

*Individual Workers' Wage Levels, Total Family Income Relative to Poverty, and
Prevalence of Employer Coverage **

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A. Introduction and Purpose

Employment-based health coverage is a benefit employers offer to compete for labor. Thus, its availability and affordability are driven by labor market considerations and tend to vary with wage level (as well as hours worked and expected duration of employment). Understanding this economic reality is important for policy makers who are designing public programs to expand coverage for the uninsured. Traditionally, eligibility for such programs is based on need as measured solely by the ratio of overall family income to the federal poverty guidelines by family size.

It is well known that, the higher a person's income, the more likely he or she is to have employment-based health coverage, and the less likely he or she is to be uninsured. This holds true whether the comparison is based on individual earnings in dollar terms or total family income as a percent of the poverty level. However, the positive association between wage level and employer coverage seems to be particularly strong.¹

Based on this observation, we have previously suggested² that taking individual parents' wage levels into account, not just total family income, could be a powerful tool in helping to design policies that will effectively expand coverage of the uninsured rather than simply substitute public coverage for existing employment-based coverage.

But would considering individual wage levels in fact help States to achieve these goals? The answer depends largely on whether individual wage levels have an effect on the prevalence of employer coverage over and above the effect due to total family income. Previously, we looked at individual earnings and total family income, and how they affect insurance status, separately.

¹ Ed Neuschler and Rick Curtis, "Expanding Healthy Families to Cover Parents: Issues & Analyses Related to Employer Coverage," January 2001 (for the California Health Care Foundation). Table 1 and Appendix Tables 4 and 6.

² Ibid.

* This analysis was supported by a grant from The California HealthCare Foundation. The California HealthCare Foundation, based in Oakland, California, is a non-profit philanthropic organization whose mission is to expand access to affordable, quality health care for underserved individuals and communities, and to promote fundamental improvements in the health status of the people of California.

In this paper, we investigate more thoroughly the interrelationships among wage level, total family income relative to poverty, and the prevalence of employer coverage. In particular, we explore how insurance status varies with individual earnings for parents in the Healthy Families income range.

B. Data and Methods

Our analysis uses the Census Bureau's March 2000 Current Population Survey (CPS), which measures income and insurance status during 1999. Family income includes all income received by every member of the "family insurance unit (FIU)," which includes all family members living together in the same household who could be covered under a single private insurance policy—typically, parents and their children under age 19.

The March CPS Supplement reports individual workers' total earnings for each job held during the previous year, rather than their wage rate or salary level for their current job. For purposes of this analysis, we used earnings from the job each worker held for the longest time during the year.³ Because we want to understand the relationship between wage or salary levels and prevalence of employer coverage, we limited the analysis to adults (aged 19 and older) who worked full-time, full-year as wage-and-salary workers. By using this limitation, reported annual earnings from the worker's longest job can be viewed as approximately equivalent to annual salary levels. This rough equivalence does not hold for part-year or part-time workers. Including them would have made it appear that more workers had low wage *rates* or salary *levels* than was actually the case. Self-employed workers were also excluded from the analysis.

We prepared cross-tabulations of insurance status by four family income categories (less than 133% FPG⁴, 133% to 199% FPG, 200% to 249% FPG, and 250% FPG or more) and by five annual earnings categories (less than \$15,000, \$15,000 to \$19,999, \$20,000 to \$29,999, \$30,000 to \$39,999, and \$40,000 or more). In order to produce statistically reliable estimates for these three-way tabulations, it was necessary to use the entire national CPS sample. However, based on a comparison of overall employer-coverage rates by annual earnings for adults in California and nationwide, we are confident that the trends we found nationally apply in California as well.⁵

Parents likely to be eligible under the proposed expansion of California's Healthy Families program will be found both in the 133%-to-199% FPG category and, because we did not apply

³ Thus, earnings might not reflect an entire year's worth of work. Because this fact could distort the translation from annual earnings to hourly wage rates, we ran the analysis a second time, including only workers who worked full-time, full-year at a single job. The results were essentially the same.

⁴ FPG means the "federal poverty guidelines" issued annually by the U.S. Department of Health and Human Services and used for program eligibility purposes. The poverty guidelines are based on, but differ from, the "poverty thresholds" used by the Census Bureau.

