*Comparing Offers and Take-ups of Employee Health Insurance across Race, Gender, and Decade**

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How often do U.S. employees receive health insurance offers from employers? When offered, how often do they take up their employer-based health insurance? This article uses the 1992 and 2002 waves of the National Study of the Changing Workforce (NSCW) to investigate changes in access to (offers) and employees electing to accept, take, or purchase their employers' health insurance plans (take-ups) among wage and salaried workers. Although much research has studied employee health benefits, little has examined the intersection of gender and race regarding both offers and take-ups of such benefits. Logistic regression results indicate that offers and take-ups of personal health benefits declined from 1992 to 2002, net of salient controls. Further analyses demonstrate that these declines did not affect all workers identically. Offers declined somewhat for both women and men among whites and African Americans, but declined more among Hispanic women and men. Among other ethnoracial groups, offers declined the most among men, but increased among comparable women. Take-ups declined among white men and Hispanic workers. However, white and African American women's take-ups did not change and among African American men take-ups increased. We discuss the need to examine gender and race simultaneously and urge researchers to more closely examine changes in health benefit offers and take-ups.

Introduction

Healthcare coverage has been a persistent topic of debate in our national conversation as the population of uninsured Americans has grown steadily from the late 1980s to the late 1990s (Holahan and Kim 2000). The U.S. healthcare system has evolved over time into an employer-based model (Starr 1982), such that most Americans who have health insurance are covered through employer-provided health benefits, either through their own job or a family member's (Wiatrowski 1995). Indeed, health insurance coverage through an employer is the most common source of health benefits for workers (Fronstin 2001), and has been declining from the 1970s to the 1990s (Cooper and Schone 1997; Holahan and Kim 2000).

Importantly, not all workers who have health benefits available to them through their employers elect to take those benefits. This article distinguishes between offers (availability) of personal health benefits and take-ups (employees electing to accept, take, or purchase the plan offered by their employer) of

Sociological Inquiry, Vol. 77, No. 3, August 2007, 425–459

such benefits. Various factors may explain the gap between offers of health benefits and take-ups, including employees' out-of-pocket expenses, the quality of the benefit package, and whether the employee has health insurance through other sources. The affordability of health benefits for employees may be particularly important for workers in low-pay jobs or who are underemployed. Thus, we emphasize both offers and take-ups since offers of health benefits do not automatically translate into coverage for many workers. To be clear, we are not referring to employees' actual use of their health insurance nor are we referring to actual consumption of healthcare services. Rather, we use the term "take-up" to refer specifically to employees electing to participate in their employers' plans.

Previous research shows that workers' sociodemographic characteristics, such as gender and race, and their positions in the labor market relate to receipt of fringe benefits including health benefits (Cubbins 1998; Glass 1990; Seccombe and Amey 1995; Wiatrowski 1995). The distribution of health benefits across industries, occupations, and jobs has implications for workers' access and use of benefits. Since different groups of workers are unequally represented across sectors of the labor force, it is imperative to systematically consider the implications for workers' access to and use of employer-based plans. Specifically, it is important to examine gender and ethnoracial stratification in offers and take-ups of health benefits.

This study compares offers and take-ups of employer-provided health benefits from 1992 to 2002. First, we consider whether the likelihood of employers' offers of health benefits and employees' take-ups of such benefits changed from 1992 to 2002. Second, we examine differences in health benefit offers and take-ups by gender and race, without focusing on changes over time. Finally, we turn to our overarching research question to address whether differences in offers and take-ups between 1992 and 2002 varied according to workers' race and gender.

The time frame of this research encompasses both Democratic and Republican administrations. With these political forces and their accompanying economic policies in mind, we take a long-term look at changes in offers and take-ups of employee health benefits. Ample research demonstrates a gradual long-term decline in workers' health benefits coverage (Cubbins 1998), although one study showed that the coverage was relatively stable between 1994 and 1999 (Fronstin 2001). Nonetheless, the question remains whether the availability and use of health benefits is consistent across different groups of workers, particularly given the persistence of gender and ethnoracial segregation in the workplace (Padavic and Reskin 2002).

We make three important contributions to this area of research. First, we employ a nationally representative sample of wage and salaried workers. Second, the data set we use allows us to distinguish between *offers* and *take-ups*

of employer-provided health benefits, while most research focuses primarily on coverage without regard to differences in workers' access to health benefits. This distinction allows us to establish which workers are more and less likely to accept or purchase their employee health benefits once offered. Third, we closely examine the intersection of gender and race in predicting workers' eligibility for and acceptance of personal employee health benefits at two time points, paying particular attention to the situations of minority workers who have received uneven attention in previous research.

The issue of access to insurance benefits is important because health equity is not based solely on the distributive patterns of health outcomes but rather on the essential practices of social institutions that create unequal access to care (Peter 2001). Health insurance coverage is related to health outcomes and to access to healthcare (Hadley 2003). Those who are uninsured are "less likely to have a personal doctor" (SHADAC 2005; Figure 7) and report being "unable to see a doctor when needed" (SHADAC 2005; Figure 6). Furthermore, the uninsured are more likely to report having worse health than the insured. Access to health insurance provides greater access to healthcare and those who have that privilege report better health. Thus, it is important to examine disparities in the distribution of employer-provided health insurance throughout the labor force because it has a direct impact on healthcare use and therefore workers' health in general. Sociological research on race and health inequality has called for an examination of the relationship between social structures and the processes that lead to racialized (Williams 1999; Williams and Collins 1995) and gendered health disparities (Bertley, Popay, and Plewis 1992).

Employer-Provided Health Insurance

Recent Trends and Macro Context

The preponderance of research on trends in employer-provided health insurance has demonstrated that rates of coverage have been gradually declining throughout the 1980s and 1990s (Cooper and Schone 1997; Farber and Levy 2000; Fronstin and Snider 1996). Scholars have offered various explanations for these trends including macro-level industrial and occupational shifts in the U.S. economy (Renner and Navarro 1989) and the affordability of health insurance coverage and care (Cubbins and Parmer 2001). It remains to be seen whether these long-term declines will persist into the twenty-first century.

Among salient macroeconomic changes are the shifts from an industrial to a service economy, from union to nonunion workplaces, from full-time to part-time employment, and from high-paying to low-paying jobs, all of which are important determinants of Americans' health benefits coverage (Cubbins 1998). Furthermore, trends toward corporate downsizing and restructuring that began

in the early 1980s also have implications for workers' health benefits as employers try to cut costs (Cubbins and Parmer 2001; Renner and Navarro 1989).

The economic environment may influence both employer offers and employee take-ups of health benefits, thus we contextualize the time points of this research. Economists note that while the recession that began in the 1980s officially ended in 1991, many indicators demonstrate that the effects of the recession persisted well into 1992 (Mishel and Bernstein 1994). The 1990s were characterized as a period of economic expansion and recovery from the recession, although structural inequalities continued (Mishel and Bernstein 1994). In 2001, the U.S. economy once again entered into a recession and many of the positive economic developments from the 1990s eroded (Mishel, Bernstein, and Allegretto 2005). Furthermore, the negative effects of the recession on the economy persisted through 2002 (Mishel, Bernstein, and Allegretto 2005).

