Changes in Family Health Insurance Coverage for Small and Large Firm Workers and Dependents: Evidence from 1995 to 2005

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by Eric E. Seiber, and Curtis S. Florence, 2007 [64] pages. Columbus, OH 43210
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Introduction

Access to and affordability of health insurance offered by business owners to employees continue to be of great concern. According to the National Federation of Independent Business, the cost of employer-sponsored health insurance is the most pressing problem affecting the provision of health insurance for small business owners. The objective of this study is to determine whether the decline in family health insurance coverage at large firms has increased financial pressure on plans sponsored by small firms. The study addresses family health insurance coverage from the worker's perspective.

Overall Findings

This study finds that family health insurance coverage for workers in both small and large firms is decreasing, and that firm size plays a role in the type of dependent coverage children have. Access to coverage through a large firm as a dependent remains very important to small firm employees.

Highlights

• Small firm workers married to large firm workers are more likely to be covered as dependents at large firms than if their spouses work at small firms. Specifically, in 2005 an estimated 47 percent of small firm workers with a spouse working in a large firm were covered as dependents, compared with 23.5 percent of small firm workers with a spouse working in a small firm.

• The study also finds that few large firm employees are shifting their coverage from their large firm to dependent coverage under their small firm spouse's plan. Large firm workers married

to small firm workers experienced a decline in coverage from work of almost 3 percentage points compared with an increase of about 0.8 percentage point in coverage through their small firm spouses.

• Small firms do face more financial pressure from the decline in large firm dependent coverage of children; however, the effect is quite small, with an increase of less than one percentage point in the share of children covered as dependents by small businesses when their parents work at different-sized firms.

• The findings show that children are more likely to have dependent coverage if they have a parent working in a large firm. In 2005, 63.7 percent of children with both parents working at a small firm had dependent coverage, compared with 78 percent if one parent worked at a large firm and the other at a small one, and 81 percent if both parents worked at a large firm.

• Nonemployer coverage of children is especially important for families where both spouses work in small businesses. This "other" coverage has reduced the share of small firm worker parents with uninsured children from 16.4 percent to 11.0 percent.

• Over the study period 1995 to 2005, dependent coverage for married workers increased slightly for large firm workers with a spouse working in a small firm. Also, there has been an increase in dependent coverage of small firm employees by their large firm spouses, which should decrease the financial pressure on small firms.

Scope and Methodology

The researchers use data from the Annual March Demographic Survey of the Current Population

Survey (CPS) for 1996, 2001, and 2006. The March CPS is collected by the U.S. Census Bureau on behalf of the Bureau of Labor Statistics. From 1996 to 2001, the survey sampled approximately 60,000 households annually. The March CPS surveys are an extensive collection of information on the work experience, income, and demographics of the U.S. noninstitutionalized population, and are also primary sources of information on health insurance coverage. The CPS does not contain any information on health insurance costs.

To control for differences in health insurance costs across different locations and across time, the authors use premium data from the Federal Employees Health Benefits Program (FEHBP). Therefore, FEHBP premiums can serve as a proxy for local health insurance costs. The FEHBP data were merged with the CPS data by calculating the mean FEHBP managed-care plan premium for each metropolitan statistical area (MSA) in the United States, and then matching this mean premium with each respondent's MSA code in the CPS data. Respondents who did not live in an MSA were assigned the mean premium for all of the MSAs in their state. If their state did not have an FEHBP plan, they were assigned the premium for the Blue Cross Blue Shield FEHBP plan for that year.

This study uses a series of four multinomial logit models to test whether spouses working for large firms and children previously covered through large firms have shifted to dependent coverage in group plans sponsored by small businesses. For a shift in coverage from large firm to small firm employers to occur, a family must have a mix (a spouse working at a large and small firm) of workers who can potentially cover dependents through their job. For this reason, employer-based health insurance for two-earner married couples and their children is analyzed. One major limitation of this study is that the data did not make it possible to determine if workers or employers were dropping health insurance coverage.

This report was peer-reviewed consistent with Advocacy's data quality guidelines. More information on this process can be obtained by contacting the director of economic research by email at **advocacy@sba.gov** or by phone at (202) 205-6533.

Ordering Information

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Table of Contents

List of Figures and Charts

List of Tables

Executive Summary

Recent research has found that 38 percent of U.S. workers with health insurance coverage in 2005 had family coverage, down from 41 percent in 2001. The change was especially acute for small businesses, with the percentage of workers covered by a family plan dropping from 39 percent in 2001 to 32 percent in 2005 (KFF 2005). This study examines the 1996-2006 Annual Demographic Survey of the Current Population Survey (CPS) to determine if the decline in health insurance coverage at large firms has increased financial pressure on plans sponsored by small firms. This study uses a series of four multinomial logit models to test whether spouses working for large firms and children previously covered through large firms have shifted to dependent coverage in group plans sponsored by small businesses.

The study examines two specific study questions. First, what is the relationship between worker firm size and health insurance coverage in households with two married workers? Second, has the decline in coverage through large firms led to increased coverage of dependents by small firm workers? The study documents trends in family coverage at both small and large firms for the years 1995, 2000, and 2005. It then examines whether declines in family policies at large firms shift family members to plans sponsored by small firms. This is done by examining the two groups whose health insurance coverage can possibly be shifted between firms: two-worker married couples and their dependent children. We estimate regression models for employer health insurance coverage for policyholders and dependents to determine if these trends still hold when controlling for confounding factors that affect health insurance coverage.

The study produces four primary findings. First, small firm workers who are married to large firm workers are more likely to be covered as dependents at large firms. Specifically, in 2005 the results estimate that 47 percent of small firm workers with a large firm spouse are

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covered as dependents. Meanwhile, only 23.5 percent of small firm workers who have a small firm spouse are covered as dependents. Our results show that access to coverage through a large firm as a dependent remains very important to small firm employees.

Second, few large firm employees are shifting their coverage from their large firm plan to their small firm spouse's plan . Large firm workers who are married to small firm workers experienced a decline in coverage from work of almost 3 percentage points. However, they experienced an increase of only about 0.8 of a percentage point in coverage through their small firm spouses.

Third, children are more likely to have dependent coverage if they have a large firm parent. For 2005, 63.7 percent of children with both parents working at a small firm had dependent coverage, which increased to 78 percent if one parent worked at a large firm and 81 percent if two parents did so. Access to insurance through a large firm employee greatly increases access to coverage for children, just as it does for adults.

Fourth, small firms do face more financial pressure from the decline in large firm coverage of children; however, the effect is quite small—an increase of less than one percentage point in the share of children covered by small businesses when their parents work at different-sized firms.

The study also produced two unanticipated findings that merit more research. First, across all firm sizes, fewer workers are covered through their own employer, and they are increasingly obtaining dependent coverage through their spouse. This finding implies that workers are concentrating their insurance coverage at fewer firms. In effect, firms are shifting the costs of their workers' coverage to other firms, both large and small. We also found that nonemployer coverage of children is especially important for families where both spouses work

at small businesses. This "other" coverage has reduced the small firm parents with uninsured children from 16.4 percent to 11.0 percent.

In conclusion, does the overall decline in family health insurance coverage in all firms increase pressure on small businesses? This report concludes the answer would be yes, since married workers have substituted for the loss of employer coverage with dependent coverage from a spouse. The magnitude of this pressure has remained small for the period 1995 to 2005; however, if coverage through employment continues to decline, small firms that still offer coverage will likely face increasing enrollment of dependents on their plans.

Introduction

This study utilizes the 1996-2006 Annual Demographic Survey of the Current Population Survey (CPS) to determine if the decline in health insurance coverage at large firms has increased financial pressure for dependent coverage on plans sponsored by small firms. This increased financial pressure could come from spouses at large firms who previously had their own coverage, but now are covered as a dependent on their spouse's plan, and from children who were previously covered by a parent who worked at a large firm, but are now covered by a parent at a small firm.

This analysis examines the impact on small businesses from the changes in family coverage occurring at all firms. We address two specific study questions. First, what is the relationship between worker firm size and health insurance coverage in married, two-worker households? Second, has the decline in coverage through large firms led to increased coverage of dependents by small firm workers? We document trends in family coverage at both small and large firms for the years 1995, 2000, and 2005. We then examine whether there have been declines in family policies at large firms and whether these declines shift family members to plans sponsored by small firms. This is done by examining the two groups for whom health insurance coverage can be shifted between firms: adults in two-worker married couples and their dependent children. We estimate regression models for employer health insurance coverage for policyholders and dependents to determine if these trends still hold when controlling for other factors that affect health insurance coverage.

Specifically, our results will examine if small firms have experienced an increase in the enrollment of dependents, and if a growing number of large firm workers are enrolling in health plans sponsored by small firms. If so, this could increase the total cost of labor in small firms.

We find that:

- Employer coverage of policyholders has declined for all workers over the study period.

- Dependent coverage for married workers has increased slightly over the study period for large firm workers who have a spouse working at a small firm.

- Dependent coverage of small firm employees by their large firm spouses has increased, which should *decrease* the financial pressure on small firms.

- Dependent coverage of children has decreased slightly over our study period, but the percentage of dependent children covered by a large firm-employed parent has remained steady.

- These results are confirmed by regression analysis that controls for health insurance costs, worker and local area characteristics.

Literature Review

Recent research has highlighted the importance for small business employees of access to family coverage through a spouse working at another firm. Abraham and Royalty (2005) use the 1996 Medical Expenditure Panel Survey to compare insurance coverage of one- and two-earner households in 1996. In households with a single wage earner, employees of small establishments were 29 percentage points less likely to be covered by an employer-sponsored plan than employees of large establishments, but the presence of a second earner in the household offsets 62 percent of the negative effect on coverage from working for a small business. However, this study did not examine the effect of the firm size of the spouse on the likelihood of coverage. Farber and Levy (2000) use supplements to six years of the Current Population Survey (CPS) to confirm the importance of coverage through a spouse, finding that 30 percent of the decline in own-employer insurance coverage between 1988 and 1997 was offset by spousal coverage. Polsky et al. (2005) found a similar effect for spousal coverage when the employee's share of the

premium contribution changes, utilizing the 1996 and 1998 rounds of the Community Tracking Study Household Survey.

The continuing decline of family coverage raises particular concern given the importance of this type of insurance in extending coverage to employees of small businesses. In their 2005 Survey of Employer Health Benefits, the Kaiser Family Foundation and the Health Research and Educational Trust reported that family coverage in the United States has declined from 41 percent of covered workers in 2001 to 38 percent in 2005. The change was especially acute for small businesses, with the percent of workers covered by a family plan dropping from 39 percent in 2001 to 32 percent in 2005. Contributing to this decline in family coverage has been the large increase in premiums for these family plans, 71.3 percent from 1996 to 2005 for small firms and 57.7 percent for large firms.

Although the literature establishes the importance of coverage through a spouse for small business employees, no study examines the relationship between coverage and the firm size of the spouse, or how the continued decline in family coverage has affected small businesses. Furthermore, the studies highlighting the importance of access to coverage through a spouse rely upon data from the mid and late 1990s, before the most recent declines in family coverage. This study remedies these gaps in the literature by examining the relationship between the firm size of the spouse and the coverage of small firm workers, and how changes in family coverage have affected small firms over the 1995-2005 time period.

Policy Relevance

Facilitating access to health insurance through small businesses remains a high priority for federal, state, and local policy makers. On the federal level, both President Bush during the 2004 campaign and the House of Representatives have proposed subsidies for small business health insurance (*New York Times* 2004, Kaiser Family Foundation 2005). In the first half of 2006, the states of Oklahoma, Rhode Island, and Washington all implemented or expanded premium subsidy programs for small businesses (Kaiser Family Foundation 2006, Gurais 2006, Shannon 2006). Targeted health insurance subsidies are sufficiently popular that they have even been implemented by individual counties to promote small business development (California Healthcare Foundation 2006).

Researchers differ on the potential impact of premium subsidies. These differences focus on subsidies' limited potential to reduce the *total* number of uninsured workers in the United States and not just uninsured workers at small businesses. Reschovsky and Hadley (2001) estimated with 1997 data that a 30 percent premium subsidy for small businesses would extend coverage to only about one half million uninsured workers nationally. In the case of San Diego County in 2001, Kronick and Olsen (2006) found very few small businesses that did not offer group plans *and* that had many uninsured workers. For firms that did not offer insurance, 75 percent had zero or one uninsured worker. However, the highest number of uninsured was found in firms with 11-50 employees that did not offer insurance.

For policymakers interested in strengthening small businesses, the findings of these studies are of limited interest. These studies assess small business development policies from the perspective of their impact on the total number of uninsured in the United States, not the policies' impact on the small business environment. Furthermore, these studies rely on five- and

ten-year-old data that do not capture the rapid increases in insurance premiums over that last half decade. Moreover, these studies focus on reducing the number of uninsured rather than on the health of small businesses.

