A Needle in a Haystack? Uninsured Workers in Small Businesses That Do Not Offer Coverage

Richard Kronick and Louis C. Olsen

Objective. To describe the insurance status of workers at small businesses, and to describe the status of uninsured persons by the employment characteristics (employment status, firm size, and whether the employer offers insurance) of the head of household.

Data Sources. Data from the March and February 2001 Current Population Survey, and a survey of 2,830 small businesses in San Diego County conducted in 2001.

Study Design. The survey of small businesses was undertaken as part of a project testing the response of employers to offers of subsidized coverage. Employers were asked whether they offered insurance, and about the insurance status of their employees. The merged February–March 2001 CPS was used to identify the employment status, firm size, and employer-offering status for uninsured persons in the U.S.

Data Collection. Telephone interviews with small businesses in San Diego County.

Principal Findings. Only 21 percent of the uninsured in the U.S. are full-time employees (or their dependents) in small businesses (<100 employees) that do not offer insurance. The employment status of the uninsured is heterogeneous: many work for large employers, small employers who do offer insurance, or are self-employed, part-time workers, or have no workers in the household. Although there are many small businesses in San Diego that do not offer coverage, most of them have very few uninsured workers. Over 50 percent of businesses that do not offer coverage have either zero or one uninsured worker. There are very few small businesses that do not offer coverage and that have substantial numbers of uninsured workers. These businesses are not quite as rare as a needle in a haystack, but they are very difficult to find.

Conclusions. If all small businesses that do not offer insurance now could be persuaded to start offering coverage, and if all the full-time workers (and their dependents) in those businesses accepted insurance, the number of uninsured would decline by 21 percent—a significant decline, but leaving 80 percent of the problem untouched. If the prime target for programs of subsidized insurance are small businesses that do not offer coverage now and that have substantial numbers of uninsured workers, the target is very small.

Key Words. Uninsured, small business

Public discussion of the shortcomings of our employer-based health insurance system often focuses on the low rate at which small businesses offer insurance to their employees. It is well known that most of the uninsured are workers or their dependents, and that small businesses are much less likely to offer coverage than large businesses (Hoffman and Wang 2003; Kaiser Family Foundation 2003). An observer viewing our debates about insurance coverage might well think that the fact that many small businesses do not offer coverage is a large part of the reason that so many hard-working Americans are uninsured. For example, in his acceptance speech at the Republican National Convention in 2004, President Bush stated, "More than half of the uninsured are small-business employees and their families."¹ And there is bipartisan concern about insurance coverage in small businesses: in the 2004 presidential campaign, Senator John Kerry proposed providing a refundable tax credit of up to 50 percent of the cost of care to small businesses and their employees.² More recently, democrats in the House of Representatives have proposed a 50 percent tax credit to help small businesses purchase health insurance.³

State governments spend considerable energy fashioning policies that attempt to make insurance more available and affordable for small businesses and their workers, including small group market reform, the creation of purchasing pools, exempting small businesses from mandated benefits laws, and programs that provide direct subsidies to small businesses (Butler 1992; Families USA Foundation 1993; Yegian et al. 1998; Curtis et al. 1999; Silow-Carroll, Anthony, and Meyer 2000; Wicks and Hall 2000; Marquis and Long 2001; Swartz 2001; Wicks 2002).

However, public policy discussion about small businesses and health insurance occurs without the benefit of good information on the extent to which small businesses contribute to the problem of the uninsured. Given the many policy proposals that are devoted to encouraging small businesses to offer insurance, it would be useful to know by how much the number of uninsured would be reduced if all small businesses offered coverage and all full-time workers and their dependents in these businesses accepted coverage. Our purpose here is to provide a better understanding of the insurance status

Address correspondence to Richard Kronick, Ph.D., Professor and Chief, Division of Health Care Sciences, Department of Family and Preventive Medicine, Ash Building, Room 102, UCSD School of Medicine 0622, 9500 Gilman Drive, La Jolla, CA 92093-0622. Louis C. Olsen, Ph.D., Staff Research Associate, is with the Division of Health Care Sciences, Department of Family and Preventive Medicine, UCSD School of Medicine, La Jolla, CA.

of workers at small businesses, and of the employment status of uninsured workers.

