

Why Is There State Variation In Employer-Sponsored Insurance?

Employer coverage for adults varies across states for reasons that are largely beyond the states' control.

by **Yu-Chu Shen and Stephen Zuckerman**

ABSTRACT: Using the National Survey of America's Families in 1997 and 1999, we investigate the sources of variation in employer-sponsored health insurance across states. We find that demographics and family characteristics (such as race/ethnicity and citizenship status), individual employment characteristics (such as firm size and labor-force attachment), and local labor market characteristics (such as unionization) consistently explain the relative position of all of the states with either high or low rates of employer coverage. Income plays a smaller role in explaining the state variation but is still an important determinant, especially among states whose average income is far from the national average.

MORE THAN 70 PERCENT of adults have employer-sponsored health insurance, which makes it the most important source of coverage for nonelderly Americans. However, there is much variation in employer coverage across states.¹ Among the thirteen focal states being studied through the Urban Institute's Assessing the New Federalism study, employer coverage rates range from a low of 65 percent in California to a high of 81 percent in Wisconsin.²

State variation in employer-sponsored insurance can influence the debate about state governments' role in providing health insurance. The federal and state governments have joined forces in providing health insurance for those not covered by employer or other private insurance through programs such as Medicaid and the State Children's Health Insurance Program (SCHIP). The federal-state system leaves a great deal of discretion to the states in establishing eligibility for public programs and the extent to which they reach out to the uninsured. However, because employer coverage varies across states, some states have a much greater coverage gap than others.³ For example, states with high rates of employer coverage may be able to afford a generous public program because their potentially eligible uninsured populations are relatively small. States with lower rates of employer coverage may face an enormous burden to bridge the insurance gap.

There has been extensive empirical research exploring factors that influence a person's decision to acquire employer coverage.⁴ However, there is little evidence

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Yu-Chu Shen is a research associate and Stephen Zuckerman is a principal research associate at the Urban Institute's Health Policy Center in Washington, D.C.

on which factors contribute to the disparity in coverage rates across states. If variation in employer coverage rates is associated with factors that are beyond states' control (for example, race/ethnicity or industrial mix), then the federal-state partnership may be unfairly asking some states to bear a much greater burden than others. Therefore, it is necessary to document both the extent of employer coverage variation across states, as has been done, and the causes of that variation. In this paper we explore the sources of state variation in employer coverage for adults and consider their implications within a policy context in which each state must define the scope of its public programs.

State variation in employer coverage depends on a combination of two effects: (1) the effect of underlying factors such as demographics, employment characteristics, state policy, and local health system characteristics on the likelihood of being covered by an employer plan; and (2) the extent to which states differ in the distribution of these underlying factors. For example, age may be an important determinant of understanding who has employer coverage, but age distributions may be fairly similar across states. Alternatively, state policy with respect to public program eligibility may play a relatively small role in explaining who has employer coverage but may vary dramatically across states.

Data And Methods

■ **Data.** The main data sources are the 1997 and 1999 rounds of the National Survey of America's Families (NSAF), a household survey that collects economic, household, and health information on more than 100,000 children and adults each year.⁵ Data are collected from a nationally representative sample of the civilian, noninstitutionalized population under age sixty-five from all fifty states and the District of Columbia. Oversampling is used in Alabama, California, Florida, Massachusetts, Michigan, Minnesota, New Jersey, New York, Texas, Washington, Mississippi, Wisconsin, and Colorado to provide representative samples in each of these states. One way that the NSAF achieves a representative sample is by combining telephone and in-person interviews, both nationally and in each state.

Since variation in employer coverage for adults among states remained stable between 1997 and 1999, we pool the two rounds together in our analysis. The sample includes adults ages 18–64, which results in a total of 106,599 observations. We also supplement the NSAF data with several other data sources to obtain local labor market and health system characteristics and state Medicaid eligibility.⁶

■ **Methods.** The variable of interest is whether a person was covered by an employer plan at the time of the survey.⁷ People who report employer along with other coverages are classified as having employer coverage. We explore the sources of state variation in employer coverage through a three-stage process. We start out by investigating individual and area factors that influence a person's likelihood of being covered by an employer plan. Second, we examine to what extent these factors vary across the states. We group the thirteen NSAF states into three categories: states

“Not surprisingly, holding other factors constant, the likelihood of having employer coverage increases with family income.”

with high rates of employer coverage (more than 78 percent of the adult population covered: Massachusetts, Michigan, Minnesota, New Jersey, and Wisconsin); states with near-average employer coverage rates (Alabama, Colorado, New York, and Washington); and states with low employer coverage rates (less than 68 percent of the adult population covered: California, Florida, Mississippi, and Texas). Finally, we bring the model parameters from the first stage and the weighted means from the second stage together to decompose the sources of state variation in employer coverage. Our decomposition analysis focuses only on the high- and low-coverage states.

