Health Insurance Disparities in Traditional and Contingent/Alternative Employment

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Relative to whites, Hispanics and blacks are less likely to have employer health insurance coverage. We examine whether ethnicity or race affects employment in traditional jobs or in contingent and alternative work arrangements, and whether ethnicity or race affects insurance offer, eligibility, and/or enrollment, conditional on employment sector. Health insurance disparities relative to whites are more pronounced for Hispanics, primarily due to disparities in employment by firms that offer coverage. Eliminating racial/ethnic disparities in offers, eligibility, and takeup would increase insurance coverage rates of Hispanics in traditional jobs and of both Hispanics and blacks in contingent and alternative jobs.

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JEL classification: I10, J32, J70

1. Introduction

Ethnic and racial differences in life expectancy and health status are pervasive and stark. As of 2000, the life expectancy of white males is 6.6 years longer than that of black males, and the life expectancy of white females is 4.9 years longer than that of black females.[1] While heart disease is the leading cause of death, rates of death from heart disease are about 30 percent higher among blacks compared to whites (U.S. Department of Health and Human Services, 2002). Similarly, disparities in the prevalence of diabetes are astounding, with prevalence rates 70 percent higher than whites for blacks and almost 100 percent higher for Hispanics (U.S. Department of Health and Human Services, 2002).

Health researchers have been increasingly concerned about identifying the underlying causes of such disparities in health status by ethnicity and race. One key factor, health

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insurance status, influences health care access and eventually health status (Levy and Meltzer, 2004; Zuvekas and Taliaferro, 2003; Institute of Medicine, 2002a). Estimates indicate that one-fourth to one-half of racial differences in health care utilization is explained by racial differences in income and insurance (Weinick, Zuvekas and Cohen, 2000) and utilization in part explains reported racial disparities in health (Institute of Medicine, 2002b). Levy and Meltzer (2004) also note that the magnitude of the influence of health insurance on health varies across population groups, with economically vulnerable populations experiencing relatively greater health improvements from health insurance coverage.

Most of those with health insurance receive coverage through employment. Using a variety of national data sources, it is widely documented that nonwhite workers are less likely than are white workers to have health insurance through their employer.[2] But nothing is known about the importance of employment in contingent or alternative arrangements in explaining the disparity in coverage. Contingent workers are employed in jobs not expected to last for non-personal reasons, and alternative work arrangements include workers paid by temporary agencies, independent contractors, contract company employees, and on-call or day laborers.[3] The likelihood that employer health insurance is offered varies by employment sector, with health insurance less likely to be offered to workers in contingent and alternative work arrangements. Hispanic and black workers have lower earnings than white workers. Characteristics that contribute to lower earnings, such as less-stable jobs, shorter tenure with employer, and lower education may also contribute to the insurance gap because of differences in eligibility as well as differences in decisions to accept available health coverage. Whether there is a link between ethnicity or race, employment sector, and insurance coverage by employers is unknown and a gap we fill with this study.

To examine the importance of contingent and alternative employment in explaining the ethnicity and race gap in insurance coverage, we use data from the four waves of the Current Population Survey Contingent Work Supplement (CWS) on workers who are Hispanic, black, or white. These surveys provide data on insurance coverage for all wage and salary workers, and also identify whether a worker is in a contingent or alternative work arrangement. Although workers in contingent or alternative arrangements and nonwhite workers are a minority of the labor force, they are overrepresented among the uninsured. Using the CWS, we calculate that although Hispanic and black workers comprise 18 percent of the sample, 33 percent of those without insurance from any source are Hispanic or black. Furthermore, although only 6.6 percent of the sample is employed in contingent or alternative arrangements, 15.5 percent of those without insurance from any source are employed in such jobs. The large number of observations on these workers in the Current Population Survey allows us to examine the health insurance status of workers in contingent or alternative arrangements by ethnicity and race.

Notwithstanding the importance of understanding the health insurance experience of a workforce for whom we have no knowledge, exploring ethnic and racial disparities in insurance coverage for workers in contingent or alternative arrangements is also important

because it sheds light on trends in uninsurance if workers transition during recessions from employment in traditional jobs to those in nontraditional settings. Contingent and alternative work arrangements fluctuate with the economy. Our calculations using the CWS show that the share of the workforce in contingent and alternative jobs was 7 percent in 1995 when the unemployment rate was 5.6 percent, dropping to 6.3 percent in 1999 when the unemployment rate was 4.2 percent. The relation between employment in contingent and alternative arrangements and unemployment suggests that such employment may increase with higher levels of unemployment.

After presenting statistics on insurance coverage status, we examine whether Hispanic and black workers have lower coverage rates due to disproportionate employment in contingent or alternative work arrangements. To explore disparities in coverage we turn to regression analysis and, after controlling for characteristics that might explain differences in coverage, explore whether unexplained differences or disparities in coverage exist. Within each employment sector, disparities in coverage may occur at any of three stages: firm offers of coverage, employee eligibility, and/or employee enrollment. We examine each of these links in the health insurance coverage process to identify the source of the coverage disparity, controlling for type of employment. Identifying the stage that generates disparities is fundamental for designing appropriate health policy interventions.

