

Validation of a Neighborhood SES Index in a Managed Care Organization

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Background/Objective: Neighborhood socioeconomic status (SES), beyond individual SES, has been associated with health behaviors and outcomes. We constructed a neighborhood SES index using readily available US Census variables and studied associations of the index with self-reported education, formal education, and neighborhood residential characteristics among adult enrollees of a managed care organization (MCO).

Methods: A neighborhood SES index was constructed for MCO enrollees using a principal components analysis of 7 Census measures of their residential tracts or block groups. Quartiles of resulting neighborhood SES scores were matched with self-reported education, household income, and neighborhood residential characteristics obtained on 3 surveys of MCO adults ranging in age from 18 to 99. Cross-tabulations of neighborhood SES with self-reported measures were used to assess concordance.

Results: Consistent with other non-MCO populations, distributions of the neighborhood SES index and self-reported education, household income, and other neighborhood residential characteristics were concordant. The presence of high SES MCO enrollees in low SES neighborhoods and low SES MCO enrollees in high SES neighborhoods was, however, common. MCO enrollees living in low SES neighborhoods also reported neighborhood problems (crime, unattended dogs) known to affect walkability more frequently than those living in high SES neighborhoods.

Conclusions: A simple, valid neighborhood SES index can be constructed for MCO populations using readily available US Census variables. Although individual and neighborhood SES are on average concordant, discrepancies between individual and neighborhood SES suggest that other factors may influence how area-based SES contributes to health behaviors and outcomes in an MCO population.

Key Words: socioeconomic status, neighborhoods, managed care organizations

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Characteristics of the areas in which individuals live, such as neighborhood socioeconomic status (SES), have been associated with health behaviors and outcomes in a range of studies.^{1–3} Partly by definition, area-based measures of neighborhood SES characteristics reflect individual SES, such as level of formal education and household income, of the neighborhood residents. Nevertheless, studies indicate that neighborhood SES characteristics may have an influence on health beyond individual SES.^{1,4,5} Neighborhoods have characteristics not necessarily related to individual SES, such as built environments that promote unhealthy behaviors or psychosocial environments that induce stress, both of which can influence health outcomes—*independent of an individual resident's SES.*^{6–13}

Although neighborhood SES indices or area-based SES characteristics using readily available US Census variables have been applied to the study of managed care populations,^{14,15} less attention has been given to how concordant or discordant those indices are with respect to self-reported SES or other neighborhood characteristics in those populations. A better understanding of the concordance of individual-based and area-based SES measures in studies of population health would help to establish whether inferences about SES influences on health of individuals using area-based SES measures might be valid in the absence of individual SES measures; and, a better understanding of the extent of discrepancies individual-based and area-based SES measures might help to guide development of future research into factors that might moderate the joint relationship of individual-based and area-based SES on population health. In this paper, the construction of a neighborhood SES index using readily available US Census variables and based on previous literature^{16–18} is described. The primary objective of this study was to assess the extent of concordance of the associations of self-reported education and household income obtained on 3 surveys in a managed care organization (MCO) with the neighborhood SES index. A secondary objective was to assess the association of self-reported neighborhood residential characteristics (eg, availability of sidewalks, perceived crime) obtained on one of the surveys with the SES neighborhood index as well as other individual characteristics that might correlate with the concordance or discordance between individual and area-based SES.

METHODS

Study Setting

Kaiser Permanente Georgia (KPG) is a federally qualified, group-model and network-model MCO established

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The author declares no conflict of interest.

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in 1985 that, at the time of the surveys used in this study, provided comprehensive medical services to approximately 275,000 members per year in the metropolitan Atlanta area. The enrolled population reflects the racial/ethnic and socioeconomic diversity of the Atlanta metropolitan area. Surveys and other studies suggest that approximately 55% of the adult population is white, 35% is African American, and 10% are other races or ethnicities (primarily Hispanic and Asian). Data used in this analysis were collected using study protocols reviewed and approved by the KPG Institutional Review Board.