Employers' ability to offer health benefits is linked to both the strength of the economy and the unemployment rate. Analyses of the Current Population Surveys (CPS) revealed that from 1987 to 1993 the percentage of Americans who had no health insurance was mostly attributable to the decline in employment-based benefits (Fronstin 2002). However, between 1993 and 1999 the proportion of Americans without health coverage increased—a trend that was due in part to declining funding for public sources of insurance. In contrast, during the period from 1997 to 2000 the percentage of Americans who were covered by employer-based health plans actually increased (Fronstin 2002). This trend was due in part to a greater number of small firms offering health benefits. The strong economy and low unemployment rates, which both enabled and encouraged employers to offer benefits to attract and retain workers (Fronstin 2002), also played a part.

Workers' decisions to take up health benefits when offered are affected by several factors, the most salient of which are healthcare costs and health insurance premiums, which are the fees for medical benefit coverage (Strunk, Ginsberg, and Gabel 2001). Since higher healthcare costs mean higher premiums, costs have an effect on whether employers decide to offer health benefits at all, the types of healthcare packages they make available to workers, as well as workers' out of pocket expenses for healthcare (Strunk, Ginsberg, and Gabel 2001). Other factors that contribute to workers' decisions to take up personal benefits include their marital status (Meyer and Pavalko 1996) and perceptions of the quality of care. Overall, rising healthcare costs and premiums contribute to the availability and expense of workers' health benefits and therefore impact workers' decisions to take up their health benefits when offered.

We refer to the U.S. system of health insurance as employer-based; however some scholars argue that such a characterization hides a great deal of variation (Meyer and Pavalko 1996). One source of this variation is in the difference

between offers of health benefits versus employees' take-ups. For example, one study found that from 1988 to 1997 offers of health benefits by employers actually increased across sectors of the labor market although take-ups declined (Farber and Levy 2000). Reductions in coverage are attributable to decreases in eligibility for benefits among workers with shorter tenure in their jobs and part-time workers. Furthermore, increases in spousal coverage accounted for much of the decline in take-ups among longer tenure and full-time workers (Farber and Levy 2000).

Another basis of variation in health insurance coverage is the source of workers' eligibility for benefits. Indeed, not all Americans are covered through their own jobs and the source of coverage varies greatly among Americans who are insured (Meyer and Pavalko 1996). For example, in 1992, 32 percent of nonelderly Americans were covered by health benefits through their own jobs, 33 percent had employer-based coverage as dependents, 7 percent bought private insurance, 16 percent had public sources of health insurance, whereas 16 percent had no health coverage (Fronstin 2002). When we compare those numbers to 2001 they are almost identical, with at most a 2 percent difference in any category of coverage (Fronstin 2002).

Overall, studies have demonstrated a long-term gradual decrease in employer health benefits, although it is important to consider who is offered and who takes these benefits. Based on this research, we ask whether decreases in employee health benefit offers and take-ups have persisted into the twenty-first century. To address this question, we posit the following hypotheses:

Hypothesis 1a: In keeping with the overall gradual decline in offers, the likelihood that workers are offered health benefits declined from 1992 to 2002, net of the human capital and demographic characteristics of workers as well as occupational and industrial shifts.

Hypothesis 1b: Among workers who are offered health benefits, the likelihood that workers take up their health benefits declined from 1992 to 2002, net of occupational and industrial shifts and workers' human capital and demographic characteristics. We expect to find this trend because of the increasing out-of-pocket cost of health insurance benefits for employees, which acts as a disincentive for workers to take health benefits when offered.

Differences across Demographic Groups

The previously unaddressed question concerning long-term trends in employer-provided health benefits remains: Which workers are most affected by these declines in offers and take-ups? Research has demonstrated that some workers are more vulnerable than others. Both gender and ethnoracial segregation

across jobs, occupations, and industries produce several types of economic disparity among workers, including differences in access to fringe benefits (Padavic and Reskin 2002). Below we summarize previous research on gender and ethnoracial differences in workers' access to and use of employer-provided health benefits and we propose research hypotheses based on this literature.

Gender Differences in Health Benefits

While the population of Americans without healthcare coverage has increased, the number of uninsured women is growing at a faster pace than the number of uninsured men (Lambrew 2001). Studies have shown that women are less likely to have benefits through their own employer than are men. There are two main reasons for this. First, persistent occupational and industrial sex segregation limits women's access to jobs that offer benefits. Second, when benefits are offered, marital status impacts whether women use them through their own jobs or whether they choose dependent coverage through a spouse. Thus, for women, health insurance is tied to labor market inequalities (Seccombe and Amey 1995; Wiatrowski 1995; Williams 1995) and to their family status as wives, widows, and mothers (Meyer and Pavalko 1996).

Sex segregation. Persistent occupational and industrial segregation ensures that women and men are concentrated in different occupations and jobs, which has consequences for their access to health benefits (Wiatrowski 1995). Jobs that are typically dominated by women are less likely to offer health benefits (Glass 1990; Padavic and Reskin 2002; Seccombe and Beeghley 1992). Furthermore, the shift from a manufacturing to a service economy combined with trends toward part-time work, and a greater reliance on temporary workers and subcontractors, all have implications for women's coverage. Women are overrepresented in these sectors of the labor market (Williams 1995), and these sectors are less likely to provide health benefits (Glass 1990).

Overall, previous research has supported the findings that women are less likely than men to be employed in occupations, industries, and jobs with health benefits. With regard to occupation, Seccombe and Beeghley (1992) found that women's lower rate of health benefits is due to gender differences in job characteristics and work conditions, particularly in occupations. Glass (1990) found that controlling for gender occupational segregation reduces the sex differential in benefits such as health insurance. Wiatrowski (1995) concluded that service workers are less likely to have health insurance through their employers than both white-collar and blue-collar workers. In terms of industrial factors, one study showed that industrial segregation is a stronger predictor of health benefits coverage than occupational segregation (Perman and Stevens 1989). In addition, Wiatrowski (1995) demonstrated that retail trade and services industries are

increasing their share of total employment and are the least likely to offer health benefits. At the job level, women tend to have jobs with few fringe benefits such as health insurance (Glass 1990; Tomoskovic-Devey 1993). Finally, several employment characteristics predict health insurance coverage and the provision of fringe benefits in general, including firm size, unionization, sectoral location, and industry (O'Rand 1986; Seccombe 1993).

Marital Status. The second main explanation for gender disparities in employee health benefits relates to marital status. Almost as many married women are covered as dependents through their spouses' job as women who receive coverage through their own employment (EBRI 1997). Many women workers rely on their spouses' benefits for their health insurance coverage rather than coverage through their own employers. Single women are then at a disadvantage without the option of spousal coverage.

Two notable studies examined the relationships between marital status, spousal coverage, and the gender gap in health benefits (Buchmueller 1996; Meyer and Pavalko 1996). Buchmueller (1996) found that much of the gender gap among married workers is attributable to the greater tendency of married women to decline their own benefits in favor of dependent coverage through their husbands' employers. Meyer and Pavalko (1996) showed similar results among mature married women, who are more likely to be insured as wives than as workers.