To briefly summarize our key findings, health insurance disparities relative to whites are more pronounced for Hispanics than for blacks. After controlling for characteristics that influence whether a worker is employed in the traditional sector instead of in a contingent or alternative arrangement, Hispanic and black workers are only slightly less likely than white workers to be employed in traditional jobs. Thus stratification by sector is not an important determinant of insurance coverage disparities by ethnicity or race. Most of the disparity between Hispanic and white workers is due to a difference in whether a worker is employed by a firm that offers insurance coverage. Hispanic workers are less likely to work for a firm that offers health insurance than are comparable white workers whether employed in traditional jobs or in a contingent or alternative arrangement, with the adjusted disparity about 9 percentage points in traditional jobs and about 13 percentage points in contingent and alternative arrangements. But conditional on working for a firm that offers coverage, Hispanic workers are more likely than white workers to be eligible for coverage and are just as likely to take up coverage.

Black workers in contingent and alternative arrangements are 5.5 percentage points less likely than white workers to work for a firm offering health insurance, but are slightly more likely than white workers to work for a firm offering insurance if employed in the traditional sector. In the traditional sector, black workers are slightly more likely to be eligible than are comparable white workers and are just as likely to take up coverage. Blacks in contingent and alternative arrangements do not differ from whites in the probability of eligibility but are somewhat less likely to take up coverage.

Eliminating ethnic and racial disparities in offers, eligibility, and takeup would increase insurance coverage rates of Hispanics in traditional jobs and of both Hispanics and blacks in contingent and alternative jobs.

2. Data Source and Descriptive Statistics

To analyze the relation between ethnicity or race and employer-provided health insurance outcomes, we use data from the Contingent Work Supplement (CWS) to the Current Population Survey (CPS). This supplement was administered in February 1995, February 1997, February 1999, and February 2001, but was discontinued for budgetary reasons after the February 2001 wave. In addition to the information available in the monthly CPS, this supplement provides information on health insurance coverage and source of coverage. A particular advantage of this data source is that it identifies workers who are employed in contingent or alternative work arrangements. This information is not generally reported in data sets such as the monthly CPS. But we also note that the CPS has fairly limited information on individual characteristics that may explain preferences for employment in jobs offering health insurance or for the decision to enroll in offered plans.

The CWS records whether workers are employed in any of these alternative arrangements: independent contractor, consultant, or freelancer; paid by a temporary agency; contract company worker; or on-call or day laborer. In addition, the CWS characterizes workers as contingent if they hold jobs that are temporary or not expected to last for non-personal reasons.[4] Self-employed workers are not asked whether they receive health insurance from employment and are therefore excluded from the analyses. We define traditional workers as those who are not in a contingent or alternative work arrangement.

We examine health insurance status and determinants of coverage of three groups of workers: Hispanic origin, non-Hispanic blacks, and non-Hispanic whites.[5] Employed respondents report whether they are covered by health insurance. Those who are insured are asked to report the source of coverage, such as employer, own purchase, spouse, and so forth. Wage and salary workers not covered by their employer's plan are asked if health insurance is offered to any of their employer's workers, and if offered to any workers, whether the individual is eligible for coverage under their employer's plan. We present analyses of these three outcomes: employer offer to any of its employees, eligibility conditional on employment by a firm that offers health insurance,[6] and employee enrollment (takeup) conditional on eligibility. A worker therefore has coverage from their employer if three conditions are met: the worker is employed by a firm that offers coverage to any of its employees, the worker is eligible for coverage, and the worker chooses to accept coverage.

We analyze the sample of employed individuals, who are of Hispanic origin, non-Hispanic black, or non-Hispanic white, not self-employed, age 20–64, who responded to the February CPS CWS in any of the years 1995, 1997, 1999, and 2001. We exclude respondents with missing information on the key insurance measures. Specifically, those who did not report whether they had insurance from any source are excluded. Those who did not report whether they received health insurance through employment are also excluded, as are those who report that they do not receive insurance through employment but do not respond to the question of whether the employer offers insurance to any of its employees. Finally, we exclude those who report that they work for an employer that offers coverage and are

not covered by their employer but do not report whether they would be eligible. Individuals under age 20 are excluded from the sample in order to focus on those who are not covered under their parents' health insurance, and those over 64 are excluded as they are eligible for Medicare. Appendix A reports the number of observations affected by each restriction.

The resulting sample is composed of 147,060 observations. Of these, 12,329 respondents are Hispanic, 13,694 are non-Hispanic black, and 121,037 are non-Hispanic white. In the analyses of insurance coverage we control for age, education, sex, marital status, full-time hours, and family income.[7] All sample means and regression estimates are weighted by the CPS supplement sample weight.