Hypotheses

Based on the previous results in the literature and our study questions, we developed four hypotheses to test in this study. They are:

Hypothesis 1: Given the importance of a working spouse in increasing the probability of health insurance coverage, and the advantages of large firms in providing such coverage, we expect small firm workers who have a spouse working at a large firm to be more likely to be covered as a dependent than small firm workers with a spouse working at a small firm.

Hypothesis 2: Given a decline in large employer coverage over time, large firm workers will be less likely to be covered by their own job, and more likely to be covered as dependents by their spouses working in small or large firms.

Hypothesis 3: Children will be more likely to have dependent coverage in an employer plan if they have a parent who works at a large firm.

Hypothesis 4: Given a decline in large firm dependent coverage of children, a growing percentage of children will be covered as dependents by small firm workers.

Data

We use data from the annual March supplements of the Current Population Survey (CPS) for 1996, 2001, and 2006.[i] The March CPS is collected by the U.S. Census Bureau on behalf of the Bureau of Labor Statistics. From 1996 to 2001, the survey sampled approximately 60,000

households annually, which comprised approximately 120,000 total individuals. Starting in 2002, the March survey was expanded to almost 100,000 households, and comprised more than 200,000 individuals. The March CPS surveys are an extensive collection of information on the work experience, income, and demographics of the U.S. noninstitutionalized population, as well as their health insurance coverage. Data are collected on each individual who resides in a sampled household.

Each March supplement asks about a person's work experience and health insurance coverage in the prior calendar year. Therefore, the data contain information on labor market experience and health insurance coverage for 1995, 2000, and 2005.[ii] Each individual is asked to report all types of health insurance they had in the previous year. This means that some individuals may report multiple types of coverage during the year. However, there is no information in the CPS on the duration of coverage. Since we are primarily interested in coverage from employers, we construct a mutually exclusive "hierarchy" of coverage, so that if a person reports having employer-sponsored coverage in their own name, they are considered to have that as their primary coverage. If they do not report coverage as a policyholder, but report coverage as a dependent, they are reported to have that as their primary coverage. If a person does not report employer-sponsored coverage, but reports some other type of coverage (public plans such as Medicaid and Medicare, and plans purchased in the private market), that is their primary coverage category. Finally, if a person does not report any coverage, they are considered uninsured, and that is the final coverage category. In addition to the health insurance variables, the CPS also contains a variable that lists the policyholder within the household for all persons with dependent coverage. This variable allows us to determine the individual in the household that is the policyholder for the employer-sponsored insurance that covers dependents. We can

therefore match the characteristics of the policyholder to all dependents in the household.

In addition to the health insurance variables, the March CPS also contains information on the number of employees at all locations of a worker's main job in the previous year. We use this variable to construct an indicator for each worker that is =1 if they are employed at a firm with 500 or more workers, which we use as our criterion for a large firm. This criterion is based on the most common employee size requirement used by the Small Business Administration (SBA) to determine eligibility for SBA programs. The SBA also uses other criteria such as total revenue to determine if a firm is a small business. Since no such firm-level data are available for the participants in the March CPS, we do not use revenue as a criterion in defining a small business.

Many factors in addition to firm size can affect the likelihood that a person has insurance coverage. To determine if the changes in health insurance coverage we document are related to firm size, we must also control for those variables in our analysis. We use information in the CPS on age, income, education level, family structure, industry, and occupation to control for other factors that also influence insurance coverage. Note that government is included among the industries shown (Table 3).

Potentially one of the main determinants of health insurance coverage is the cost of coverage. The CPS does not contain any information on health insurance costs. To control for differences in health insurance costs across different locations and across time, we use premium data from the Federal Employees Health Benefit Plan (FEHBP) to control for differences in premiums across local markets. All local plans are allowed to participate in the FEHBP as long as their premiums are not greater than those they charge local employers of similar group size and demographics (Florence and Thorpe (2003)). Therefore, FEHBP premiums can serve as a proxy for local health insurance costs.

The FEHBP data were merged with the CPS data by calculating the mean FEHBP managed-care plan premium for each metropolitan statistical area (MSA) in the United States, and then matching this mean premium with each respondents MSA code in the CPS data. Respondents who did not live in an MSA were assigned the mean premium for all of the MSAs in their state. If their state did not have an FEHBP plan, they are assigned the premium for the Blue Cross Blue Shield FEHBP plan for that year.

The specifications for all the variables used in the analysis are described in detail in the empirical section below. Detailed information on the methodology used to construct the health insurance dependency variables and the health insurance costs data can be found in the appendix.

Empirical Methodology

Dependents in private health insurance are typically spouses, children under 18, and children over 18 who are full-time students. For a shift in coverage from large firm to small firm employers to take place, a family must have a mix of workers who can potentially cover dependents through their job. This could occur in households where the two spouses in a married couple both work.[iii] For that reason, we analyze the employer-based health insurance for two-earner married couples and their children.

Many factors other than firm size influence the probability of insurance coverage, including the cost of coverage, family income, and demographic factors such as education and the region of the country. Since the outcome in this case is a categorical, mutually exclusive variable where the independent variables are all characteristics of the individual, not the type of insurance coverage, the model is estimated as a multinomial logit. The multinomial logit regression model estimates the probability of having a given type of insurance coverage as a

function of the individual's characteristics. The probability of having a particular type of coverage is given as:

$$P(y_i = j) = \frac{\exp(Z_i\gamma_j)}{\sum_{j=1}^{J}\exp(Z_i\gamma_j)}$$

Where:

i=1,…,N (where N represents the total number of adults in the analysis sample)

j=1,2,3,4

y_i=1 if the worker has employer health insurance in their own name

y_i =2 if $y_i \neq 1$ and if the worker is covered as a dependent on their spouse's employer plan

y_i =3 if $y_i \neq 1$ and $y_i \neq 2$ and if the worker has some other type of coverage

y_i =4 if $y_i \neq 1$, $y_i \neq 2$ and $y_i \neq 3$, the worker is considered uninsured

A flow chart presenting the weighted distribution of these four insurance outcomes is given in Chart 1. The Z_i is a matrix of the individual's characteristics, and γ_j are the coefficients that give the effect of the characteristics on the likelihood of coverage. To estimate the multinomial logit model, the coefficients for one insurance category must be set to zero. In the estimation results that follow below, we choose coverage from the worker's own employer as the reference category (γ_1=0).

The estimated coefficients then represent the effect of the variable on having one of the other types of coverage relative to having coverage from the worker's own employer.

Chart 1: Weighted Distribution of Health Insurance Coverage for Married Workers in Two-earner Couples, By Worker and Spouse Firm Size,* 2005

```
┌─────────────────────────┐
│   Total population      │
│ = 134.6 million workers │
└─────────────────────────┘
            │
   ┌────────┴──────────────────────────────────┐
┌──────────────────────┐        ┌──────────────────────────┐
│ Workers unmarried or │        │   Married couples with   │
│ with nonworking      │        │   both spouses working   │
│ spouses=             │        │   =66.3 million workers  │
│ 68.4 million workers │        └──────────────────────────┘
└──────────────────────┘
```

	SB workers (spouse in SB) =23.7 million workers	LB workers (spouse in SB) =13.3 million workers	SB workers (spouse in LB) =13.3 million workers	LB workers (spouse in LB) =16.0 million workers
Own coverage thru work	=10.8 million	=10.0 million	=4.8 million	=10.3 million
Coverage from spouse's job	=5.9 million	=1.8 million	=6.7 million	=4.3 million
Other coverage	=3.1 million	=0.7 million	=0.8 million	=0.7 million
Uninsured	=3.8 million	=0.8 million	=0.9 million	=0.7 million

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* SB = small business; LB = large business.

10

The exact specification of the model for adult, married two-worker couples is given below.

Model 1 (Adult Married Workers in Two-Worker Couples):

$$Z_i \gamma_j = \text{Large Firm}_i \beta_{1j} + (\text{Large Firm}_i * year\_2000_i)\beta_{2j} + (\text{Large Firm}_i * year\_2005_i)\beta_{3j} +$$
$$\text{Spouse Large Firm}\beta_{4j} + (\text{Spouse Large Firm}_i * year\_2000_i)\beta_{5j} + (\text{Spouse Large Firm}_i * year\_2005_i)\beta_{6j}$$
$$+ (\text{premium/income})_i \beta_{7j} + year\_2000_i \beta_{8j} + year\_2005_i \beta_{9j} + X_i \phi_j$$

> Large firm$_i$=1 if the worker works at a firm with 500 or more workers (=0 otherwise)
>
> Spouse large firm$_i$=1 if the worker's spouse works at a firm with 500 or more workers (=0 otherwise)
>
> Year_2000$_i$=1 if the observation is for the year 2000 (=0 otherwise)
>
> Year_2005$_i$ =1 if the observation is for the year 2005 (=0 otherwise)
> (1995 is the excluded category)
>
> Premium/income$_i$ is the share of family income that would be require to purchase a family policy based on the mean local FEHBP premium
>
> X$_i$ is a matrix of individual and local area characteristics (detailed in Figure 2).

A detailed description of all variables in the model is given in Figure 1.

The results of this model can be used to examine the first two hypotheses of our study. Hypothesis 1 (being married to a large firm worker increases the probability of being covered by a dependent) is measured by the β_{4j} coefficients. If having a large firm spouse increases the probability of dependent coverage (relative to the other types of coverage), this will be shown as a statistically significant β_{42} coefficient. Hypothesis 2 (the effect of firm size has changed over time) is estimated by the coefficients on the interactions of own and spouse firm size and the

year indicator variables. If these are statistically significant, they will reflect a significant change in the relationship between firm size and insurance coverage over the years of our study.

Given the multi-category nature of our model, and the need to choose one category as a reference, the interpretation of the coefficients beyond sign and significance is quite difficult. For example, we will know how the variable affects the probability of a given coverage type relative to the reference category, but not relative to the other types of coverage. While the choice of reference category determines the scale of the coefficients, the predicted probabilities from the model are not affected by the choice of reference category. We will use the predicted probabilities to interpret the results of the model. The predicted probability of a given type of coverage is obtained by taking the coefficients for that type of coverage in the numerator of the multinomial logit equation and calculating the resulting probability. The probability of the excluded category is found by subtracting the probability of the other categories from 1. The effect of firm size and year on the probability of coverage is found by setting the firm size and year variables to the appropriate value to predict coverage for the given category and year, leaving all other values of the right hand side variables at their actual levels. Then we calculate the mean rate of predicted coverage over the entire sample.

Model 2 (Children of Adult Married Workers in Two-Worker Couples):

$$P(y_i = j) = \frac{\exp(Z_i \gamma_j)}{\sum_{j=1}^{J} \exp(Z_i \gamma_j)}$$

$Z_i \gamma_j =$ One parent large firm $* \beta_{1j} +$ One parent large firm $* year\_2000_i * \beta_{2j} +$
One parent large firm $* year\_2005_i * \beta_{3j} +$ Two parents large firm $* \beta_{4j} +$
Two parents large firm $* year\_2000_i * \beta_{5j} +$ Two parents large firm $* year\_2005_i * \beta_{6j}$
$+ (premium/income)_i * \beta_{7j} + year\_2000_i * \beta_{8j} + year\_2005_i * \beta_{9j} + X_i \phi_j$

Where:

i=1,…,N (where N represents the total number of children in the analysis sample)

j=1,2,3

y_i =1 if the child has employer health insurance from one of their parents

y_i =2 if $y_i \neq 1$ and if the child is covered by some other type of insurance

y_i =3 if $y_i \neq 1$, $y_i \neq 2$, the child is considered uninsured

One parent large firm$_i$=1 if the child has one (and only one) parent who works at a firm with 500 or more workers

Two-parent large firm$_i$=1 if both of the child's parents work at a firm with 500 or more workers

Year_2000$_i$=1 if the observation is for the year 2000 (=0 otherwise)

Year_2005$_i$ =1 if the observation is for the year 2005 (=0 otherwise)
(1995 is the excluded category)

Premium/income$_i$ is the share of family income that would be require to purchase a family policy based on the mean local FEHBP premium

X_i is a matrix of individual and local area characteristics (detailed in Figure 4).

A flow chart presenting the weighted distribution of these three insurance outcomes is given in Chart 2. A detailed description of all variables in the model appears in Figure 2. In estimating this model, we set coverage from a parent's employer-sponsored plan (category 1) as the excluded category. The results of this model will be used to examine Hypothesis 3 (children are more likely to have dependent coverage if a parent works at a large firm) by using the effect

Chart 2: Weighted Distribution of Health Insurance Coverage for Children of Married, Two-worker Couples, by Parent's Firm Size,[*] 2005

Total population
= 88.4 million children

Children of non-married, 2-worker couples =33.0 million

Children of married, 2-worker couples =55.4 million

Both parents work in SB =23.7 million children

One parent works in SB, one in LB =23.0 million children

Both parents work In LB =8.7 million children

Covered thru parent's employer =13.1 million

Covered thru parent's employer =18.5 million

Covered thru parent's employer =7.7 million

Other insurance =7.3 million

Other insurance =3.2 million

Other insurance =0.7 million

Uninsured =3.3 million

Uninsured =1.2 million

Uninsured =0.3 million

[*] SB = small business; LB = large business

Of the parent's firm size measured by the β_{1j} and β_{4j} coefficients. As with the adult model, we will demonstrate this relationship by simulating predicted coverage for the sample for each year and firm size combination.

