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The Changing Profile of the Urban Uninsured: Exploring Implications of Rise in the Number of Moderate-Income Uninsureds

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ABSTRACT *Access to care is a major problem in urban America that increasingly affects new segments of the population. Although the demographic profile of the uninsured has changed, recording large increases in numbers of moderate-income uninsured persons, it has not been accompanied by changes in health care safety net programs or increased availability of private insurance products tailored to these groups. Any such changes, however, need to be based on a good understanding of the similarities and differences between low-income and moderate-income uninsured. Based on a telephone survey of the uninsured in three northern New Jersey counties, this study presents a systematic comparison of low-income (below 150% of federal poverty level) and moderate-income (150% to 350% federal poverty level) uninsured on attitudes to health care, perceptions regarding access to care, health status, and health care utilization. We discuss the implications of this comparison for expanding health care access and design of safety net programs and institutions.*

KEYWORDS *Health care access, Health care utilization, Urban uninsured, Safety net programs.*

Access to health care is a major problem in urban America.[1–6] Inadequate access leads to the displacement of routine care with crisis-driven care, a pattern graphically described by Abraham in her careful chronicle of the experiences of a family from Chicago's West Side.[1] (While the focus is often on patients' circumstances, physicians serving in urban areas face equally formidable barriers. In describing the plight of primary care physicians serving uninsured urban residents suffering from chronic conditions, Mullan noted that primary care physicians are reduced to rattling the proverbial "tin cup" to procure free care for patients unable to pay for specialty services.)[6] Unfortunately, in-depth accounts like Abraham's are not isolated anecdotes in an otherwise well-functioning urban health care system.

Indeed, recent studies pointed out that lack of health insurance coverage continues to undermine health care access to growing segments of urban America.[7,8] More than ever, moderate-income Americans are likely to be uninsured.[9,10] To be sure, there is some controversy about the manner in which the middle-income groups come to be uninsured. Holahan and colleagues, for example, noted that job loss precipitates both loss of health insurance and decline in income, converting moderate-income

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families into low-income families.[11] If, as Holahan et al. suggest, middle-income families are at risk of becoming uninsured because of job or income loss, a better understanding of the preferences and attitudes of the at-risk population can be helpful in preparing for changes in composition of the uninsured. They also highlighted significant methodological problems associated with the use of household income instead of family income in calculating the distribution of uninsured across the income gradient.

Notwithstanding this important methodological concern, we believe that lack of insurance is becoming a serious issue at higher income levels. The most recent trend data[12] on cost of coverage, comparing growth rate from spring 2002 to that of spring 2003, suggested that it is growing at the highest rate since 1990. Thus, it stands to reason that unaffordability of coverage is a growing problem and is likely to become manifest higher up the income distribution.

Although the composition of the uninsured has been undergoing significant changes, health care safety net programs have undergone little change. Conceived and designed to help populations with very low income, incremental expansions of the American health care safety net have primarily enhanced public coverage available to low-income individuals and families.[13–15] Although expansions in public coverage have stemmed the tide of low-income people joining the ranks of the uninsured, sustained increases in the cost of health care coverage have eroded private employment-based health insurance and added to the numbers of moderate-income uninsured.[5,12,16] An Institute of Medicine study[5] made the following observation in this regard: "Employment-based approach to insurance coverage in the United States functions less like a system and more like a sieve" (p. 59).

As more moderate-income individuals join the ranks of uninsured, new public policy questions about providing adequate access to health care for the uninsured crop up. Can the safety net programs be bolstered to ensure adequate access to health care? Alternately, do the shifting demographics of the uninsured make market-based innovations more viable? Although a detailed consideration of either of these questions would have to be multifaceted, we believe that efforts to address these questions must begin with a better understanding of the similarities and differences between low-income and moderate-income uninsured persons.

Accordingly, this study provides a range of comparisons between low-income and moderate-income uninsured persons on dimensions such as attitudes toward health care, perceptions regarding access to health care, health status, and health care utilization. The data for this study were drawn from a telephone survey of the uninsured in three urban northern New Jersey counties. The rest of the article is divided into four sections. First, to set the context, we briefly describe larger systemic forces that drive access to health insurance coverage. This is followed by a description of the data collection procedures. The next section presents results of the comparison of low-income and moderate-income uninsureds. The final section discusses implications of study findings.