Table 1 provides descriptive statistics by ethnicity and race on health insurance coverage, work arrangements, and individual characteristics. Starting with overall coverage rates reported in the first row of Panel A of Table 1, there are stark differences in health insurance coverage rates by group. Of employed whites, 89 percent have health insurance. The coverage rate among blacks is lower at 82 percent, but is still far in excess of the rate for Hispanics of 67 percent. As the following three rows indicate, these gaps in coverage may be due to differences in employment in a firm that offers coverage, in eligibility, or in takeup. White workers are most likely to work for an employer who offers health insurance and to be eligible for coverage. Except for the probability of health insurance coverage from any source, the insurance status rates for blacks are generally close to that of whites, with any differences within 2 percentage points. The corresponding rates for Hispanic workers are 14 to 22 percentage points below that of white workers.

The differences in the likelihood of spousal coverage among workers without coverage from their own employer are considerable. As indicated in the fifth row of Table 1, nearly half of the white workers who lack coverage from their employer are covered by their spouses' health insurance policies. In contrast, of workers without employer coverage, only 19 percent of Hispanic workers and 26 percent of black workers are covered by their spouses' health insurance.

Also noteworthy is the similarity in work arrangement across ethnicity and race, with 93 to 94 percent of workers of each ethnicity or race employed in traditional jobs. Whites are slightly more likely to be in traditional jobs and correspondingly less likely to be in contingent or alternative work arrangements. The demographic information in Table 1 shows that Hispanics are younger and have less formal education than do black and white workers, with the average age and years of education for blacks between that of Hispanics and whites. Blacks are the least likely to be married or male. The lower marriage rates among blacks accounts in part for the racial difference in coverage by a spouse. White workers are in families with considerably higher family income than are Hispanic and black workers.

Despite the similarity of employment arrangement among workers of different ethnicity and race, as Panel B shows, it is clear that whether a worker has employer health insurance coverage differs considerably by employment sector as well as by ethnicity and to a lesser extent by race. Workers in traditional jobs have the highest coverage rates, with employer coverage rates among workers in contingent and alternative arrangements

about one-third of that of traditional workers. The coverage rate is the product of the probability of the offer, probability of eligibility, and probability of takeup. Within every type of employment arrangement, Hispanics are less likely to have insurance coverage. Among traditional workers, the coverage rates range from a low of 58 percent for Hispanics, to 71–72 percent for blacks and whites. Coverage rates in contingent and alternative

Table 1. Sample characteristics by ethnicity, race, and employment sector.

	Hispanic	Black	White	Significant differences[b]
Panel A: Mean or percent (Standard deviation)				
Has health insurance from any source	67.21	81.97	89.37	a, b, c
	(46.95)	(38.45)	(30.82)	
Employer offers health insurance	70.79	85.80	87.65	a, b, c
	(45.47)	(34.91)	(32.90)	
Eligible for coverage	64.73	79.09	80.32	a, b, c
	(47.78)	(40.67)	(39.76)	
Has health insurance from employer	55.09	68.83	68.72	a, c
	(49.74)	(46.32)	(46.37)	
Has health insurance from spouse if not covered by employer[a]	18.65	26.34	49.60	a, b, c
	(38.95)	(44.06)	(50.00)	
Traditional	92.02	92.75	93.69	b, c
	(27.09)	(25.94)	(24.31)	
Contingent or alternative arrangement	7.98	7.25	6.31	b, c
	(27.09)	(25.94)	(24.31)	
Age	36.17	38.05	39.46	a, b, c
	(10.62)	(10.63)	(11.09)	
Education	11.32	12.99	13.68	a, b, c
	(3.54)	(2.06)	(2.27)	
Male	58.28	45.95	52.02	a, b, c
	(49.31)	(49.84)	(49.96)	
Married	61.56	44.97	64.38	a, b, c
	(48.65)	(49.75)	(47.89)	
Full-time	84.95	85.12	82.75	b, c
	(35.76)	(35.59)	(37.78)	
Real family income ($1000)	38.53	39.85	53.93	a, b, c
	(23.47)	(23.76)	(24.61)	
Number of observations	12,329	13,694	121,037	
Panel B: Percent with health insurance coverage from employer by employment sector				
Traditional	58.06	72.18	71.18	a, c
	(49.35)	(44.81)	(45.29)	
Contingent or alternative arrangement	20.86	25.92	32.05	a, b, c
	(40.65)	(43.85)	(46.67)	

(*Continued on next page.*)

Table 1. (*Continued*).

	Hispanic	Black	White
Panel C: Insurance status if not covered by employer			
Traditional			
No insurance	72.59	57.08	33.34
Coverage by spouse or family member	19.29	27.47	51.29
Other source of coverage	8.12	15.44	15.37
Number of observations	4,792	3,496	33,237
Contingent or alternative arrangement			
No insurance	75.67	61.54	38.02
Coverage by spouse or family member	14.73	20.91	38.93
Other source of coverage	9.60	17.55	23.05
Number of observations	758	729	5,338

Data source: Current Population Survey, February Contingent Work Supplement, 1995, 1997, 1999, 2001. The sample is composed of employed individuals age 20–64, not self-employed, without missing data on health insurance status. All values are weighted by CPS survey supplement weights.
[a]The number of observations in the row for "Has health insurance from spouse if not covered by employer" is 5,550 for Hispanic, 4,225 for black, and 38,575 for white.
[b]Differences in means tested using Bonferroni multiple comparison test. Significant differences in means at the 5% level where

a—compares Hispanics to Blacks
b—compares Blacks to Whites
c—compares Hispanics to Whites

employment are very low, ranging from 21 percent for Hispanic workers to 32 percent for white workers.