⁵ Nationally, own-employer coverage rates range from 25.1% for the lowest earnings category to 85.0% for the highest. In California, the range is 21.1% to 83.3%. Similar results are obtained for any-employer coverage rates across earnings categories: 51.0% to 93.4% nationally, 39.8% to 91.5% in California. Thus, although coverage rates in California are slightly lower in absolute terms, the difference in coverage rates across earnings categories is actually larger. California-specific figures for two-way tabulations are presented in a companion Issue Brief, "Family (Parental) Status and Prevalence of Employer Coverage."

programmatic deductions or “disregards” in calculating family income, also in the 200%-to-249% of FPG category.⁶

Note that the federal poverty guidelines for 1999 ranged from \$11,060 for a two-person family (e.g., single parent and child) to \$19,520 for a five-person family (e.g., two parents and three children). Thus, the 133%-to-199% FPG category could realistically include families with incomes anywhere from \$14,747 (family of two at 133% FPG) to \$39,000 (family of five just under 200% FPG), or even \$47,800 (245% FPG) if both parents work and pay maximum allowable child care expenses for three children.⁷ Thus, the target income group for the Healthy Families expansion includes parents whose annual earnings may differ dramatically.

C. Results

First, we examined coverage through a worker’s own employer (“own EBI”). As expected, the strong association between annual earnings (a proxy for wage level) and coverage through the worker’s own employer is clearly evident (see Figure 1).

Analysis of these data for statistical significance (see Appendix Table 1) indicates the dominance of individual earnings over family income as a predictor of coverage through a worker’s own employer. At any given level of annual earnings, the difference in own-employer-coverage rates between adjacent %FPG categories is never statistically significant at the 90% confidence level. On the other hand, within %FPG categories, the difference in own-employer-coverage rates between adjacent annual earnings levels is statistically significant at the 90% confidence level more than half the time (10 out of 16 comparisons).

That is, within any given earnings category, family income relative to poverty is not a good predictor of own-employer coverage; but, within a given %FPG category, individual earnings do influence whether or not a worker has employer coverage through their own employer.

Not surprisingly, if we examine coverage through any employer (rather than the worker’s own employer), the situation becomes a bit more muddled (see Figure 2.) For every annual-earnings category, employer-coverage rates rise as family income rises as a percent of poverty,

⁶ California has requested federal waivers to make parents with incomes less than 200% FPG eligible for Healthy Families. Expansion to 250% FPG has been proposed and is under consideration. Whether or not the 250% FPG standard is adopted, however, both Medi-Cal and the Healthy Families Program deduct certain amounts, such as work expenses and childcare expenses, before comparing applicants’ income with the program’s eligibility standards. (Similar deductions or “disregards” are used by public programs in many other States.) Thus, working parents with gross incomes higher than 200% FPG will be able to qualify, particularly if they pay for child care. The tables in our earlier paper presented family income net of a rough estimate of such deductions or “disregards.” However, for purposes of this paper we thought it best to keep the analysis as clean and uncomplicated as possible.

⁷ Allowable disregards include \$90 per month per worker for work expenses, plus up to \$175 per child for child care (up to \$200 per month if the child is under age 2). 200% FPG = \$39,040 for a family of five. Annual work expense = 2 x (\$90 x 12) = \$2,160. Annual child care = 2 x \$175 x 12 + \$200 x 12 = \$6,600 (assumes one child under 2).

particularly for low-earnings workers. Apparently, many of these workers are obtaining employer coverage as dependents of higher-earning spouses.⁸

But individual earnings levels are still important. If they were not, the lines in Figure 2 would be flat. More technically, within family income (% FPG) categories, “any-employer” coverage-rate differences between annual earnings levels are statistically significant⁹ half the time—8 out of 16 comparisons of adjacent cells (see Appendix Table 2). Predictably, the difference in the any-employer coverage rate between the lowest and highest earnings categories is the smallest for those with family incomes above 250% FPG.

For the target population for the Healthy Families expansion—those with incomes between 133% and 199% FPG—individual earnings do have a strong effect on coverage rates (see Figure 3).

