

Special Article

A REAPPRAISAL OF PRIVATE EMPLOYERS' ROLE IN PROVIDING HEALTH INSURANCE

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ABSTRACT

Background In 1996, according to official figures, 61 percent of Americans received health insurance through employers. However, this estimate includes persons who relied primarily on government insurance such as Medicare, workers whose employers arranged their insurance but contributed nothing toward the premiums, and government employees whose private coverage was paid for by taxpayers.

Methods To estimate the number of persons whose principal health insurance was paid for in whole or in part by employers in the private sector and the number receiving government-funded insurance, we analyzed data from the March 1997 Current Population Survey. Approximately 130,000 persons representative of the noninstitutionalized U.S. population were sampled. We considered people to be covered principally by health insurance paid for by private-sector employers if they had no public insurance coverage and were covered by insurance from a non-governmental employer who paid all or part of their premiums. Those who were covered by Medicaid, Medicare, insurance resulting from former or current military service, or the Indian Health Service were considered to be receiving government insurance.

Results In 1996, 43.1 percent of the population (90 percent confidence interval, 42.7 to 43.5 percent) depended principally on health insurance paid for by private-sector employers, 34.2 percent (90 percent confidence interval, 33.8 to 34.6 percent) had publicly funded insurance, 7.1 percent (90 percent confidence interval, 6.8 to 7.6 percent) purchased their own coverage, and 15.6 percent (90 percent confidence interval, 15.3 to 15.9 percent) were uninsured. In only six states was more than half the population covered principally by health insurance paid for by private-sector employers.

Conclusions Current definitions of health insurance overemphasize the role of private employers and underestimate the extent to which government pays for health insurance. (N Engl J Med 1999;340:109-14.)

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HEALTH insurance paid for by private employers, initially nurtured by wage controls in the World War II era that did not restrict insurance benefits, has become a common fringe benefit of employment.¹ As a result, most Americans obtain health insurance through their employers. In 1996, according to the Census Bureau, 61.2 percent of the United States population was covered by insurance related to employment, and 25.9 percent received insurance through the government.² As a result, private employers have played a major part in shaping recent changes in our health care system.³ Furthermore, discussions of health care reform often start from the premise that our health insurance system is predominantly private and based on employment. For example, requirements that employers provide health insurance for their employees were the cornerstone of President Bill Clinton's unsuccessful attempt at comprehensive health care reform. Subsequent incremental strategies such as the Health Insurance Portability and Accountability Act of 1996 (formerly known as the Kassebaum-Kennedy bill) and recent congressional proposals⁴ are also designed to make up for the shortcomings of employer-provided health insurance.

However, the Census Bureau's method of classifying insurance² as "employer provided" (and the similar method adopted by the Agency for Health Care Policy and Research [AHCPR])⁵ may overstate the role of private employers, for several reasons. First, persons who receive both government insurance and coverage through a private employer in a given year are included either in both categories² or only in the private-insurance category.⁵ In most such cases, however, the government is the primary insurer. For example, in 1992, although three quarters of elderly Medicare beneficiaries had employer-sponsored retirement health benefits or individually purchased private Medigap plans, Medicare and Medicaid paid

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67 percent of their total health care costs; private insurance paid for only 10 percent; the rest was paid out of pocket.⁶ Second, although military personnel are correctly classified as receiving government insurance, most other federal, state, and local government workers who receive health benefits are classified as privately insured because they have an employer-provided plan; “privately insured” accurately describes their status as it appears on their insurance card but not the ultimate payers (the taxpayers). Finally, employees who purchase health insurance through an employer who pays none of the costs of the premiums are counted as having employer-provided insurance.

We analyzed data from the Current Population Survey, the standard source of information on health insurance coverage, in order to estimate the numbers of persons who relied principally on private, non-governmental employers for their health insurance during 1996. We also calculated the number of persons for whom the government provided coverage.

METHODS

We analyzed data from the March 1997 supplement to the Current Population Survey,⁷ the standard source of national data on health insurance. The Current Population Survey is a survey conducted by the Census Bureau of the noninstitutionalized population of the United States, covering approximately 50,000 households comprising 130,000 persons. Each March, the survey asks detailed questions about health insurance coverage during the previous year.