Based on these findings we posit two hypotheses about gender and employee health benefits. As the research literature has been inconsistent in its emphasis on long-term trends in gender differences in health benefits, we focus on static gender differences in access to and use of health benefits and return to temporal changes later in the analyses.

Hypothesis 2a: Women will be less likely than men to be offered health benefits, net of controls. We expect this to be the case due to women's overrepresentation in low-pay, low-status jobs that are less likely to offer health benefits.

Hypothesis 2b: Among workers who are offered health benefits, women will be less likely than men to take up their benefits. We expect this because previous research shows that women are less likely to be covered by their own health benefits than are men workers.

Ethnoracial Differences in Employer-Provided Health Insurance

Research shows that, in general, ethnoracial minority workers have lower rates of access to and coverage by employer-provided health benefits than white workers (Holahan and Kim 2000; Shi 2001). Labor force factors explain many

of the ethnoracial differences in access to health benefits (Cubbins and Parmer 2001; Fronstin and Snider 1996; Meyer and Pavalko 1996). Furthermore, because income explains a great deal of the variation in private insurance coverage, minorities' overrepresentation in lower income groups may in part account for their lower rates of insurance coverage through employers (Fronstin, Goldberg, and Robins 1997; Shi 2001), although income does not completely explain these differences (Holahan and Kim 2000).

Several recent studies have examined ethnoracial differences in health benefits offers and take-ups and show persistent disparities (Cooper and Schone 1997; Seccombe, Clarke, and Coward 1994; Shi 2001). The general trend of declining employer-provided health benefits from the 1970s through the 1990s is also true for minorities (Cooper and Schone 1997; Holahan and Kim 2000). Most research examining insurance coverage has shown that white workers are more likely than minorities to be covered through employee health benefits (Cooper and Schone 1997; Hersch and White-Means 1993; Holahan and Kim 2000; Seccombe, Clarke, and Coward 1994; Shi 2001). However, Meyer and Pavalko (1996) examined the health benefits of mature women (ages 52–66) and found no race differences in either offers or take-ups in 1989. In general, studies tend to focus on disparities between white workers and other workers and have not focused on differences between groups of minority workers. One notable exception found that Hispanic workers had the lowest coverage through employers, followed by black workers, with whites having the highest rates of coverage (Seccombe, Clarke, and Coward 1994).

Explaining Ethnoracial Differences in Access and Take-ups of Health Benefits. Several factors account for ethnoracial differences in access to employee health benefits and coverage. Most significant are race differences in the representation of workers in different occupations, industries, and jobs. These trends are similar to the dynamics of health benefits among women, with occupational, industrial, and job segregation continuing to concentrate minority workers in jobs in which pay and access to health benefits are lower (Fronstin, Goldberg, and Robins 1997; Reskin 1998). In addition, family factors, including family structure, have been shown to influence insurance coverage (Amey, Seccombe, and Duncan 1995).

Occupational segregation may explain some of the ethnoracial differences in access to health insurance coverage. Unfortunately, few studies have examined the relationship between occupations and access to health benefits and instead focus on coverage, which offers an indication of access. Fronstin, Goldberg, and Robins (1997) found that industry and occupation explain much of the differences in insurance coverage among different groups of Hispanic men. Puerto Rican men, for instance, were more likely to work in large firms, which are

typically able to offer lower-cost health insurance than smaller firms. Mexican American men were more often employed in manufacturing, which is more likely to offer insurance than the service industry. Other research showed that several occupation-related variables influence insurance coverage, including union membership, full-time work, and firm size; but more importantly, these factors had different effects on insurance coverage depending on race (Seccombe, Clarke, and Coward 1994). Specifically, Seccombe, Clark, and Coward (1994) found that union membership had a smaller effect on health benefit coverage among Hispanics than black or white workers; full-time work had a larger effect among Hispanic and black workers, and the effect of being in a large firm was not as strong among Hispanics as it was for black or white workers.

Research has consistently found that income has a strong influence on insurance coverage and that income differences across ethnoracial categories explain some of the differences in insurance coverage (Amey, Seccombe, and Duncan 1995; Fronstin, Goldberg, and Robins 1997; Holahan and Kim 2000; Shi 2001). Holahan and Kim (2000) used CPS data from 1994 and 1998 and found that increases in employee coverage during the 1990s were explained by moves up the income distribution for white and black people, although among Hispanics insurance coverage increased among the low-income group. Similarly, another study using 1996 National Medical Expenditures Study data found that income was a strong predictor of a lack of insurance coverage (of any kind) and minorities were overrepresented in low-income groups (Shi 2001).

Several other factors may affect the distribution of health benefits across ethnoracial groups. Demographic characteristics (age, marital status, and parent status), as well as human capital factors (education), may explain ethnoracial differences in health benefits (Fronstin, Goldberg, and Robins 1997). One study found that place of residence (urban/rural) influenced insurance coverage of Mexican American families differently from white families (Amey, Seccombe, and Duncan 1995). Meyer and Pavalko (1996) explored how race and marital status interact to the disadvantage of African American women in particular. Because African American women are less likely to be married to a covered employee, they are two to three times more likely to be uninsured or to rely on public programs such as Medicaid.

Based on these findings we posit the following two hypotheses about race on health benefits. As the research literature has been inconsistent in its emphasis on long-term trends in ethnoracial differences in health benefits, we focus on static race differences in access to and use of health benefits and return to temporal changes later in the analyses.

Hypothesis 3a: Minority workers will be less likely to be offered health benefits than white workers, net of salient controls. We expect this to be

the case because of minorities' persistent overrepresentation in low-pay, low-status jobs that are less likely to offer health benefits.

Hypothesis 3b: Minority workers will be less likely than white workers to take up their health benefits when offered. This expectation is based on previous research showing that minorities have lower rates of health insurance coverage than white workers.

Beyond our main hypotheses about gender and ethnoracial differences, we also explore the three-way interaction of race, gender, and time. Thus, after examining ***Hypotheses 1–3*** we return to our overarching research question, which asks whether differences in offers and take-ups between 1992 and 2002 varied according to workers' race and gender.

Data and Sample

We use data from the 1992 and 2002 waves of the National Study of the Changing Workforce (NSCW), which is a study of the work and personal/family lives of the U.S. workforce. The NSCW was developed by the Families and Work Institute and data were collected by Mathematica Policy Research in 1992 and Harris Interactive in 2002 through random-digit dialing telephone interviews with workers (Bond, Galinsky, and Swanberg 1997). The NSCW includes a substantial number of respondents: 3718 people in 1992 and 3504 in 2002. Sample eligibility in 2002 was limited to noninstitutionalized, employed, civilian adults living in a home with a telephone within the contiguous 48 states. Calls were made to a regionally stratified unclustered random probability sample generated using random-digit-dial methods. The 1992 sample eligibility was similar to that of the 2002 with two exceptions: workers aged over 64 were not eligible and three groups of respondents were oversampled. The oversampled respondents included workers aged 18 to 24, minority group workers, and women who were not in the labor force. Selecting only wage and salaried workers who had complete data on personal employment insurance variables (our dependent variables) resulted in an analytical sample for this paper of 2921 waged and salaried workers from the 1992 data set, and 2775 from the 2002 sample (Families and Work Institute 2004).