UNCERTAIN PROSPECTS FOR THE UNINSURED

Why is it that when most uninsured individuals desire health insurance coverage, even moderate-income uninsured who have comparatively greater ability to pay insurance premiums, they remain uninsured in such high numbers? There are at least three underlying factors that, acting both separately and jointly, determine whether moderate-income uninsured individuals are able to obtain health insurance:

(1) the dynamics of employer-sponsored coverage; (2) trends in public coverage initiatives; and (3) the imperfections of the nongroup insurance market.

The pressure of rising health care costs has an impact on each of these, limiting the ability of employers, governments, and individuals to purchase health insurance coverage. (For the sake of completeness, it is worth noting that, even for moderate-income uninsured individuals, income may be too low compared with the cost of coverage.) We review the impact of each of these factors, considering first trends in employer-sponsored and public coverage followed by the nongroup insurance market.

Trends in Employer-Sponsored and Public Coverage

Historically, employer-sponsored insurance has been the predominant form of health insurance coverage in the United States. Rising health care costs have, however, eroded the ability of employers to provide health coverage. In the 1980s, private health insurance coverage dropped by 10 million.[17,18] Especially hard hit were small employers who employed lower-wage workers and faced much higher prices in the group insurance market. Structural changes in the labor market, with increases in the part-time labor force, have been another reason leading to a reduction in the number of employees eligible for insurance. Even when employers offer health insurance, many employees are not able to take advantage of the offer.[12,16,19,20] The proportion of employees who turn down coverage because of high costs is almost as high as those who are ineligible for coverage.[20] Gabel et al. believed that rising health care costs will drive employers to shift a higher share of costs to employees, which in turn will have an impact on the employees' ability to purchase health insurance.[16]

Given the central role of the private sector in providing health insurance coverage, public sector efforts to expand coverage can at best be described as tentative. Despite well-documented positive effects of insurance on access to health care, systematic and comprehensive efforts to increase access to insurance for moderate-income individuals have not been forthcoming.[21,22] After the demise of the ambitious health reform at the federal level during the first term of President Clinton, a series of incremental steps shifted the locus of health policy leadership to the states.[23,24]

Indeed, states provided the motive force for creating the State Child Health Insurance Program (SCHIP). Before SCHIP came into being, more than 30 states had enhanced medical care programs for poor children—programs that operated under more generous eligibility policies than stipulated under federal requirements.[15] SCHIP was created in 1997 and is the biggest federal commitment to health care since the creation of Medicare and Medicaid programs in 1965. SCHIP has been assessed to have a major impact on reducing uninsurance among children living in moderate-income families, with one estimate citing a decrease of over 1 million in the number of uninsured children.[25,26]

Although the adoption of SCHIP by the states significantly improved access to coverage for children living in moderate-income families, moderate-income adults have not fared as well. It should be noted that some states, such as New Jersey, took advantage of the flexibility afforded under SCHIP to extend coverage to adults as well. By and large, however, both state and federal governments have not taken complete advantage of flexibility afforded under SCHIP and exercised caution in implementing the program.

For example, in promulgating rules and regulations to oversee the SCHIP programs, the federal Center for Medicare and Medicaid Services instructed states to devise policies and procedures to avoid substituting for private coverage, so called crowd-out. A variety of proposals were put forth and negotiated individually

between the Center for Medicare and Medicaid Services and the states for restricting crowd-out.[27] (Despite evidence that crowd-out from Medicaid and SCHIP has been small, the policy debate continues because it is part of a larger national debate about the role of government in health coverage programs.[28,29] Those who view these as health programs would like to see the programs expanded. On the other hand, those who see these programs as welfare programs advocate for restraint in expanding the ambit of coverage.)