The individual-level model. We estimate an individual-level regression model, with the dependent variable equal to 1 if a person is covered by an employer plan (either as a policyholder or through dependent coverage) and 0 otherwise. We chose the linear regression model over the logistic or probit models, more commonly used for dichotomous dependent variables, because only the linear model allows us to conduct the decomposition analysis.⁸ All NSAF respondents (not just respondents from the high- and low-coverage states) are included in the estimation. The regression is properly weighted to reflect the complex survey design.

Based on the current literature, we group factors that affect employer coverage into six categories: (1) demographics and family characteristics, (2) individual employment characteristics, (3) family income, (4) local labor market characteristics, (5) local health system characteristics, and (6) state Medicaid eligibility.

In previous studies, demographic and family characteristics—such as marital status, race, citizenship, educational attainment, and general health status—were all important determinants of a person’s health insurance coverage.⁹ Given that health insurance is an employment benefit, coverage rates vary greatly by industry and firm size.¹⁰ In addition, longer job tenure and working full time instead of part time increase one’s probability of being covered by an employer plan. We capture this employment information in a second category of factors. Family income completes the set of individual determinants of employer coverage.

We capture the characteristics of the local labor market by county type (measured by rural/urban status and population), per capita income, unemployment rate, wage index, and percentage of the workforce that is white-collar.¹¹ We also categorize states into three levels of unionization based on 2000 Bureau of Labor Statistics data.¹² Health care spending and health care service capacity in an area could influence people’s decision to obtain employer coverage. We include information on the availability of public hospital beds, general and family practitioners, and managed care penetration, which could influence the provision of uncompensated care and might act as an imperfect alternative to having coverage. Higher health care costs are often associated with higher premiums and could deter peo-

ple from purchasing insurance. We use the adjusted average per capita cost (AAPCC) rate as a proxy for local health care costs.¹³ Finally, we include measures of state Medicaid eligibility, because more generous Medicaid programs might be associated with lower rates of employer coverage.¹⁴ We categorize states into quintile groups based on the percentage of adults in the state who are eligible for Medicaid.¹⁵

Variation in characteristics across states. A variable could be important in predicting a person's employer coverage, but it may not explain state variation in employer coverage rates if it does not vary much across states. Thus, in this stage we identify state-level differences in individual and local area characteristics. We compute weighted means of the variables included in the first-stage regressions, for the nation and for each NSAF state. Weights are applied to produce estimates of each factor that are representative of the national and state-specific population means.

Regression-based decomposition of employer coverage variation across states. We use the coefficients from the individual-level regression and the weighted state-specific means to obtain a predicted employer coverage rate for each state. Then, we decompose the state-specific predicted coverage rate by assuming that one category of factors is state-specific, while the rest of the variables take on the value of the national average. For example, we isolate the contribution of demographics to California's low employer coverage rate by multiplying the regression coefficients for the demographic factors with California-specific averages, but national averages for the rest of the variables.¹⁶ These regression-adjusted coverage rates are then compared with the predicted coverage rate for the entire nation.

Study Findings

■ Factors influencing a person's likelihood of having employer coverage.

Almost all of the variables included in the individual-level regression are statistically significant. Exhibit 1 lists those factors that significantly increase the probability of having employer coverage and those that significantly decrease that probability.¹⁷ Our results are consistent with the existing literature. Demographic and family characteristics are all very important indicators of a person's likelihood of having employer coverage. Not surprisingly, holding other factors constant, the likelihood of having employer coverage increases with family income.

Employer coverage also varies with individual employment characteristics and local labor market conditions. For example, a person who worked at his or her current employer at least one year was much more likely to be covered by employer insurance than were nonworkers or workers whose job tenure was less than one year. People in highly unionized states (more than 18 percent of workers represented by unions) are also more likely to have employer coverage than are people in less unionized states.