We considered people to be insured if they reported any health insurance coverage, either public or private, during the previous year. Those who were covered by Medicaid, Medicare, insurance resulting from former or current military service, the Indian Health Service, or various insurance programs sponsored by individual states were classified as receiving government insurance. We added to this standard definition of publicly insured persons an additional group consisting of government workers whose government employer paid for all or part of their health insurance premiums (and their covered dependents).

We considered people to have health insurance paid for by a private-sector employer only if they had no public coverage (as traditionally defined) and were covered by insurance from a non-governmental employer who paid for all or part of the premiums. Dependents were classified according to categories introduced into the Current Population Survey since 1995, which allow identification of the policyholder. Those who reported being covered by the private plan of someone living outside the household (that is, someone not in the Current Population Survey sample) and who could not be classified in one of the groups described above were considered to have private employer-paid insurance. Those with private health insurance that was paid for neither by a private employer nor by the government were considered to have purchased their own insurance.

Population estimates were derived with use of weights provided by the Census Bureau⁷ to allow the data to be extrapolated to the entire U.S. population, with factors such as the complex sampling design, undercoverage (missed housing units and missed persons in households), and inability or unavailability of any person in a household to be interviewed taken into account.⁸ We calculated 90 percent confidence intervals for percentages using the formula $SE = \sqrt{[(p(100-p) \times b)/x]}$, where SE is the standard error, x is the total number of people, p is the percentage, and b is a value provided by the Census Bureau for estimating the variability of the sample.⁸ For absolute numbers, the formula used was $SE = \sqrt{(ax^2 + bx)}$, where a is another value from the Census Bureau for

estimating the sample variability.⁸ Standard errors for data for individual states were further adjusted with use of state-specific parameters. The standard errors of the difference between two sample estimates were obtained with the formula $SE = \sqrt{(SE_1^2 + SE_2^2)}$ where SE_1 and SE_2 are the standard errors of each estimate.⁸ In keeping with Census Bureau conventions, we considered a difference significant if the 90 percent confidence interval did not include zero.

RESULTS

In 1996, according to our analysis of the data from the Current Population Survey, 84.4 percent (90 percent confidence interval, 84.1 to 84.7 percent) of the population living in the United States — a total of 225.1 million people (90 percent confidence interval, 224.3 million to 225.9 million) — reported having some form of health insurance; 160.8 million (90 percent confidence interval, 160.1 million to 161.5 million) had health insurance through an employer (as either policyholders or dependents). There were also 69.0 million people (90 percent confidence interval, 68.4 million to 69.6 million), making up 25.9 percent of the population (90 percent confidence interval, 25.5 to 26.3 percent), who were covered by some form of traditional government insurance, including Medicare, Medicaid, health insurance associated with military service (the Civilian Health and Medical Program of Uniformed Services or the Civilian Health and Medical Program of Veterans Affairs), or insurance provided through the Indian Health Service. Of the 160.8 million people with insurance provided by employers, 11.3 million (90 percent confidence interval, 11.0 million to 11.6 million) were also covered by Medicare, 4.1 million (90 percent confidence interval, 3.9 million to 4.3 million) were also covered by Medicaid, and 3.6 million (90 percent confidence interval, 3.5 million to 3.7 million) also had military-associated insurance. Thus, these 19.0 million persons (90 percent confidence interval, 18.7 million to 19.3 million) were not considered as receiving their principal health insurance from private employers (Fig. 1).

The remaining 141.8 million people (90 percent confidence interval, 141.1 million to 142.5 million) received private insurance through an employer without also receiving traditional government insurance. Among this group, 9.1 million employees or their dependents (90 percent confidence interval, 8.9 million to 9.2 million) reported that the employer contributed nothing toward the cost of the employer-provided insurance plan and thus were not considered as receiving employer-paid health insurance. Of these 9.1 million persons, 55.1 percent (90 percent confidence interval, 51.6 to 58.6 percent) worked for an employer with more than 100 employees. Among the remaining 132.7 million persons, 22.2 million (90 percent confidence interval, 21.8 million to 22.6 million) received insurance paid for by a government employer and thus were not considered to be receiv-