States continue to display an abundance of caution in the face of opportunities to expand coverage, especially for adult populations. Indeed, most states have been reluctant to take advantage of the "devolution revolution" of the 1990s to expand public coverage. The repeal of the linkage between cash assistance and Medicaid eligibility under the Personal Responsibility and Work Opportunity Reconciliation Act of 1996, which had greatly constrained the Medicaid eligibility policy of states, provided an opportunity for the states to extend Medicaid coverage to moderate-income residents.[30,31] States, however, have not moved to take advantage of this increased flexibility, prompting one analyst to conclude that,[31] "Barring a federal initiative to set and perhaps underwrite a higher income floor for the Medicaid program . . . state efforts alone are unlikely to significantly expand health insurance coverage for the adults" (p. 6). More recently, record state budget deficits have begun to lead states to reverse some of the strides they had made in expanding public coverage.[32,33]

The Nongroup Insurance Market

A significant proportion of the moderate-income uninsured individuals are not able to participate in the employer-sponsored group market for a variety of reasons. With public coverage targeted at the poor or other categorical groupings such as children, insurance purchased directly from insurance companies or health maintenance organizations (often called "individual" or "nongroup" coverage) is the only avenue for the many moderate-income people to protect themselves from the high costs of health care. Insurance theorists argue that the purchase of insurance to cover against personal risk is directly associated with the magnitude of the risk.[34] It would thus be expected that individuals would purchase insurance in increasing numbers as health care costs rise. Paradoxically, the proportion of uninsured has continued to increase despite rising health care costs. The predicted increase in demand for coverage from rising risk of financial losses is likely offset by the rising cost of coverage, but there may be other explanations as well.

Perhaps the apparent lack of demand for coverage among moderate-income uninsured is because of a lack of access to accurate information about the cost of health care and the cost of health insurance. Yegian et al.[35] provided evidence that people consistently overestimate the cost of insurance. Relatedly, based on a California sample, they reported that the moderate-income consumers are not aware of the full range of choices available in the individual health insurance market in California. In light of the fact that high participation rates are necessary for development and marketing of insurance products, they suggested that public education is perhaps one of the few ways in which participation in a voluntary insurance market may be increased.[35]

Although public education may indeed benefit the moderate-income Californians, on a nationwide basis such a measure by itself may not bring down the number of the uninsured. There is great variety in the pricing and benefit packages available in the individual insurance market in different states. Indeed, at the level of states,

even on a basic matter like defining a core benefit package, there are multiple and competing standards.[36] Therefore, public education can only have a limited effect.

It may also be the case that the uninsured have a weak demand for coverage because of a higher-than-average tolerance for risk or other preferences.[37] There is little evidence associating other specific attitudes and beliefs (e.g., lack of confidence in medical care or a high level of comfort using free clinics) with weak demand for coverage, but it is possible that the moderate-income uninsured disproportionately hold weak preferences for coverage.

DATA AND METHODS

Data were collected through a telephone survey based on random-digit dialing. This study was conducted by the Rutgers University Center for State Health Policy with sponsorship from the New Jersey Department of Health and Senior Services. (The survey was administered by Schulman, Ronca, Bucuvalas Inc. [SRBI], a survey research firm based in New York City.) The study protocol was reviewed and approved by the Rutgers University Institutional Review Board. Uninsured adults in the age range 19 to 64 years in Essex, Hudson, and Passaic Counties in northern New Jersey comprised the study population. These counties were selected because of historically high uninsured rates and because of their economic and racial/ethnic diversity. Because the study focused on persons with moderate income, individuals between 150% and 350% of the poverty level were oversampled. Contacts were attempted with a total of 13,077 telephone numbers; after excluding ineligible numbers (e.g., businesses, no qualified uninsured adults, etc.), 436 qualified respondents were identified. The survey response rate, calculated as the number of completed interviews (including nonqualified cases identified through screening) divided by the total sample of household telephone numbers dialed (including screening calls) was 64.2%. Telephone numbers that were dialed at least seven times on various days of the week and at different times of day but were never answered by a person or an answering device and were not found in a database of household telephone numbers provided by Survey Sampling (this database includes unlisted numbers) were assumed to be unassigned numbers ineligible for the survey. If the "presumed ineligible" cases were assumed to be eligible nonrespondents, then the response rate would be 54.8%.