Within this single family income category, the percent of all adult workers with any employer coverage (directly or as a dependent) rises from 48.1% for adults earning less than \$15,000 to 82.7% for adults earning \$30,000 to \$39,999. Conversely, the percent of workers who are uninsured falls from 41.2% for those earning less than \$15,000 to 9.5% for those earning \$30,000 to \$39,999.¹⁰

For the most part, the differences in coverage and uninsurance rates by annual earnings level are statistically significant at the 90% confidence level (see Appendix Tables 2 and 3).¹¹

The key observation here is that adults with individual earnings of \$30,000 or more are very likely to have employer coverage, even if their overall family income is within the proposed limits for the Healthy Families expansion (less than 200% FPG).

Figure 4 presents the same information for adults with family incomes between 200% and 249% of poverty. As noted earlier, parents in this income range could become eligible for Healthy Families under the proposed expansion when deductions for work expenses and childcare costs are applied.

As can be seen, employment-based coverage is more prevalent in this family income range, regardless of individual earnings levels. Coverage rates range from 62.1% with employer coverage at the lowest annual earnings level to 85.6% in the \$30,000 to \$39,999 earnings range. Coverage rates for adults earning more than \$20,000 are statistically higher than for those with lesser earnings, at the 90% confidence level.

⁸ As seen in Appendix Table 2, these differences are statistically significant at the 90% confidence level about half the time—in 7 out of 15 comparisons of adjacent cells. Family income increases are most likely to make a significant difference in employer coverage rates for workers with annual earnings less than \$20,000.

⁹ At the 90% confidence level.

¹⁰ In this %FPG range, there are too few workers earning \$40,000 or more to provide reliable estimates.

¹¹ The differences between the \$20,000-\$29,999 category and the \$30,000-\$39,999 category are not statistically significant, due to a relatively small number of workers in the \$30,000-\$39,999 earnings category at this %FPG level.

Similar results are obtained for the uninsured rate in this family income range. The percent uninsured ranges declines from 28.4% to 9.2% as annual earnings increase. Lower uninsured rates for those earning more than \$20,000 per year are statistically significant at the 90% confidence level.

It is worth noting that almost half (48.7%) of all working adults in the 200%-249% FPG range earned \$20,000 or more in 1999 (see Appendix Table 4).

D. Possible Policy Implications

These data suggest that, within the income range targeted by the proposed Healthy Families expansion, individual wage rates can be very useful for identifying parents who are more or less likely to have access to employer coverage. This knowledge can then be used to help target the uninsured more effectively while helping to avoid substituting public coverage for the employer coverage that higher wage workers are very likely to have access to.

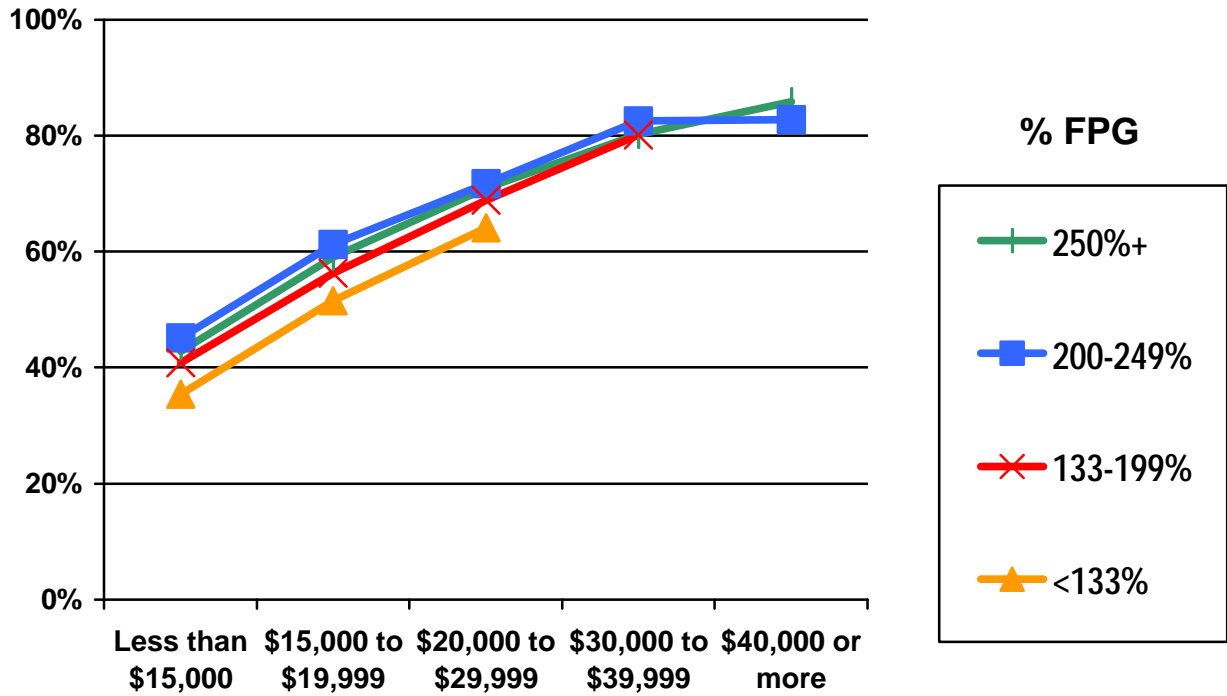
As we have suggested elsewhere,¹² a specific option worth consideration is to base the amount of premium contribution required for parents to enroll in Healthy Families on their individual earnings.