Panel C provides additional information on health insurance coverage status of those who are not covered by their employer. Workers without insurance from their employer may be insured by sources in addition to a spouse or family member, such as by own purchase or coverage from a previous job. Panel C shows that regardless of employment sector, over 70 percent of Hispanic workers and over 57 percent of black workers who are not covered by their employer are not covered by any source, while only about one-third of white workers lack coverage from any source.

3. Racial and Ethnic Differences in Coverage

To examine the effect of employment arrangement on health insurance coverage and whether ethnicity or race affects health insurance outcomes, we estimate equations of the following form, where j denotes employment sector, either traditional or contingent/alternative arrangement:

Table 2. Health insurance status by decision stage and ethnicity, race, and employment sector.

Decision	Hispanic	Black	White
Traditional	0.92	0.93	0.94
Contingent/Alternative	0.08	0.07	0.06
Offer if traditional	0.73	0.88	0.89
Offer if contingent/alternative	0.40	0.56	0.69
Eligible if offer, traditional	0.92	0.93	0.93
Eligible if offer, contingent/alternative	0.70	0.66	0.64
Enrollment if eligible, traditional	0.86	0.88	0.86
Enrollment if eligible, contingent/alternative	0.74	0.69	0.73
Covered by employer, traditional	0.58	0.72	0.71
Covered by employer, contingent/ alternative	0.21	0.26	0.32

Data source: Current Population Survey, February Contingent Work Supplement, 1995, 1997, 1999, 2001. The sample is composed of employed individuals age 20–64, not self-employed, without missing data on health insurance status. All values are weighted by CPS survey supplement weights.

(1) Prob (Employment sector $= j) = f(X,$ ethnicity, race)
(2) Prob (Offer |Employment sector $= j) = g_1(Z,$ ethnicity, race)
(3) Prob (Eligible |Employment sector $= j,$ Offer) $= g_2(Z,$ ethnicity, race)
(4) Prob (Takeup |Employment sector $= j,$ Eligible) $= g_3(Z,$ ethnicity, race).

Table 2 reports the unadjusted probabilities associated with each of these stages and provides a basis of comparison to the regression results that control for individual characteristics. The bottom two rows of Table 2 repeat the information reported in Panel B of Table 1 and indicate the overall employer insurance coverage differences that we seek to explain. Note again that black and white workers in traditional employment have similar employer coverage rates of 71–72 percent, while the employer coverage rate of Hispanic workers in traditional employment is 13–14 percentage points lower. Among workers in contingent or alternative jobs, the coverage rate for Hispanics is 11 percentage points below whites, and the coverage rate for blacks is 6 percentage points lower than whites. The largest differences by ethnicity and race appear in the probability of employment in a firm offering health insurance and in takeup among workers in contingent and alternative jobs. Thus, if Hispanic workers were as likely as white workers to be employed by a firm offering insurance (i.e., their offer probability was 0.89 rather than 0.73), their coverage rate by employer would be 70 percent in traditional jobs and 36 percent in contingent and alternative jobs, holding everything else constant.[8]

As Table 1 demonstrates, individual characteristics vary considerably by ethnicity and race, with nonwhites younger and with less education and lower income relative to whites. Thus some of the differences in coverage may derive from differences in individual characteristics. The following regressions control for individual characteristics in order to

determine what share is due to observable characteristics and what share is an unexplained ethnic or racial disparity.

Because traditional employment is associated with a higher probability of health insurance coverage, workers who value health insurance may be more likely to choose to work in traditional jobs, so the error terms in the employment sector and insurance equations may be correlated. We begin by estimating Eqs. (1) and (2) using bivariate probit to allow for correlation between the error terms in each equation.[9] But because our primary interest is in examining whether there is differential treatment on the basis of ethnicity or race conditional on employment sector, we estimate Eqs. (2)–(4) stratifying by employment sector. For ease of interpretation, we present linear probability estimates for Eqs. (1)–(4).