The sampling frame for the study was generated by Survey Sampling Inc., which uses a variety of databases to compile a list of current listed and unlisted residential numbers. Despite the best efforts on the part of Survey Sampling, the connection status of phone numbers changed between the time the list was prepared and the time the interview was administered. Therefore, SRBI contacted each number in the sample frame using a predialer program. This program detected the status of each connection and updated the sampling frame by removing numbers that were disconnected, not in service, or had a computer or facsimile tone. During the course of the interviews, some additional numbers were discovered as not in service and disconnected and were removed from the sample frame. To avoid biasing the sample toward respondents who were easy to contact, interviews were scheduled to span all days of the week and calling periods, and multiple attempts were made to contact each household dialed.

Telephone interviews were conducted in December 2000 and January 2001, with each interview lasting nearly 20 minutes. The survey instrument was made up of 141 close-ended questions and was translated into Spanish. (The questionnaire

for this study drew extensively from the study sponsored by the California Health Care Foundation as reported in Yegian et al.[35]) Survey questions examined the willingness of the uninsured persons to pay for health insurance coverage, health status, health care utilization, access to care, out-of-pocket costs, health coverage history, purchasing priorities, and a variety of sociodemographic variables. Nearly 30% of the respondents were administered the Spanish version of the instrument. No provision for a language besides English or Spanish was made. (Please see Cantor et al.[38] for more details on study methodology.)

RESULTS

As the first step in the analysis, we compared key sociodemographic characteristics of the respondents with three geographic areas: the tri-county region from which the sample was drawn, New York primary metropolitan statistical area (PMSA), and the state of New Jersey (Table 1). The sample and the tri-county region had similar profiles, except for significant differences in racial composition and educational attainment. Of tri-county residents, 52.7% were white; only 22.3% of the uninsured in the sample were white. On the other hand, compared to only 27% of tri-county residents who were Hispanic, nearly 51% of the uninsured in the sample were Hispanic. This was consistent with findings from other studies.[39] On educational attainment, compared to nearly 57% of the sample 55% of tri-county residents had either less than or up to high school education. However, on the other end of the educational pipeline, a significantly larger percentage of tri-county residents were likely to be college graduates (nearly 25% for tri-county residents compared with 14.4% for the sample).

TABLE 1. Comparing sample characteristics with tri-county area, New York metropolitan statistical area, and the state of New Jersey

Characteristic	Sample (N = 412)	Tri-county region	New York PMSA	State of New Jersey
Gender, %				
Male	46.4	48.3	47.5	48.5
Female	53.6	51.7	52.5	51.5
Median age, years	34.0	34.4	34.6	36.7
Average family size	2.9	3.3	3.3	3.2
Median household income		$44,752	$41,053	$55,146
Race, %*				
White (non-Hispanic)	22.3	52.7	48.8	72.6
Black (non-Hispanic)	19.9	25.0	24.6	13.6
Hispanic	50.9	27.0	25.1	13.3
Asian	6.9	5.5	9.1	5.7
Education, %				
Less than high school	20.0	26.6	26.0	17.9
High school/GED	36.7	28.1	24.2	29.4
Some college	28.9	20.1	20.7	23.0
College graduate (or beyond)	14.4	25.1	29.2	29.8

Figures for the tri-county region, New York PMSA, and New Jersey were derived from the US Bureau of Census, Census 2000 profiles.

*Please note that percentages may total more than 100% because the 2000 census allowed individuals to report more than one race/ethnicity category.

We also present in Table 1 comparable figures for the state of New Jersey. Comparing the sociodemographic characteristics of the tri-county region with those of the state of New Jersey drives home the point that urban areas are quite different from the rest of the state. The contrast is especially notable because New Jersey is one of the most urbanized states in the nation. The median household income for the tri-county region was lower by nearly $10,000, and the median age was younger by 2 years compared with the entire state. Also, the racial composition of the urban tri-county region was quite distinct from that of the entire state, with the tri-county region having a comparatively higher proportion of racial and ethnic minorities. Finally, compared to the tri-county region, the state had more residents who had completed high school and college.