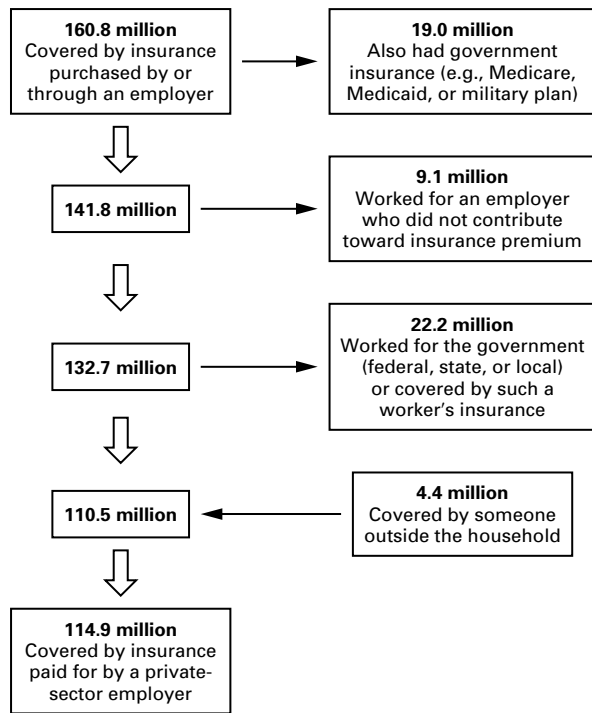


Figure 1. Classification of Persons Who Received Their Principal Health Insurance from Private Employers in 1996.

ing insurance from private-sector employers. Finally, to the remaining 110.5 million persons with health insurance paid for by a private-sector employer, we added 4.4 million persons (90 percent confidence interval, 4.2 million to 4.6 million) who were covered as dependents by the insurance plan of someone living outside the household; we conservatively assumed that such insurance was paid for by a private employer. Thus, at most, 43.1 percent of the population (90 percent confidence interval, 42.7 to 43.5 percent), or 114.9 million persons (90 percent confidence interval, 114.2 million to 115.6 million), depended principally on health insurance paid for by private-sector employers in 1996 (Fig. 1).

A total of 91.2 million persons (90 percent confidence interval, 90.6 million to 91.8 million), making up 34.2 percent of the population (90 percent confidence interval, 33.8 to 34.6 percent), were covered by insurance that was provided or purchased by the government: the 69.0 million with traditional public coverage plus 22.2 million employees and dependents who had insurance policies paid for by a government employer. Among the rest, 7.1 percent (90 percent confidence interval, 6.8 to 7.6 percent) purchased their own health insurance, and 15.6 percent (90 percent confidence interval, 15.3 to 15.9 percent) were uninsured. Figure 2 presents independent estimates of health insurance provided by employers

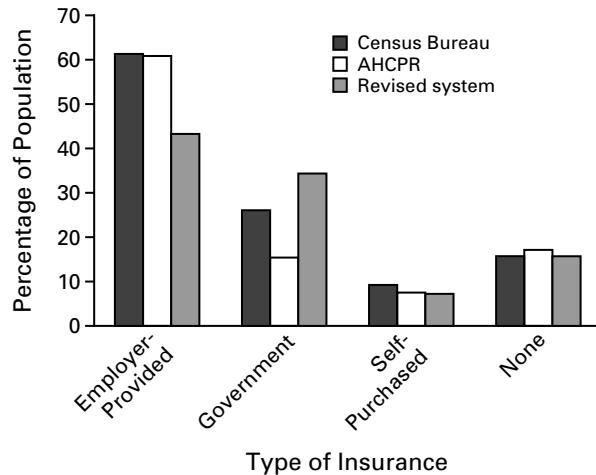


Figure 2. Distribution of Types of Insurance Coverage, as Estimated by the Census Bureau and the Agency for Health Care Policy and Research (AHCPR) and According to a Revised Classification System.

