two weeks

- **Race:** Overall, Hispanic adults and those of “other” race were less likely to have seen a health care provider in the past two weeks. Racial disparities were less among rural residents and among persons with limitations in activities of daily living. African Americans were not significantly less likely than whites to have a visit.
- **Rural residence:** In general, non-metro adults were more likely to have seen a physician during the past two weeks than were urban residents. However, the likelihood of a physician visit declined with age among non-metro adults more than among urban adults.
- **Sex:** Women were more likely to have seen a physician within the past two weeks than were men. Differences between men and women declined slightly among older age groups.
- **Insurance coverage:** Absence of insurance coverage nearly halved the likelihood of a recent physician visit.
- **Need:** Adults with limitations in their ability to carry out daily activities had a higher probability of having seen a physician recently, as did those who perceived their health as poor.
- **Education and income:** Persons with less than a high school education were less likely to have seen a physician than more educated adults. Similarly, persons with a family income of less than \$20,000 per year were less likely to have visited a physician.
- **Family:** Each additional family member decreased the probability that a person would have seen a physician. At the same time, however, single or divorced persons were less likely to have seen a physician than were married persons.

Race and Insurance status

Non-metro overall disparities in physician visits, shown in the table on page 19, were almost entirely due to insurance status. The chart below, which varies insurance status while holding other personal characteristics constant, illustrates the absence of disparities based on race alone.

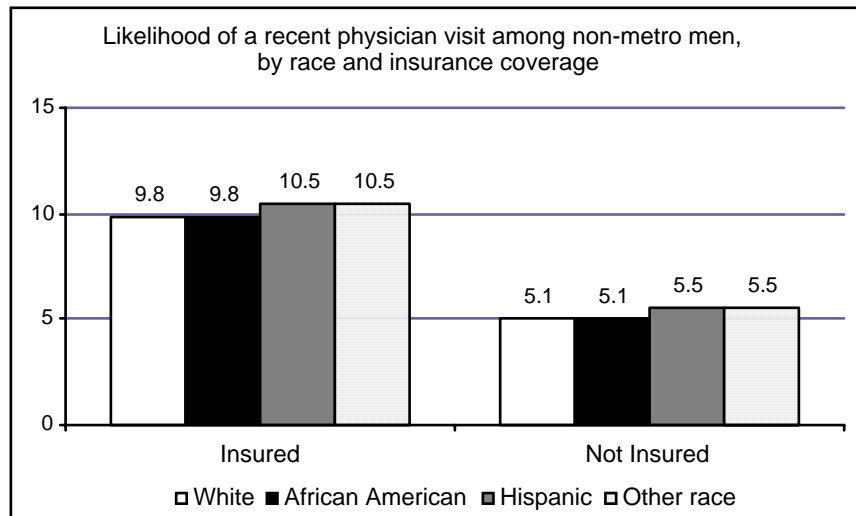
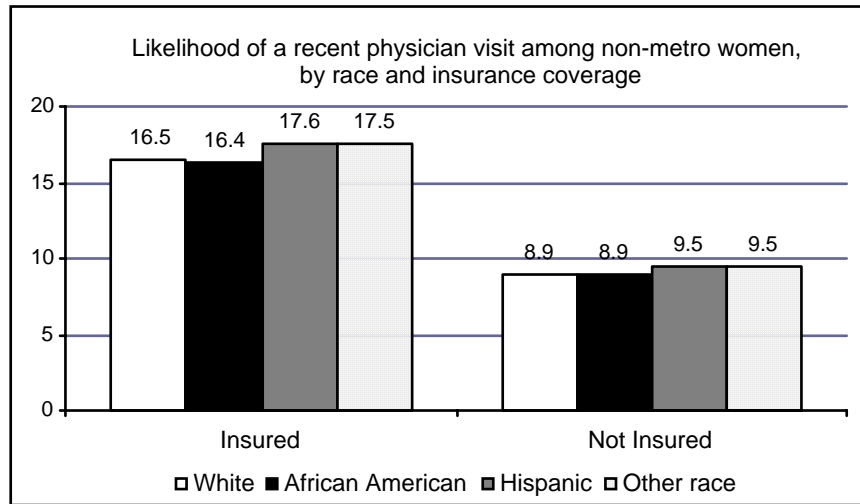