To assess the relevance of the results from our study for other urban regions, we compared the sociodemographic characteristics of the urban tri-county region with New York PMSA. As is clear from the comparison in Table 1, the tri-county region and the New York PMSA had very similar profiles. Compared with the state of New Jersey, both these urban regions had somewhat younger residents, lower median household income, lower level of educational attainment, and a significantly higher proportion of racial and ethnic minorities. This close correspondence in the sociodemographic profiles of the tri-county urban region with New York PMSA indicates that the findings from our study may have relevance for other similar urban areas as well.

Table 2 presents key results on differences between low-income (below 150% of the federal poverty level) and moderate-income (150% to 350% federal poverty level) persons on insurance coverage. The first comparison in this table shows the availability of private health insurance coverage irrespective of whether this coverage was available as an employee or as a dependent. There was a statistically significant difference between the two groups, with only 12.1% of the low-income group reporting that such coverage was available compared with 31% of the moderate-income group.

TABLE 2. Comparison of low-income and moderate-income uninsured on health insurance coverage issues

	Low income, %	Moderate income, %
Private health insurance coverage available*	12.1	31
Ease of obtaining health insurance*		
Very easy	17.3	32.6
Fairly easy	26.7	31.8
Fairly difficult	10.7	12.8
Very difficult	45.3	22.7
Had health insurance coverage in the past†	41	57.3
Health insurance coverage history‡		
Last covered less than 1 year ago	13.4	19.6
Last covered 1–3 years ago	12.1	14.9
Last covered 3–10 years ago	10.2	16.1
Last covered 10+ years ago	5.1	6.7
No coverage history	59.3	42.8

Tests of significance based on the χ^2 test; percentages may not total 100 because of rounding errors.
*Significant at $P < .0001$.
†Significant at $P < .005$.
‡Significant at $P < .05$.

This difference was striking for two reasons. First, a high percentage of persons had access to employer-sponsored coverage, but failed to enroll; second, the magnitude of the difference between the two groups is large. The large difference was a result of moderate-income persons having greater access to private coverage through an employer as well as considerably greater access to coverage as a dependent. On the face of it, the fact that so many who have access to private coverage do not enroll seems counterintuitive. However, mere availability of coverage, although necessary, is not sufficient for the uninsured to sign up for coverage. We asked respondents to indicate reasons for not enrolling in coverage when it was available; price of health insurance and eligibility restrictions emerged as the top two reasons for not signing up for coverage.

Moderate-income respondents were more likely to believe that it would be relatively easy to obtain health insurance. When respondents were asked to assess the ease of obtaining health insurance coverage on a 4-point scale ranging from very easy to very difficult, 45.3% of the low-income individuals, compared with 22.7% of moderate-income individuals, chose very difficult. Although income is correlated with access to a wide variety of social and economic opportunities, the size of this difference may have more to do with perceptions than reality. Perhaps the respondents, in answering this question, were only thinking of employer-sponsored coverage and not public or nongroup coverage. An alternate possibility is that, even if respondents took into account public coverage, they may regard signing up for public coverage as considerably more difficult than signing up for employer-based coverage. However, it is not possible to sort out these alternatives based on the questions we asked of our respondents.

A very high percentage of both low-income (59%) and moderate-income respondents (nearly 43%) had no prior history of insurance coverage. The difference between the two groups was nearly 16% and is statistically significant. A closer examination of coverage history showed that low-income respondents are considerably more likely to have no coverage history, and moderate-income respondents are somewhat more likely to have had coverage within the last 3 years.

We next examined differences between low-income and moderate-income groups on attitudes toward health care, perceptions regarding access to health care, health status, and health care utilization. For meaningful comparisons of the two groups on these dimensions, it is important to control for confounding factors. Accordingly, we employed multivariate models to examine differences between two groups. As a first step, however, we present simple comparisons of the two groups. A larger percentage of the moderate-income group indicated its health status as very good or better (49.8% vs. 34.2%). Correspondingly, a larger percentage of the low-income group reported being in fair or poor health. There were no significant differences between the low-income and moderate-income groups in their reported usual source of care, with both groups indicating a doctor's office, emergency room, and hospital clinics as principal locations for care. However, the low-income group reported greater difficulty in obtaining care, with nearly 39% of the low-income group rating ease of obtaining care as very difficult, compared to about 17% for the moderate-income group.