One strength of the NSCW surveys for the present study is that they contain information about workers' family and work characteristics and information about fringe benefits, including eligibility for and use of employee health benefits. They also contain significant numbers of workers, which allows for race and gender comparisons. Finally, the two waves of the NSCW have multiple questions in common and we are able to code responses so that items are comparable across surveys. As recommended by the Families and Work Institute, we employ the weights provided with the survey for use with 1992 and 2002 data in order to adjust for unequal probabilities of inclusion in the samples. The

survey weights were designed to represent household proportions from the 1992 and 2002 Current Population Survey.

Variable Measurement[1]

Dependent Variables

The first dependent variable for the analysis is a dummy variable indicating whether or not the respondent is offered health insurance through their employer. Responses are coded 1 for workers who were offered benefits, and coded 0 if the respondent indicated that health benefits were not available. The second dependent variable is whether or not the respondent is actually covered by their employer's health insurance plan, which we refer to as take-ups. In both years of the survey, questions about take-ups were asked only of those respondents who answered affirmatively that their employer offered health benefits. Responses are coded 1 if taken.

Independent Variables

Important predictor variables for these analyses include demographics, human capital, and employment characteristics.

Demographics. Gender is indicated by a dummy variable coded 1 for women. Ethnoracial categories are captured by a series of dummy variables, coded 1 for Hispanic, African American, and other[2] ethnoracial groups (white is the reference category). These are the most refined race categories that the survey would allow us to delineate. Age is captured by four dummy variables coded 1 if the respondent is aged 19–25 years, 26–35 years, 36–50 years (reference category), or 50–64 years. Socioeconomic status is indicated by the respondent's logged yearly salary.

Marital life characteristics are meant to indicate other potential sources of healthcare coverage. These measures include dummy variables for marital status (not married is the reference category) and spouse's employment status (unemployed is the reference category). Parental status is a dummy variable coded 1 if respondents had children younger than 18 years at home.

Human Capital. For these analyses, the primary indicator of human capital is respondent's education. Level of education is measured by a set of four dummy variables each coded 1 if the respondent has less than a high school diploma, a high school diploma, some college or a Bachelor's degree (reference category), and more than a Bachelor's degree. Job tenure is captured by the number of years with the current employer and is continuous.

Employment. Employment characteristics include the respondent's work hours, industry, occupation, firm size, union membership, and public or private employment sector. Workers are coded 1 for part-time if they worked fewer than 35 hours in the past week. Industry is indicated by a set of five dummy variables grouping various industries together in accordance with previous conventions (Fronstin 2002). Each dummy variable is coded 1 for the following: manufacturing, construction and agriculture; wholesale and retail trade; financial, insurance, and real estate; all other services including health, educational, and social services; and business and professional services (reference category).

Respondent's occupation is measured by a set of seven dummy variables indicating separate groupings of occupations consistent with conventions set by previous studies (Galinsky and Bond 1998). Each dummy variable is coded 1 for the following groups: top- or mid-level manager, executive or administrator; technical positions; sales; administrative support; service position; other occupations including machine operator, skilled or manual labor, and farming, forestry, or fishing; and professional positions (reference category).

Five dummy variables indicate the national number of employees at the respondent's firm: less than 25, 25–49, 50–99, 100–499, and 500+ (reference category).[3] A dummy variable indicates whether the respondent belongs to a labor union (coded 1) and a final dummy variable designates whether the respondent is a public employee (coded 1).

Analysis Plan

To answer our research questions and address each hypothesis, we proceed through a multi-stage analysis. We begin by presenting descriptive statistics for each of the dependent and independent variables in order to provide a sense of the sample characteristics. We then discuss differences in dependent and independent variables between 1992 and 2002 and examine temporal changes at the bivariate level. To address ***Hypotheses 1a*** and ***1b***, we run separate logistic regression equations predicting the likelihood of offers and take-ups of employer-provided health insurance controlling for survey year and demographics, occupation, industry, and other workplace predictors.

To address ***Hypotheses 2*** and ***3***, and our main research question, we run separate but identical logistic regression equations for women and men predicting, first, the likelihood of their being offered health benefits, and second, the likelihood of their taking up health benefits. These analyses allow us to examine the effects of gender and race, as well as the combined effects of gender and race on the change in offers and take-ups from 1992 to 2002. To fully illustrate the findings concerning the interaction of gender and race over time, we present predicted probabilities of offers and take-ups in both years for different categories of workers.

Results

Bivariate Results

Descriptive statistics for all variables included in the analyses for 1992 and 2002 are presented in Table 1. We find significant changes between 1992 and 2002 for a number of the sample characteristics including the age structure and racial composition of the sample as well as respondents' education, marital status, and spouses' employment status. Furthermore, the employment variables show several trends, including changes in the industrial and occupational characteristics of the labor force and declines in employment in small businesses.

Turning to the two dependent variables we find support for ***Hypothesis 1a***, but not ***Hypothesis 1b***. The availability of employer-provided health insurance declined significantly from 86 percent to 82 percent between 1992 and 2002. However, the difference in health insurance take-ups did not change significantly in those years. Bivariate results are often misleading, however, as the declines in health insurance offers and the lack of change in take-ups may be related to changes in the labor force structure from 1992 to 2002. Thus, we now turn to multivariate results to test our hypotheses and address our main research question.

Multivariate Results

Table 2 presents separate logistic regression equations predicting the likelihood of workers being offered employer-provided health benefits and, when offered, take-ups of such benefits. Column 1 reports the coefficients and standard errors for whether the respondent was offered benefits, and column 2 reports the same information regarding take-ups.

We now reconsider ***Hypotheses 1a*** and ***1b*** using the multivariate results. We find support for ***Hypotheses 1a*** and ***1b***, which state that both health insurance offers and take-ups were lower in 1992 than in 2002, net of controls. In both equations, the negative coefficients for the survey year variable (coded 1 for 2002) indicate significant declines in both offers and take-ups during this time. The odds ratios for these coefficients show that the odds of being offered health benefits were 43 percent lower ([.57–1]*100) in 2002 than in 1992, and the odds of taking-up benefits were 19 percent lower ([.81–1]*100) in 2002 than 1992.[4]

The results in Table 2 also allow us to discuss preliminary results regarding the remaining hypotheses. We fail to find support for ***Hypotheses 2a*** and ***2b*** about gender differences in offers and take-ups. In general, when we control for demographic and employment factors, women were not less likely than men to be offered or to take up their own employer-provided health insurance in either 1992 or 2002.