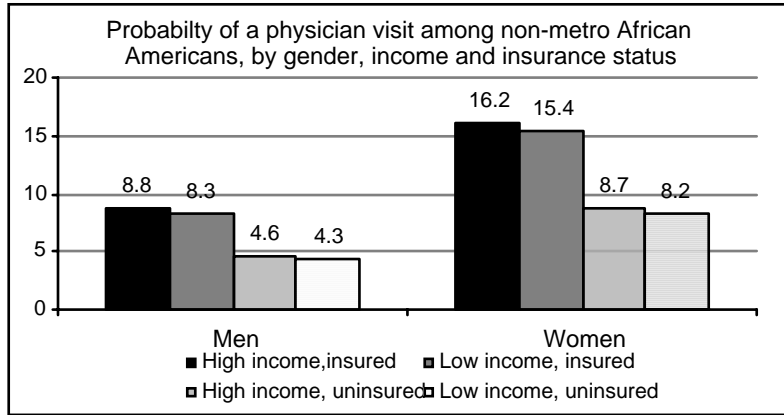
Table limited to adults age 25-49 living in the West, who are married, in good health with no limitations in daily activities, with family income of \$20,000 or more, living in a 3-person family.

African Americans

Gender and insurance

Gender, income and insurance effects are illustrated in the chart below. Whether insured or not, rural African American women were more likely to have seen a physician recently than were men. Among both sexes, having insurance sharply increased the probability of a physician visit. The effects of insurance were larger than those of income, which had only a small, barely significant effect on visits.

Chart is specific to African Americans aged 25-49 living in the South, who are married, in good health, not limited in



physical activities, and have at least a high school education.

Need

The chart below illustrates the probability of a physician visit among high need non-metro African Americans. High need persons reported poor health and limitations in daily activity, both of which strongly increased the probability of a recent healthcare visit. Even among persons who are likely to have a high need for services, insurance coverage strongly influenced whether a physician was seen.

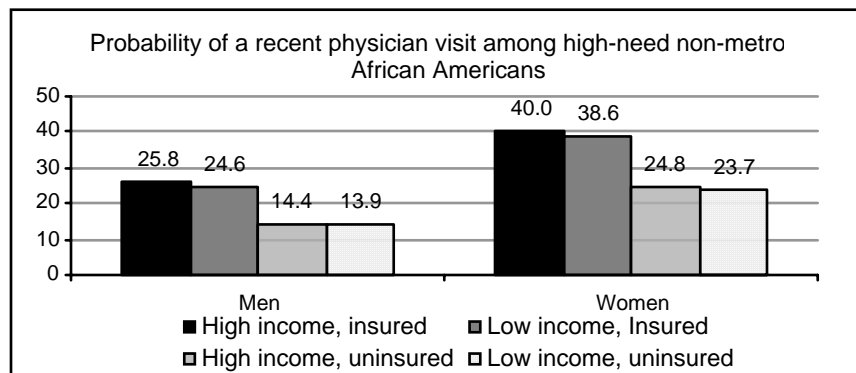
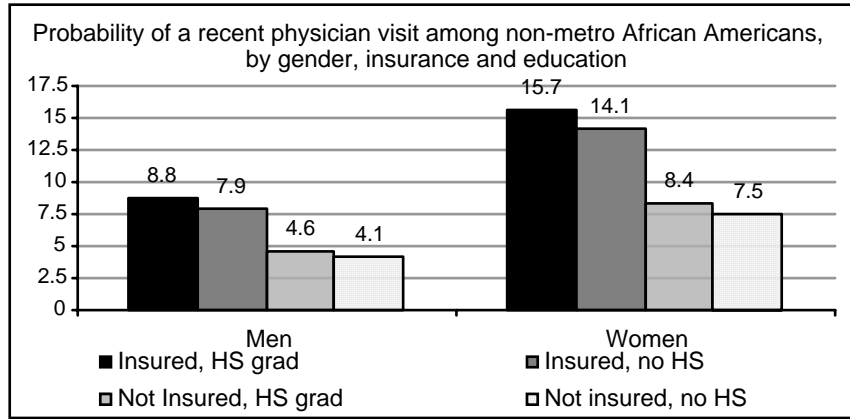