Data

2005 Healthy Behaviors Survey

Inclusion in the enrollee sample required: (1) enrolled with KPG since January, 2004 and at survey time, (2) subscriber within the enrolled family, (3) employed by one of the 100 largest KPG private or public employer groups, (4) 25 to 59 years of age as of August 31, 2005, and (5) empanelled to one of the 16 group-model primary care teams as of January, 2004. Among the KPG adults who met these criteria, the study population was limited to 3 condition cohorts: adults with diabetes, adults with elevated lipids but no history of advanced coronary artery disease, and “low risk” adults (ie, adults without any identifiable major morbidities). These criteria identified 15,260 enrollees, from which 5609 were randomly sampled for survey and 2224 responded. Of the respondents, 46.3% were white, 45.0% were African American, and 8.8% were other (primarily Hispanic or Asian).

2007/2008 Hypertension Survey

The study sample consisted of adults aged 18–74 years with hypertension who received primary care from a group-model primary care physician and who had systolic BP (SBP) and diastolic BP (DBP) measured on at least 2 primary care visits in a 12-month period before the survey. The survey was administered twice—once in the Fall of 2007 and again in the Spring of 2008 (below)—on 2, independent random samples of 3000, with a stratified design to select 750 from each of the 4 hypertension classes defined by “The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure” (JNC VII): normal, prehypertension, stage I hypertension, and stage II hypertension.¹⁹ SBP and DBP were measured as the mean of any SBP and DBP values obtained on primary care visits in the 12 months preceding the month during which the survey was administered. Of 1411 respondents, 41.9% were white, 54.3% were African American, and 3.8% were other.

2000/2002/2004 Medicare Health Outcomes Surveys

The Medicare Health Outcomes Survey (HOS) is administered on behalf of the Centers for Medicaid and Medicare Services by survey vendors certified by the National Committee for Quality Assurance.²⁰ The purpose of the survey is to collect information on health status of Medicare beneficiaries enrolled in managed care plans for

use in quality improvement activities and for monitoring of health plan performance.²¹ A baseline survey is administered to 1000 Medicare beneficiaries randomly selected each year from a managed care plan. Respondents to the baseline survey are surveyed 2 years later. Of the 991 respondents with completed baseline and 2-year follow-up surveys, 76.9% were white, 20.1% were African American, and 2.9% were other.

Census SES Data

The residence address of each KPG enrollee is available in the membership database. Residence addresses are verified and, if necessary updated, at the time an appointment is made for a visit. The KPG Research Department uses MapMarker Plus (MapInfo Corporation, Troy, NY) to geocode each enrollee’s address to exact latitude and longitude and to the 2000 US Census tract or block group, zipcode, and county. Geocoded data are stored in a SAS dataset with 1 record per enrollee per year from 2000 through the present time. The patient identifier permits linkage back to all other KPG computerized administrative and clinical data. The US Census tract or block group permits linkage to all Summary File 3 (SF3) variables.

Neighborhood SES Index

The neighborhood SES index is based on 7 measures available in the SF3 file: (1) Percent of households with income below the poverty level, (2) Percent of households receiving public assistance, (3) Percent of households with annual income below \$30,000, (4) Percent of working age adult males not in the labor force, (5) Percent of adults 25 and older with a high school education or less, (6) Log of median household income, and (7) Log of median value of single family homes. The variables that we selected were based on review of published studies defining similar indices from US Census variables.^{16–18} The value of each variable assigned to a geocoded KPG enrollee is based on the US Census tract or block group of the enrollee’s residence.

Using a principal components analysis on the study population successfully linked to their Census tract, we assign a factor score (which results from the principal components analysis) to each enrollee. To keep all component measures on scales of the same magnitude, median value of single family homes and median household income are entered as logarithmic transformed measures. The log-transformation of these 2 measures mitigates the risk that extremely high outlier values on the income and home values scales could influence factor scores and introduce measurement bias into the SES factor score distribution. Using the standardized scoring coefficients resulting from the principal components analysis, enrollees are assigned to quartiles based on the values of the computed factor score.

Statistical Analysis

Distributions of the SF3 measures, the SF3 standardized scoring coefficients that resulted from a principal components analysis, and the resulting neighborhood SES scores were examined for 4 datasets: (1) any 18-year-old to 74-year-old enrollees (including new, continuing, and

terminating enrollees) during the period 2000 to 2007 (N=548,014), (2) the survey of working age adults in 2005 (N=2224), (3) the survey of 18-year-old to 74-year-old adults with hypertension in 2007 and 2008 (N=1411), and (4) the Medicare beneficiary surveys of 2000, 2002, and 2004 (N=930). The purpose of these analyses was to ascertain if the distributions of principal components results were substantially different across these 4 populations, which represented KPG overall and selected subsets by age and chronic disease status.