Local health system characteristics and Medicaid eligibility are less important in explaining the likelihood of being covered by an employer plan. There is some

EXHIBIT 1**Factors That Affect The Probability Of Having Employer-Sponsored Insurance Coverage In Individual-Level Regression Analysis, 1997 And 1999**

	Factors that increase the probability	Factors that reduce the probability
Demographics and family characteristics	Being white Being a citizen Having at least a high school diploma Being married (with or without children) Ages 55–64 Being in excellent, very good, or good health Being female	Being African American, Hispanic, or Asian Being a noncitizen Did not graduate from high school Being a single parent Ages 18–54 Being in fair or poor health Being male
Individual employment characteristics	Works in a firm with more than 25 workers Worked for at least one year at current employer Worked part time or full time for at least 1 year at current employer. Works in manufacturing, transportation, communication, utility, financial, insurance, real estate, and service industries Works for the government	Works in a firm with fewer than 25 workers Worked less than 1 year for current employer Worked less than 1 year for current employer (part time or full time) or is a nonworker Works in construction, wholesale, retail trade, agriculture, forestry, and public administration industries Works in private sector
Family income	Has higher family income	Has lower family income
Local labor market characteristics	Lives in an urban county Lives in a state with high unionization rate Lives in a county with low unemployment rate Lives in an area with high wage index	Lives in a rural county Lives in a state with low unionization rate Lives in county with high unemployment rate Lives in an area with a low wage index
Local health market characteristics	Lives in a county with low percentage of general or family physicians	Lives in a county with high percentage of general or family physicians
State Medicaid eligibility level ^a	Lives in a state with moderate Medicaid eligibility	Lives in a state with limited or broad Medicaid eligibility

SOURCE: Urban Institute, National Survey of America's Families, 1997 and 1999.

NOTE: We also explored the following factors, but they did not significantly influence the probability of having employer coverage: per capita income at the county level, percentage of the workforce in the county that is white collar, health maintenance organization (HMO) penetration at the county level, adjusted average per capita cost (AAPCC) rate (proxy for local health care cost), number of physicians per capita, number of hospital beds per capita, and percentage of public hospital beds.

^aState Medicaid eligibility levels are broken into quintile groups based on the percentage of the state's adult population that is eligible for Medicaid. The quintile break points differ for 1997 and 1999, because the income distribution and eligibility rules changed slightly. We define a state as having limited eligibility if less than 3.8 percent of its adult population was eligible for Medicaid in 1997 (3.6 percent in 1999). A state is defined as having broad eligibility if more than 5.9 percent of its adult population was eligible for Medicaid in 1997 (6.8 percent in 1999).

evidence that employer coverage is related to adult eligibility for Medicaid, but it does not appear that moving toward broader eligibility is consistently associated with lower rates of employer coverage.¹⁸

■ **Variations in state characteristics.** In Exhibit 2 we report differences in state means for some of the characteristics that are strongly associated with having employer coverage in the individual-level regression model. States with high rates of employer coverage in general have above-average values for factors that are positively associated with employer coverage and below-average values for factors that are negatively associated with it; the opposite is true for states with low rates of employer coverage.

■ **Decomposition results.** Exhibit 3 presents state-by-state analysis of em-

EXHIBIT 2**State-Level Means Of Selected Characteristics Used In The Regression Analysis, By State Employer-Sponsored Insurance (ESI) Coverage Rates, 1997 And 1999**

	National average	High-ESI states					Low-ESI states			
		WI	MI	MN	NJ	MA	FL	MS	TX	CA
Demographics and family characteristics										
African American	11.6%	5.1%	13.8%	2.8%	13.4%	5.1%	13.3%	34.3%	11.8%	7.0%
Hispanic	10.8	2.3	2.5	1.6	12.9	5.6	9.8	0.8	28.3	29.9
Noncitizen	6.6	1.9	2.1	1.9	8.3	6.2	5.8	0.5	11.8	18.3
Bachelor's degree or higher	24.8	22.7	23.7	29.3	32.6	37.2	21.2	18.3	22.4	25.9
Single parent	7.1	6.6	7.1	6.0	6.0	6.0	7.9	11.4	8.1	7.7
Individual employment characteristics										
Works in a firm with fewer than 25 workers	18.1	18.1	17.4	17.7	17.8	16.6	20.8	17.5	18.8	19.0
Works in a firm with more than 500 workers	10.0	12.7	13.7	12.8	12.1	11.3	7.2	10.4	9.2	8.3
Worked at least 1 year for current employer	52.8	60.4	55.0	59.6	55.9	56.8	49.6	50.5	48.9	51.6
Works full time	64.3	69.4	63.8	68.6	65.9	65.4	64.2	63.1	65.4	60.8
Family income										
Family income as percent of poverty	410	410	420	430	510	500	390	320	360	400
Local labor market characteristics										
State unionization rate in 2000	14.9	18.7	21.8	18.8	21.8	15.7	8.7	9.3	7.4	17.7