Changes in this relationship over time can be seen by the interactions of the firm size variables with the year indicators. However, in this case the results do not directly examine our Hypothesis 4 (if large firm dependent coverage drops, children will be more likely to have coverage through a small firm employed parent). In order to directly examine this hypothesis, our final regression model examines how the likelihood of being covered by a large firm-employed parent changes over time. In this case the population examined is all children that are covered as dependents in a parent's employer plan, and that have one parent who works at a small firm and one that works at a large firm.

Model 3 (Children Covered by Employer Insurance, with One Parent at a Large Firm and One at a Small Firm):

$$P(\text{Coverage from large firm}_i = 1) = f((\text{premium/income})_i * \beta_1 + year\_2000_i * \beta_2 + year\_2005_i * \beta_3 + X_i\phi + \varepsilon_i)$$

Where:

i=1,…,N (where N represents the total number of children in the analysis sample)

Coverage from large firm=1 if the child is covered as a dependent by their large firm parent's plan

Year_2000$_i$=1 if the observation is for the year 2000 (=0 otherwise)

Year_2005$_i$ =1 if the observation is for the year 2005 (=0 otherwise)
(1995 is the excluded category)

15

Premium/income$_i$ is the share of family income that would be require to purchase a family policy based on the mean local FEHBP premium

X$_i$ is a matrix of individual and local area characteristics (detailed in Figure 2).

The results of this model will examine Hypothesis 4 by estimating how the probability of being covered by the large firm parent has changed over time. This effect is measured by the year indicator variables. If β_2 and β_3 are significantly different from zero, then the probability of being covered by the large firm parent is different in 2000 and 2005 than it was in 1995. As with the other models, we will also simulate the rate of coverage using the regression results to show the magnitude of any effect.

Results

For married workers in two-worker households, coverage from their own employer declined by almost three percentage points from 1995 to 2005 (Table 1). Most of this decline in coverage was offset by a two percentage-point increase in coverage for dependents on spouses' employer plans. Almost the entire remaining decline in coverage from a worker's own employer has been offset by an increase in "other" coverage, with only a slight increase in the uninsured rate.

Since it seems clear that the decline in coverage from work is to a large extent offset by spousal coverage, how do these changes over time differ by the sizes of the firms employing the worker and the spouse? The group with the smallest declines in coverage through work (-1.4 percentage points) is small firm workers married to small firm workers (Table 2). The two groups with the largest declines in coverage are workers in small and large firms whose spouses work in large firms (-4.3 percentage points). Small firm workers married to large firm workers had a five percentage-point drop in coverage through work, which was largely offset by an

almost four percentage-point increase (3.8 percentage points) in coverage through their large firm spouse. Large firm workers married to large firm workers had a drop in coverage through work of more than four percentage points (-4.3 percentage points), which was offset by an increase in coverage through their spouse of more than three (3.3) percentage points.

Finally, the group of workers who are the main focus of our analysis, large firm workers married to small firm workers, had a relatively small drop in employment coverage of slightly less than two (-1.8) percentage points. Almost one (0.9) percentage point of this drop is offset by an increase in coverage as dependents of small firm spouses. Therefore, it does appear that small businesses are now covering more large firm workers as dependents than in the past. However, this effect is small compared with the effects of other firm size combinations among married couples. It should also be kept in mind that these are the raw changes in coverage over our study period. Many other factors aside from firm size, including changes in health care costs and the socioeconomic composition of the work force, could be partially determining the trends we observe. For that reason we will need to examine the effect of firm size while controlling for these factors in our regression model.

Table 3 reports the descriptive statistics for married workers in the two-worker household sample. Over 44 percent (44.5) of this portion of the work force is employed in large firms. This is a relatively high-income group, with more than 60 percent of the sample having a family income four times the federal poverty level. During the period of this study, health insurance premiums constituted a large share of the average family income (almost 10 percent of family incomes in the sample).

The regression results from Model 1 are presented in Table 4. The results are converted to relative risk ratios (RRR) by taking the exponent of the logit coefficients.[iv] An RRR greater

than one indicates that as the value of the variable increases, the likelihood that the person is in

the given category of coverage is higher, relative to the reference category of coverage. A value

less than one means the likelihood is lower. For example, workers at large firms are much less

likely to be covered as a dependent on their spouse's plan than workers at small firms

(RRR=0.370). Workers whose spouse works at a large firm are much more likely to be covered

as a dependent than to have their own coverage (RRR=2.661). However, interpreting the entire

model in this way is quite unwieldy. Therefore, we use the results of the model to produce

regression-adjusted predictions of the rates of coverage presented in Table 2. The results of these

simulations are given in Table 5. These simulations are produced by setting the large firm

indicator variables and the year indicator variables to the values that coincide with each category.

For example, to predict the rate of coverage for small firm workers whose spouses worked at a

small firm in 1995, we set Large Firm$_i$=0, Spouse Large Firm$_i$=0, year_2000$_i$=0 and year-

_2005$_i$=0 and predict the probability of each type of coverage for each observation in the

analysis sample, then we take the mean of these predictions. To simulate the coverage rate for

this category for 2000, we set year_2000$_i$=1, and recalculate. The other firm size and year

combinations are simulated by changing the firm size and year values to those that coincide with

the category.

The results of the simulations are qualitatively very similar to the raw coverage rates

presented earlier.[v] The groups that have experienced the largest declines in coverage through

their employers are those who are married to large firm workers. Small firm workers married to

large firm workers have had a predicted 6 percentage-point decline in coverage through their

own employers, which has been offset by a more than 4 percentage-point increase in coverage

through their spouses. Large firm workers married to large firm workers have an almost identical

percentage-point decline in coverage and offset through spousal coverage. Small firm workers married to small firm workers had a 3 percentage-point decline in coverage through work, with only 1 percentage point of the decline offset by increased coverage through a spouse. Finally, for the group which is the focus of our analysis—large firm employees married to small firm employees—we see a decline in coverage from work of almost 3 percentage points, with less than 1 percent of the decline offset by an increase in spousal coverage.

Just as spouses move from having their own coverage to being covered by a spouse, child dependents could be moved from one parent's coverage to another's. Children also have experienced declining coverage through employer plans over our study period (Table 6).[vi] However, this decline was smaller than it was for married workers. Dependent coverage for children declined by slightly less than 2 (-1.7) percentage points, while they have experienced a dramatic increase (4.5 percentage points) in "other" coverage, and an almost 3 (-2.8) percentage-point drop in the uninsured rate. Most of this increase in other coverage is attributable to the implementation of the State Children's Health Insurance Program (SCHIP), which was instituted in 1997.

As was the case with adult health insurance coverage, firm size plays a strong role in the type of coverage children have. The rate of children's coverage by parents' employers is much higher for children with at least one parent working at a large firm than for children with both parents working at small firms (for children with both parents present in the household and employed, Table 7). The rate of employer coverage of workers' children has decreased slightly over the study period, but these declines are much smaller than they were for married adults. For children with both parents working in small firms, or both parents at large firms, the rate of coverage from employer plans changed very little between 1995 and 2005 (although there was a

large temporary increase of 4.0 percentage points in 2000). Coverage has been fairly consistent for children with one or both parents employed in large firms, a group that experienced a decline in health insurance coverage between 1995 and 2005.

It is also notable that the rate of other coverage is much higher for children with both parents working in small firms. This type of coverage has grown considerably for children of small firm workers, while the uninsured rate has declined substantially. While not directly the topic of this study, it is interesting that the availability of public coverage seems to disproportionately benefit the children of small firm workers.

While these descriptive results suggest a strong role for firm size in determining the insurance coverage of workers' children, they do not control for other factors that contribute to coverage. The results from Model 2 will estimate coverage rates adjusting for other factors that influence coverage. The descriptive statistics for the independent variables in this model are given in Table 8. These means show that households with children generally have lower incomes than the sample of all married two-worker couples. Only 38.4 percent of children are in households with income more than four times the federal poverty level. Health insurance premiums are also proportionally higher relative to income (almost 17 percent).

The RRRs for Model 2 are presented in Table 9, with dependent coverage from an employer as the reference category. Having one (RRR=0.382) or two parents (RRR=0.293) in a large firm significantly lowers the odds of having other or no coverage (relative to coverage through a parent's employer). Increases in premiums greatly increase the odds of other (RRR=9.416) or no coverage (RRR=11.244).

The results of the simulations for Model 2[vii] are again qualitatively very similar to the raw rates (Table 10). Children who have two parents working at small firms have experienced little

change in coverage through their parents' employment. They also have experienced significant growth in other coverage and a drop in the uninsured rate. Children of large firm workers have higher rates of employer coverage, but have experienced small declines over time. They also have seen growth in other coverage, but this has not been as pronounced as for the children of small firm workers. They have also experienced considerable growth in the uninsured (5.4 percentage points).

While the results of Model 2 show the relationship between firm size and coverage for children, this model cannot directly address the issue of shifts in coverage from large firms to small firms. For that reason, we estimate model 3 for the child population. This model directly addresses changes over our study period in the percentage of dependents covered by the large firm parent when the parents work at firms of different size categories. Over the period of study, the percentage of children covered by the large firm parent has changed only slightly (Table 11). However, Model 3 will show if these rates have changed when other factors that affect the distribution of coverage are controlled for. The descriptive statistics in this model are given in Table 12, and the odds ratios from the logit Model are given in Table 13. The odds of being covered by the large firm employer is smaller in 2000 (RRR=0.912) and 2005 (RRR=0.953) than in 1995 (the excluded category). However, these differences are small, and are statistically significant only for the year 2000. This pattern is reflected in the simulations from this model (Table 14), where the rate of coverage from the large firm parent drops by 1.4 percentage points from 1995 to 2000, but is different by only 0.7 of a percentage point from 1995 to 2005.

Conclusions

This study proposed four hypotheses about the factors influencing health insurance coverage in families that potentially have multiple sources of coverage. The first, that small firm workers married to large firm workers would be more likely to be covered as a dependent, was strongly confirmed by our results. For example, in 2005 our results estimate that 47 percent of small firm workers with a large firm spouse are covered as a dependent. Meanwhile, only 23.5 percent of small firm workers with a small firm spouse are covered as dependents. Our results show that access to coverage through a large firm as a dependent is very important to small firm employees.

Our second hypothesis, that large firm employees would shift to coverage through small firm spouses if they lost coverage from their own job, was also observed in our study. However, the magnitude of this effect is rather small. Large firm workers married to small firm workers experienced a decline in coverage from work of almost 3 percentage points and only about 0.8 of a percentage point increase in coverage through their small firm spouses.

Hypothesis 3, that children will be likely to have dependent coverage if they have a large firm parent, was also confirmed by our results. For example, in 2005, 63.7 percent of children with both parents working at a small firm had dependent coverage, compared with 78 percent if one parent worked at a large firm and 81 percent if two parents did so. Access to insurance through a large firm employee greatly increases access to coverage for children, just as it does for adults.

Our final hypothesis predicted that small firms would face more financial pressure from a decline in large firm coverage of children, because a growing percentage of children will be covered as dependents by small firm workers. We find some confirmation that this has occurred,

as coverage from large firms has declined. However, the effect again was quite small, with a less than 1 percentage point increase in the share of children covered by small firms when their parents worked at different-sized firms.

The study also produced two unanticipated findings that merit further research. First, across all firm sizes, workers are dropping coverage through their own employer and switching to dependent coverage through their spouse. This finding implies that workers are concentrating their insurance coverage at fewer firms. In effect, some firms are shifting the costs of their workers' coverage to other firms, both large and small. We also found that nonemployer coverage of children is especially important for families where both spouses work at small businesses. This "other" coverage has reduced the percentage of small firm parents with uninsured children from 16.4 percent to 11.0 percent.

Finally, does the decline in family health insurance coverage increase pressure on small businesses? This report concludes the answer would be yes, since married workers have substituted for the loss of employer coverage with dependent coverage from a spouse. The magnitude of this pressure remained small for the period 1995 to 2005; however, if coverage through employment continues to decline, small firms that still offer coverage will likely face increasing enrollment of dependents in their plans.