Table 1
Descriptive Statistics for Variables in the Analysis, by Year

	1992 $N = 2921$	2002 $N = 2775$	Chi-square	*t*-value
Demographics				
Percent Women	49%	49%	.022	
Age				
Mean age	38.40	40.95		8.01***
0–25 years	10%	15%	22.30***	
26–35 years	33%	20%	112.59***	
36–49 years	40%	41%	.72	
50–64 years	16%	24%	46.09***	
Race				
White	77%	75%	3.59*	
African American	12%	10%	3.40*	
Hispanic	9%	10%	2.56	
Other race/ethnicity	3%	5%	18.86***	
Logged yearly salary	10.04	10.45		20.15***
Human capital				
Education				
Less than high school diploma	9%	11%	8.40**	
High school diploma	31%	31%	.00	
Some college or B.A. degree	48%	30%	203.97***	
More than B.A. degree	13%	29%	228.70***	
Years with current employer	7.51	7.56		.244
Personal life				
Married (not married)	64%	58%	20.22***	
Spouse employed (unemployed)	48%	45%	4.68*	
Parent	42%	43%	.88	
Employment				
Part-time worker (full-time)	16%	15%	.01	
Industry				
Manufacturing, construction, agriculture	33%	32%	1.17	
Professional services	8%	7%	5.41*	

(*continued*)

Table 1
(*continued*)

	1992 $N = 2921$	2002 $N = 2775$	Chi-square	*t*-value
Wholesale and retail trade	16%	19%	6.61**	
Financial, insurance, real estate	7%	5%	3.49*	
Other industry	36%	38%	.95	
Occupation				
Top/mid-level manager, executive, administrator	16%	14%	3.95*	
Professional positions	16%	19%	12.10***	
Technical positions	11%	4%	106.45***	
Sales	10%	9%	.80	
Administrative support	14%	15%	.80	
Service position	13%	13%	.15	
Other	22%	27%	19.89***	
Firm size				
<25 employees	23%	20%	9.13**	
25–49 employees	9%	7%	3.99*	
50–99 employees	8%	8%	.04	
100–499 employees	16%	18%	6.93**	
500+ employees	42%	46%	9.92**	
Union member	17%	18%	.05	
Public employee (private)	23%	22%	.26	
Dependent variables				
Employer health insurance offered	86%	82%	18.29***	
Took up employer health insurance	68%	67%	1.02	

Note: Weighted data. Reference categories for dummy variables are in parentheses. All numbers are percentages or means (with standard deviations in parentheses) as noted.
*$P < .05$; **$P < .01$; ***$P < .001$.

Table 2
Logistic Regression Coefficients Predicting the Likelihood of Offers and Take-ups of Employer-Provided Health Insurance

	Offers	Take-ups
	B	B
Demographics		
Female	.02	13
	(.11)	(.08)
Age[a]		
0–25 years	–.19	–.35*
	(.17)	(.14)
26–35 years	.15	.31**
	(.15)	(.12)
36–50 years	.08	.20
	(.14)	(.11)
Race[b]		
African American	.15	–.02
	(.15)	(.12)
Hispanic	–.29*	–.24*
	(.14)	(.12)
Other race/ethnicity	.18	.18
	(.26)	(.19)
Logged yearly salary	.38***	.40***
	(.06)	(.06)
Human capital		
Education[c]		
Less than high school diploma	–.61***	–.38**
	(.15)	(.13)
High school diploma	.03	.03
	(.11)	(.09)
More than B.A. degree	.32*	.28*
	(.16)	(.11)
Years with current employer	.05***	.06***
	(.01)	(.01)

(*continued*)

Table 2
(*continued*)

	Offers	Take-ups
	B	B
Personal life		
Married (not married)	.08	.04
	(.15)	(.12)
Spouse employed (unemployed)	−.17	−.57***
	(.15)	(.11)
Parent	—	−.08
	—	(.08)
Employment		
Part-time worker (full-time)	−1.49***	−1.75***
	(.11)	(.10)
Industry[d]		
Manufacturing, construction, agriculture	.28	0.40***
	(.14)	(.11)
Professional services	.21	−.12
	(.19)	(.14)
Wholesale and retail trade	.11	−.22
	(.14)	(.12)
Financial, insurance, real estate	.52*	−.02
	(.24)	(.16)
Occupation[e]		
Top/mid-level manager, executive, administrator	.43*	.55***
	(.19)	(.14)
Professional positions	.13	.19
	(.19)	(.14)
Technical positions	.89***	.68***
	(.25)	(.17)
Sales	−.34	.07
	(.18)	(.15)
Administrative support	.37*	.22
	(.18)	(.13)

(*continued*)

Table 2
(*continued*)

	Offers	Take-ups
	B	B
Service position	−.69***	−.32*
	(.16)	(.13)
Firm size[f]		
<25 employees	−1.95***	−1.36***
	(.12)	(.09)
25–49 employees	−.79***	−.62***
	(.17)	(.13)
50–99 employees	−.51**	−.63***
	(.18)	(.13)
100–499 employees	−.23	−.32**
	(.15)	(.10)
Union member	1.58***	.90***
	(.23)	(.12)
Public employee (private)	.44**	.32**
	(.14)	(.10)
Survey year (1 = 2002)	−.57***	−.21**
	(.10)	(.08)
Constant	−1.38*	−2.96***
	(.64)	(.59)
Chi-square	2063.85***	2064.8***
−2 log likelihood	5207.9	5207

*$P < .05$; **$P < .01$; ***$P < .001$.
[a]omitted category of age is 50–64 years old.
[b]omitted category of race is white.
[c]omitted category of education is "some college or B.A."
[d]omitted industry category is "all other industries."
[e]omitted category of occupation is "other occupations."
[f]omitted category of firm size is "500 or more employees."

In contrast, the results offer some support for ***Hypotheses 3a*** and ***3b***, which posited race differences in offers and take-ups of health benefits. Specifically, Hispanic workers were less likely to be offered health insurance and less likely to take up such insurance than white workers. The odds of Hispanic workers being offered health benefits is 25 percent lower ([.75–1]*100) than for white workers, and the odds of them taking-up benefits are 21 percent lower ([.79–1]*100). African American workers and other ethnic minorities show no differences in offers or take-ups relative to non-Hispanic and white workers.

To more closely examine ***Hypotheses 2*** and ***3*** and address our overarching research question concerning whether the declines in offers and take-ups of employee health benefits adversely affected some groups more than others, we turn to Table 3. Table 3 presents logistic regression results predicting the likelihood of offers and take-ups separated by gender. The results of Table 3 show that the effects of gender and race are inextricably intertwined, and that ***Hypotheses 2*** and ***3*** as proposed are too simplistic. These results allow us to discuss gender effects as they relate to race and vice versa. Table 3 also allows us to reexamine our overarching research question about gender and race differences in declining offers and take-ups.

Employing separate equations for women and men enables us to assess whether gender differences exist in factors influencing health benefit offers and take-ups. In addition, in each model, we include interaction terms between ethnoracial categories and year to determine whether the declines in offers and take-ups differentially affect some ethnoracial and gender groups more or less than others. For example, focusing first on the model for men predicting the likelihood of offers, the interaction term for Hispanic by Year gives the effect of 2002 (versus 1992) among Hispanic men. Similarly, in the equation for women, the interaction between Hispanic by Year gives the effect of 2002 among Hispanic women. We then perform a chi-square test for the difference in coefficients using the coefficients for the Hispanic by Year interaction terms for men and women (see Allison 1999). The results of the chi-square test show whether the decline in offers from 1992 to 2002 among Hispanic women was greater than the decline in offers from 1992 to 2002 among Hispanic men (and indeed it was). We perform similar comparisons of coefficients across models in the discussion below, followed by a more detailed explanation of the effects using predicted probabilities.