Does access to coverage or perception regarding ease of obtaining coverage correspond with health care access, utilization, or satisfaction with care received? Based on a simple comparison of the two groups, there were no significant differences between the two groups on satisfaction with care received. Furthermore, utilization patterns for the two groups were largely similar, with one major exception. About 41% of moderate-income respondents reported seeing a doctor in the last year

compared with only 29% of low-income respondents, suggesting better access to ambulatory care among moderate-income individuals.

We asked a series of questions regarding attitudes of respondents to health care issues. Respondents were presented with eight statements regarding health care and asked to indicate their level of agreement or disagreement on a 4-point Likert scale. We used factor analysis to determine if these items represented a smaller set of underlying constructs. The results of the factor analysis (after varimax rotation) indicated that the eight items loaded on two factors. (Factor analysis is a multivariate technique for identifying whether a larger set of questionnaire items reflects a smaller number of underlying dimensions. Varimax rotation is a procedure designed to identify the most parsimonious set of underlying dimensions, and it accomplishes this by maximizing item loadings on a single factor.)[40]

Based on the items comprising the factors, one of these was labeled "attitude toward low-cost health care alternatives" and the other "ability to pay for health care." We carried out a test of difference of means between low-income and moderate-income groups on each of the eight questionnaire items. Although the magnitude of differences between the two groups was small, the difference for seven of the eight items was statistically significant. Low-income respondents were more likely to hold more favorable attitudes toward low-cost health care alternatives. Although both groups were concerned about paying for health care, comparatively speaking, a much greater percentage of low-income respondents were concerned about ability to pay for health care costs.

The bivariate comparisons presented thus far demonstrate differences between low-income and moderate-income respondents. However, we wanted to be sure about these observed differences by ruling out other explanations. We did this by constructing several dependent variables and testing multiple regression equations that use a variety of control variables in addition to low-income versus moderate-income status. The dependent variables chosen for this purpose were ease of obtaining coverage, ease of obtaining medical care, satisfaction with care received, ability to pay for health care, attitude toward low-cost health care alternatives, and a doctor visit in the last year. Ability to pay health care costs and attitude toward low-cost health care alternatives were measured by summing the four items for each construct, with each item rated on a 4-point Likert scale. Ability to pay health care costs was measured with the sum of following four items:

- I don't always get the treatment I need because I can't afford to pay for it.
- I live from paycheck to paycheck.
- I worry a lot about not having health insurance for myself.
- I worry about not having health insurance for others in my family.

Attitude toward low-cost health care alternatives measure was based on a sum of the following items:

- Going to public or free clinics is just fine for me.
- Most doctors will treat you even if you can't afford to pay the full amount.
- I am very comfortable getting my medical care from a managed care plan or health maintenance organization.
- If I get sick, I can get the care I need in an emergency room.

(Note that although using the emergency room may not be a low-cost alternative, it may reflect the attitude that it is okay to save money by delaying care until faced with a medical emergency.)

Modeling possible pathways influencing each of the above-named dependent variables can take the shape of an extensive theory development and testing effort. However, given the relatively modest aims of this exploratory study, we chose some of the more commonly mentioned factors presumed to influence health and access to health care. With this in mind, we estimated the following model for each of the dependent variables as follows:

Dependent Variable = F (Low-income vs. Moderate-income Status, Race, Gender, Age, Employment Status, Hospitalization in family in last year, Health status, Health insurance coverage history)

All of the models except one were estimated using ordinary least squares (OLS). The dependent variable for the model presented in the last column of Table 3 was binary; therefore, a limited dependent variable model with logit as the link function was estimated. For ease of interpretation and better comparability of effects caused by different independent variables, we report standardized β coefficients for the OLS regressions and odds ratios for the logistic regression.

It is interesting to note that, except for satisfaction with care received, there were significant differences between low-income and moderate-income respondents even after controlling for race, gender, age, full-time employment status, hospitalization in the family in last year, health status, and health insurance coverage history. Furthermore, all of these differences were consistent with the bivariate results. Moderate-income respondents, as compared with low-income respondents, had greater ease in obtaining coverage and medical care, reported better ability to pay for health care, held a less-favorable attitude toward low-cost health care alternatives, and were more likely to have visited a doctor in the last year. However, income status was not the strongest predictor for any of the dependent variables.