SOURCE: Urban Institute, National Survey of America's Families, 1997 and 1999.

NOTES: High-ESI states are states where more than 78 percent of the adult population has employer coverage. Low-ESI states are states where less than 68 percent of the adult population has employer coverage. The national average ESI rate is 72 percent.

ployer coverage variation, based on the regression estimates (Exhibit 1) and the weighted means of state characteristics (Exhibit 2). For each state, the top row in the exhibit shows the actual difference between the state's employer coverage rate and the national average rate. The second row shows the difference between the state and national average employer coverage rates that were predicted based on the factors included in the regression model. The remaining entries in the exhibit show the contribution of each set of factors to the predicted difference in employer coverage rates, as well as the contributions of selected factors within each set.

For example, if Wisconsin were equal to the national average in all ways other than its demographic and family characteristics, the state's employer coverage rate would be predicted to be 2.4 percentage points above the national average. Of these 2.4 percentage points, race/ethnicity differences account for 1.3 percentage points, citizenship for 0.6 percentage points, and six other factors for 0.5 percentage points. Other major influences that contribute to Wisconsin's high rate of employer coverage are related to individual employment and local labor market characteristics. Within these categories, unionization, the distribution of firm sizes,

EXHIBIT 3 Decomposition Of State Variation In Employer-Sponsored Insurance (ESI) Coverage Rates, 1997 And 1999

	High-ESI states					Low-ESI states			
	WI	MI	MN	NJ	MA	FL	MS	TX	CA
Actual percentage-point difference from the rest of U.S.	9.1	8.0	7.4	6.5	6.4	-3.9	-5.5	-8.0	-8.5
Predicted percentage-point difference	7.5	6.4	7.0	6.0	4.7	-2.6	-8.6	-6.0	-7.1
Predicted percentage-point difference that can be attributed to									
Demographics and family characteristics ^a									
Race/ethnicity	2.4	1.5	3.5	-0.1	2.1	0.0	-1.2	-3.1	-4.8
Noncitizen	1.3	0.6	1.5	-0.3	1.0	0.0	-0.6	-1.6	-1.8
Others	0.6	0.6	0.6	-0.2	0.1	0.1	0.8	-0.8	-1.8
	0.5	0.3	1.4	0.4	1.0	-0.1	-1.4	-0.7	-1.2
Individual employment characteristics ^b									
Industry mix	2.8	1.0	2.3	1.0	1.3	-1.6	-0.3	-1.0	-0.9
Firm size	0.3	-0.1	0.2	0.0	0.0	-0.4	0.4	0.0	-0.2
Labor-force attachment	1.2	0.8	1.1	0.4	0.8	-0.7	-0.5	-0.5	-0.3
	1.3	0.3	0.9	0.5	0.5	-0.6	-0.2	-0.5	-0.4
Local labor market characteristics									
Family income	0.0	0.2	0.4	1.8	1.4	-0.3	-1.3	-0.8	0.0
State-level unionization	3.1	2.8	3.5	3.5	1.2	-0.6	-4.2	-1.9	-2.0
Others ^c	2.5	2.6	2.5	2.5	-0.3	-2.1	-2.0	-2.1	-0.4
	0.6	0.3	1.0	0.9	1.6	1.4	-2.2	0.2	-1.6
Local health market characteristics ^d									
State Medicaid eligibility level	-0.4	0.4	-1.6	0.6	-0.1	0.4	-0.5	0.4	-0.2
	-0.4	0.5	-1.1	-0.4	-1.1	-0.2	-1.1	0.3	0.8

SOURCE: Urban Institute, National Survey of America's Families, 1997 and 1999.