Examining offers in further detail, we find significant differences across groups of workers as evidenced by various significant main effects, two-way interactions, and three-way interactions between gender, race, and survey year. The constants in columns 1 and 2 show that white men have lower likelihoods of offers than do white women in 1992, net of other factors. This directly contradicts ***Hypothesis 2a***, that women would be less likely to be offered health benefits (although the effect itself is negligible). Further, in column 3 the significant

Table 3
Logistic Regression Coefficients Predicting the Likelihood of Offers and Take-ups of Employer-Provided Health Insurance

	Offers			Take-ups		
	1	2	3	4	5	6
	Men	Women	Gender difference	Men	Women	Gender difference
	B	B		B	B	
Demographics						
Age[a]						
0–25 years	−.34	−.09	−.25	−.07	−.43*	.36
	(.27)	(.23)		(.21)	(.19)	
26–35 years	−.11	.33	−.44	.50**	.28	.22
	(.24)	(.20)		(.18)	(.17)	
36–50 years	−.07	.19	−.26	.56**	−.01	.57
	(.23)	(.18)		(.17)	(.15)	
Race[b]						
African American	.03	.07	−.04	−.38	.07	−.45
	(.32)	(.30)		(.23)	(.21)	

Hispanic	−.23	.07	−.30	−.60**	.10	−.70
	(.28)	(.30)		(.23)	(.24)	
Other race/ethnicity	1.76	−.70	2.46*	.45	−.10	.55
	(.95)	(.59)		(.42)	(.45)	
Logged yearly salary	.59***	.27**	.32*	.42***	.37***	.05
	(.10)	(.08)		(.09)	(.08)	
Human capital						
Education[c]						
Less than high school diploma	−.59**	−.59**	.00	−.30	−.49*	.19
	(.21)	(.22)		(.17)	(.21)	
High school diploma	.10	−.02	.12	−.01	.08	−.09
	(.18)	(.15)		(.13)	(.12)	
More than B.A. degree	.24	.37*	−.13	.28	.31*	−.03
	(.26)	(.21)		(.17)	(.15)	
Years with current employer	.03*	.06***	−.03	.06***	.06***	.00
	(.01)	(.01)		(.01)	(.01)	
Personal life						
Married (not married)	.18	−.02	.20	.40*	−.25	.65
	(.19)	(.26)		(.16)	(.20)	
Spouse employed (unemployed)	−.08	−.24	.16	−.50**	−.59**	.09
	(.19)	(.25)		(.14)	(.19)	
Parent	—	—		−.24	−.05	
				(.12)	(.11)	

(*continued*)

Table 3
(*continued*)

	Offers			Take-ups		
	1	2	3	4	5	6
	Men	Women	Gender difference	Men	Women	Gender difference
	B	B		B	B	
Employment						
Part-time worker (full-time)	−1.54***	−1.45***	−.09	−1.97***	−1.63***	−.34
	(.20)	(.13)		(.20)	(.12)	
Industry[d]						
Manufacturing, construction, agriculture	.22	.37	−.15	.35*	.61***	−.26
	(.21)	(.22)		(.16)	(.17)	
Professional services	.51	−.16	.67	−.07	−.15	.08
	(.31)	(.24)		(.21)	(.19)	
Wholesale and retail trade	.07	.04	.03	.03	−.47**	.50
	(.23)	(.19)		(.18)	(.17)	
Financial, insurance, real estate	−.04	.83**	−.87	−.02	−.02	.00
	(.39)	(.32)	.07	(.28)	(.19)	

Occupation[e]						
Top/mid-level manager, executive, adminiinistrative	.45	.63*	−.18	.38*	.70**	−.32
	(.28)	(.29)		(.19)	(.23)	
Professional positions	.24	.19	.05	.23	.22	.01
	(.29)	(.28)		(.20)	(.23)	
Technical positions	1.08*	.98**	.10	.59*	.75**	−.16
	(.44)	(.34)		(.25)	(.25)	
Sales	−.68**	−.00	−.68	−.08	.21	−.29
	(.26)	(.28)		(.21)	(.23)	
Administrative support	.11	.60*	−.49	.12	.26	−.14
	(.32)	(.25)		(.24)	(.20)	
Service position	−.51*	−.66**	.15	−.31	−.37	.06
	(.22)	(.25)		(.18)	(.21)	
Firm size[f]						
<25 employees	−1.98***	−1.95***	−.03	−1.37***	−1.31***	−.06
	(.18)	(.16)		(.13)	(.13)	
25–49 employees	−.85**	−.68**	−.17	−.73***	−.52**	−.21
	(.26)	(.23)		(.19)	(.18)	
50–99 employees	.02	−.70**	.72*	−.75***	−.42*	−.33
	(.33)	(.22)		(.19)	(.18)	
100–499 employees	−.65**	.20	−.85**	−.32*	−.27	−.05
	(.22)	(.22)		(.15)	(.14)	
Union member	1.18***	1.97***	−.79	.76***	1.03***	−.27
	(.30)	(.36)		(.17)	(.17)	
Public employee (private)	1.00***	.14	.86**	.79***	.02	.77
	(.26)	(.18)		(.18)	(.13)	

(*continued*)

Table 3
(*continued*)

	Offers			Take-ups		
	1	2	3	4	5	6
	Men	Women	Gender difference	Men	Women	Gender difference
	B	B		B	B	
Year	−.39*	−.69***	.30	−.30*	−.16	−.14
	(.17)	(.15)		(.13)	(.12)	
Interaction terms						
African American* year	.15	.23	−.08	.69*	−.18	.87
	(.45)	(.42)		(.34)	(.31)	

Hispanic* year	−.31	−.51	.20*	.15	−.10	.25
	(.37)	(.41)		(.31)	(.34)	
Other race* year	−2.05	1.18	−3.23*	−.38	.24	−.62
	(1.05)	(.76)		(.55)	(.58)	
Constant	−3.29**	−0.38	−2.91*	−3.58***	−2.62**	−.96
	(1.08)	(.83)		(.90)	(.78)	
Chi-square	776.89***	830.20***		975.09***	1072.03***	
−2 log likelihood	1536.65	1825.84		2469.24	2664.37	

*$P < .05$; **$P < .01$; ***$P < .001$.
[a]omitted category of age is 50−64 years old.
[b]omitted category of race is white.
[c]omitted category of education is "some college or B.A."
[d]omitted industry category is "all other industries."
[e]omitted category of occupation is "other occupations."
[f]omitted category of firm size is "500 or more employees."

gender difference between women and men of other ethnic minority groups shows that in 1992 the race effect for men is bigger than the race effect for women. Other than these differences, the nonsignificant main effects of race show no race differences among women or men in 1992. These findings are contrary to ***Hypothesis 3a***, which posited race differences in offers.