Chart assumes a person living in the South, age 25-49, who is single or never married, has less than a high school education, had poor health and limitations in daily activity, and lives in a family of 3 persons.

Education

Education had a small but statistically significant effect on physician visits, with more educated persons being more likely to report a recent physician visit. Education increased visit probability among both men and women.

Chart is limited to non-metro African Americans age 25 – 49 living in the South, who are married, have family



incomes of \$20,000 or more, in good health with no limitations in daily activity, living in a 3-person family.

Hispanics

Gender and insurance

The chart below illustrates the probability that non-metro Hispanic adults in good health, with no limitations in daily living, will have seen a physician in the past two weeks. As was the case among rural African Americans, women were more likely to report seeing a physician than men. Having a family income of less than \$20,000 slightly reduced health care use. The strongest influence after gender, however, was health insurance. Without insurance, the probability of a visit was markedly less.

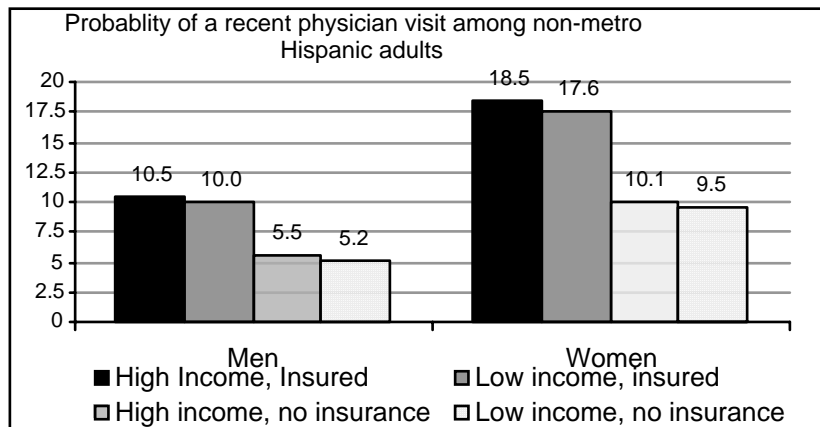


Chart is limited to adult Hispanics living in the West who have a high school education, are in good health and not limited in activities of daily living, are married, and come from a 3-person family.

Need

The chart below illustrates the probability of a physician visit in the last two weeks among high need Hispanic adults living in non-metro areas. High need persons are those who reported that they were in poor to fair health and limited in their ability to carry out activities of daily living. As was the case among non-metro African Americans, high need Hispanic adults were less likely to have seen a physician if they were uninsured.