Each of the insurance coverage equations includes indicator variables for Hispanic and black and controls for age, age squared, education, sex, marital status, the interaction of sex and marital status, full-time hours, and family income.[10] The traditional employment equation excludes family income, which is likely to be endogenous with respect to employment sector, and adds controls for survey year and state of residence. State and year indicator variables control for all state- and time-specific factors, such as state unemployment levels, which influence the probability that a worker is employed in a traditional job. The bivariate probit estimates of traditional employment—offer yield an estimate of the correlation between the error terms (rho) of −0.02, p-value $= 0.69$, so we cannot reject the hypothesis that the error terms in the employment sector and offer equations are not correlated, and that single equation estimates are not biased. We report the bivariate probit results in Appendix B. This lack of correlation between the error terms in the employment sector and offer equations lends support to the validity of the single equation estimates and correspondingly yields similar coefficient estimates to those in the single equation estimates. For this reason, we discuss the single equation estimates which we report in Tables 3–5. Column 1 of Table 3 presents the single equation estimates of employment sector choice. Columns 2 and 3 of Table 3 present the offer equation estimates stratified by sector.

Starting with the estimates for the probability of traditional employment reported in column 1 of Table 3, the results indicate that relative to whites, both Hispanics and blacks are less likely to be employed in traditional jobs. However, the magnitude of the disparity between whites and nonwhites is quite small, consistent with the small difference in the unadjusted means. Thus there is little evidence that whites and nonwhites are treated differently with respect to choice of employment sector, whether or not we control for individual characteristics.

Turning to the offer equations reported in columns 2 and 3, perhaps the most surprising finding is that blacks employed in traditional jobs are actually 2 percentage points on average more likely than whites to work for a firm that offers insurance. But blacks employed in contingent and alternative jobs are 5.5 percentage points less likely than whites to work for a firm that offers health insurance. Regardless of sector, Hispanics are considerably less likely than whites to work for a firm that offers health insurance. Relative to whites, Hispanics are 9.2 percentage points less likely to be employed in a firm offering health insurance in traditional jobs and 13.2 percentage points in contingent and alternative jobs.

Table 3. Selection into traditional employment and health insurance offer by employment sector.[a,b]

	(1) Traditional employment outcome	(2) Offer-traditional	(3) Offer-contingent/ alternative
Age	0.008** (0.0004)	0.008** (0.001)	0.002 (0.003)
Age Squared/100	−0.009** (0.001)	−0.008** (0.001)	−0.004 (0.003)
Education	−0.001** (0.0003)	0.017** (0.0004)	0.038** (0.002)
Male	−0.008** (0.002)	−0.029** (0.003)	−0.031* (0.013)
Married	0.007** (0.002)	−0.033* (0.003)	−0.004 (0.014)
Married × male	0.018** (0.003)	0.047** (0.004)	0.070** (0.018)
Full time		0.153** (0.002)	0.039** (0.010)
Real family income ($1000)		0.002** (0.00004)	0.002** (0.0002)
Family income missing		0.070** (0.004)	0.057** (0.020)
Hispanic	−0.008** (0.002)	−0.092** (0.003)	−0.132** (0.015)
Black	−0.010** (0.002)	0.020** (0.003)	−0.055** (0.014)
Constant	0.787** (0.013)	0.284** (0.012)	0.019 (0.054)
Adjusted *R*-squared	0.01	0.10	0.12
Number of observations	147,060	137,305	9,755

[a]Table reports linear probability coefficient with standard errors in parentheses. **(*) indicate significance at the 1% (5%) level. Weighted by CPS survey supplement weights.
[b]Coefficients not shown for state and survey year indicator variables included in the traditional employment equation.

Table 4 presents estimates of eligibility conditional on employment in a firm offering health insurance. As, this table indicates, regardless of sector, if employed in a firm that offers health insurance, Hispanics and blacks are more likely than whites to be eligible for coverage. Among traditional workers and for blacks in contingent and alternative jobs, the effect is fairly small, with Hispanic and black workers only 1 to 2.1 percentage points more likely to be eligible for coverage than white workers. Hispanic workers in contingent and alternative jobs are substantially more likely to be eligible for coverage than are white workers, with Hispanic workers 6.8 percentage points more likely to be eligible than white

Table 4. Eligibility for employer health insurance by employment sector.[a]

	(1) Traditional	(2) Contingent/Alternative
Age	0.015**	0.030**
	(0.0005)	(0.003)
Age Squared/100	−0.016**	−0.035**
	(0.001)	(0.004)
Education	0.003**	0.007**
	(0.0003)	(0.002)
Male	0.002	0.058**
	(0.002)	(0.017)
Married	−0.010**	−0.082**
	(0.002)	(0.017)
Married × male	0.026**	0.148**
	(0.003)	(0.022)
Full time	0.230**	0.267**
	(0.002)	(0.012)
Real family income ($1000)	0.001**	0.001**
	(0.00003)	(0.0002)
Family income missing	0.047**	0.104**
	(0.003)	(0.026)
Hispanic	0.010**	0.068**
	(0.003)	(0.021)
Black	0.016**	0.021
	(0.002)	(0.018)
Constant	0.315**	−0.319**
	(0.010)	(0.067)
Adjusted *R*-squared	0.13	0.16
Number of observations	119,871	6,329

[a]Conditional on employment in firm offering health insurance. Table reports linear probability coefficient with standard errors in parentheses. **(*) indicate significance at the 1% (5%) level. Weighted by CPS survey supplement weights.

workers. This is a surprising finding. Eligibility largely relates to tenure with a firm, hours worked, and absence of preexisting conditions. These results suggest that within contingent and alternative jobs, Hispanics are doing better along these lines than are whites.