Turning to 2002, we observe several trends. The coefficient for Year shows that white women and men both had lower offers in 2002 than in 1992 (although the difference between them was not statistically significant). Among Hispanics and other ethnic minorities, the difference between women and men was significantly different than the gap between white women and men (the chi-square test for the difference in the interaction terms for race by survey year indicates these differences. Therefore, the change from 1992 to 2002 was different for these groups than for white workers. Other than the effects above, there were no race differences among women and men in 2002. We elaborate further on these findings later in this section.

Slightly different patterns emerged regarding take-ups of health benefits. In 1992 we find no gender differences among white workers (based on the constants in columns 4 and 5). The chi-square test for the main effects of Hispanic shows a significant difference between Hispanic women and men's take-ups in 1992. Hispanicity predicts lower coverage among men, although we find no other race differences among men. Among women, we find no significant race differences. The effect of being Hispanic among men is consistent with ***Hypothesis 3b***, while the lack of race differences among women is inconsistent with the hypothesis.

In 2002 the chi-square test for differences across models demonstrates no gender difference in the effect of Year, although the main effect for Year show that white men's take-ups declined significantly from 1992 to 2002 while white women's decline was not significant. Concerning race, we find no significant gender differences in 2002 within any of the non-white groups (based on the chi-square test for the differences across models corresponding to the interaction terms for race and year). The lack of gender differences is inconsistent with ***Hypothesis 2b***, which predicted lower rates of take-ups for women. Moreover, the significant interaction between African American and Year among men shows differences between African American and white men's take-ups. In contrast, we find no race differences among women. Thus, the findings regarding race are generally inconsistent with ***Hypothesis 3b***.

In order to ease the interpretation of the three-way interactions (between race, gender, and year) implied in our models, we compute predicted probabilities for men and women of different ethnoracial groups for both 1992 and 2002, and report the predicted probabilities in Table 4. Predicted probabilities are calculated as:

Table 4
Predicted Probabilities of Offers and Take-ups by Year and Gender

	Offers				Take-ups			
	Men		Women		Men		Women	
	1992	2002	1992	2002	1992	2002	1992	2002
White	.95	.93	.96	.92	.81	.76	.77	.74
African American	.95	.94	.96	.94	.75	.81	.78	.72
Hispanic	.94	.88	.96	.89	.70	.67	.79	.74
Other Race	.99	.90	.92	.95	.87	.77	.75	.77

$$P_i = \exp(Z_i)/[1 + \exp(Z_i)]$$

where P represents the probability of offers or take-ups of health insurance (when control variables are set at their means), and Z_i represents the sum of the products created by multiplying each referenced control variable by the coefficient estimates (Aldrich and Nelson 1984; Brewster and Padavic 2002). We rely on results from Table 4 to interpret statistical significance. The most notable trend is that offers increased among women of other ethnoracial backgrounds, unlike any other group. Additionally, health benefit take-ups increased among African American men.

The results presented in the first four columns indicate the declines in health insurance offers were not the same for each ethnoracial/gender group. Specifically, offers declined somewhat for white women and men (row 1) and for African American women and men (row 2) but declined much more among Hispanic men (offers were down about 6%), and the greatest amount among Hispanic women (offers were down 7%; $P < .05$). Furthermore, offers declined the most among men of other ethnoracial groups, but actually increased among their female counterparts ($P < .05$).

The pattern for take-ups was somewhat different, although the general trend of declining coverage is apparent. However, while white men saw statistically significant declines between 1992 and 2002, white women did not. As mentioned above, African American men's take-ups increased during this time, while African American women's did not change significantly. Consistent with

previous literature and ***Hypothesis 3b***, the odds of Hispanic men's take-ups was lower than for white workers and Hispanic women ($P < .01$), although Hispanic workers' likelihood of take-ups declined at the same pace as white workers'. These findings make it apparent that the effect of Hispanicity on insurance coverage is generated by Hispanic men's lower likelihood of coverage, not Hispanic women's. Finally, while it appears that take-ups among other minority men declined more than other groups, and that other minority women's take-ups increased, these differences are not statistically significant, and thus are no different from white men's and women's take-ups.

In these models the influence of several control variables merits mention. Importantly, most of the occupational and human capital variables influence both health insurance offers and take-ups. Indeed, many of the predictors have similar effects on the two dependent variables. Below we point to the influence of these variables and to how they operate differently depending on whether they are predicting health insurance offers or employees health insurance take-ups.

In terms of health insurance offers, the human capital and occupational variables show expected trends. In general, higher levels of education are related to a higher chance of being offered health insurance. Specifically, those with less than a high school diploma have lower odds of being offered insurance relative to those with a college degree and those with higher degrees (at least among women) have greater odds of being offered insurance through their employer. Similarly—and also related to human capital—the longer workers have been with their employers, the higher the odds that they will be offered health insurance.

Occupational characteristics also demonstrate predictable findings. Higher salary (logged in these models) leads to higher chances of being offered insurance through employers. Additionally, part-time workers are far less likely to be offered health insurance benefits. Occupation itself matters as well, with technical workers and top-level managers and executives showing greater odds of insurance offers and service workers showing lower odds. The size of employment firms also matters: smaller firms show lower chances of offering insurance benefits than do the largest firms (those over 500 people).

Unionization is a strong predictor of insurance offers as well, and those in unionized jobs are far more likely to be offered insurance than those who are not. Among men, public sector employment leads to higher odds of insurance offers, although this is not the case among women.

Human capital and occupational variables influence health insurance benefit take-ups (once workers are offered) similarly to how they influence benefit offers, with some notable exceptions. While having an employed spouse does not influence offers, it is negatively related to take-ups. Thus, men and women who have an employed spouse are less likely to take up their insurance benefits

than those who do not have an employed spouse. In terms of occupational predictors, those in service positions, once offered, are no less likely to take up insurance benefits than are those who work in other occupations. Other than these exceptions, occupational and human capital variables have similar influences on both health insurance offers and on take-ups of insurance.

Discussion and Conclusion

Our results showed that health insurance offers and take-ups declined significantly from 1992 to 2002, net of salient occupational, industrial, and demographic shifts. These findings are consistent with other research documenting the long-term decline in employee health benefits (Cubbins 1998). A unique contribution of this research, however, is that we investigated whether the changes in employee health benefits differentially impacted disparate groups of workers. Indeed, we found that the declines we observed did not uniformly impact all workers. Instead, the results bolster the argument that future studies need to investigate the intersecting effects of gender and race in determining employee fringe benefits.

Although we controlled for changes in the structure of the labor market, it is possible that the larger economic context of the decade from 1992 to 2002 influenced the change in health benefit availability and coverage at both time points, and unfortunately we are unable to directly control for that context in this study. The direction of the effect of economic stagnation and recovery on health benefits is unclear, however, and these forces may either exacerbate or diminish the declining trends we found. We suspect that the opposing forces (described below) counteract one another and that what we are observing is an artifact of long-term trends in the reduction of benefit provision.