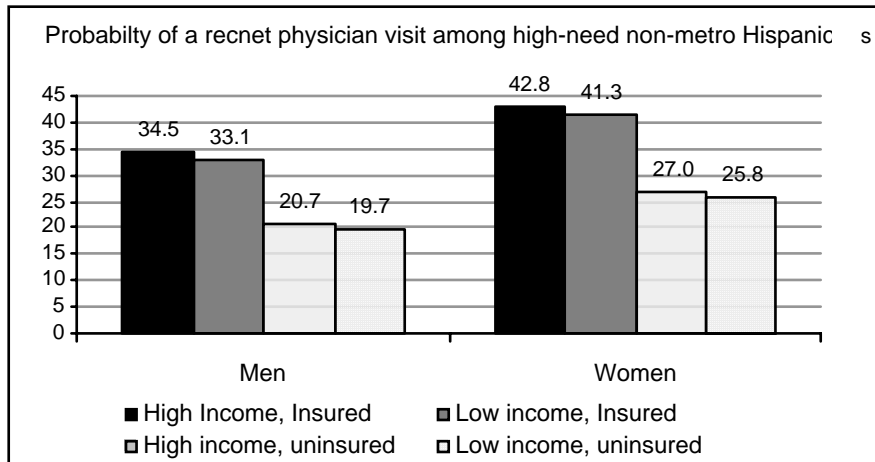


Chart is limited to Hispanic adults ages 25-49, living in the West, who report that they are in poor to fair health, are limited in daily activities, have not completed high school, are single or never married, and live in a 3-person family.

Education

As was the case among non-metro Africans, non-metro Hispanics with less than a high school education were slightly less likely to have seen a physician recently. However, the effects of education were small compared to the effects of insurance coverage.

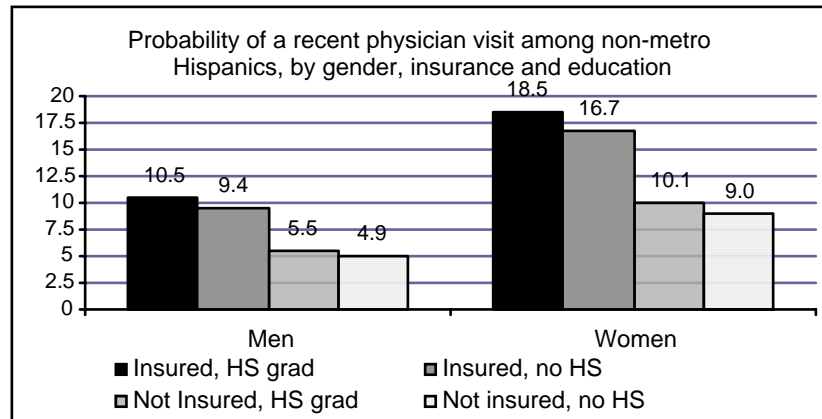


Chart is limited to married adults age 25 – 49, living in the West, in good health with no limitations in daily activity, who have a family income of \$20,000 or more and live in a 3-person family.

Adults of “other” race

Gender, Income and Insurance

The probability of a physician visit by persons of “other” race, as among other non-metro adults, was strongly influenced by gender and insurance. Women were more likely to report a recent physician visit than were men, and those with insurance more likely than those who lacked it. Income effects were relatively small.

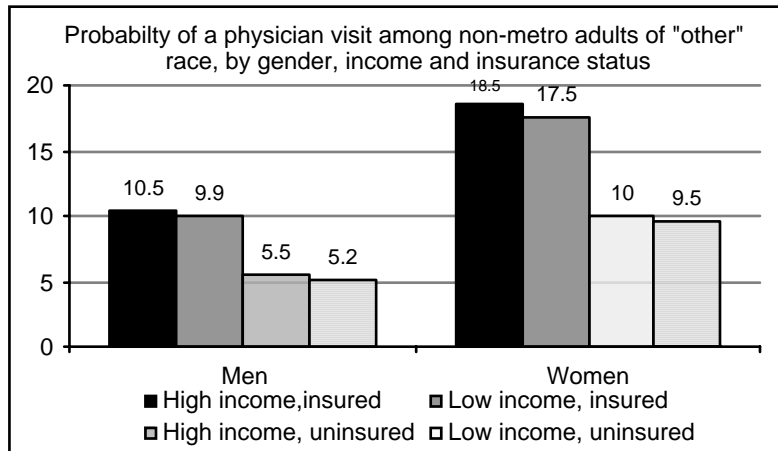


Chart is limited to adults of “other” aged 25-49, living in the West, who have a high school education, are in good health and not limited in activities of daily living, are married, and come from a 3-person family.