^aDemographics and family characteristics are as follows. Race/ethnicity: white, African American, Hispanic, Asian/other; noncitizen: foreign-born nationals; others: education, family structure (single with no children, single parent, married with no children, married with children), sex, age, fair/poor health.

^bIndividual employment characteristics are as follows. Industry mix: seven industry categories and indicator for government workers; firm size: four firm-size categories (fewer than 25, 25-99, 100-500, and more than 500 workers); labor-force attachment: part time and work less than one year for current employer, part time and work at least one year for current employer, full time and work less than one year for current employer, full time and work at least one year for current employer.

^cOther local labor market characteristics are as follows. Hospital wage index at metropolitan statistical area (MSA) level, unemployment rate and percentage of white-collar workers at county level; percentage residing in a rural county or small or large urban county, and county-level per capita income.

^dLocal health market characteristics (county-level measures) are as follows. Health maintenance organization (HMO) penetration, adjusted average per capita cost (AAPCC) rate, number of physicians per capita, percentage of general/family practitioners, number of hospital beds per capita, percentage of public hospital beds.

and labor-force attachment are the key determinants of the difference in the rate of employer coverage between Wisconsin and the rest of the nation.

Although each state is unique, we find that two categories of factors—individual employment characteristics and the local labor market—consistently explain the relative position of all of the states with either high or low rates of employer coverage. Other than New Jersey and Florida, demographics and family characteristics also play a key role. In addition, although income is not a particularly important factor in most states, it is a key factor among states at the extreme ends of the income distribution (such as Massachusetts, Mississippi, and New Jersey).

“Holding income constant, states with more Hispanics, African Americans, and noncitizens have lower rates of employer coverage.”

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Although Medicaid eligibility was significantly related to the probability of an adult's having employer coverage, broader eligibility does not consistently imply lower employer coverage rates, and the decomposition reflects this finding. In fact, Medicaid eligibility plays almost no role in explaining why states such as California, Texas, Mississippi, and Florida have below-average employer coverage rates. The only states in which there is evidence of broader Medicaid eligibility being associated with lower rates of employer coverage are Minnesota and Massachusetts—states among those with the highest rates of employer coverage.

In addition to this summary, a more detailed decomposition of the determinants of state variation in employer coverage rates shows what drives state variation in these rates within each set.¹⁹ (1) Racial and ethnic composition and citizenship are important factors in explaining state variations. Holding income constant, states with relatively more Hispanics, African Americans, and noncitizens have lower rates of employer coverage. For example, demographic and family characteristics lower employer coverage rates in California by 4.8 percentage points relative to the national average; 3.6 of these percentage points are attributable to race, ethnicity, and citizenship. Similarly, more than half of the positive effect that demographic and family characteristics have in Minnesota results from its racial, ethnic, and citizenship composition. (2) High unionization rates are especially important in contributing to high employer coverage rates in the Midwestern states (Michigan, Minnesota, and Wisconsin) and New Jersey. For example, in Michigan more than 90 percent of the effect of the local labor market is attributable to the state's high rate of unionization.²⁰ (3) Both firm size and labor-force participation (measured by job tenure and part-time or full-time status) are major contributors to the effects of individual employment characteristics in all nine states. Overall, these factors explain more than 80 percent of the effect on individual employment characteristics. (4) The analysis reveals that state variation in employer coverage rates is not generally the result of industry mix, as is sometimes argued.

Discussion

This study shows that state variation in employer coverage is driven by two forces: the effect of various factors on a person's likelihood of being covered by an employer plan, and the extent to which states differ in the distribution of these factors. For example, education, while an important predictor of employer coverage at the individual level, does not explain much of the state variation, because the percentage of adults with at least a high school diploma is similar across states. Among the six categories of factors that we examine, we find that demographic and family characteristics, individual employment characteristics, and lo-

cal labor market characteristics explain much of the variation in employer coverage across high- and low-coverage states.

Although we recognize that demographic and family characteristics are associated with differences in human capital, which can affect labor-market success and earnings, the independent effects of these variables suggest that state differences in employer coverage should not be attributed to differences in income alone. Holding income constant, we find that weaker demand for insurance among certain demographic groups contributes to the lower rates of employer coverage observed in some states. Despite finding that employer coverage increases with income for, say, Hispanics, a Hispanic person with average family income is still less likely than a white person with the same income to be covered by employer insurance (results not shown). In other words, average incomes in states such as California and Texas are not high enough to overcome the independent effects of their large Hispanic populations.