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Figure 1: Variable Definitions and Descriptions for Two Workers Married Adult Analysis Population, Model 1

Variable	Definition	Source	Year
Large Firm	=1 if the worker is employed at a firm with 500 or more workers (=0 otherwise)	March CPS	1996, 2001, 2006
Spouse Large Firm	=1 if the worker's spouse employed at a firm with 500 or more workers (=0 otherwise)	March CPS	1996, 2001, 2006
Urban	=1 if worker lives in an urban area (=0 otherwise)	March CPS	1996, 2001, 2006
Poverty< Income <=2*poverty	=1 if the family income is above the poverty level but less than twice the poverty level (=0 otherwise)	March CPS, HHS Income Guidelines	1996, 2001, 2006
2*poverty< Income <=3*poverty	=1 if the family income is above twice the poverty level but less than three times the poverty level (=0 otherwise)	March CPS, HHS Income Guidelines	1996, 2001, 2006
3*poverty< Income <=4*poverty	=1 if the family income is above three times the poverty level but less than four times the poverty level (=0 otherwise)	March CPS, HHS Income Guidelines	1996, 2001, 2006
4*poverty < Income	=1 if the family income is above four times the poverty level (=0 otherwise)	March CPS, HHS Income Guidelines	1996, 2001, 2006
Male	=1 if the worker is male (=0 otherwise)	March CPS	1996, 2001, 2006
High School Graduate	=1 if the worker is a high school graduate, but has no further education (=0 otherwise)	March CPS	1996, 2001, 2006
Attended College	=1 if the worker attended college but did not graduate (=0 otherwise)	March CPS	1996, 2001, 2006
College Graduate	=1 if the worker is a college graduate but has not attended graduate school (=0 otherwise)	March CPS	1996, 2001, 2006
Post-Graduate Education	=1 if the worker has some post-graduate education (=0 otherwise)	March CPS	1996, 2001, 2006
African-American	=1 if the worker is African-American, but not Hispanic (=0 otherwise)	March CPS	1996, 2001, 2006
Other Race	=1 if the worker is nonwhite but is not African-American or Hispanic (=0 otherwise)	March CPS	1996, 2001, 2006
Hispanic	=1 if the worker is Hispanic (=0 otherwise)	March CPS	1996, 2001, 2006
Immigrant	=1 if the worker is not a U.S. citizen (=0 otherwise)	March CPS	1996, 2001, 2006
Mining	=1 for NAICS codes 0370-0490 (=0 otherwise)	March CPS	1996, 2001, 2006

Figure 1: Variable Definitions and Descriptions for Two Workers Married Adult Analysis Population, Model 1 (Continued)

Construction	=1 for NAICS code 0770 (=0 otherwise)	March CPS	1996, 2001, 2006
Manufacturing	=1 for NAICS codes 1070-3990 (=0 otherwise)	March CPS	1996, 2001, 2006
Wholesale or Retail Trade	=1 for NAICS codes 4070-5790 (=0 otherwise)	March CPS	1996, 2001, 2006
Transportation	=1 for NAICS codes 6070-6390 and 0570-0690 (=0 otherwise)	March CPS	1996, 2001, 2006
Information Technology	=1 for NAICS codes 6470-6780 (=0 otherwise)	March CPS	1996, 2001, 2006
Financial Services	=1 for NAICS codes 6870-7190 (=0 otherwise)	March CPS	1996, 2001, 2006
Professional or Business Services	=1 for NAICS codes 7270-7790 (=0 otherwise)	March CPS	1996, 2001, 2006
Education and Health	=1 for NAICS codes 7860-8470 (=0 otherwise)	March CPS	1996, 2001, 2006
Hospitality	=1 for NAICS codes 8560-8690 (=0 otherwise)	March CPS	1996, 2001, 2006
Other Services	=1 for NAICS codes 8770-9290 (=0 otherwise)	March CPS	1996, 2001, 2006
Government	=1 for NAICS codes 9370-9590 (=0 otherwise)	March CPS	1996, 2001, 2006
White Collar	=1 for Census Occupation codes 0010-0950 (=0 otherwise)	March CPS	1996, 2001, 2006
Professional	=1 for Census Occupation codes 1000-6130 (=0 otherwise)	March CPS	1996, 2001, 2006
Self Employed	=1 if the worker reports being self employed (=0 otherwise)	March CPS	1996, 2001, 2006
Part Time	=1 if the worker reports working less than 35 hours per week (=0 otherwise)	March CPS	1996, 2001, 2006
Mid-Atlantic	=1 if the worker lives in the Census sub-region (=0 otherwise)	March CPS	1996, 2001, 2006
East North Central	=1 if the worker lives in the Census sub-region (=0 otherwise)	March CPS	1996, 2001, 2006
West North Central	=1 if the worker lives in the Census sub-region (=0 otherwise)	March CPS	1996, 2001, 2006
South Atlantic	=1 if the worker lives in the Census sub-region (=0 otherwise)	March CPS	1996, 2001, 2006
East South Central	=1 if the worker lives in the Census sub-region (=0 otherwise)	March CPS	1996, 2001, 2006

Figure 1: Variable Definitions and Descriptions for Two Workers Married Adult Analysis Population, Model 1 (Continued)

West South Central	=1 if the worker lives in the Census sub-region (=0 otherwise)	March CPS	1996, 2001, 2006
Mountain	=1 if the worker lives in the Census sub-region (=0 otherwise)	March CPS	1996, 2001, 2006
Pacific	=1 if the worker lives in the Census sub-region (=0 otherwise)	March CPS	1996, 2001, 2006
Age 30 to 39	=1 if the workers age is in the given range (=0 otherwise)	March CPS	1996, 2001, 2006
Age 40 to 49	=1 if the workers age is in the given range (=0 otherwise)	March CPS	1996, 2001, 2006
Age 50 to 59	=1 if the workers age is in the given range (=0 otherwise)	March CPS	1996, 2001, 2006
Age 60 to 64	=1 if the workers age is in the given range (=0 otherwise)	March CPS	1996, 2001, 2006
Premium as Percent of Income	Mean FEHBP premium in the local area divided by family income (capped at 100 percent)	FEHBP Premiums and March CPS	1995,1996,2000, 2001, 2005,2006
Year 2000	=1 if the observation is from the 2001 March CPS (=0 otherwise)	March CPS	1996, 2001, 2006
Year 2005	=1 if the observation is from the 2006 March CPS (=0 otherwise)	March CPS	1995, 2000, 2005

Figure 2: Variable Definitions and Descriptions for Children in Two-Parent, Two-Worker Households Analysis, Model 2

Variable	Definition	Source	Year
One Parent Large Firm	=1 if only one of the child's parents is employed at a firm with 500 or more workers (=0 otherwise)	March CPS	1996, 2001, 2006
Both Parents Large Firm	=1 if both of the child's parents are employed at a firm with 500 or more workers (=0 otherwise)	March CPS	1996, 2001, 2006
Urban	=1 if child lives in an urban area (=0 otherwise)	March CPS	1996, 2001, 2006
Poverty< Income <=2*poverty	=1 if the family income is above the poverty level but less than twice the poverty level (=0 otherwise)	March CPS, HHS Income Guidelines	1996, 2001, 2006
2*poverty< Income <=3*poverty	=1 if the family income is above twice the poverty level but less than three times the poverty level (=0 otherwise)	March CPS, HHS Income Guidelines	1996, 2001, 2006
3*poverty< Income <=4*poverty	=1 if the family income is above three times the poverty level but less than four times the poverty level (=0 otherwise)	March CPS, HHS Income Guidelines	1996, 2001, 2006
4*poverty < Income	=1 if the family income is above four times the poverty level (=0 otherwise)	March CPS, HHS Income Guidelines	1996, 2001, 2006
Male	=1 if the child is male (=0 otherwise)	March CPS	1996, 2001, 2006
African-American	=1 if the child is African-American, but not Hispanic (=0 otherwise)	March CPS	1996, 2001, 2006
Other Race	=1 if the child is nonwhite but is not African-American or Hispanic (=0 otherwise)	March CPS	1996, 2001, 2006
Hispanic	=1 if the child is Hispanic (=0 otherwise)	March CPS	1996, 2001, 2006
Immigrant	=1 if the child is not a U.S. citizen (=0 otherwise)	March CPS	1996, 2001, 2006
Mid-Atlantic	=1 if the child lives in the Census sub-region (=0 otherwise)	March CPS	1996, 2001, 2006
East North Central	=1 if the child lives in the Census sub-region (=0 otherwise)	March CPS	1996, 2001, 2006
West North Central	=1 if the worker lives in the Census sub-region (=0 otherwise)	March CPS	1996, 2001, 2006
South Atlantic	=1 if the child lives in the Census sub-region (=0 otherwise)	March CPS	1996, 2001, 2006

Figure 2: Variable Definitions and Descriptions for Children in Two-Parent, Two-Worker Households Analysis, Model 2 (Continued)

			1996, 2001, 2006
East South Central	=1 if the child lives in the Census sub-region (=0 otherwise)	March CPS	
West South Central	=1 if the child lives in the Census sub-region (=0 otherwise)	March CPS	1996, 2001, 2006
Mountain	=1 if the child lives in the Census sub-region (=0 otherwise)	March CPS	1996, 2001, 2006
Pacific	=1 if the child lives in the Census sub-region (=0 otherwise)	March CPS	1996, 2001, 2006
Age 6 to 17	=1 if the child age is in the given range (=0 otherwise)	March CPS	1996, 2001, 2006
Age 18 and above	=1 if the child age is in the given range (=0 otherwise)	March CPS	1996, 2001, 2006
Premium as Percent of Income	Mean FEHBP premium in the local area divided by family income (capped at 100 percent)	FEHBP Premiums and March CPS	1995,1996,2000, 2001, 2005,2006
Year 2000	=1 if the observation is from the 2001 March CPS (=0 otherwise)	March CPS	1996, 2001, 2006
Year 2005	=1 if the observation is from the 2006 March CPS (=0 otherwise)	March CPS	1995, 2000, 2005

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Table 1: Distribution of Health Insurance Coverage for Married Workers in Two-Earner Couples, By Year (Percent)

Year	Covered By Own Employer's Plan	Covered as a Dependent By Spouse's Employer	Other Coverage	Uninsured
1995	57.3	26.3	7.1	9.3
2000	56.8	27.4	6.7	9.1
2005	54.4	28.3	8.0%	9.4
Change 1995-2005 (percentage points)	-2.9	2.0	0.9	0.1
N	129,201			

Source: Authors' tabulations from the March Current Population Surveys (1996, 2001, 2006)

Table 2: Distribution of Health Insurance Coverage for Married Workers in Two-Earner Couples, By Worker and Spouse Firm Size, and Year

	1995	2000	2005	Change 1995-2005 (percentage points)
Small Firm Worker, Spouse Works at Small Firm				
Own Coverage Through Work	47.2%	48.4%	45.8%	-1.4
Covered Through Spouse's Job	24.1%	25.6%	25.0%	0.9
Other Coverage	12.3%	11.2%	13.1%	0.8
Uninsured	16.4%	14.8%	16.2%	-0.2
Large Firm Worker, Spouse Works at Small Firm				
Own Coverage Through Work	77.3%	75.4%	75.5%	-1.8
Covered Through Spouse's Job	12.6%	13.8%	13.5%	0.9
Other Coverage	4.0%	4.4%	5.2%	1.2
Uninsured	6.1%	6.5%	5.8%	-0.3
Small Firm Worker, Spouse Works at Large Firm				
Own Coverage Through Work	41.4%	39.9%	36.4%	-5.0
Covered Through Spouse's Job	47.0%	47.0%	50.8%	3.8
Other Coverage	4.3%	4.7%	5.7%	1.4
Uninsured	7.3%	8.4%	7.1%	-0.2
Large Firm Worker, Spouse Works at Large Firm				
Own Coverage Through Work	68.7%	66.8%	64.4%	-4.3
Covered Through Spouse's Job	23.6%	25.0%	26.9%	3.3
Other Coverage	4.2%	4.1%	4.5%	0.3
Uninsured	3.5%	4.1%	4.3%	0.8
N	129,201			

Source: Authors' tabulations from the March Current Population Surveys (1996, 2001, 2006)