Need

The chart below illustrates the probability of a physician visit in the last two weeks among high need adults of “other” living in non-metro areas. High need persons are those who reported that they were in poor to fair health and limited in their ability to carry out activities of daily living. As was the case among all non-metro residents, high need adults were less likely to have seen a physician if they were uninsured.

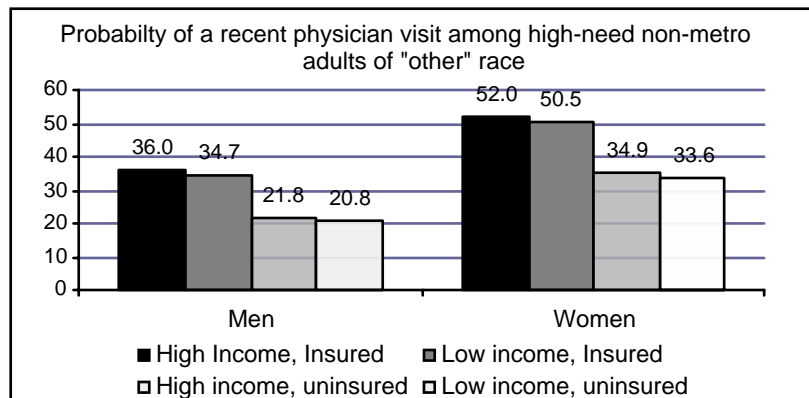


Chart is limited to adults of other race aged 25-49, living in the West, who report that they are in poor to fair health, are limited in daily activities, have not completed high school, are single or never married, and live in a 3-person family.

Education

As was the case among other minorities, non-metro adults of “other” race with less than a high school education were slightly less likely to have seen a physician recently than persons with more education. However, the effects of education were small compared to the effects of insurance coverage.

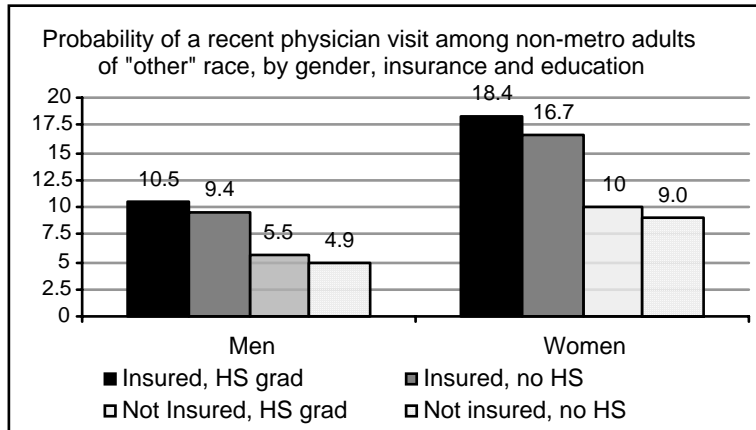


Chart is limited to married adults age 25 – 49, living in the West, in good health with no limitations in daily activity, who have a family income of \$20,000 or more and live in a 3-person family.

Chapter Five

Conclusions and Recommendations

Summary of Findings

Health insurance

Rural minority populations, as measured in the 1997 -1998 National Health Interview Survey, were resource poor, handicapped by poverty and lack of education. Over half of non-metro working age African Americans (54%) and Hispanics (51%) were poor, as were over a third of non-metro residents of “other” racial / ethnic groups (38%). In contrast, only 21% of the non-metro white population, and only 18% of the metropolitan population regardless of race, were poor. Half (50%) of non-metro Hispanic adults had not completed high school, as had nearly a third of African American working age adults (31%).

Low income and low education levels in non-metro areas translated into jobs that did not offer health insurance. Non-metro minorities were particularly disadvantaged, with rates of uninsurance ranging from 47% among the Hispanic population to 30% among non-metro African Americans.