For the 3 survey-based samples, the associations of self-reported formal education and household income with quartile of the neighborhood SES index were assessed using a χ^2 test statistic. The working hypotheses were that: (1) the association between individual SES and the neighborhood SES index would be statistically significant, and (2) the association would indicate concordance, insofar as MCO enrollees represent samples (albeit with potential for selection bias) from neighborhood populations. Respondents with lower levels of formal education and household incomes would be more prevalent in the lower versus higher SES neighborhoods, and conversely.

For the 2005 Healthy Behaviors Survey, the association of self-reported neighborhood characteristics with quartiles of the neighborhood SES index was assessed using a χ^2 statistic. The 5 survey items measuring neighborhood characteristics were: (1) "My neighborhood has sidewalks," (2) "My neighborhood has street lighting at night," (3) "My neighborhood is relatively safe from crime," (4) "Walking or cycling paths are within walking distance or no more than a 5-minute drive," and (5) "Unattended dogs are a problem in my neighborhood." Legitimate responses were "Yes" or "No." Selection and construction of these items was based on review of published studies.^{22–24} The working hypothesis was that these neighborhood characteristics (known to promote or inhibit healthy behaviors such as leisure physical activity) would be correlated with neighborhood deprivation or wealth, represented through the neighborhood SES index.

All data management and statistical analyses were done using SAS version 9.1 (SAS Institute, Cary, NC).

RESULTS

Table 1 displays the median and interquartile range of the Census measures used in computation of the neighborhood SES index. Overall, the distribution of the measures is representative of an MCO population that is generally low to upper middle class. Across the 4 study samples, the medians and interquartile ranges are remarkably consistent—indicating that even stratified or simple random samples by disease or by age tend to result in selection of samples in neighborhoods comparable to the overall KPG adult population. Although it appears as if the log of median home value and household income distributions are more compressed than the other component measures, these measures also show notable variation on the original scale—with median and interquartile ranges of \$122,000 (\$97,000 to \$160,000) for home values and \$52,600 (\$43,500 to \$65,500) for household income.

Table 2 displays the standardized scoring coefficients from the principal components analysis on each of the 4 study samples and the quartile cutpoints for the SES index resulting from the principal components analysis of each sample (Appendix Table A1 shows the distributions of the component measures by SES quartiles). Across the 4 study samples, the standardized scoring coefficients and the resulting factor score distributions are again remarkably consistent—indicating that a similar stratification of this MCO population into the SES quartiles would be obtained irrespective of which sample happened to be used for obtaining standardized scoring coefficients for computing the factor scores for adults in the population.

Tables 3 and 4 display the association of neighborhood SES quartile with self-reported education and income in the 2005 survey of 25-year-old to 59-year-old employed adults. The associations are statistically significant for $P < 0.01$.

TABLE 1. Median and Interquartile Ranges for Component Measures of the Neighborhood SES Index in the KPG Population 2000–2007 and in 3 Survey Samples

	KPG Population: 2000–2007 Adult Enrollees	2005 Survey of 25–59 y Old Employed Adults	2007/2008 Survey of 18–74 y Old Adults with Hypertension	2000, 2002, and 2004 Surveys of Medicare Beneficiaries
N of enrollees or survey respondents	548,014	2171	1300	980
Percent of households with income below the poverty level	6.06 (3.52–9.60)	5.70 (3.25–9.08)	6.58 (3.70–10.39)	5.63 (3.66–9.70)
Percent of households receiving public assistance	1.27 (0.65–2.60)	1.40 (0.65–2.74)	1.70 (0.79–3.24)	1.29 (0.65–2.70)
Percent of households with annual income below \$30,000	21.36 (13.49–30.62)	20.86 (12.87–26.65)	22.72 (15.04–34.37)	20.77 (14.20–30.80)
Percent of working age adult males not in the labor force	19.69 (15.88–28.18)	19.78 (16.50–25.25)	22.07 (17.70–28.33)	20.44 (16.28–26.23)
Percent of adults 25 and older with a high school education or less	12.87 (7.56–20.64)	12.66 (7.23–19.90)	13.94 (9.10–21.33)	13.15 (7.95–21.75)
Log of Median value of single family homes	11.71 (11.50–11.96)	11.71 (11.48–11.98)	11.64 (11.44–11.85)	11.76 (11.48–12.03)
Log of Median household income	10.87 (10.68–11.09)	10.87 (10.69–11.13)	10.84 (10.62–11.06)	10.90 (10.61–11.13)