There are two caveats regarding this analysis. First, the individual-level regression cannot include all factors that might explain why a person is covered by an employer plan. Most notably, we do not have information about premiums and health plan characteristics at the workplace. Instead, we used the Medicare AAPCC to capture costs at the county level to reflect the role that health care costs may have on employer coverage. Second, we use state-level Medicaid eligibility and unionization rates. There still may be a great deal of variation in eligibility and union status within each state that cannot be captured by these state-level measures.

With these cautions in mind, the evidence suggests that employer coverage among adults varies across states for reasons that are largely beyond the states' control. To the extent that states are asked to use Medicaid or SCHIP to fill insurance coverage gaps in the adult population, the federal-state partnership is assigning some states a more difficult task than others because of differences in demographics, individual employment, and labor market characteristics. In essence, state policymakers are being asked to play the cards they are dealt when designing their public programs. Although the federal contribution to Medicaid payments attempts to compensate for some interstate variation, through adjusting the matching rates by state per capita income, it cannot address the inequality in employer coverage that is attributable to factors unrelated to income.

States might be able to design policies that encourage lower job turnover rates or that attract larger companies or those that hire more full-time workers, but there is a limit to the extent to which a state can intervene in the labor market. States with large percentages of Hispanics and noncitizens are especially vulnerable under the current system. Even if these states are willing to increase the eligibility threshold in their public programs and reach out to eligible groups as a way to reduce the overall uninsured population, such measures might not overcome the cultural barriers to employer coverage among Hispanics and noncitizens.

Moreover, federal rules bar states from using federal Medicaid funds to extend coverage to recent immigrants who are not citizens.²¹

Given that states with the lowest rates of employer coverage also have the highest rates of uninsurance, it appears that these states are unable or unwilling to create public programs that fully fill employer coverage gaps.²² The federal-state partnership in Medicaid and SCHIP is designed to give state policymakers greater latitude in designing public programs that are tailored toward the needs of their unique populations. But our analysis suggests that such flexibility may not be particularly fair to states with low rates of employer coverage.

If the national goal is to achieve a greater degree of equalization in insurance coverage across states, then it appears that present programs and states' incentives are not adequate to achieve this objective and that some new policy approaches may be needed. No matter what approach is ultimately followed, consideration needs to be given to the fact that rates of employer coverage determine the magnitude of the health insurance gap that states are trying to fill, and variations in those gaps are largely beyond states' control.

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NOTES

1. Agency for Healthcare Research and Quality, *State Differences in Job-Related Health Insurance*, 1998, Medical Expenditure Panel Survey Chartbook no. 7 (Rockville, Md.: AHRQ, 1998); J.M. Branscome et al., "Private Employer-Sponsored Health Insurance: New Estimates by State," *Health Affairs* (Jan/Feb 2000): 139-147; and S. Zuckerman et al., "Shifting Health Insurance Coverage, 1997-1999," *Health Affairs* (Jan/Feb 2001): 169-177.
2. The national average is 71.9 percent. The employer coverage rates for each NSAF state are as follows: Wisconsin, 80.8 percent; Michigan, 79.6 percent; Minnesota, 79.2 percent; New Jersey, 78.2 percent; Massachusetts, 78.1 percent; Alabama, 72.9 percent; Colorado, 72.8 percent; Washington, 71.8 percent; New York, 70.5 percent; Florida, 68.1 percent; Mississippi, 66.5 percent; Texas, 64.6 percent; and California, 64.5 percent.
3. B.C. Spillman, "Adults without Health Insurance: Do State Policies Matter?" *Health Affairs* (July/Aug 2000): 178-187.
4. See, for example, S.H. Long and M.S. Marquis, "Gaps in Employer Coverage: Lack of Supply or Lack of Demand?" *Health Affairs* (Supplement 1993): 282-293; J.C. Cantor, S.H. Long, and M.S. Marquis, "Private Employment-Based Health Insurance in Ten States," *Health Affairs* (Summer 1995): 199-211; and H.S. Farber and H. Levy, "Recent Trends in Employer-Sponsored Health Insurance Coverage: Are Bad Jobs Getting Worse?" *Journal of Health Economics* 19, no. 1 (2000): 93-119.
5. See G. Kenney, F. Scheuren, and K. Wang, *1997 NSAF Survey Methods and Data Reliability*, NSAF Methodology Reports no. 1, July 1999, www.urban.org/UploadedPDF/Methodology_1.pdf (24 October 2002).
6. The data sources include the Area Resource File (county characteristics, physician supply), the American Hospital Association annual survey (hospital bed supply aggregated to the county level), Bureau of Labor Statistics (state-level unionization rate), Centers for Medicare and Medicaid Services (indexes for living and health costs), Current Population Survey (to construct measures of state Medicaid generosity), and managed care penetration data from Douglas Wholey.