Table 3: Descriptive Statistics for Married Adult Workers,Two-Worker Couples

	Mean	Std. Error		Mean	Std. Error
Large Firm	0.445	0.00138	White Collar	0.173	0.00105
Large Firm * Year2000	0.154	0.00100	Professional	0.526	0.00139
Large Firm * Year2005	0.148	0.00099	Self Employed	0.127	0.00093
Spouse Large Firm	0.445	0.00138	Part Time Worker	0.142	0.00097
Spouse Large Firm * Year2000	0.155	0.00101	*Census Region*		
Spouse Large Firm * Year2005	0.148	0.00099	Mid-Atlantic	0.130	0.00094
Urban	0.734	0.00123	East North Central	0.174	0.00105
Poverty Level			West North Central	0.084	0.00077
100-200 Percent of Poverty	0.074	0.00073	South Atlantic	0.182	0.00107
200-300 Percent of Poverty	0.132	0.00094	East South Central	0.059	0.00065
300-400 Percent of Poverty	0.163	0.00103	West South Central	0.107	0.00086
Over 400 Percent of Poverty	0.616	0.00135	Mountain	0.065	0.00069
Male	0.506	0.00139	Pacific	0.146	0.00098
Education					
High School Graduate	0.307	0.00128	Age 30 to 39	0.290	0.00126
Attended College	0.288	0.00126	Age 40 to 49	0.328	0.00131
College Graduate	0.215	0.00114	Age 50 to 59	0.214	0.00114
Post-Graduate Education	0.113	0.00088	Age 60 to 64	0.040	0.00055
African-American	0.075	0.00073	Premium as Percent of Income	0.096	0.00027
Other Race	0.050	0.00061	Year = 2000	0.341	0.00132
Hispanic	0.092	0.00080	Year = 2005	0.337	0.00131
Immigrant	0.122	0.00091			
Industry					
Mining	0.005	0.00019			
Construction	0.068	0.00070			
Manufacturing	0.108	0.00086			
Wholesale or Retail Trade	0.088	0.00079			
Transportation	0.048	0.00060			
Information Technology	0.017	0.00036			
Financial Services	0.036	0.00052			
Professional or Business Services	0.063	0.00068			
Education and Health	0.164	0.00103			
Hospitality	0.064	0.00068			
Other Services	0.018	0.00037			
Government	0.077	0.00074			
N	129,201				

Source: Authors' tabulations from the March Current Population Surveys (1996, 2001, 2006)

Table 4: Multinomial Logit Estimates of Health Insurance Coverage for Married Adult Workers in Two-Worker Couples, Relative Risk Ratios with Coverage from Own Employer as Reference Category, Model 1

	Dependent on Spouse's Employer Plan	Other Coverage	Uninsured
Large Firm	0.370***	0.363***	0.370***
	(0.01)	(0.02)	(0.02)
Large Firm * Year 2000	1.031	1.148	1.037
	(0.05)	(0.10)	(0.08)
Large Firm * Year 2005	1.000	1.137	0.977
	(0.05)	(0.10)	(0.08)
Spouse Large Firm	2.661***	0.694***	0.686***
	(0.09)	(0.05)	(0.04)
Spouse Large Firm * Year 2000	1.012	1.203**	1.270***
	(0.05)	(0.10)	(0.10)
Spouse Large Firm * Year 2005	1.183***	1.231**	1.181**
	(0.05)	(0.10)	(0.09)
Urban	1.025	0.845***	0.994
	(0.02)	(0.03)	(0.03)
100-200 Percent of Poverty	2.078***	0.514***	0.595***
	(0.29)	(0.06)	(0.06)
200-300 Percent of Poverty	2.497***	0.281***	0.289***
	(0.37)	(0.04)	(0.03)
300-400 Percent of Poverty	2.592***	0.192***	0.171***
	(0.40)	(0.03)	(0.02)
Over 400 Percent of Poverty	2.560***	0.149***	0.106***
	(0.41)	(0.02)	(0.01)
Male	0.376***	0.639***	0.685***
	(0.01)	(0.02)	(0.02)
High School Graduate	0.914**	0.847***	0.672***
	(0.04)	(0.05)	(0.03)
Attended College	0.844***	0.828***	0.481***
	(0.03)	(0.05)	(0.02)
College Graduate	0.760***	0.707***	0.358***
	(0.03)	(0.05)	(0.02)
Post-Graduate Education	0.586***	0.594***	0.260***
	(0.03)	(0.04)	(0.02)
African-American	0.921**	1.112*	1.410***
	(0.03)	(0.07)	(0.07)
Other Race	0.948	1.173**	1.323***
	(0.04)	(0.08)	(0.08)
Hispanic	0.940*	0.902*	1.501***
	(0.03)	(0.05)	(0.06)
Immigrant	1.091***	1.270***	1.818***
	(0.04)	(0.07)	(0.08)

36

Table 4: Multinomial Logit Regression Estimates of Health Insurance Coverage for
Married Adult Workers in Two-Worker Couples, Relative Risk Ratios with Coverage from
Own Employer as Reference Category, Model 1 (Continued)

	Dependent on Spouse's Employer Plan	Other Coverage	Uninsured
Mining	0.603***	0.418***	0.962
	(0.09)	(0.12)	(0.19)
Construction	1.134***	1.048	1.699***
	(0.05)	(0.07)	(0.10)
Manufacturing	0.639***	0.515***	0.745***
	(0.02)	(0.04)	(0.04)
Wholesale or Retail Trade	0.903***	0.819***	1.066
	(0.03)	(0.05)	(0.06)
Transportation	0.837***	0.854*	1.253***
	(0.04)	(0.07)	(0.09)
Information Technology	0.692***	0.675***	0.894
	(0.05)	(0.10)	(0.12)
Financial Services	0.915*	0.946	0.983
	(0.05)	(0.08)	(0.09)
Professional or Business Services	1.076*	0.989	1.271***
	(0.04)	(0.07)	(0.08)
Education and Health	1.152***	1.071	1.326***
	(0.03)	(0.05)	(0.06)
Hospitality	1.129***	1.176**	1.438***
	(0.04)	(0.08)	(0.09)
Other Services	1.581***	1.731***	2.345***
	(0.11)	(0.16)	(0.20)
Government	1.027	1.089	1.419***
	(0.04)	(0.07)	(0.08)
White Collar	0.817***	0.867***	0.739***
	(0.02)	(0.04)	(0.04)
Professional	0.937***	1.052	0.882***
	(0.02)	(0.04)	(0.03)
Self Employed	3.686***	7.075***	4.092***
	(0.11)	(0.27)	(0.16)
Part Time	3.854***	3.241***	2.623***
	(0.10)	(0.13)	(0.11)
Mid-Atlantic	0.814***	0.925	1.099
	(0.03)	(0.07)	(0.08)
East North Central	0.901***	0.904	1.053
	(0.03)	(0.06)	(0.07)
West North Central	0.812***	1.419***	0.985
	(0.03)	(0.09)	(0.07)
South Atlantic	0.743***	1.367***	1.578***
	(0.03)	(0.09)	(0.10)
East South Central	0.736***	1.233**	1.506***
	(0.04)	(0.10)	(0.12)

Table 4: Multinomial Logit Regression Estimates of Health Insurance Coverage for Married Adult Workers in Two-Worker Couples, Relative Risk Ratios with Coverage from Own Employer as Reference Category, Model 1 (Continued)

	Dependent on Spouse's Employer Plan	Other Coverage	Uninsured
West South Central	0.733***	1.361***	1.860***
	(0.03)	(0.10)	(0.12)
Mountain	0.743***	1.541***	1.337***
	(0.03)	(0.11)	(0.09)
Pacific	0.689***	1.626***	1.314***
	(0.03)	(0.11)	(0.09)
Age 30 to 39	1.135***	0.597***	0.595***
	(0.04)	(0.03)	(0.02)
Age 40 to 49	1.156***	0.653***	0.617***
	(0.04)	(0.03)	(0.03)
Age 50 to 59	0.955	0.763***	0.593***
	(0.03)	(0.04)	(0.03)
Age 60 to 64	0.769***	0.935	0.663***
	(0.04)	(0.07)	(0.05)
Premium as Percent of Income	4.656***	2.190***	2.383***
	(1.01)	(0.55)	(0.54)
Year 2000	1.111***	1.016	1.029
	(0.04)	(0.05)	(0.04)
Year 2005	1.127***	1.280***	1.137***
	(0.04)	(0.07)	(0.05)
Constant	0.234***	0.910	1.704***
	(0.04)	(0.17)	(0.28)
N	129,201		

Standard Errors in Parentheses

* p<.1, ** p<.05, *** p<.01

Source: Authors' estimates from the March Current Population Surveys (1996, 2001, 2006)

Table 5: Simulated Insurance Coverage Rates from Model 1, by Worker and Spouse Firm Size and Year

	1995	2000	2005	Change 1995-2005 (percentage points)
Small Firm Worker, Spouse Works at Small Firm				
Own Coverage Through Work	56.9%	55.5%	53.9%	3.0
Covered Through Spouse's Job	22.5%	24.1%	23.5%	1.0
Other Coverage	8.6%	8.4%	10.0%	1.4
Uninsured	12.0%	12.0%	12.5%	0.5
Large Firm Worker, Spouse Works at Small Firm				
Own Coverage Through Work	74.7%	72.8%	72.0%	-2.7
Covered Through Spouse's Job	12.8%	14.0%	13.6%	0.8
Other Coverage	5.1%	5.6%	6.8%	1.7
Uninsured	7.4%	7.5%	7.6%	0.2
Small Firm Worker, Spouse Works at Large Firm				
Own Coverage Through Work	45.5%	42.5%	39.2%	-6.3
Covered Through Spouse's Job	42.8%	44.1%	47.1%	4.3
Other Coverage	4.7%	5.2%	6.0%	1.3
Uninsured	7.1%	8.3%	7.7%	0.6
Large Firm Worker, Spouse Works at Large Firm				
Own Coverage Through Work	65.5%	62.0%	59.5%	-6.0
Covered Through Spouse's Job	26.9%	28.6%	30.9%	4.0
Other Coverage	3.0%	3.8%	4.5%	1.5
Uninsured	4.6%	5.6%	5.1%	0.5
N	129,201			
Standard Errors in Parentheses				

Source: Authors' estimates from the March Current Population Surveys (1996, 2001, 2006)

Table 6: Distribution of Health Insurance Coverage for Children of Married, Two-Worker Couples (Model 2), by Year (Percent)

Year	Covered as a Dependent By Parent's Employer	Other Coverage	Uninsured
1995	72.7	15.7	11.6
2000	74.4	16.4	9.2
2005	71.0	20.2	8.8
Change 1995-2005 (percentage points)	-1.7	4.5	-2.8
N	125,917		

Source: Authors' tabulations from the March Current Population Surveys (1996, 2001, 2006)

Table 7: Distribution of Health Insurance Coverage for Children of Married, Two-Worker Couples (Model 2), by Parent's Firm Size and Year

	1995	2000	2005	Change 1995-2005 (percentage points)
Both Parents Work at Small Firms				
Covered Through Parent's Employer	55.7%	59.7%	55.2%	-0.5
Other Insurance	24.9%	25.4%	30.8%	5.9
Uninsured	19.4%	14.9%	14.1%	-5.3
One Parent Works At Large Firm, Other Parent Works at Small Firm				
Covered Through Parent's Employer	82.6%	82.2%	80.7%	-1.9
Other Insurance	10.3%	11.6%	13.8%	3.5
Uninsured	7.1%	6.2%	5.4%	-1.7
Both Parents Work at Large Firms				
Covered Through Parent's Employer	90.2%	88.1%	89.5%	-0.7
Other Insurance	6.3%	8.1%	8.0%	1.7
Uninsured	3.6%	3.8%	3.6%	0
N	125,917			

Standard Errors in Parentheses

Source: Authors' tabulations from the March Current Population Surveys (1996, 2001, 2006)

41

Table 8: Descriptive Statistics for Children in Two-Parent (Model 2), Two-Worker Households

	Mean	Std. Error
One Parent Large Firm	0.445	0.50
One Parent Large Firm * Year2000	0.155	0.36
One Parent Large Firm * Year2006	0.146	0.35
Two Parents Large Firm	0.162	0.37
Two Parents Large Firm * Year2000	0.057	0.23
Two Parents Large Firm * Year2006	0.053	0.22
Poverty Level		
100-200 Percent of Poverty	0.176	0.38
200-300 Percent of Poverty	0.187	0.39
300-400 Percent of Poverty	0.168	0.37
Over 400 Percent of Poverty	0.384	0.49
Male	0.514	0.50
African-American	0.083	0.28
Other Race	0.061	0.24
Hispanic	0.157	0.36
Immigrant	0.047	0.21
Census Region		
Mid-Atlantic	0.137	0.34
East North Central	0.163	0.37
West North Central	0.072	0.26
South Atlantic	0.166	0.37
East South Central	0.056	0.23
West South Central	0.117	0.32
Mountain	0.071	0.26
Pacific	0.170	0.38
Age 6 to 17	0.595	0.49
Age 18 and above	0.100	0.30
Premium as Percent of Income	0.167	0.17
Year 2000	0.337	0.47
Year 2005	0.339	0.47
N	125,917	

Source: Authors' tabulations from the March Current Population Surveys (1996, 2001, 2006)

Table 9: Multinomial Logit Results for Insurance Coverage of Children in Two-Parent, Two-Worker Households, Relative Risk Ratios with Coverage Through a Parent's Employer as the Reference Category, Model 2