TABLE 2. Standardized Scoring Coefficients From Principal Components Analysis of the Neighborhood SES Index in the KPG Population 2000–2007 and in 3 Survey Samples

	KPG Population: 2000–2007 Adult Enrollees	2005 Survey of 25–59 y Old Employed Adults	2007/2008 Survey of 18–74 y Old Adults With Hypertension	2000, 2002, and 2004 Surveys of Medicare Beneficiaries
N of enrollees or survey respondents	548,014	2171	1300	980
Percent of households with income below the poverty level	0.17697	0.17141	0.17075	0.16821
Percent of households receiving public assistance	0.16210	0.15671	0.15721	0.15705
Percent of households with annual income below \$30,000	0.16748	0.16631	0.16326	0.16003
Percent of working age adult males not in the labor force	0.18395	0.17946	0.17619	0.17407
Percent of adults 25 and older with a high school education or less	0.14613	0.14561	0.14420	0.14564
Log of Median household income	−0.14265	−0.14806	−0.14375	−0.14540
Log of Median value of single family homes	−0.18181	−0.17680	−0.17539	−0.17223
Factor score distribution				
75th Percentile	0.42917	0.44492	0.41080	0.41061
Median	−0.17733	−0.14771	−0.17153	−0.22763
25th Percentile	−0.68860	−0.70143	−0.64387	−0.69453

Working adults with a high school education or less were 3.5 times as likely to live in low versus high SES neighborhoods (30.0% vs. 8.5%); working adults with some postgraduate education were 2.5 times as likely to live in high versus low SES neighborhoods (40.9% vs. 16.7%). Working adults with household incomes less than \$50,000 were 4.1 times as likely to live in low versus high SES neighborhoods (54.0% vs. 13.3%); working adults with household incomes of \$100,000 or more were 6.2 times as likely to live in high versus low SES neighborhoods (42.7% vs. 6.9%). Similar associations were obtained for the association of SES quartile with self-reported education and household income in the 2007 and 2008 surveys of adults with hypertension (Appendix Tables A2 and A3) and the 2000, 2002, and 2004 surveys of Medicare beneficiaries (Appendix Tables A4 and A5).

Table 5 displays the associations of neighborhood SES with self-reported neighborhood characteristics. All associations were statistically significant ($P < 0.05$); however, the association of neighborhood SES with the built environment was most evident for perceptions that the neighborhood was relatively safe from crime and unattended dogs were a problem. On both measures, residents in low SES neighborhoods were less likely to perceive their neighborhoods as

relatively safe from crime but more likely to perceive unattended dogs as a problem than residents in high SES neighborhoods.

DISCUSSION

Consistent with other research,⁴ neighborhood SES—as measured by our proposed neighborhood SES index—was concordant with self-reported SES (level of formal education and household income) in these 3 surveys of MCO adults. Personal preferences, financial opportunities and constraints, and other systematic and cultural factors determine, on average, that individuals with similar characteristics have tended to segregate into specific neighborhoods.^{25–28} High SES individuals have substantial degrees of freedom because of their financial means in moving from one neighborhood to another, often in pursuit of neighborhoods with high-quality schools for their children, large homes, and a built environment that is safe and offer easy access to a range of recreational amenities.

Nevertheless, study results also show that some high SES individuals reside in low SES neighborhoods; and, conversely, some low SES individuals reside in high SES

TABLE 3. Association of Neighborhood SES Quartile With Self-reported Education in a 2005 Survey of 25–59 y Old Employed Adults (N = 2224)

	Percent (by Row) of Self-reported Education				N of Survey Respondents
	HS Grad or Less	Some College	College Graduate	Post-college	
	17.8%	33.8%	20.0%	28.4%	2134
SES quartile					
Lowest SES	30.0%	38.7%	14.6%	16.7%	540
Lower Middle SES	18.8%	38.3%	19.3%	23.7%	528
Upper Middle SES	13.9%	30.5%	23.4%	32.2%	525
Highest SES	8.5%	27.9%	22.7%	40.9%	541

TABLE 4. Association of Neighborhood SES Quartile With Self-reported Household Income in a 2005 Survey of 25–59 Year Old Employed Adults (N = 2224)