Many policy makers understandably view federal poverty guidelines and other objective standards as the best measure of need for public programs. Although contributions based on wages/earnings are not typically found in means-tested programs, they would not be without precedent. A number of other well-established public programs—from Social Security to Medicare to workers' compensation programs—base contributions on workers' wage levels, and means-tested public programs like Medi-Cal and Healthy Families routinely request earnings information on their application forms.

Policy that bases contributions for public coverage on individual earnings could create a more effective and workable interface with employment-based coverage, because it would be more compatible with market forces and equity in the workplace. Labor economists generally agree that wages and (health and other) employer-financed benefits are interchangeable. For example, a worker earning \$35,000 with an employer health insurance contribution of \$4,000 toward family coverage could generally earn \$39,000 instead in a comparable job without such benefits. Requiring a premium contribution that increased with wage level would make it less likely that people would drop employer coverage or switch jobs to gain increased wages without employer-sponsored health insurance, knowing they can qualify for publicly financed coverage. And it would reduce the degree to which the State, through public coverage, would be giving a competitive advantage to employers who do not pay for health insurance over those who do.

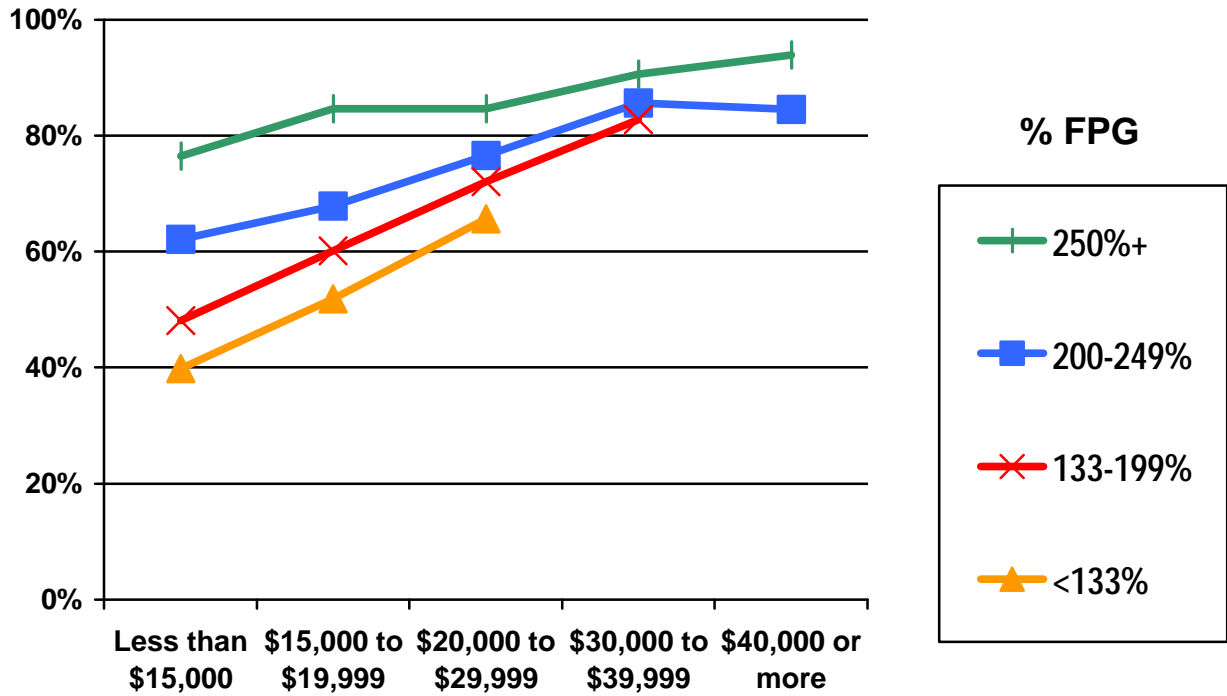
¹² Neuschler and Curtis, op.cit.