Census Bureau estimates of employer-provided insurance include all persons receiving insurance from an employer. Government insurance includes all those covered by Medicare, Medicaid, military insurance plans, state-sponsored insurance plans, and the Indian Health Service. The category of self-purchased insurance also includes persons who receive government insurance. For these reasons, the total of Census Bureau categories exceeds 100 percent.² AHCPR estimates of health insurance are from the Medical Expenditure Panel Survey.⁵ Like the Census Bureau, AHCPR includes in estimates of employer-provided insurance all persons receiving insurance from an employer. However, AHCPR estimates of government insurance exclude anyone who receives private insurance from an employer or who purchases insurance. Our revised system of classification excludes from employer-paid health insurance those who receive government insurance such as Medicare, those employed by the government, and those whose employer pays none of their health insurance premium. We used the same categories as the Census Bureau for government insurance and also included those who receive insurance from a government employer. Self-purchased insurance includes those whose employer (private or government) did not contribute toward their insurance premium but excludes those receiving government insurance (such as Medicare and Medicaid).

and by government from the Census Bureau² and the AHCPR,⁵ according to the traditional classification system, and estimates based on our revised classification system.

Table 1 presents insurance status according to sex, age, and race or ethnic group. Women and girls were more likely to receive government insurance and less likely than men and boys to have insurance paid for by private-sector employers. Adults 18 to 64 years of age were more likely to have private employer-paid insurance and much less likely to receive government insurance than children and adolescents under 18 years of age. Virtually all people over 64 were covered by government insurance through Medicare.

Among racial or ethnic groups, 43.7 percent of

TABLE 1. TYPE OF HEALTH INSURANCE ACCORDING TO SEX, AGE, AND RACE OR ETHNIC GROUP.*

CATEGORY	PRIVATE EMPLOYER-PAID INSURANCE	GOVERNMENT INSURANCE	SELF-PURCHASED INSURANCE	NO INSURANCE
	percent			
Total	43.1	34.2	7.1	15.6
Sex				
Male	44.7	31.3	6.9	17.1
Female	41.5†	37.0†	7.3	14.2†
Age				
<18 yr	44.9‡	33.2‡	7.1‡	14.8
18–39 yr	50.0	20.3‡	7.1‡	22.7‡
40–64 yr	50.4	25.0	9.9	14.4
>64 yr	1.7‡	96.7‡	0.6‡	1.1‡
Race or ethnic group				
Non-Hispanic white	47.5	33.2	7.8	11.5
Black	29.6§	43.7§	5.1§	21.6§
Hispanic	29.9§	31.6	4.9§	33.6§

*Because of rounding, not all percentages total 100. In analyses of demographic data, the Census Bureau considers differences to be significant at the 90 percent level.^{2,8}

†P<0.10 for the comparison with males.

‡P<0.10 for the comparison with persons 40 to 64 years of age.

§P<0.10 for the comparison with non-Hispanic whites.

blacks (90 percent confidence interval, 42.2 to 45.2 percent) received insurance from a government source, whereas only 29.6 percent (90 percent confidence interval, 28.2 to 31.0 percent) were covered under a private employer-paid plan. Hispanics had a low rate of private employer-paid insurance, similar to that of blacks, at 29.9 percent (90 percent confidence interval, 28.4 to 31.4 percent), but had a rate of government insurance similar to that of non-Hispanic whites at 31.6 percent (90 percent confidence interval, 30.1 to 33.1 percent). Blacks were much more likely than Hispanics to receive traditional government insurance (35.1 percent [90 percent confidence interval, 33.7 to 36.5 percent] vs. 26.2 percent [90 percent confidence interval, 24.8 to 27.6 percent]) and were, among adults in the labor force, more likely to work for the government (19.9 percent [90 percent confidence interval, 18.1 to 21.7 percent] vs. 10.8 percent [90 percent confidence interval, 9.3 to 12.3 percent]). As a result, the proportion of Hispanics without insurance was 33.6 percent (90 percent confidence interval, 32.1 to 35.1 percent), as compared with 21.6 percent (90 percent confidence interval, 21.0 to 22.2 percent) for blacks and 11.5 percent (90 percent confidence interval, 11.3 to 11.7 percent) for non-Hispanic whites.

Data for individual states and the District of Columbia are presented in Table 2. The rates of private employer-paid insurance varied widely, from a low of 25.6 percent (90 percent confidence interval, 22.4

TABLE 2. TYPE OF HEALTH INSURANCE IN THE STATES AND THE DISTRICT OF COLUMBIA.