Table 5 presents estimates of takeup probabilities conditional on eligibility for coverage from the employer. With the exception of blacks in contingent and alternative arrangements, ethnicity and race have only a small and insignificant effect on takeup. However, in contingent and alternative arrangements, blacks are 5.3 percentage points less likely to take up insurance relative to whites.

To summarize the effect of controlling for worker characteristics on the measured coverage gap, Table 6 reports offer, eligibility, and takeup rates, by ethnicity/ race and sector, as well as the unadjusted gap and the regression-adjusted gap. The figures reported in columns

Table 5. Enrollment in employer health insurance.[a]

	(1) Traditional	(2) Contingent/Alternative
Age	0.008** (0.001)	0.017** (0.004)
Age Squared/100	−0.008** (0.001)	−0.019** (0.005)
Education	0.008** (0.0005)	0.015** (0.003)
Male	0.012** (0.003)	0.020 (0.021)
Married	−0.176** (0.003)	−0.219** (0.022)
Married x male	0.124** (0.004)	0.200** (0.028)
Full time	0.164** (0.003)	0.130** (0.017)
Real family income ($1000)	−0.00001 (0.0001)	−0.0002 (0.0003)
Family income missing	0.031** (0.005)	−0.002 (0.032)
Hispanic	0.007 (0.004)	0.038 (0.025)
Black	0.004 (0.003)	−0.053* (0.022)
Constant	0.472** (0.015)	0.089 (0.088)
Adjusted *R*-squared	0.07	0.07
Number of observations	111,517	4,051

[a]Conditional on eligibility for employer-offered health insurance. Table reports linear probability coefficient with standard errors in parentheses. **(*) indicate significance at the 1% (5%) level. Weighted by CPS survey supplement weights.

5 and 7 of Table 6 are the regression coefficients for race/ethnicity from Tables 3–5 and reflect disparities in offer, eligibility, and takeup rates.

Starting with offer rates, it is clear that part of the Hispanic—white disparity arises from differences in characteristics, although a substantial disparity remains after adjusting for characteristics. The unadjusted offer gap of 16 percentage points in traditional jobs is reduced by one-third with controls for age, education, sex, marital status, full-time hours, and family income. The unadjusted offer gap of 29 percentage points in contingent and alternative jobs is reduced by over a half with adjustment for demographic characteristics and a control for full-time work. The small black—white difference in offers in traditional jobs becomes a small black advantage after controlling for characteristics, while the black—white gap in contingent and alternative jobs is cut by half.

Table 6. Summary of health insurance coverage rates and disparities.[a]

Sector	Hispanic (1)	Black (2)	White (3)	Hispanic-White difference (4)	Adjusted Hispanic-White difference (5)	Black-White difference (6)	Adjusted Black-White difference (7)
A. Offer rates: Fraction working for firm offering employer-provided health insurance to some employees, by race/ethnicity and job sector.							
Traditional	0.734	0.881	0.889	−0.155**	−0.092**	−0.008**	0.020**
Contingent/Alternative	0.404	0.565	0.690	−0.286**	−0.132**	−0.125**	−0.055**
B. Eligibility rates: Fraction eligible for employer-provided health insurance given employment in firm offering insurance to some employees, by race/ethnicity and job sector.							
Traditional	0.925	0.935	0.931	−0.006*	0.010**	0.004	0.016**
Contingent/Alternative	0.701	0.661	0.640	0.062**	0.068**	0.021	0.021
C. Takeup rates: Fraction accepting employer-provided health insurance given eligibility, by race/ethnicity and job sector.							
Traditional	0.855	0.876	0.860	−0.005	0.007	0.016**	0.004
Contingent/Alternative	0.736	0.694	0.726	0.010	0.038	−0.032	−0.053*

[a]Adjusted differences in columns 5and 7 are coefficients on indicator variables for Hispanic and black in an OLS regression controlling for age, age squared, education, sex, marital status, the interaction of sex and marital status, full time, and family income. ** (*) indicates significance at the 1% (5%) level. Weighted by CPS survey supplement weights.

The smaller and often insignificant differences in eligibility and takeup rates indicated in panels B and C of Table 6 demonstrate that the greatest source of disparity arises from differences in whether an employer offers health insurance rather than in disparities in eligibility or takeup. Indeed, Hispanics and blacks are more likely to be eligible for coverage in contingent and alternative jobs than whites and, except for blacks in contingent and alternative jobs, are equally or more likely to accept coverage.