Figure 1: Percent of Full-Time, Full-Year Adult Wage-and-Salary Workers with Employment-Based Insurance (EBI) through Their Own Employer, by Earnings at Longest Job and by Family Income as a Percent of the Federal Poverty Guidelines (% FPG), United States, 1999



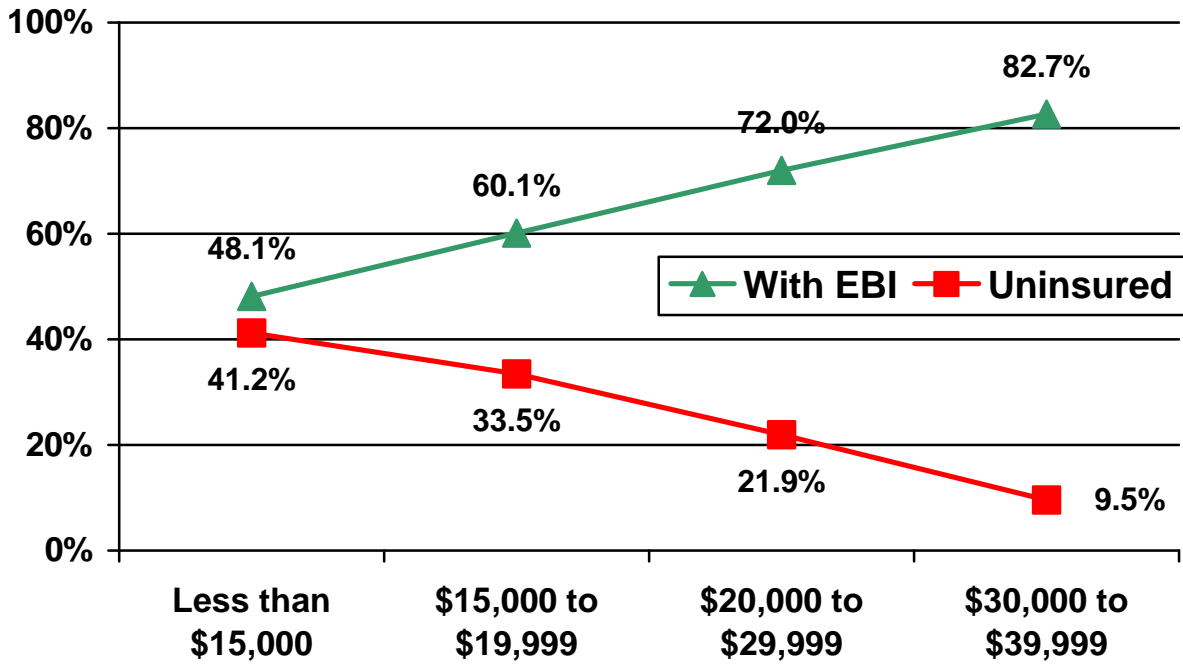
Source: IHPS analysis of the March 2000 Current Population Survey. Data points with large relative standard errors have been omitted.

Figure 2: Percent of Full-Time, Full-Year Adult Wage-and-Salary Workers with Any Employment-Based Insurance (EBI), by Earnings at Longest Job and by Family Income as a Percent of the Federal Poverty Guidelines (% FPG), United States, 1999