Many circumstances, including rural residence, region of the country, age, sex, family size and health status, combined to influence whether an individual would be insured. Even with all factors held equal, rural residents were less likely to report having health insurance than persons from metropolitan areas. Minority status added further disadvantage, as African Americans, Hispanics and persons of “other” race were all less likely to be insured than whites. The factors placing rural minority populations at greatest risk for being uninsured were income, education and marital status.

- All things being equal, rural African American women who lack a high school education and who have low family income (less than \$20,000 per year) have a less than an even chance of being insured throughout their entire working life. Higher income or education raised the likelihood that African American women would have health insurance, to a maximum of approximately 80% in the Northeast.
- Non-metro Hispanic women who lacked a high school education and who had low family income also had a less than an even chance of being insured throughout their working life. Among Hispanics living in the West, even high income women without a high school diploma had less than a 50% chance of having health insurance for most of their working years.
- Rural women of “other” race (principally Native American) had less than a 50% chance of being insured if they lacked a high school education. Even if they had a high school diploma and a family income of \$20,000 or more, they still only had, at most, a 70% chance of having health insurance during their working years.
- Rural minorities who were currently married were significantly more likely to have health insurance, an effect that was present across all races, both sexes, and

all income and education levels. This finding probably results from the fact that having two potential workers in the household increases the likelihood that one will have a job offering health benefits. The implications of a “marriage effect” are strongest for rural African American women, the majority of whom are not currently married.

Rural minorities who were “high need,” that is, who reported that they were in poor health and suffered from limitations in activities of daily living, were not necessarily more likely to have health insurance than persons in good health. Among high need minority individuals who were low income and low education, only non-metro African Americans had better than a 50% chance of being insured. Rural high need Hispanics and adults of “other” race who fell into the low income, low education category reported having health insurance less than 40% of the time.

Use of physician services

Although non-metro adults were less likely to have insurance than metropolitan residents, they were not less likely to have seen a physician. The proportion of working age adults who reported seeing a health care provider in the past two weeks was similar in both non-metro and metropolitan areas (13.6% and 13.5%, respectively). Racial disparities in utilization were less severe in non-metro areas, with rural whites (13.8%), persons of “other” race (13.8%) and African Americans (13.3%) having similar likelihood of a recent visit, followed by Hispanics (11.2%).

The overall finding that rural adults were likely to obtain health care did not imply that there were no pockets of need. Even with insurance status controlled, rural Hispanics were less likely to report a recent healthcare visit than other groups. Low education and low income, even controlling for insurance status, also reduced the probability of a recent physician visit. Most prominently, lack of health insurance nearly halved the likelihood of a recent visit. The effect was present even among high need rural minorities, those with poor health and limitations in daily activities. Lack of insurance reduces use of health care among working age adults, regardless of their health status.

Discussion and Recommendations

There are both short-term and long-term actions that can serve to reduce disparities in insurance and health services use among rural minorities. However, actions in both time frames are likely to be constrained by current economic circumstances and budgetary priorities.

In the short term, there are two possible approaches to ensuring that rural adults have financial access to health care: increasing the ability of rural minorities to obtain insurance, or increasing the number of practitioners in rural areas who accept indigent patients with a minimal financial requirement.

Expanding coverage

One way to expand coverage is to subsidize the participation of low income employees in current employer health plans. One in five uninsured persons has access to employer based insurance, but the majority of these persons decline to purchase coverage, citing high costs (Cunningham, Schaefer and Hogan, 1999). While an income-based system might result in subsidies for low-income persons who already purchase health insurance, as well as to the

uninsured, the authors deemed the effect small enough to be acceptable in terms of the benefits gained.