	Other Coverage	Uninsured
One Parent Large Firm	0.382***	0.332***
	(0.02)	(0.02)
One Parent Large Firm * Year 2000	1.099	1.183**
	(0.06)	(0.08)
One Parent Large Firm * Year 2006	1.082	1.081
	(0.06)	(0.08)
Two Large Firm	0.293***	0.213***
	(0.02)	(0.02)
Two Large Firm * Year 2000	1.301***	1.411***
	(0.12)	(0.18)
Two Large Firm * Year 2006	1.041	1.414***
	(0.10)	(0.19)
poverty< Income <=2*poverty	0.516***	0.728***
	(0.03)	(0.04)
2*poverty< Income <=3*poverty	0.229***	0.380***
	(0.01)	(0.03)
3*poverty< Income <=4*poverty	0.138***	0.222***
	(0.01)	(0.02)
4*poverty < Income	0.118***	0.169***
	(0.01)	(0.01)
Male	1.034	1.007
	(0.02)	(0.03)
African-American	1.193***	1.345***
	(0.05)	(0.07)
Other Race	1.227***	1.319***
	(0.06)	(0.07)
Hispanic	1.302***	2.437***
	(0.04)	(0.08)
Immigrant	0.973	2.248***
	(0.05)	(0.11)
Mid-Atlantic	0.980	1.148*
	(0.05)	(0.09)
East North Central	0.835***	1.142*
	(0.04)	(0.09)
West North Central	1.345***	1.172*
	(0.07)	(0.10)
South Atlantic	1.412***	2.024***
	(0.07)	(0.15)

Table 9: Multinomial Logit Results for Insurance Coverage of Children in Two-Parent, Two-Worker Households, Relative Risk Ratios with Coverage Through a Parent's Employer as the Reference Category, Model 2 (Continued)

	Other Coverage	Uninsured
East South Central	1.322***	1.679***
	(0.08)	(0.15)
West South Central	1.442***	2.624***
	(0.07)	(0.19)
Mountain	1.336***	1.973***
	(0.07)	(0.15)
Pacific	1.617***	1.696***
	(0.08)	(0.12)
Age 6 to 17	0.939***	1.102***
	(0.02)	(0.03)
Age 18 and above	1.387***	2.168***
	(0.06)	(0.11)
Premium as Percent of Income	9.416***	11.244***
	(1.31)	(1.75)
Year 2000	1.080**	0.748***
	(0.04)	(0.03)
Year 2005	1.255***	0.654***
	(0.05)	(0.03)
Constant	0.734***	0.217***
	(0.07)	(0.03)
N	125,917	

Standard Errors in Parentheses
* p<.1, ** p<.05, *** p<.01

Source: Authors' estimates from the March Current Population Surveys (1996, 2001, 2006)

Table 10: Simulated Insurance Coverage for Children in Two-Parent, Two-Worker Families (Model 2), by Year and Firm Size of Parents

	1995	2000	2005	Change 1995-2005 (percentage points)
Both Parents Work at Small Firms				
Covered Through Parent's Employer	63.5%	64.7%	63.7%	0.2
Other Insurance	20.1%	22.5%	25.3%	5.2
Uninsured	16.4%	12.8%	11.0%	-5.4
One Parent Works At Large Firm, Other Parent Works at Small Firm				
Covered Through Parent's Employer	79.1%	78.3%	78.0%	-1.1
Other Insurance	12.1%	14.0%	15.9%	3.8
Uninsured	8.8%	7.7%	6.1%	-2.7
Both Parents Work at Large Firms				
Covered Through Parent's Employer	83.0%	80.2%	81.3%	-1.7
Other Insurance	10.5%	13.5%	13.0%	2.5
Uninsured	6.5%	6.3%	5.7%	-0.8
N	125,917			
Standard Errors in Parentheses				

Source: Authors' estimates from the March Current Population Surveys (1996, 2001, 2006)

Table 11: Distribution of Coverage by Large Firm Parent for Children in Married, Two-Worker Families (Model 3), by Year

1995	80.5%
2000	79.4%
2005	80.1%
Change 1995-2005 (percentage points)	-0.4

Source: Authors' tabulations from the March Current Population Surveys (1996, 2001, 2006)

Table 12: Descriptive Statistics for Children in Two-Parent, Two-Worker Families, Where One Parent is a Small Firm Employee and the Other is a Large Firm Employee, Covered as Dependents in Employer-sponsored Health Insurance Plans (Model 3)

	Mean	Std. Error
Urban	0.763	0.43
Poverty Level		
100-200 Percent of Poverty	0.114	0.32
200-300 Percent of Poverty	0.193	0.39
300-400 Percent of Poverty	0.205	0.40
Over 400 Percent of Poverty	0.472	0.50
Male	0.512	0.50
African-American	0.076	0.26
Other Race	0.054	0.23
Hispanic	0.095	0.29
Immigrant	0.031	0.17
Census Region		
Mid-Atlantic	0.141	0.35
East North Central	0.188	0.39
West North Central	0.079	0.27
South Atlantic	0.166	0.37
East South Central	0.057	0.23
West South Central	0.101	0.30
Mountain	0.067	0.25
Pacific	0.147	0.35
Age		
Age 6 to 17	0.598	0.49
Age 18 and above	0.118	0.32
Premium as Percent of Income	0.118	0.08
Year 2000	0.348	0.48
Year 2005	0.325	0.47
N	43,701	

Source: Authors' tabulations from the March Current Population Surveys (1996, 2001, 2006)

Table 13: Logit Results for Probability of Being Covered by the Large Firm-Employed Parent (Model 3)

	Odds Ratio	Std. Error	
100-200 Percent of Poverty	1.441	0.20	***
200-300 Percent of Poverty	1.285	0.20	
30%-400 Percent of Poverty	1.374	0.23	*
Over 400 Percent of Poverty	1.577	0.28	***
Male	1.037	0.03	
African-American	1.067	0.07	
Other Race	1.242	0.09	***
Hispanic	1.058	0.05	
Immigrant	0.879	0.08	
Census Region			
Mid-Atlantic	1.235	0.08	***
East North Central	0.969	0.06	
West North Central	0.911	0.06	
South Atlantic	1.409	0.09	***
East South Central	1.119	0.09	
West South Central	1.426	0.10	***
Mountain	1.323	0.09	***
Pacific	1.296	0.08	***
Age			
Age 6 to 17	0.773	0.03	***
Age 18 and above	0.471	0.02	***
Premium as Percent of Income	0.862	0.28	
Year 2000	0.912	0.03	**
Year 2005	0.953	0.04	
Constant	3.130	0.63	***
N	43,701		

Standard Errors in Parentheses

p<.1, ** p<.05, *** p<.01

Source: Authors' estimates from the March Current Population Surveys (1996, 2001, 2006)

Table 14: Simulated Probability of Being Covered by a Large Firm Parent for Children Covered as Dependents by an Employer Plan (One Parent Works at a Large Firm and One Parent Works at a Small Firm), by Year (Model 3)

	Simulated Probability	Std. Error
1995	0.807	0.00
2000	0.793	0.00
2005	0.800	0.00
Change 1995-2005 (percentage points)	-0.7	
N	43,701	

Source: Authors' estimates from the March Current Population Surveys (1996, 2001, 2006)

Methodology Appendix

This study uses data from the annual March supplements of the Current Population Survey (CPS) for 1996, 2001 and 2006. The March CPS surveys are an extensive collection of information on the work experience, income and demographics of the U.S. non-institutionalized population. These surveys are also one of the main sources of information on health insurance coverage for the U.S. non-institutionalized population. Data is collected on each individual who resides in a sampled household.

The dataset used for the analysis was created by pooling the 1996, 2001, and 2006 surveys. By pooling the surveys, the same geographic areas (MSAs) could be linked across time, but not individual households. Although it is possible to link the same households 12 months apart in the CPS, the five years separating the datasets for this study prevents the comparison of individual households across time. The first step of pooling the three surveys produced a dataset of 507,307 individuals spread across the ten year period (130,476 from the 1996 survey, 218,269 from 2001, and 208,562 from 2006). Next, we linked the same MSAs across all three years of data. In the 1996 and 2001 surveys, we used the HG_MSAC variable for the MSA code. The comparable variable for 2006 was the variable GTCBSA. Linking the same MSAs across time allowed us to use the merge commands in STATA to link the FEHBP premium data in each MSA to respondents living in those MSAs.

As described in the main body of the paper, for a shift in coverage from large firm to small firm employers to take place, a family must have a mix of workers who can potentially cover dependents through their job. For this reason, we dropped all respondents except for two-earner married couples and their children. Also, the study focuses on employer sponsored insurance, so the dataset drops workers aged 65 and above since they are eligible for Medicare.

The next step to produce the analysis dataset required linking partner's firm size for both workers in these married, two-worker households. The process of creating this link creates the LARGE_FIRM and the SPOUSE_LARGE_FIRM variables from the regression models. The following steps create these two variables.

1. Create a dummy variable indicating whether the worker's employer is a large firm.
   i.   Begin with the CPS variable NOEMP (Total number of persons who work for employer)
   ii.   Create LARGE_FIRM = 1 if NOEMP >= 500 employees
   iii. Set LARGE_FIRM = 0 otherwise

2. Create a dummy variable indicating whether the worker's spouse is employed by a large firm.
   i.   Begin with the CPS variable HHDFMX (Detailed Household and Family Status
   ii.   Create the following two variables:
         WORKER1   = 1 if HHDFMX indicates Head of Household
                            = 0 otherwise
         WORKER2   = 1 if HHDFMX indicates Spouse
                            = 0 otherwise
   iii. With a short computer code loop or with STATA's "egen" command, create:
         WORKER1_LARGE_FIRM = 1 if LARGE_FIRM = 1 and WORKER1 = 1
                            = 0 otherwise
         WORKER2_LARGE_FIRM = 1 if LARGE_FIRM = 0 and WORKER2 = 1
                            = 0 otherwise
   iv.   Create the regression variable SPOUSE_LARGE_FIRM:
         SPOUSE_LARGE_FIRM = 1 if
                1. WORKER1 = 1 and WORKER1_LARGE_FIRM = 1
              OR
                2. WORKER2 = 1 and WORKER2_LARGE_FIRM = 1

The last step to produce the analysis dataset focuses on the insurance outcome variables. The following page reproduces a flow chart created by the U. S. Census Bureau, Housing and Household Economic Statistics Division and available at:

http://www.census.gov/hhes/www/hlthins/pathbig4.pdf

This flow chart lists the questionnaire items and variable names in the CPS data used to derive the health insurance estimates produced by Census and the Bureau of Labor Statistics. The

discussion following the flow chart will explain the derivation of the insurance outcomes in the

paper and will refer to the CPS variable names in the flow chart.

CPS ASEC Health Insurance Variables

Questionnaire items	Edited variables	Recode variables	Edited variables	Questionnaire items

SHI2
SHI3 → HI

SHI4 → DEPHI

SHI5
SHI6 → HIOUT

SHI6 → PAID

SHI7 → PRIV

SHI8
SHI9 → DEPRIV

SHI10 → POUT

SHI11 → OUT

SHI12
SHI13 → CARE

SHI14

SHI15 → CAID

SHI16

SHI17 → MON

SHI21
SHI22 → PCHIP

SHI18
SHI19 → OTH

SHI20a → OTYP_1, OTYP_2, OTYP_3, OTYP_5, OTYP_4

COV_HI — Private Health Insurance

MCARE — Medicare

MCAID — Medicaid or other state program

CHAMP — Military health care

AHITYP ← SHIC6

AHIPER ← SHIC4@a, SHIC4

OTHSTYP ← SHIC3

OTHSTPER ← SHIC2@a, SHIC1

53

Insurance Variables for Model 1 and Model 2

As explained in the paper, adult married workers in two-worker couples (Model 1) choose from four possible insurance outcomes. The children of married workers have the same choice set with the exception of insurance through their own employer (Outcome #1). The steps below list the four outcomes and the CPS variables used to create the insurance variable.

Outcome #1: Worker has employer sponsored insurance in their own name (from their own employer).

$$ESI\_OWN = 1 \text{ if } HI = 1$$
$$= 0 \text{ otherwise.}$$

Outcome #2: Worker/child is covered as a dependent on their spouse/parent's employer plan.

$$DEPENDENT\_ESI = 1 \text{ if } DEPHI = 1$$
$$= 0 \text{ otherwise.}$$

Outcome #3: Worker/child has some other type of coverage.

$$OTHER\_INS = 1$$

if $ESI\_OWN = 0$ and
$DEPENDENT\_ESI = 0$ and
$UNINSURED = 0$ (see Outcome #4).

Outcome #4: Worker/child is uninsured

$$UNINSURED = 1$$

if $COV\_HI = 0$ and
$MCARE = 0$ and
$MCAID = 0$ and
$CHAMP = 0$.