To see the importance of the unexplained disparities in offer, eligibility, and takeup in determining coverage rates, we calculate what coverage rates would be in each sector if Hispanics and blacks were treated as whites. For example, as reported in Table 2, the proportion of whites in traditional employment working for firms offering insurance is 0.889. The corresponding proportion of Hispanics is .734, or a gap of 0.155 percentage points. Of this gap, 0.092 is not explained by differences in characteristics and represents the ethnic disparity in offers. Adding this 0.092 to the Hispanic rate of 0.734 indicates that Hispanics would have an offer rate of 0.826 in traditional employment if treated like whites. Performing the corresponding calculations to predict eligibility and takeup for Hispanics and blacks, and then to predict the employer insurance coverage rate, yields a coverage rate of 0.64 for Hispanics and 0.69 for blacks in traditional employment, and 0.25 for Hispanics and 0.31 for blacks in contingent and alternative employment. Thus coverage rates would be higher for Hispanics in both sectors if disparities between Hispanics and whites were

eliminated. with Hispanic Coverage rates about 10 percent higher in the traditional sector and about 20 percent higher in contingent and alternative arrangements. The coverage rate among blacks in contingent and alternative arrangements would increase by about 25 percent

4. Discussion

Hispanic and black workers are less likely to have health insurance coverage than white workers. They also have lower earnings than whites. While these two gaps may evoke images of dead end, low quality jobs among Hispanic and black workers, most workers regardless of ethnicity or race are employed in jobs in the traditional sector, and such jobs generally offer health insurance. Because firms must make health insurance available to all employees meeting certain hours and tenure requirements if offered to any employees, even low-paid Hispanic and black workers may be eligible for their firms' health insurance coverage. But given their lower pay, it is possible that Hispanics and blacks decline coverage more often than do higher paid white workers.

We examine three stages of the insurance coverage process, offer, eligibility, and enrollment, within traditional employment and employment in contingent and alternative arrangements, in order to identify the source of the health insurance coverage disparity. Employment in traditional jobs is a key factor influencing ethnic and racial differences in coverage. For Hispanic workers, much of the disparity in coverage derives from their lower likelihood of employment in a firm that offers health insurance within both traditional jobs and contingent or alternative jobs. But Hispanic workers are actually more likely to be eligible for coverage in both sectors, and are as likely to enroll for coverage for which they are eligible as are comparable white workers. Thus other factors that in part explain lower pay, such as lower tenure and less education, do not adversely affect eligibility or enrollment.

In contrast, black workers in traditional jobs are more likely than white workers to work for a firm that offers health insurance and to be eligible for such coverage, and have no disparity in takeup rates. But black workers in contingent and alternative jobs are less likely than white workers to be in firms offering coverage or to enroll in coverage for which they are eligible.

It is important to note that low own-employer coverage rates alone do not imply low health insurance coverage, because workers not insured by their own employer may obtain coverage through their spouse's policy. But Hispanics and blacks are less likely than white workers to have coverage through their spouses, because of lower marriage rates (among blacks) and because their spouses are less likely to have own coverage from employment. In our study sample, we found that among whites without own employer coverage, only one-third do not have coverage from another source. Among blacks not covered by their own employer, 57 percent in traditional jobs and 62 percent in contingent and alternative jobs do not have another source of coverage. Among Hispanics who are not covered by their own employer, 73 percent in traditional jobs and 76 percent in contingent and alternative jobs do not have coverage from any other source.

Hispanic and black workers are only slightly less likely to be employed in the traditional sector than are comparable white workers, so job sorting into sector is not an important component of the insurance coverage disparity. The bulk of the ethnicity and race disparity in heath insurance coverage occurs at the insurance offer stage and affects Hispanics in both sectors and blacks in contingent and alternative arrangements. Thus, public policy that addresses existing ethnic and racial differences in tenure with employers, preexisting conditions, or inadequate resources to pay for the rising costs of copayments may not contribute significantly to reducing disparities in health insurance coverage. Rather, the policy concern relates to devising remedies for ethnic or racial disparities in employment in firms that offer insurance. This is because the contingent and alternative sector employers who are most likely to hire Hispanic and black workers and the traditional employers who are most likely to hire Hispanic workers are also more likely to not offer health insurance. Thus, our findings suggest that ethnic and racial disparities in health insurance coverage could be narrowed by health policy initiatives that either provide opportunities for employers to have greater access to health insurance risk pools or expand buy-ins to Medicaid for workers whose employers do not offer insurance coverage.

Appendix A: Construction of Sample

	Net number affected	Number remaining
Initial sample		200,899
Self-employed	23,135	177,764
Missing "health insurance from any source?"	5,355	172,409
Missing whether received health insurance through employment	763	171,646
Missing whether employer offers health insurance to any of its employees	5,827	165,819
Missing whether eligible for health insurance	673	165,146
Age < 20 or age> 64	10,825	154,321
Not white, Hispanic, or Black	6,958	147,363
Missing whether in alternative arrangement	303	147,060

Notes:

Data source: Current Population Survey Contingent Work Supplement 1995, 1997, 1999, 2001. The initial sample is composed of interviewed adult civilian household members who responded to Contingent Work Supplement and were employed. Only employed respondents were asked whether they had health insurance from any source. Self-employed not asked whether they received health insurance through employment.