	Percent (by Row) of Self-reported Annual Household Income				N of Survey Respondents
	Less Than \$50,000	\$50,000–\$74,999	\$75,000–\$99,000	\$100,000 or More	
	30.7%	28.4%	17.5%	23.4%	2082
SES quartile					
Lowest SES	54.0%	28.0%	11.1%	6.9%	533
Lower Middle SES	32.6%	33.7%	17.3%	16.5%	516
Upper Middle SES	22.4%	30.0%	19.7%	27.9%	513
Highest SES	13.3%	21.9%	22.1%	42.7%	520

(1) Percents sum to 100% across rows, with N of Survey Respondents in each row serving as the denominator. (2) Associations of neighborhood SES quartile with self-reported education and household income are assessed with a χ^2 test statistic.

neighborhoods. An exploratory analysis of the 2005 Healthy Behaviors Survey indicated, for example, in low SES neighborhoods high SES adults were more likely to be male, white, have lower body mass index (BMI) and have higher self-reported physical functioning than low SES individuals, whereas in high SES neighborhoods low SES individuals were more likely to be female, African American, have higher BMI, and have lower self-reported physical and emotional functioning than high SES individuals. These results reinforce the notion that both individual and neighborhood SES factors should be considered as determinants of individual health behaviors and outcomes.

Study results also show that neighborhood SES represents something other than individual SES. Perceived crime and problems with unattended dogs were strongly associated with the neighborhood SES index. Most middle-class residents would perceive these characteristics as undesirable; and, research has shown that these factors can inhibit pursuit of a healthy lifestyle—particularly neighborhood walkability—independent of a resident's formal education or financial means.^{5–13}

This validation study has limitations. Part of the discordance between individual SES and neighborhood SES might be attributable to error (intended or unintended) in self-report of formal education or household income. Many

other neighborhood SES factors might have been included in developing the neighborhood SES index; however, the high inter-correlations in the principal components analysis (Table 2) suggest that many of these potential measures essentially are redundant. Adding many more would not add much additional information for discriminating among high and low SES neighborhoods than a limited subset of 7, or potentially even fewer, area-based measures. This validation study of the neighborhood SES index covered a range of samples by health status (adults with chronic conditions as well as low risk adults) and by age (from young adults through the elderly); however, these samples, in the aggregate, do not represent a simple random sample of this MCO's adult enrollees. Also, the survey samples were obtained from a single MCO and may not represent results that might be obtained in studies of other health care systems.

In conclusion, a neighborhood SES index was constructed from a limited number of publicly available Census SF3 variables and validated by comparing the association of the neighborhood SES index with self-reported formal education and household income and other neighborhood characteristics. Concordance of individual-based and area-based SES measures in this MCO suggests that inferences about SES influences on health using area-based SES measures in the absence of individual-level SES

TABLE 5. Association of Neighborhood SES Quartile With Self-reported Neighborhood Characteristics in a 2005 Survey of 25–59 Year Old Employed Adults (N = 2224)

	Percent (by Column) of Self-reported Neighborhood Characteristics				
	Sidewalks Available	Street Lights at Night Available	Safe From Crime	Walking/Cycling Paths Nearby	Dogs Are a Problem
	42.2%	83.5%	91.1%	62.7%	17.4%
SES quartile					
Lowest SES	43.9%	83.4%	81.4%	50.3%	22.9%
Lower Middle SES	37.5%	79.8%	91.2%	62.1%	19.0%
Upper Middle SES	41.4%	83.1%	94.2%	60.1%	18.3%
Highest SES	46.1%	87.6%	96.9%	68.4%	9.8%
P	0.03	0.01	<0.01	0.02	<0.01
N of Survey Respondents	2138	2139	1947	2014	2008

(1) Percents in each cell represent the number of survey respondents within the SES quartile who responded affirmatively to the item on the neighborhood characteristic defining the column. (2) Associations of neighborhood SES quartile with each neighborhood characteristic are assessed with a χ^2 test statistic. The comparison group for each SES quartile is the percent who responded negatively (vs. affirmatively) to the item on the neighborhood characteristic.

measures will have some, albeit qualified, validity; however, individual SES differs within neighborhoods of relatively homogeneous SES according to area-based measures. Discordance between individual and neighborhood SES, and the extent to which other individual demographic and

health characteristics correlate with these differences suggests that future research might explore how other individual characteristics amplify or suppress the influence of area-based SES factors on population health behaviors or outcomes.