FEHBP Premiums, by MSA and Year

MSA	1995 Single Premium	1995 Family Premium	2000 Single Premium	2000 Family Premium	2005 Single Premium	2005 Family Premium
Akron, OH, PMSA	$2,045	$4,997	$2,585	$6,343	$4,309	$10,343
Albany-Schenectady-Troy, NY MSA	$2,111	$5,508	$2,654	$6,779	$4,079	$10,095
Albuquerque, NM MSA	$1,605	$4,393	$2,205	$5,766	$4,305	$10,706
Allentown-Bethlehem, PA-NJ MSA	$1,655	$4,760	$2,411	$6,605	$5,546	$12,689
Altoona, PA MSA	$1,621	$4,831	$2,102	$6,308	$4,314	$10,376
Ann Arbor, MI PMSA	$2,180	$5,816	$2,234	$5,953	$3,777	$8,687
Appleton-Oshkosh-Neenaht, WI MSA	$2,231	$5,957	$2,589	$6,605	$4,125	$10,256
Asheville, NC MSA	$2,133	$5,411	$2,689	$6,121	$5,636	$12,174
Atlanta, GA MSA	$2,052	$5,229	$2,302	$6,013	$3,506	$8,472
Augusta, GA-SC MSA	$2,123	$5,998	$2,455	$6,329	$4,248	$9,878
Austin, TX MSA	$1,956	$5,164	$2,192	$5,662	$3,830	$9,127
Bakersfield, CA MSA	$1,921	$4,897	$2,152	$5,242	$3,728	$8,930
Baltimore, MD MSA	$2,017	$4,908	$2,663	$6,285	$4,227	$9,867
Baton Rouge, LA MSA	$1,829	$4,999	$1,982	$5,470	$3,621	$8,380
Beaumont-Port Arthur, FL MSA	$1,926	$5,127	$2,221	$5,652	$3,769	$8,889
Bellingham, WA MSA	$2,049	$5,036	$2,791	$6,296	$4,165	$9,460
Benton Harbor, MI MSA	$1,972	$5,142	$2,196	$5,920	$3,493	$9,255
Bergen-Passaic, NJ PMSA	$2,419	$6,065	$2,995	$7,225	$4,375	$10,455
Binghamton, NY MSA	$2,130	$5,445	$2,642	$6,748	$4,290	$10,544
Birmingham, AL MSA	$2,154	$5,286	$2,769	$7,089		
Bloomington-Normal, IL MSA	$1,999	$5,142	$2,349	$5,978	$4,062	$10,080
Boise City, ID MSA	$2,221	$5,506				
Boston, MA PMSR	$2,371	$6,203	$2,833	$7,287	$4,335	$10,559
Boulder-Longmont, CO PMSA	$2,064	$5,271	$2,258	$5,676	$4,073	$9,745
Brazoria, TX PMSA	$1,912	$5,031	$2,322	$6,083	$3,970	$9,446
Bridgeport-Milford, CT PMSA	$2,481	$6,311	$2,778	$7,517	$4,076	$9,879
Brockton, MA PMSA	$2,593	$6,687	$3,191	$8,464	$3,777	$8,687
Buffalo, NY PMSA	$1,641	$4,332	$2,157	$5,794	$3,758	$10,060
Burlington, VT MSA	$2,091	$5,507	$2,719	$6,815	$5,219	$13,481
Canton, OH MSA	$2,067	$5,023	$2,548	$6,322	$4,283	$10,390
Champaign-Urbana-Rantoul, IL MSA	$2,176	$5,774				
Cedar Rapids, IA MSA			$2,269	$6,044	$3,939	$9,651
Champaign-Urbana-Rantoul, IL MSA			$2,465	$5,999	$4,079	$9,925
Charleston, SC MSA	$2,212	$5,628	$2,270	$5,894	$4,524	$10,175
Charleston, WV MSA	$1,853	$4,798	$2,386	$6,368		
Charlotte-Gastonia-Rock Hill, NC-SC MSA	$1,935	$5,053	$2,442	$6,224	$4,026	$9,183
Chattanooga, TN-A MSA	$2,001	$5,877				
Chicago, IL PMSA	$2,022	$5,299	$2,242	$5,852	$3,788	$9,182
Chico, CA MSA	$1,969	$4,998	$2,156	$5,332	$3,895	$9,318
Cincinnati, OH-KY-IN PMSA	$1,942	$4,867	$2,467	$5,702	$4,416	$10,170
Cleveland, OH PMSA	$2,030	$4,997	$2,601	$6,443	$4,153	$10,061
Colorado Springs, CO MSA	$2,031	$5,286	$2,195	$5,594	$4,146	$9,900
Colombia, MO MSA	$2,126	$4,908	$2,806	$6,218	$5,126	$11,083
Columbia, SC MSA	$2,271	$5,603	$2,270	$5,894	$4,524	$10,175
Columbus, GA-AL MSA	$2,313	$5,320				

	1995		2000		2005	
	Single Premium	Family Premium	Single Premium	Family Premium	Single Premium	Family Premium
Columbus, OH MSA	$2,132	$5,247	$2,491	$6,017	$4,238	$10,336
Corpus Christi, TX MSA	$1,873	$5,056	$2,333	$5,866	$3,725	$8,920
Dallas, TX PMSA	$2,074	$5,376	$2,438	$6,666	$3,780	$8,873
Danbury, CT PMSR	$2,426	$6,210	$2,778	$7,517	$3,976	$9,482
Davenport-Rock Island-Moline, IA-IL MSA	$1,772	$4,920	$2,411	$6,268	$4,218	$10,388
Dayton-Springfield, OH MSA	$2,005	$4,873	$2,409	$5,678	$4,303	$9,989
Daytona Beach, FL MSA	$1,762	$4,694	$2,501	$6,666	$3,777	$8,687
Denver, CO PMSA	$2,064	$5,271	$2,258	$5,676	$3,657	$8,680
Des Moines, IA MSA	$1,824	$4,926	$2,240	$5,995	$3,744	$9,772
Detroit, MI PMSA	$2,142	$5,693	$2,078	$5,677	$3,534	$9,232
Duluth, MN-WI MSA	$2,041	$5,308	$2,806	$7,264		
El Paso, TX MSA			$2,142	$5,588	$4,332	$11,297
Erie, PA MSA	$1,888	$5,611	$2,285	$6,342	$4,136	$10,227
Eugene-Springfield, OR MSA	$2,053	$4,887			$4,838	$10,827
Evansville, IN-KY MSA	$2,076	$5,437	$2,541	$6,049	$5,051	$11,718
Fayetteville, NC MSA	$1,978	$5,165	$2,686	$6,433		
Fayetteville-Springdale, AR MSA	$2,142	$5,271				
Flint, MI MSA	$2,288	$5,994	$2,300	$6,053	$3,750	$9,410
Florence, SC MSA	$2,147	$5,466			$4,524	$10,175
Fort Collins-Loveland, CO MSA	$2,003	$5,213	$2,195	$5,594	$3,960	$9,494
Fort Lauderdale-Hollywood-Pompano Beach, FL PMSA	$1,794	$4,821	$2,243	$6,086	$3,847	$9,799
Fort Myers, FL MSA	$1,814	$4,721	$2,275	$6,056	$3,948	$9,081
Fort Smith, AR-OK MSA	$2,142	$5,271				
Fort Walton Beach, FL MSA	$2,166	$5,520				
Fort Wayne, IN MSA	$2,008	$5,188	$2,572	$6,042	$5,335	$12,167
Fort Worth-Arlington, TX PMSA	$2,074	$5,376	$2,438	$6,666	$3,780	$8,873
Fresno, CA MSA	$1,976	$4,887	$2,203	$5,360	$3,972	$9,498
Gainesville, FL MSA	$1,748	$4,647	$2,700	$7,075	$4,098	$10,942
Galveston-Texas City, TX PMSA	$1,840	$4,996	$2,322	$6,083	$3,970	$9,446
Gary-Hammond, IN PMSA	$2,037	$5,378	$2,308	$6,065	$3,789	$8,973
Grand Rapids, MI MSA	$1,830	$4,995	$2,370	$6,349	$4,883	$13,945
Greensboro-Winston Salem-High Point, NC MSA	$2,010	$5,277	$2,680	$6,192		
Greenville-Spartanburg, SC MSA	$2,304	$5,739			$4,524	$10,175
Hamilton-Middletown, OH PMSA	$2,019	$4,891	$2,371	$5,640	$4,170	$9,582
Harrisburg-Lebanon-Carlisle, PA MSA	$2,005	$5,091	$2,358	$6,089	$5,053	$11,676
Hartford, CT PMSA	$2,394	$5,998	$2,779	$7,175	$3,976	$9,482
Hickory, NC MSA	$2,070	$5,312	$2,633	$6,292	$5,636	$12,174
Honolulu, HI MSA	$2,265	$5,517	$2,688	$5,840	$3,909	$8,502
Houma-Thibodaux, LA MSA	$1,980	$5,237	$2,364	$6,146	$2,425	$5,577
Houston, TX PMSA	$1,898	$5,112	$2,322	$6,083	$3,970	$9,446
Huntington-Ashland, WV-KY-OH MSA	$1,853	$4,798	$2,285	$5,769	$4,259	$9,797
Huntsville, AL MSA	$2,120	$4,983				
Indianapolis, IN MSA	$2,200	$5,768	$2,657	$6,362	$4,633	$10,944
Jackson, MI MSA	$2,319	$6,038	$2,490	$6,268	$4,170	$10,604
Jackson, MS MSA	$1,858	$4,684				

	1995		2000		2005	
	Single Premium	Family Premium	Single Premium	Family Premium	Single Premium	Family Premium
Jacksonville, FL MSA	$1,855	$4,969	$2,419	$6,496	$3,454	$7,944
Jersey City, NJ PMSA	$2,419	$6,065	$2,995	$7,225	$4,375	$10,455
Johnson City-Kingsport-Bristol, TN-VA MSA	$2,126	$6,201	$1,862	$5,168	$4,000	$9,983
Johnstown, PA MSA	$2,090	$5,400	$3,247	$7,405		
Joplin, MO MSA	$2,205	$4,907	$2,734	$6,126	$4,955	$10,719
Kalamazoo, MI MSA	$1,754	$4,700	$2,121	$5,819		
Kankakee, IL MSA	$1,911	$4,979	$2,176	$5,858	$3,152	$7,647
Kansas City, MO-KS MSA	$2,011	$5,197	$2,325	$5,670	$3,719	$9,076
Killeen-Temple, TX MSA	$2,086	$5,528	$2,260	$5,490	$3,630	$8,193
Knoxville, TN MSA	$1,918	$5,716	$1,862	$5,168		
Lafayette, LA MSA	$1,868	$5,123	$1,844	$6,016	$3,318	$7,632
Lakeland-Winter Haven, FL MSA	$1,834	$4,916	$2,481	$6,626		
Lancaster, PA MSA	$2,010	$5,104	$2,457	$6,328	$4,963	$11,365
Lansing-East Lansing, MI MSA	$2,140	$5,584	$2,460	$6,524	$4,847	$11,953
Las Vegas, NV MSA	$1,789	$4,582	$2,170	$5,787	$3,515	$8,502
Lawrence-Haverhill, MA-NH PMSA	$2,375	$6,207	$2,885	$7,595	$4,148	$9,753
Lawton, OK MSA	$1,945	$5,021	$2,174	$5,388	$4,104	$9,642
Lexington-Fayette, KY MSA	$1,927	$5,151	$2,665	$6,403	$4,181	$9,616
Lima, OH MSA	$2,027	$5,136	$2,758	$6,820	$4,865	$11,188
Lincoln, NE MSA	$1,734	$4,456				
Little Rock-North Little Rock, AR MSA	$1,919	$5,118				
Los Angeles-Long Beach, CA PMSA	$1,900	$4,913	$2,048	$4,967	$3,681	$8,847
Louisville, KY-IN MSA	$1,968	$5,303	$2,665	$6,383	$4,683	$10,763
Lowell, MA-NH PMSA	$2,425	$6,309	$2,885	$7,595	$4,148	$9,753
Lubbock, TX MSA	$2,752	$5,881	$2,962	$6,363	$5,521	$11,859
Macon-Warner Robins, GA MSA	$2,126	$5,162	$2,268	$6,012	$3,972	$9,582
Madison, WI MSA	$2,159	$5,548	$2,498	$6,551	$3,821	$10,219
Manchester, NH MSA	$2,310	$6,182	$3,355	$8,892		
Mansfield, OH MSA	$2,080	$5,043	$2,430	$6,023	$4,047	$9,963
McAllen-Edinburg-Mission, TX MSA	$2,107	$5,477	$2,215	$4,757		
Medford, OR MSA	$2,209	$5,263				
Melbourne-Titusville-Palm Bay, FL MSA	$1,892	$5,060	$2,354	$6,481		
Memphis, TN-AR-MS MSA	$1,987	$5,528	$1,944	$5,671	$3,568	$8,592
Miami-Hialeah, FL PMSA	$1,832	$4,949	$2,243	$6,086	$3,773	$9,522
Middlesex-Somerset-Hunterdon, NJ PMSA	$2,419	$6,065	$2,995	$7,225	$4,375	$10,455
Milwaukee, WI PMSA	$2,200	$5,530	$2,885	$7,391	$2,808	$6,458
Minneapolis-St, Paul, MN-WI MSA	$1,990	$5,174	$2,830	$6,966	$5,601	$13,366
Mobile, AL MSA	$2,263	$5,363	$2,709	$6,794		
Modesto, CA MSA	$1,966	$4,884	$2,203	$5,360	$3,972	$9,498
Monmouth-Ocean, NJ PMSA	$2,520	$6,362	$3,040	$7,293	$4,163	$9,804
Montgomery, AL MSA	$2,078	$5,113	$2,709	$6,794		
Nashville, TN MSA	$1,696	$4,988	$2,070	$5,788	$4,202	$9,619
Nassau-Suffolk, NY PMSA	$2,286	$5,926	$2,631	$6,895	$4,258	$10,949
New Bedford, MA MSA	$2,427	$6,001	$2,847	$7,229	$4,151	$10,118
New Haven-Meriden, CT MSA	$2,440	$6,203	$2,778	$7,517	$3,976	$9,482
New London-Norwich, CT-RI MSA	$2,340	$5,704	$2,571	$6,689	$4,345	$10,881