The Current Population Survey Contingent Work Supplement uses 3 definitions of contingent work, recoded from responses to survey questions. We include in the sample workers who meet the broadest definition, which is defined as "wage and salary workers whose jobs, for non personal reasons, are temporary or cannot last as long as they wish, plus self-employed persons and independent contractors who expect to be self-employed or act as an independent contractor for a year or less and have been self-employed or an independent contractor for a year or less." Note that because self-employed are not asked whether they receive health insurance through employment they are excluded from the sample.

Appendix B: Bivariate Probit Estimates of Employment Sector and Employer Offer[a]

	Traditional	Offer
Age	0.007**	0.007**
	(0.0005)	(0.001)
Age Squared/100	−0.008**	−0.007**
	(0.0006)	(0.001)
Education	−0.001**	0.018**
	(0.0003)	(0.0005)
Male	−0.007**	−0.027**
	(0.002)	(0.003)
Married	−0.006**	−0.033**
	(0.002)	(0.003)
Married × male	0.017**	0.051**
	(0.003)	(0.004)
Full time		0.132**
		(0.003)
Real family income ($1000)		0.002**
		(0.0001)
Family income missing		0.051**
		(0.003)
Hispanic	−0.008**	
	(0.003)	
Black	−0.010**	
	0.003)	
Hispanic × Contingent/Alternative		−0.326**
		(0.040)
Hispanic × Traditional		−0.066**
		(0.004)
Black × Contingent/Alternative		−0.245**
		(0.039)
Black × Traditional		0.019**
		(0.003)
White × Contingent/Alternative		−0.176**
		(0.032)
Rho	−0.018	
	(0.046)	
Log pseudolikelihood	−2.25e+12	
Number of observations		147,060

[a]Table reports marginal effects with standard errors in parentheses. **(*) indicate significance at the 1% (5%) level. Coefficients not shown for state and survey year indicator variables included in the traditional employment equation. Weighted by CPS survey supplement weights.

Notes

1. Specifically, the life expectancy at birth for white males and black males are 74.9 years and 68.3 years. For white and black females, life expectancy is 80.1 years and 75.2 years. Life expectancy is not reported separately for those of Hispanic origin, so those of Hispanic origin are included in these tables by their race. Source: Statistical Abstract of the United States: 2003, No. 107. Expectation of Life and Expected Deaths by Race, Sex, and Age: 2000.
2. See for example Angel and Angel (1996), Freeman et al. (1990), Hall, Collins and Glied, (1999), Institute of Medicine (2001), Schur and Feldman (2001), and Seccombe, Clarke and Coward (1994).
3. These are the terms and definitions used in the Current Population Survey Contingent Work Supplement analyzed in this paper.
4. The CPS provides three estimates of the number of contingent workers. The narrowest definition refers to wage and salary workers with less than one year of tenure who expect their jobs to last less than one additional year. The broadest definition counts as contingent any wage and salary worker who does not expect their job to last indefinitely, and includes self-employed and independent contractors with less than one year of work experience as self-employed or as an independent contractor who expect to be in this arrangement for less than an additional year.
5. For convenience we refer to our groups as Hispanic, black, and white. Those of Hispanic origin may be of any race, not limited to black or white, but because of small sample sizes, we restrict consideration to these 3 disjoint groups.
6. Some workers who report they are eligible for their employer's coverage respond to a follow-up question that they are not covered because they have a precluding pre-existing condition, have not worked for their employer long enough to be covered, or are not eligible because contract or temporary employees are not covered by the plan. We classify those workers reporting any of these reasons as not eligible. On the other hand, some workers report they are not eligible and give "too expensive" as the reason. We classify these workers as eligible.
7. Education is reported in the CPS in 16 categories that correspond either to number of years of completed schooling, a range such as "some college", or to degrees received. We assign number of years of education based on these categories using midpoints when ranges are provided. Family income is reported in 14 ranges from the lowest category of less than $5,000 to the top category of more than $75,000. We assign the midpoint of the range for the first 13 categories and assign $80,000 to those in the top category. Family income is converted to 2001 dollars using the CPI-U. Those missing information on family income are included in the regressions by assigning zero to those with missing values and including an indicator variable to denote missing information on family income. Family income is missing for about 10 percent of the observations. We exclude these from the calculation of the mean in Table 1, but include them in the regression analyses with an indicator variable to denote missing values.
8. These calculations are as follows. The employer coverage rate in traditional jobs is 0.73 times 0.92 times 0.86, which equals 0.58. Replacing the offer rate of 0.73 with 0.89 yields a projected coverage rate of 0.70.
9. The bivariate probit estimates reported in Appendix B include in the offer equation interaction terms for ethnicity and race with traditional or contingent/ alternative employment to allow the probability of working for a firm that offers health insurance to any of its employees to differ by sector as well as by ethnicity or race.
10. Because firms that offer health insurance to any employees must offer to all who meet certain eligibility requirements regardless of wages, endogeneity of family income with firm offer should not be an important concern. Estimates excluding family income yield coefficients on Hispanic and black similar to those reported in the tables. (Available on request.)

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