7. Using past-year insurance information (that is, whether a person is covered by an employer plan at any time during the past twelve months) gives the same results.
8. To check the validity of our linear model, we reestimated the model using a probit equation. The marginal effects and statistical significance from the probit estimation were extremely close to the coefficients from the linear model (regression results of both models are available upon request; contact Stephen Zuckerman by e-mail, szuckerm@ui.urban.org).
9. F.A. Sloan and C.J. Conover, "Effects of State Reforms on Health Insurance Coverage of Adults," *Inquiry* (Fall 1998): 280–293; P.J. Cunningham and P.B. Ginsburg, "What Accounts for Differences in Uninsurance Rates across Communities?" *Inquiry* (Spring 2001): 6–21; and P.J. Cunningham, "Declining Employer-Sponsored Coverage: The Role of Public Programs and Implications for Access to Care," *Medical Care Research and Review* (March 2002): 79–98.
10. D. Chollet, "Employer-Based Health Insurance in a Changing Work Force," *Health Affairs* (Spring I 1994): 315–326; and J. Gruber, "Health Insurance and the Labor Market," in *Handbook of Health Economics*, ed. J.P. Newhouse and A.J. Culyer (Amsterdam: Elsevier, 2000), 646–706.
11. See reviews of the relationship between the labor market and health insurance in Gruber, "Health Insurance and the Labor Market."
12. This state-level unionization indicator and the industry and government worker indicators all act as proxies for a missing individual-level unionization variable. We recognize that this approach might not be ideal, but it is the best that we can do with the available data.
13. This is an appropriate measure despite the fact that it only reflects medical spending for the elderly, because the AAPCC rate represents inpatient and outpatient costs as well as price and volume differences.
14. D.M. Cutler and J. Gruber, "Does Public Insurance Crowd Out Private Insurance?" *Quarterly Journal of Economics* (May 1996): 391–429; K. Swartz, "Medicaid Crowd Out and the Inverse Truman Bind," *Inquiry* (Spring 1996): 5–8; and L. Dubay and G. Kenney, "Did Medicaid Expansions for Pregnant Women Crowd Out Private Coverage?" *Health Affairs* (Jan/Feb 1997): 185–193.
15. We obtain the percentage of adults eligible by applying each state's Medicaid eligibility rules in 1997 and 1999 to the adult sample from that year's CPS. Using a national sample of adults instead of the state population allows us to isolate the effects of state Medicaid policies on the rate of employer coverage from the effect of demographics and income.
16. This approach is similar to a regression-based decomposition of differences in uninsurance rates used by Cunningham and Ginsburg, "What Accounts for Differences in Uninsurance Rates?"
17. The exhibit also shows those factors that were included in the model but did not have a significant effect on employer coverage. The full set of regression coefficients along with standard errors are available from the authors upon request.
18. The relationship between levels of Medicaid eligibility and employer coverage appeared to be U-shaped. People in states with limited or broad eligibility rules (that is, the first and the fifth quintiles) have lower probability of having employer coverage than do people residing in states that belong to the third and fourth quintiles. We experimented with other specifications and found that they did not affect our decomposition results.
19. The full results related to this detailed decomposition are available from the authors upon request.
20. Michigan's rate of unionization (21.8 percent) is almost 50 percent above the national average rate (14.9 percent).
21. L. Ku and S. Matani, "Left Out: Immigrants' Access to Health Care and Insurance," *Health Affairs* (Jan/Feb 2001): 247–256.
22. Zuckerman et al., "Shifting Health Insurance Coverage, 1997–1999."