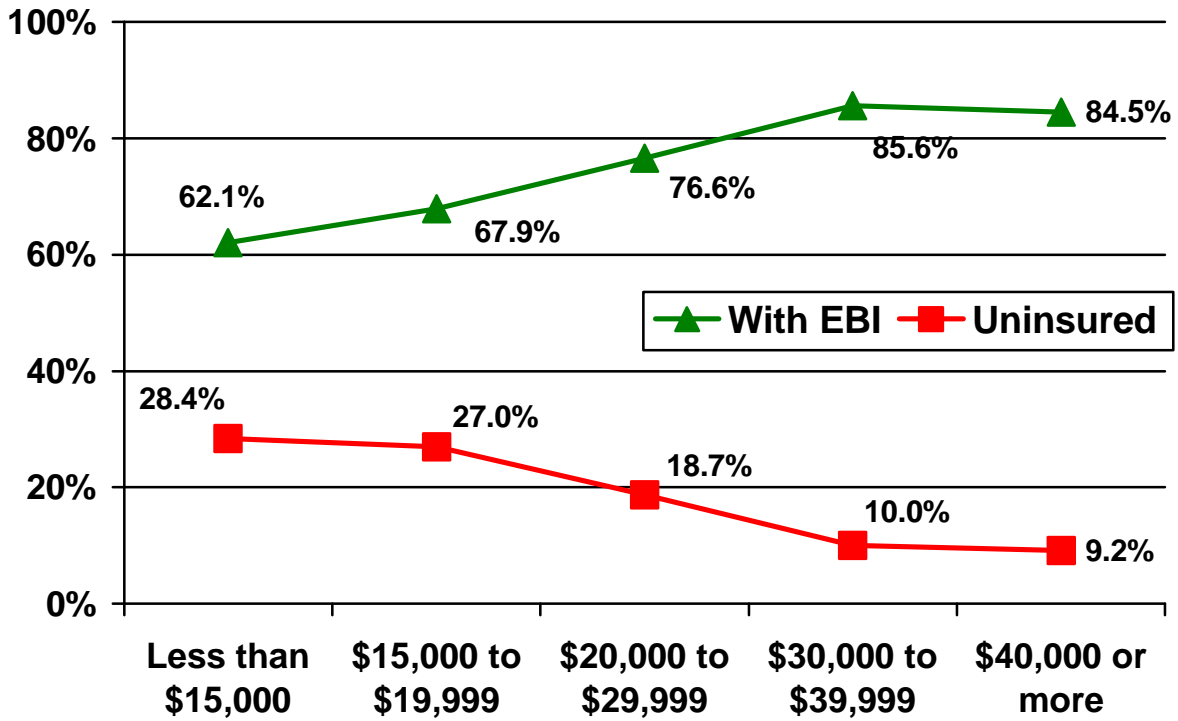
Source: IHPS analysis of the March 2000 Current Population Survey. Data points with large relative standard errors have been omitted.

Figure 3: Percent of Full-Time Full-Year Adult Wage-and-Salary Workers with Any Employment-Based Insurance (EBI) and Percent Uninsured, with Family Income between 133% and 199%FPG, by Earnings at Longest Job, United States, 1999



Source: IHPS analysis of the March 2000 Current Population Survey

Figure 4: Percent of Full-Time Full-Year Adult Wage-and-Salary Workers with Any Employment-Based Insurance (EBI) and Percent Uninsured, with Family Income between 200% and 249%FPG, by Earnings at Longest Job and by Parental Status : United States, 1999



Source: IHPS analysis of the March 2000 Current Population Survey

Appendix Table 1: Percent of Full-Time, Full-Year Adult Wage-and-Salary Workers with Employment-Based Insurance (EBI) from Their Own Employer, by Earnings at Longest Job and by Family Income as a Percent of the Federal Poverty Guidelines (% FPG), United States, 1999

Own EBI		%FPG	SS?	%FPG	SS?	%FPG	SS?	%FPG
Annual Earnings	TOTAL	< 133%		133-199%		200-249%		250%+
< \$15,000	39.8%	35.4%	N	40.8%	N	45.1%	N	42.8%
Statistically Significant?	Y	Y		Y		Y		Y
\$15,000 - \$19,999	58.3%	51.5%	N	56.3%	N	61.2%	N	59.0%
Statistically Significant?	Y	N		Y		Y		Y
\$20,000 - \$29,999	70.7%	64.1%	N	68.9%	N	71.7%	N	70.9%
Statistically Significant?	Y	N		~		Y		Y
\$30,000 - \$39,999	80.3%	*	N	80.1%	N	82.5%	N	80.2%
Statistically Significant?	Y	N		N		N		Y
\$40,000 +	85.8%	*	N	*	N	82.8%	~	85.8%
TOTAL	72.3%	42.8%	Y	53.5%	Y	65.7%	Y	77.8%

* Percentage estimate unreliable due to small sample size.