One possibility is that we overstate the declines in health benefits. That is, the upswing in the economy that began in 1991 may have meant that businesses were better able to offer health benefits by 1992. However, a great deal of evidence (low wages and high unemployment, in particular) indicates that individuals were still experiencing the effects of the economic recession during this time, thus potentially limiting their ability to take coverage if any co-payment for benefits was required. The recession of 2001 was likely to have influenced both employers' ability to provide insurance coverage, as they attempted to reduce costs, as well as individuals' ability to take coverage that required co-payment. Thus, it is possible that the reduction in offers and take-ups from 1992 to 2002 may reflect a low point during 2002 rather than a more general trend of declining benefits over the long term.

It is also possible that we understate the changes in benefit provision from 1992 to 2002. Specifically, there is probably a small lag between economic downturns and businesses' response in terms of changes to benefit structures.

Such a lag would imply that during 1992 businesses may not have yet begun to increase benefits, and, potentially, benefit offers were still low from the recession. In turn, businesses may not have had time to dramatically reduce benefits by 2002, which was early in this second economic downturn, and rather the provision of benefits had yet to adjust to the new stagnant economy.

Contrary to our expectation, the analysis of gender and health benefits demonstrated fewer differences between women and men workers than previously suggested in the literature. Indeed, examining differences in offers and take-ups between women and men within different race categories yielded few significant differences. The results concerning gender differences in take-ups suggest, however, that martial status is a factor influencing workers' propensity to take up their health benefits when offered. Being married increased the odds that men will be covered by health benefits, while it had no significant effect among women, net of race and other controls (see Table 3). While previous research suggested that the gender difference is due to married women's declines of their own health benefits, a different explanation is that it is because of married men's greater proclivity for accepting coverage through their own employers. This area is ripe for future research.

The analyses of ethnicity, race, and gender over time were by necessity exploratory in nature. Indeed, previous research in this area is limited and does not provide a strong foundation for conjecture. Thus, the analysis of ethnoracial differences in health insurance offers and take-ups constitutes a significant contribution to the research literature. Although the data set limited our ability to differentiate within ethnoracial groups, the focus of this article was on group trends over time. Furthermore, with more refined categories the multivariate models would be too cumbersome to manage and interpret. Still, for example, the residual category of "other race" in our analyses yielded some significant results that merit further investigation. We are hesitant to make claims about this group of workers and urge other researchers to analyze finer ethnoracial categories. Nonetheless, comparisons across these broad ethnoracial groups continue to demonstrate the advantages for white workers in access to and take-ups of benefits that have been documented in some previous research.

Although the overall trend is one of declines in offers and take-ups of health benefits, we found that African American men's experience was anomalous in that their likelihood of coverage increased over time. Why would only this group of workers experience increases in take-ups? One explanation is that it may be evidence of a decline in the significance of racial discrimination in this area of health provision. A second explanation is that it is evidence of lingering gender discrimination toward African American women. Previous research sheds little light on the reasons for this trend and it clearly merits further attention.

Our findings are consistent with previous research showing lower rates of health benefits among Hispanics. In addition, the results allow us to add complexity to the picture heretofore not discussed in the literature. One important finding was that the declines in offers of health insurance between 1992 and 2002 were greater among Hispanic workers than among white workers. Further, regarding coverage, the disparities we observed only occurred among men, not women, highlighting the importance of examining gender and ethnicity simultaneously.

While these findings about Hispanic trends are certainly important, we acknowledge their limited applicability for two reasons. First, as stated above, grouping all Hispanic workers into one category hides a great deal of variation among this large and diverse group. Much of the research examining differences in insurance coverage focuses on broad ethnoracial categorizations, although there is one notable exception. Fronstin, Goldberg, and Robins (1997) investigate differences in health insurance coverage among Hispanic men, and show that among employed Hispanic men, Mexican Americans were less likely than Puerto Ricans and Cuban Americans to have employer-provided health insurance.

The second possibility for the difference in insurance provision among Hispanic workers is that nativity and immigration may influence health benefit provision through unmeasured labor market experiences. Indeed, additional exploratory analyses provided some evidence that this may be the case (results not shown). In particular, incorporating a variable indicating nativity subsumed the effect of Hispanicity on offers and take-ups. However, the high correlation of Hispanicity and nativity (a larger proportion of Hispanic workers were non-native to the United States than were other workers) in these samples made it difficult to disentangle these effects. It is clear that other data are needed in order to address these issues.

The results of this study point to the institutional context that perpetuates health disparities across ethnoracial groups and gender. For an individual to be covered by employer-based health insurance they must first be in a position to be offered such insurance and second have the resources to take up that benefit. Structural inequalities in the labor market ensure that not all workers have equal access and consequently equal chances of taking up health benefits, and therefore ultimately of coverage by and use of those benefits. For those who are interested in social justice and health the complicated institutional process of health insurance and its link to healthcare consumption and health outcomes is an issue that demands attention (Peter 2001).

In addition to the limitations of these data for studying ethnoracial differences, two more issues deserve attention. First, these data sets do not allow us to examine the actual use of health benefits, only whether employees are offered and choose to take them. Second, although we are fortunate to have two waves of NSCW data, without panel data we are unable to trace patterns over the

individual life course and career cycle. In the age of declining benefits it would be informative to know whether individuals lose and gain access to health benefits through their own employers over the course of their careers.

Our findings are consistent with some previous research in this area that documents declines in health insurance coverage over this time period. Of course, this research only addresses the situation for wage and salaried workers, and therefore excludes the self-employed, those in any kind of alternative work arrangements, and people not currently in the labor force. Nevertheless, we are able to say that the declines in the worker population, at least in offers and take-ups, mirror the declines in coverage within the general population.

In light of the popular concern over the rising cost of healthcare, and the nation's perpetual and institutional reliance on employers as the primary source of healthcare coverage, it is important to note how employer-provided insurance offers and take-ups have changed over time in order to speculate about the future as well as how different groups of workers are differentially affected. If all workers are experiencing declines in insurance take-ups it is important to document who is disadvantaged most by those declines. Some workers will have fewer resources to buffer the losses and ultimately those losses may create greater strain on the healthcare system.

Perhaps just as important as the declining provision of health benefits are the cost and quality of those benefits. As employers shift more premium costs to workers, it is likely that we can expect some workers to bear this burden with more difficulty than others, thus increasing disparities across groups of workers. Although beyond the scope of the current article, the question of employees' out-of-pocket costs for both insurance and healthcare are crucial elements in this equation. Ideally, our national conversation will eventually move beyond simply a discussion of whether or not workers have insurance to a richer conversation about the quality of that insurance and disparities in health outcomes which also may vary across different groups of workers and for whom may have important implications.

ENDNOTES

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[1]We discuss variable measurement for items in both surveys. Where applicable, we note differences in wording and coding across years.

[2]The NSCW does not allow us to specify which "other" ethnoracial groups are included in this category.

[3]Respondents were asked how many people worked for their company. If the respondent's work location was the only location, we used the number of employees at their local place of work.

[4]We do not present the odds ratios in the tables; however, they are easily derived by exponentiating the coefficients, exp (B).

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