	1995		2000		2005	
	Single Premium	Family Premium	Single Premium	Family Premium	Single Premium	Family Premium
New Orleans, LA MSA	$1,902	$5,069	$2,242	$5,534	$3,441	$7,967
New York, NY PMSA	$2,305	$5,992	$2,675	$6,995	$4,405	$11,252
Newark, NJ PMSA	$2,419	$6,065	$2,995	$7,225	$4,375	$10,455
Norfolk-Virginia Beach-Newport News, VA MSA	$1,821	$5,024	$2,397	$5,724	$4,509	$10,717
Oakland, CA PMSA	$1,940	$4,844	$2,203	$5,360	$3,961	$9,467
Ocala, FL MSA	$2,054	$5,238	$2,601	$7,153		
Oklahoma City, OK MSA	$2,014	$5,192	$2,154	$5,430	$4,068	$9,542
Olympia, WA MSA	$2,049	$5,036	$2,474	$6,104	$4,040	$9,217
Omaha, NE-IA MSA	$1,734	$4,456			$4,393	$11,055
Orlando, FL MSA	$1,828	$4,910	$2,362	$6,356	$3,496	$8,042
Pensacola, FL MSA	$1,955	$4,974				
Peoria, IL MSA	$2,056	$5,272	$2,411	$6,268	$4,317	$10,511
Philadelphia, PA-NJ PMSA	$2,281	$5,785	$2,968	$7,240	$4,624	$11,125
Phoenix, AZ MSA	$1,643	$4,580	$2,050	$5,516	$3,624	$8,743
Pittsburgh, PA PMSA	$1,931	$5,281	$2,236	$5,992	$4,097	$10,279
Portland, ME MSA	$2,525	$6,262	$3,295	$8,046		
Portland, OR PMSA	$2,178	$5,193	$2,567	$5,891	$4,566	$10,218
Portsmouth-Dover-Rochester, NH-ME MSA	$2,386	$6,196	$3,295	$8,046	$3,777	$8,687
Providence, RI PMSA	$2,316	$5,697	$2,767	$7,141	$4,151	$10,118
Provo-Orem, UT MSA	$2,218	$5,220			$5,023	$11,052
Pueblo, CO MSA	$2,010	$5,227	$2,215	$5,644	$4,045	$9,661
Racine, WI PMSA	$2,168	$5,397	$2,958	$7,561	$2,808	$6,458
Raleigh-Durham, NC MSA	$1,927	$5,024	$2,580	$6,407	$3,777	$8,687
Reading, PA MSA	$2,041	$5,096	$2,702	$6,961	$4,688	$10,822
Reno, NV MSA	$1,708	$4,309	$2,165	$5,539	$3,374	$8,288
Richmond-Petersburg, VA MSA	$1,770	$4,595	$2,491	$6,082	$4,174	$9,681
Riverside-San Bernardino, CA PMSA	$1,895	$4,891	$2,048	$4,967	$3,635	$8,706
Roanoke, VA MSA	$1,846	$4,799	$2,530	$6,033	$4,189	$10,054
Rochester, NY MSA	$1,681	$4,295	$2,178	$5,702	$3,565	$9,164
Rockford, IL MSA	$1,955	$5,211	$1,998	$5,254	$4,090	$10,459
Sacramento, CA MSA	$1,971	$4,906	$2,264	$5,451	$3,933	$9,374
Saginaw-Bay City-Midland, MI MSA	$2,265	$5,875	$2,558	$6,691	$4,643	$11,645
St. Louis, MO-IL PMSA	$2,004	$4,793	$2,575	$6,020	$4,631	$10,220
Salem, OR MSA	$2,091	$4,981	$2,567	$5,891	$4,546	$10,266
Salinas-Seaside-Monterey, CA MSA	$1,846	$4,731	$2,176	$5,341	$3,972	$9,498
Salt Lake City-Ogden, UT MSA	$2,218	$5,220			$5,023	$11,052
San Antonio, TX MSA	$1,895	$5,004	$2,154	$5,652	$4,262	$9,958
San Diego, CA MSA	$1,900	$4,900	$2,152	$5,242	$3,636	$8,903
San Francisco, CA PMSA	$1,940	$4,881	$2,302	$5,545	$3,972	$9,498
San Jose, CA PMSA	$1,940	$4,881	$2,302	$5,545	$3,972	$9,498
Santa Barbara-Santa Maria-Lompoc, CA MSA	$1,950	$4,999	$2,107	$5,183	$3,766	$9,040
Santa Cruz, CA PMSA	$1,949	$4,932	$2,311	$5,578	$3,895	$9,318
Santa Rosa-Petaluma, CA PMSA	$1,972	$4,930	$2,302	$5,545	$3,975	$9,494
Sarasota, FL MSA	$1,834	$4,916	$2,525	$6,643	$3,411	$7,846
Savannah, GA MSA	$2,213	$5,461				

	1995		2000		2005	
	Single Premium	Family Premium	Single Premium	Family Premium	Single Premium	Family Premium
Scranton-Wilkes Barre, PA MSA	$1,639	$4,439	$2,163	$5,731	$5,707	$13,076
Seattle, WA PMSA	$2,049	$5,036	$2,474	$6,104	$3,895	$9,087
Sharon, PA MSA	$1,838	$5,376	$2,278	$5,923	$4,195	$10,472
Shreveport, LA MSA	$2,310	$5,913			$4,097	$9,424
Sioux City, IA-NE MSA	$2,048	$5,511	$2,320	$6,246	$5,482	$12,608
South Bend-Mishawaka, IN MSA	$2,015	$5,314	$2,517	$5,998	$4,991	$11,492
Spokane, WA MSA	$1,948	$5,026	$2,449	$6,322	$4,229	$9,893
Springfield, IL MSA	$2,001	$5,362	$2,470	$6,054	$4,657	$10,489
Springfield, MO MSA	$2,205	$4,907	$2,734	$6,126	$5,126	$11,083
Springfield, MA MSA	$2,408	$6,089	$2,719	$6,739	$4,894	$12,432
Stamford, CT PMSA	$2,426	$6,210	$2,778	$7,517	$3,976	$9,482
Stockton, CA MSA	$1,995	$4,945	$2,203	$5,360	$3,972	$9,498
Syracuse, NY MSA	$2,123	$5,453	$2,598	$6,634	$4,329	$10,704
Tacoma, WA PMSA	$2,049	$5,036	$2,474	$6,104	$3,926	$9,074
Tallahassee, FL MSA	$1,903	$4,800	$2,208	$5,895	$3,971	$10,547
Tampa-St, Petersburg-Clearwater, FL MSA	$1,863	$4,912	$2,563	$6,832	$3,411	$7,846
Terre Haute, IN MSA	$2,105	$5,471	$2,694	$6,204	$4,838	$11,187
Toledo, OH MSA	$1,889	$4,881	$2,665	$6,555	$4,108	$9,826
Topeka, KS MSA	$2,058	$5,549	$2,702	$7,187	$4,529	$11,914
Trenton, NJ PMSA	$2,411	$6,127	$2,966	$7,243	$4,163	$9,804
Tucson, AZ MSA	$1,636	$4,499	$1,952	$5,420	$3,845	$9,430
Tulsa, OK MSA	$2,036	$5,377	$2,289	$5,453	$4,003	$9,238
Utica-Rome, NY MSA	$2,047	$5,215	$2,614	$6,633	$4,314	$10,724
Vallejo-Fairfield-Napa, CA PMSA	$1,970	$4,928	$2,264	$5,451	$3,972	$9,498
Visalia-Tulare-Porterville, CA MSA	$1,964	$4,862	$2,167	$5,299	$3,977	$9,599
Waco, TX MSA	$2,027	$5,417	$2,523	$5,979	$3,710	$8,111
Washington, DC-MD-VA MSA	$1,962	$4,760	$2,622	$6,234	$3,990	$9,427
Waterbury, CT MSA	$2,443	$6,184	$2,778	$7,517	$3,976	$9,482
Waterloo-Cedar Falls, IA MSA	$1,824	$4,926	$2,240	$5,995	$3,937	$10,140
West Palm Beach-Boca Raton-Delray Beach, FL MSA	$1,728	$4,663	$2,298	$6,261	$3,458	$8,540
Wheeling, WV-OH MSA	$1,848	$4,702	$2,413	$5,958	$3,778	$8,690
Wichita, KS MSA	$2,095	$5,634	$2,460	$6,423	$4,318	$11,136
Williamsport, PA MSA	$1,563	$4,430	$2,100	$5,817	$4,860	$11,113
Wilmington, DE-NJ-MD PMSA	$2,268	$6,017	$2,818	$6,885	$4,167	$10,007
Worcester, MA MSA	$2,405	$6,064	$2,807	$7,267	$4,185	$9,980
York, PA MSA	$2,035	$5,082	$2,506	$6,308	$5,100	$11,821
Youngstown-Warren, OH MSA	$2,103	$5,118	$2,734	$6,556	$4,450	$10,748
Yuba City, CA MSA	$2,030	$4,957	$2,189	$5,204	$3,995	$9,353

Source: Authors' estimates from the FEHBP Premiums and March CPS

Endnotes

[i] The original analysis plan for this study was to use the 1995 to 2005 Contingent Worker Supplements to the CPS, which are conducted in February of odd-numbered years. These surveys ask workers if they were offered coverage at work, and if they enrolled. However, these surveys do not have information on firm size, which is critical to this study. It is possible to match a subset of respondents who are interviewed in both the February and March surveys in order to have information on firm size. We attempted to do this, but the published algorithm for matching the survey rounds did not work properly for 2005. We made repeated attempts to contact the Census Bureau and correct the matching algorithm for the 2005 data, but did not receive a response. Since the previous survey was conducted in 2001, this severely limits the timeliness of the CWS data. In addition, we had planned to use a measure of access to family coverage in the CWS data which asks if a worker could be covered under a family member's plan. However, when we tabulated the responses to this question, we discovered that it was asked only of those that already had coverage through their job. Since our research question requires knowledge of access to insurance for all family members, this question did not suit our purposes. For both of these reasons we focus on the March surveys, and reported coverage, instead of offer and take up.

[ii] In the CPS, the most frequently tabulated questions ask whether the respondent (and others in the household) had specific types of health insurance at any time during the previous year. Thus, if the CPS questions are taken at face value, the residual category of "uninsured" means uninsured all year. However, previous research has shown that the CPS statistics are actually very close to monthly estimates obtained from other data sources (Swartz 1986). Therefore, the timeframe that the CPS responses refer to is ambiguous. Since all the employment and income data reported in the March CPS surveys that we use in the regression analysis also ask about activity in the prior year, we maintain the standard convention of referring to insurance coverage in the previous calendar year.

[iii] Work is defined as any work for pay in the previous calendar year.

[iv] In a logit model with only two outcomes, the exponentiated coefficients will produce an odds ratio. However, if there are more than two outcomes in a logit model, the exponentiated coefficients are instead a measure of the relative risk of the category in question to the reference category.

[v] The standard errors for the means of the predicted rates are very small because of the large sample size. Therefore, any change of 0.1 of a percentage point is statistically significant in these simulations. We estimated standard errors both by assuming the variable was normally distributed, and by estimating bootstrap standard errors with 1,000 replications. The standard errors were essentially the same in both cases.

[vi] Children as defined as all children 17 and under, and all children 18 to 23 who are full-time students.

[vii] As with the adult simulations, the standard errors here are very small, and any 0.1 percentage-point difference is statistically significant.