SS = Statistical significance of difference in percentage estimate between adjacent cells, measured at the 90% confidence level.

~ indicates difference is just on the borderline of statistical significance at the 90% confidence level.

Source: IHPS analysis of the March 2000 Current Population Survey

Appendix Table 2: Percent of Full-Time, Full-Year Adult Wage-and-Salary Workers with Any Employment-Based Insurance (EBI), by Earnings at Longest Job and by Family Income as a Percent of the Federal Poverty Guidelines (% FPG), United States, 1999

Any EBI		%FPG	SS?	%FPG	SS?	%FPG	SS?	%FPG
Annual Earnings	TOTAL	< 133%		133-199%		200-249%		250%+
< \$15,000	53.3%	39.8%	Y	48.1%	Y	62.1%	Y	76.5%
Statistically Significant?	Y	Y		Y		N		Y
\$15,000 - \$19,999	70.7%	51.8%	N	60.1%	Y	67.9%	Y	84.6%
Statistically Significant?	Y	N		Y		Y		N
\$20,000 - \$29,999	82.2%	65.7%	N	72.0%	N	76.6%	Y	84.6%
Statistically Significant?	Y	N		~		Y		Y
\$30,000 - \$39,999	90.1%	*	N	82.7%	N	85.6%	N	90.6%
Statistically Significant?	Y	N		N		N		Y
\$40,000 +	93.8%	*	N	*	N	84.5%	Y	93.9%
TOTAL	82.6%	43.7%	Y	58.6%	Y	72.6%	Y	89.7%

* Percentage estimate unreliable due to small sample size.

SS = Statistical significance of difference in percentage estimate between adjacent cells, measured at the 90% confidence level.

~ indicates difference is just on the borderline of statistical significance at the 90% confidence level.

Source: IHPS analysis of the March 2000 Current Population Survey

Appendix Table 3: Percent of Full-Time, Full-Year Adult Wage-and-Salary Workers Who Are Uninsured, by Earnings at Longest Job and by Family Income as a Percent of the Federal Poverty Guidelines (% FPG), United States, 1999

Uninsured		%FPG	SS?	%FPG	SS?	%FPG	SS?	%FPG
Annual Earnings	TOTAL	< 133%		133-199%		200-249%		250%+
< \$15,000	35.3%	44.9%	N	41.2%	Y	28.4%	Y	15.9%
Statistically Significant?	Y	N		Y		N		Y
\$15,000 - \$19,999	23.1%	35.6%	N	33.5%	N	27.0%	Y	10.0%
Statistically Significant?	Y	N		Y		Y		N
\$20,000 - \$29,999	13.4%	26.9%	N	21.9%	N	18.7%	Y	11.3%
Statistically Significant?	Y	N		Y		Y		Y
\$30,000 - \$39,999	7.0%	*	N	9.5%	N	10.0%	N	6.7%
Statistically Significant?	Y	N		N		N		Y
\$40,000 +	4.1%	*	N	*	N	*%	N	4.0%
TOTAL	13.0%	42.1%	Y	33.1%	Y	21.8%	Y	7.2%

* Percentage estimate unreliable due to small sample size.

SS = Statistical significance of difference in percentage estimate between adjacent cells, measured at the 90% confidence level.

~ indicates difference is just on the borderline of statistical significance at the 90% confidence level.

Source: IHPS analysis of the March 2000 Current Population Survey

Appendix Table 4: Percent Distribution of Full-Time, Full-Year Adult Wage-and-Salary Workers by Earnings at Longest Job and by Family Income as a Percent of the Federal Poverty Guidelines (% FPG), United States, 1999

		%FPG	%FPG	%FPG	%FPG
Annual Earnings	TOTAL	< 133%	133-199%	200-249%	250%+
< \$15,000	12.8%	76.8%	43.2%	13.5%	4.0%
\$15,000 - \$19,999	11.4%	15.4%	31.0%	37.9%	5.5%
\$20,000 - \$29,999	23.3%	7.5%	19.9%	34.2%	23.7%
\$30,000 - \$39,999	18.5%	0.3%	5.3%	10.6%	22.5%
\$40,000 +	34.0%	0.0%	0.6%	3.9%	44.3%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%

Source: IHPS analysis of the March 2000 Current Population Survey