STATE OR DISTRICT	PRIVATE EMPLOYER-PAID INSURANCE	GOVERNMENT INSURANCE	SELF-PURCHASED INSURANCE	NO INSURANCE
	percent			
Alabama*	46.4	33.6	7.2	12.8
Alaska†	29.1	51.7	5.8	13.4
Arizona	32.9	36.5	6.4	24.1
Arkansas	36.2	35.5	6.7	21.7
California*	39.5	33.3	7.1	20.1
Colorado*	44.1	28.9	10.4	16.6
Connecticut*	50.1	31.9	7.1	11.0
Delaware*	49.2	32.1	5.4	13.3
District of Columbia†	28.2	47.9	9.1	14.8
Florida	35.6	37.7	7.8	18.9
Georgia*	42.5	33.0	6.7	17.8
Hawaii	41.7	43.9	5.8	8.6
Idaho*	39.0	34.1	10.3	16.5
Illinois*	50.0	32.1	6.6	11.3
Indiana*	54.9	25.2	9.3	10.6
Iowa*	49.5	28.0	11.0	11.6
Kansas*	46.0	36.1	6.6	11.4
Kentucky	41.3	37.1	6.2	15.4
Louisiana	37.4	33.9	7.8	20.9
Maine*	49.4	31.6	7.0	12.1
Maryland	40.0	39.4	9.2	11.4
Massachusetts*	50.3	32.1	5.2	12.5
Michigan*	53.6	32.5	5.0	8.9
Minnesota*	48.7	32.6	8.5	10.2
Mississippi	36.5	36.2	8.8	18.5
Missouri*	43.1	34.2	9.5	13.2
Montana†	33.8	44.0	8.7	13.6
Nebraska*	40.4	34.9	13.4	11.4
Nevada*	49.0	31.0	4.5	15.6
New Hampshire*	53.4	30.5	6.5	9.6
New Jersey*	47.8	29.9	5.6	16.8
New Mexico†	25.6	44.3	7.8	22.3
New York	39.0	38.3	5.7	17.0
North Carolina*	42.9	34.1	7.1	16.0
North Dakota*	42.7	35.6	11.9	9.8
Ohio*	50.8	32.4	5.3	11.5
Oklahoma†	34.2	42.1	6.7	17.0
Oregon*	45.2	32.5	7.0	15.3
Pennsylvania*	49.3	33.8	7.5	9.5
Rhode Island*	48.0	36.7	5.4	9.9
South Carolina*	40.4	32.9	9.6	17.1
South Dakota	40.2	39.1	11.3	9.5
Tennessee†	33.8	43.2	7.8	15.2
Texas*	38.8	30.0	6.9	24.3
Utah*	47.5	32.5	7.9	12.0
Vermont*	45.0	35.2	8.7	11.1
Virginia*	42.7	37.2	7.6	12.5
Washington*	42.0	36.1	8.4	13.5
West Virginia	38.1	42.3	4.7	14.9
Wisconsin*	53.8	31.3	6.5	8.4
Wyoming	39.5	41.2	6.0	13.4

*The rate of private employer-provided insurance was significantly higher than that of government insurance (P<0.10).

†The rate of government insurance was significantly higher than that of private employer-provided insurance (P<0.10).

to 28.7 percent) in New Mexico to a high of 53.8 percent (90 percent confidence interval, 50.2 to 57.4 percent) in Wisconsin. Similarly, government health insurance coverage varied from 25.2 percent (90 percent confidence interval, 22.0 to 28.3 percent) in Indiana to 51.7 percent (90 percent confidence interval, 47.8 to 55.6 percent) in Alaska. In 5 states and the District of Columbia, the rates of government-provided coverage significantly exceeded those of private employer-paid coverage, and in 10 states the two rates were not significantly different from each other. In only six states was more than half the population covered by private employer-paid health insurance.

DISCUSSION

Prior estimates of health insurance coverage have led to the view that employers in the private sector provide and pay for most people's health care. Yet we found that although over 70 percent of the U.S. population was covered by private insurance in 1996, only 43 percent had health insurance paid for by private-sector employers as their primary coverage; 34 percent of the population received insurance that was provided or purchased by the government, 16 percent were uninsured, and 7 percent purchased their own health insurance. The groups most likely to have private employer-paid insurance included males, nonelderly adults, and non-Hispanic whites. Although both blacks and Hispanics were much less likely to receive private employer-paid coverage than non-Hispanic whites, the proportion of Hispanics without insurance was particularly high because of their low levels of traditional government coverage and lower participation in the government work force.