A second alternative entails increasing the ability of low-income adults to access Medicaid (e.g., Rosenbaum Borzi and Smith, 2000). Such a program could be targeted through employers of low income persons, as well as individually marketed. Medicaid expansion in the current economic environment may face economic barriers. Medicaid enrollment had been increasing from mid-1998 through 2001 in response to the current economic downturn, at the same time as state government revenues have been declining (Wachino, 2002). In consequence, a majority of states (41) are acting to constrain Medicaid growth in FY 2003, including 18 states planning to reduce eligibility categories (Wachino, 2002).

Recommendations:

- The Secretary of the Department of Health and Human Services should continue to promote Medicaid waiver demonstration programs that address low income adults, including both programs that promote employer buy-in to Medicaid for low income employees and programs that are marketed individually.
- The Secretary of the Department of Health and Human Services should work with State Offices of Rural Health to explore methods by which non-metro employers can obtain better “deals” on health insurance, with the possibility of expanding coverage among low-income employees.

Expanding practitioners

The second major approach to providing health care to medically indigent persons involves increasing the number of facilities providing free or low cost care. Research has shown that a substantial proportion of the primary care received by minority persons who lack insurance or who are covered by Medicaid comes from hospital outpatient centers and federally qualified community health centers (Forrest and Whelan, 2000). Academic medical centers (AMCs) have called for reform of Medicare and Medicaid disproportionate share regulations to help underwrite the care they already provide (The Commonwealth Fund, April 2001). AMCs, however, are generally located in urban areas. Rural medical training is unusual. Thus, AMCs are not a viable means for extending health care to rural poor and minority populations.

Federally qualified community health centers are an existing vehicle for providing care to medically indigent persons. However, their geographic and financial availability may need to be expanded. A New York study assessing the accessibility of various sites to persons without insurance rated FQHCs highly for range of services offered, but noted that sliding fee scales and a requirement that payment be provided before services could be received may have deterred uninsured persons from seeking care. FQHCs were found to have a smaller proportion of medically indigent persons in their patient population than did city-sponsored hospital clinics (Weiss, Haslanger and Cantor, 2001).

Recommendations:

- The Secretary of the Department of Health and Human Services should monitor the planned expansion of the Community Health Center program to ensure that geographic regions with a high concentration of low income and uninsured persons are appropriately targeted.

- The Secretary of the Department of Health and Human Services should evaluate the degree to which Community Health Center patients perceive sliding scale fees or co-pays as an obstacle to the receipt of care.
- The Secretary of the Department of Health and Human Services should provide Community Health Centers, particularly those in rural areas, with technical assistance in budgeting for care for uninsured adults and in helping reduce excess utilization among these adults through education and disease management.
- The Secretary of the Department of Health and Human Services should ensure adequate implementation of the “Kids into Health Careers” program in rural areas, as a means of both expanding the number of rural practitioners and of providing rural minority children with incentives to complete high school.

Future Research

The current study found that low income, minority adults, particularly women, have very low chances of being insured at different times across a working life. However, a survey conducted at a single point in time cannot describe any individual adult’s pattern of having, losing and regaining health insurance over time. It is quite possible that a subgroup of low-income adults will spend up to half of their working life, ages 18 through 64, without insurance. Further research is needed to explore the effects of a history of extended periods of uninsurance on health as adults enter middle age, when chronic disease is likely to emerge and intensify.

Lack of a high school diploma presages a low income job; lack of an educated work force forestalls community economic development. The 1996 Rural Manufacturing Survey found that quality of labor force was the principal barrier keeping businesses from locating in non-metro areas, with such issues as transportation and telecommunications secondary (Gale, McGranahan, Teixeira, and Greenberg, 1999). Research is needed into effective programs that keep non-metro minority adolescents, particularly Hispanics, in school.

Recommendations:

- The Secretary of the Department of Health and Human Services should promote longitudinal research into the effects of extended periods without health insurance.
- The Secretary of the Department of Health and Human services should promote research and demonstration projects that attempt to enhance high school graduation rates among rural poor and minority adolescents. Linkages to health career planning through local Area Health Education Consortium facilities should be encouraged.

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