Although a number of control variables achieved statistical significance in the different models presented in Table 3, race/ethnicity and health status seemed to have a more pervasive effect than others. Better health status was associated with the perception that it was easier to obtain coverage and medical care and greater satisfaction with care received. This finding could simply be reflective of the fact that those in better health status have fewer health needs and significantly more infrequent contact with the health care system. We find support for this in the data: Respondents reporting better health status were less concerned about ability to pay health care costs and were less likely to have visited a doctor during the last year. The effect of race/ethnicity was notable, especially for Hispanic respondents. For the results reported here, we used white respondents as the reference group. Hispanic respondents reported greater difficulty in obtaining coverage and care. Also, they were significantly less likely to have visited a doctor during the previous year. In light of these findings, it is somewhat surprising that Hispanic respondents held a more favorable attitude toward low-cost health care alternatives—alternatives that may not necessarily have sufficient capacity and as a result fail to provide timely access for routine and chronic care.

DISCUSSION

Perhaps the best way to characterize our study is that it is a quantitative case study. Therefore, caution needs to be exercised in interpretation and extension of these

TABLE 3. Multiple regression results

Independent variables	Dependent variable(s)					
	Ease of obtaining coverage	Ease of obtaining medical care	Satisfaction with care received	Ability to pay for health care	Attitude toward low-cost health care alternatives	Doctor visit in last year
Moderate income	**.10***	**.13†**	.002	**−.17‡**	**−.11§**	**1.66***
Race						0.67
Black	.02	−.02	−.05	−.09	.04	**0.46†**
Hispanic	**−.22‖**	**−.32¶**	.05	−.03	**.25‖**	0.9
Asian	.04	−.02	−.02	−.09	.08	1.6*
Gender	.07	−.01	.02	.05	−.04	0.996
Age	**−.15‡**	−.08	.11	**.18‡**	**.11***	
Full-time employment	.04	**−.003§**	.03	.06	**.09§**	0.77
Hospitalization in family in the last year	**.11***	**−.09***	.004	−.02	.04	**1.77§**
Health status	**.22¶**	**.17‖**	**.24‡**	**−.14*|**	.03	**0.82§**
Had health insurance in the past	**.26¶**	.07	**.15***	.007	−.04	**2.22‖**
Model F	15.3	9.9	1.8	4.0	3.60	
N	382	396	199	287	346	400
Adjusted R^2	0.27	0.18	0.04	0.10	0.07	
−2 Log L						464

The first five regressions used OLS, with standardized β displayed; the last used logistic regression, with odds ratios shown. Statistically significant coefficients appear in bold.

*$P < .05$.

†$P < .01$.

‡$P < .005$.

§$P < .10$.

‖$P < .001$.

¶$P < .0001$.

findings. Despite this limitation, the findings may have broader relevance, as indicated by the comparison in Table 1, which shows that the tri-county region from which the sample was drawn is very similar to New York PMSA. (Although this argument for relevance of study findings for New York PMSA would have been stronger with comparative data on uninsured individuals in the tri-county region and New York PMSA, such comparative data are hard to find. Therefore, we based our case on sociodemographic comparability.) Furthermore, other major population centers, such as Los Angeles, California; New York; Dallas, Texas; Miami, Florida; Houston, Texas; and Phoenix, Arizona, have profiles similar to New York PMSA.[7]

In accordance with cumulated findings on the effect of income, we found that income had a significant effect on availability of insurance coverage, ease of obtaining care, satisfaction with care received, attitudes toward health care, and actual utilization of services. This difference between low-income and moderate-income uninsured individuals persisted even after controlling for factors such as race, gender, age, employment status, health status, and health insurance coverage history. Examination of standardized β coefficients for OLS results and odds ratios for logistic regression, however, pointed to the fact that several other variables had a stronger effect than income. For the dependent variable ease of obtaining coverage, income status had the smallest effect among the five statistically significant independent variables. Race, age, health status, and health insurance coverage history had much stronger effects on perceptions of ease of obtaining coverage.