APPENDIX

TABLE A1. Medians of SES Index Component Measures: Overall and by SES Quartile

SES Index	Component Measure Mean							KPG Population: 2000–2007 Adult Enrollees
	Percent of Households With Income Below The Poverty Level	Percent of Households Receiving Public Assistance	Percent of Households With Annual Income Below \$30,000	Percent of Working Age Adult Males Not in The Labor Force	Percent of Adults 25 and Older with a High School Education or Less	Log of Median Value of Single Family Homes (Original Scale in Parentheses)	Log of Median Household Income (Original Scale in Parentheses)	
Overall	6.06	1.27	21.36	19.69	12.87	11.71 (\$122,000)	10.87 (\$52,600)	548,014
Lowest SES Quartile	12.88	3.77	38.53	27.44	26.22	11.39 (\$88,400)	10.52 (\$37,000)	137,001
Lower Middle SES Quartile	7.07	1.65	25.05	20.82	15.26	11.64 (\$114,000)	10.68 (\$43,500)	136,982
Upper Middle SES Quartile	4.65	0.93	17.18	18.48	11.71	11.78 (\$131,000)	10.98 (\$58,700)	137,436
Highest SES Quartile	2.55	0.62	10.42	14.70	5.68	12.10 (\$180,000)	11.12 (\$75,400)	136,595

TABLE A2. Association of Neighborhood SES Quartile With Self-reported Education in a 2007/2008 Survey of 18–74 Year Old Adults With Hypertension (N=1411)

	Percent (by Row) of Self-reported Education			N of Survey Respondents
	HS Grad or Less	Some College	College Graduate/ Post-College	
	33.0%	32.5%	34.5%	1295
SES quartile				
Lowest SES	46.4%	32.8%	20.7%	323
Lower middle SES	36.6%	33.3%	30.0%	306
Upper middle SES	28.7%	32.5%	38.9%	342
Highest SES	20.7%	31.5%	47.8%	324

TABLE A3. Association of Neighborhood SES Quartile With Self-reported Household Income in a 2007/2008 Survey of 18–74 Year Old Adults With Hypertension (N=1411)

	Percent (by Row) of Self-reported Annual Household Income				N of Survey Respondents
	Less than \$50,000	\$50,000–\$74,999	\$75,000–\$99,000	\$100,000 or More	
	47.9%	23.2%	15.2%	13.7%	1042
SES quartile					
Lowest SES	66.8%	18.5%	8.5%	6.2%	259
Lower Middle SES	54.0%	21.8%	14.9%	9.3%	248
Upper Middle SES	35.8%	29.0%	20.1%	15.1%	279
Highest SES	35.9%	23.1%	16.8%	24.2%	256

Percents sum to 100% across rows in Tables A2–A3, with N of Survey Respondents in each row serving as the denominator.

TABLE A4. Association of Neighborhood SES Quartile with Self-reported Education in 2000, 2002, and 2004 Surveys of Medicare Beneficiaries (N = 1011)

	Percent (by Row) of Self-reported Education				N of Survey Respondents
	Less than HS	HS Graduate	Some College	College Graduate or Postgraduate	
	23.9%	31.0%	27.3%	17.8%	965
SES quartile					
Lowest SES	42.0%	32.4%	18.5%	7.1%	238
Lower Middle SES	23.2%	32.4%	28.2%	16.2%	241
Upper Middle SES	15.9%	35.1%	27.8%	21.2%	245
Highest SES	14.9%	24.1%	34.4%	26.6%	241

TABLE A5. Association of Neighborhood SES Quartile With Self-reported Household Income in 2000, 2002, and 2004 Surveys of Medicare Beneficiaries (N = 1011)

	Percent (by Row) of Self-reported Annual Household Income				N of Survey Respondents
	Less than \$20,000	\$20,000–\$39,999	\$40,000–\$49,000	\$50,000 or More	
	37.5%	35.4%	20.5%	6.7%	782
SES Quartile					
Lowest SES	58.9%	28.1%	9.7%	3.2%	185
Lower Middle SES	40.0%	35.4%	19.0%	5.6%	195
Upper Middle SES	30.8%	41.7%	22.8%	4.7%	211
Highest SES	21.5%	35.6%	29.8%	13.1%	191

Percents sum to 100% across rows in Tables A4–A5, with N of Survey Respondents in each row serving as the denominator.

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