Our finding that the role of private business in providing health insurance is not as extensive as commonly assumed is consistent with national data on health expenditures. Of the \$950 billion spent on health care in 1994, private business paid for about 21 percent of expenditures, government paid for 47 percent (including health expenditures on behalf of government employees, as well as Medicare, Medicaid, and other public programs), and consumers paid directly for about 26 percent (including private insurance premiums and out-of-pocket costs), with the rest coming from nonpatient revenues (philanthropic sources and other sources, such as gift shops).⁹ Although employers contribute to the Medicare Hospital Insurance Trust Fund, their contributions accounted for less than 25 percent of Medicare expenditures in 1994⁸ and were dwarfed by tax subsidies for employer-provided health insurance, currently estimated at about \$100 billion a year.¹⁰

Previous studies of employer-provided health insurance have highlighted declining rates of coverage.¹¹⁻¹⁴ From 1980 to 1995, levels of private insurance coverage dropped by 9 percentage points.¹⁴ Most studies

attribute this decrease to a shift of workers to service industries that often do not provide insurance coverage, a decline in unionization, and the increased use of part-time workers. Rising health care costs have also caused some employers who provided insurance either to drop coverage altogether or, more commonly, to increase employees' contributions,^{14,15} which in turn has resulted in many low-wage workers' declining coverage.¹⁶ Analysts have also highlighted other problems of employer-provided health insurance, including the regressive nature of premiums and the disruption of continuity of care resulting from changes in the health plan offered by the employer or changes in jobs.^{3,17} In addition, employers' decisions about health care may be driven more by concern about cost than by the best interests of their employees.³

Certain caveats apply to our study. We classified people who were simultaneously covered by traditional government insurance and by private-sector employers as having government insurance. Over half of these were Medicare beneficiaries, for whom Medicare is the primary payer.¹⁸ Among the 8 million people with Medicaid or military-associated insurance who also received private insurance during 1996, the relative contributions of each type of insurance may have varied. We also considered workers whose employer contributed nothing to their insurance premiums as having purchased their own insurance. About 5 million such people had insurance through large employers. Although these employers made no financial contribution toward health insurance premiums, they may have negotiated for lower premiums and more generous benefits than their employees would have obtained had they purchased coverage individually from insurance companies.

Whereas these assumptions may have led us to understate private employers' role in health insurance, we made several assumptions that tended to overstate their role. First, we assigned all 4.4 million dependents receiving coverage through an out-of-household policyholder to the category of persons covered by private employer-paid insurance. Second, because the Current Population Survey uses data reported by those surveyed, our estimates of Medicaid and Medicare coverage are lower than enrollment data from the Health Care Financing Administration (HCFA); some people who are enrolled in these programs may be unaware of their coverage.² In 1995, for example, HCFA reported that there were 37.3 million Medicare enrollees and 36.2 million Medicaid enrollees,¹⁹ whereas the Current Population Survey reported 34.7 million Medicare recipients and 31.9 million Medicaid recipients.²⁰ Finally, because the Current Population Survey does not ask respondents whose employers pay only part of their premiums how much the employers pay, we classified persons as receiving employer-paid insurance if the employer

made any contribution whatsoever. On average, however, employees themselves paid for about 20 to 30 percent of health insurance premiums in 1996.¹⁵

Other limitations of the Current Population Survey should also be highlighted. Although respondents are asked about their coverage during the entire previous year, their responses may actually reflect coverage at the time the survey was made.^{21,22} As with all surveys, sampling and nonsampling errors occur in the Current Population Survey. Nonsampling errors (e.g., the inability of respondents to recall information accurately, difficulties with definitions, and errors in data collection and processing) are harder to estimate.⁸

In conclusion, less than half the population receives their principal health insurance coverage through private employers. The majority of people in the United States receive insurance provided or purchased by the government, pay for their own insurance, or are uninsured. Current methods of classifying health insurance overemphasize the role of private employers and may have encouraged the government to cede to private firms an inappropriately large role in decision making about health care. Accordingly, debates on the future of our health care system (and tabulations by the Census Bureau and AHCPR) should more accurately reflect the relatively limited role of private employers in providing health insurance coverage.

Supported in part by a General Medicine Research Fellowship (Health Services and Resource Administration grant 2D28 PE50018-04, to Dr. Carrasquillo).

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