Indeed, race and ethnicity had the strongest overall effect, with Hispanic uninsured individuals reporting greater difficulty in obtaining coverage and medical care and a much lower likelihood of having seen a doctor during the previous year. Despite these access barriers, Hispanic uninsured individuals held more favorable attitudes toward low-cost health care alternatives. Interestingly, by far the strongest predictors of having seen a doctor in the last year were having had health insurance in the past and a hospitalization in the family.

The comparatively strong effect of prior coverage is notable for two reasons and deserves policymaker attention. First, the sheer magnitude of the effect prior coverage has on ease of obtaining care and satisfaction with care and a doctor visit in the past year deserves attention. When we combine this with the fact that large percentages of both the low-income and moderate-income uninsured individuals had no coverage history, it makes sense to pursue policy measures that make coverage more affordable and widely accessible. Finally, health status figures as an important influence on a wide variety of dependent variables. Those in better health reported greater ease in obtaining insurance coverage and medical care, greater satisfaction with care, and less concern about costs.

As the number of the uninsured who have moderate incomes increases, what do these findings mean for urban health and policymakers? The health care preferences and needs of the moderate-income uninsured differ from those of the traditional low-income user for whom the health care safety net was presumably designed. On the whole, the moderate-income uninsured hold a less-favorable attitude toward low-cost health care alternatives. However, these differences are not large in absolute terms and are only borderline statistically significant. About 26% of the moderate-income group identified hospital clinics and community health centers as their usual source of care, compared with roughly 29% of the lower income group using the "core" safety net. Moreover, the association of moderate-income status and attitudes reflecting acceptance of low-cost health care alternatives is smaller than the effect of demographic factors such as Hispanic ethnicity and age. These findings suggest that

the core safety net or other discounted alternatives (such as private doctors' offices) may be acceptable sources of care for at least some portions of this group.

Although the moderate-income uninsured seem comfortable with existing safety net resources, most rely on private doctors and express some discomfort using clinics and health centers. As the size and average income of the moderate-income uninsured group grows, policymakers may wish to consider strategies that bolster availability of care through private offices, such as encouraging voluntarism among physicians or offering tax incentives for discounting care for the uninsured. Such measures are, however, likely to raise equity concerns about the opportunity cost associated with coverage for low-income uninsured individuals. Perhaps a more attractive and less contentious strategy that policymakers and safety net institution managers may consider would seek to make community health centers and hospital clinics more accessible and acceptable to the growing number of working uninsured, including the moderate-income uninsured population. Our data showed that this group has a slightly higher propensity to visit a physician outside the emergency room, representing a potential source of (partial pay) revenue for financially stressed clinics.

Nearly 31% of moderate-income uninsured reported access to private health insurance coverage, and yet they did not take advantage of it. Indeed, full-time employment status did not seem to make obtaining insurance coverage any easier for the uninsured when we control for other factors. The uninsured cited cost and eligibility constraints as top reasons for not obtaining coverage. Almost certainly, a large part of the reason the uninsured face high costs in sharing premiums is because of the high share of premiums low-wage employees are asked to pay by their employers. Strategies that offer partial public subsidies for worker premium shares may have promise for this group of moderate-income uninsured. Other promising strategies that state and local governments (especially in large metropolitan areas) can pursue at fairly low public costs are subsidizing reinsurance for small businesses or bringing together businesses to form buyers' cooperatives that may be able to purchase health insurance at a lower cost.

Another finding suggests possibilities for improving the lot of the uninsured by focusing on specific communities. For example, in our study, we found that Hispanic uninsured individuals were considerably more disadvantaged and yet more willing to accept low-cost health care alternatives. Outreach programs with elements of public education that build credibility and trust about government and government programs may be able to make significant differences.

The problem of the uninsured has been persistent and appears to be growing. As the cost of employer-sponsored coverage rises, the profile of the uninsured will skew toward nonpoor individuals and families. These changes suggest that policymakers must rethink their strategies for providing access for the uninsured. Our findings provide an important first view of how the new uninsureds differ from those for whom the safety net was designed.

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