NEW CONTRIBUTION

A number of researchers have used data from the Current Population Survey to characterize the employment status of the uninsured. For example, Fronstin (2004) uses data from the March 2004 Current Population Survey to show that among all uninsured adult workers, 37 percent work for a firm with fewer than 25 employees, and just under 50 percent work for a firm with fewer than 100 employees. Similarly, Garrett and colleagues, using merged data from the 1999 February and March Current Population Survey, show that 40 percent of uninsured workers are employed at a firm with fewer than 25 employees, and 57 percent at a firm with fewer than 100 employees (the denominator for these statistics excludes the self-employed) (Garrett, Nichols, and Greenman 2001).

Glied, Lambrew, and Little (2003) also use Current Population Survey data to extend the Fronstin and Garrett et al. analyses to include data on uninsured children and uninsured nonworking adults. Glied et al. show that although 45 percent of uninsured workers are employed at a firm with fewer than 100 employees, only 36 percent of all the uninsured are either workers at a small firm or the dependent of such a worker. The difference in the two percentages is because there are few uninsured nonworking adults who are the dependents of a worker in a small firm, and partially because there are relatively few uninsured children who are the dependent of a worker in a small firm.

The analysis of the Current Population Survey that we present below builds on the Glied et al. analysis by characterizing employees based on whether they work for an employer who offers insurance. As we shall see, many uninsured small business employees work at firms that do offer insurance to at least some workers.

In addition to extending the results of previous analyses of Current Population Survey data to better describe the employment status of the uninsured and their dependents, we use data from a survey of small businesses in San Diego to describe the insurance status of workers at small firms that do not offer coverage.

DATA AND METHODS

We use data from the March and February 2001 Current Population Survey to categorize the uninsured by employment status and by whether they are

offered employer-sponsored insurance.⁴ First, the March 2001 CPS is used to categorize the under age 65 uninsured into the following groups: children, nonworkers, part-time workers (fewer than 35 hours per week), self-employed, full-time workers at a business with fewer than 100 workers, and full-time workers at a business with more than 100 workers. Second, the March to February merged data are used to estimate the percentage of uninsured workers in each firm size who work at a firm that offers insurance.⁵ Third, using standard rules for insurance units, we assign uninsured children, nonworkers, and part-time workers to an insurance unit, and then classify dependents based on the employment status of the head of the insurance unit. We perform a similar analysis with 2001 California Health Interview Survey data to estimate the employment status and insurance-offering behavior of the uninsured in San Diego County.⁶

Household survey data provide information on the fraction of the uninsured who work for a small business that does not offer insurance, but do not provide useful information about the number of small businesses that do not offer insurance, or the insurance status of workers in these businesses. Employer surveys, such as the survey conducted annually by the Kaiser Family Foundation and HRET, provide estimates of the fraction of businesses that do not offer insurance, but cannot produce estimates of the insurance status of workers in these firms.

As part of a project analyzing the response of small businesses and their employees to variations in the price of coverage, we surveyed small businesses in San Diego County, gathering information on whether the employer offered insurance, and on the insurance status of employees.

We started with a random sample, from Dun & Bradstreet (D&B) data, of 5,720 San Diego County employers with between 3 and 50 employees. We sent an initial mailing to each sampled employer, offering to sell them Sharp Health Plan (a San Diego-based, nonprofit HMO) at subsidized rates if they were not currently offering health insurance, had between two and 50 employees, and had at least two uninsured full-time employees (FTEs) with family incomes below 300 percent of the federal poverty level.⁸ The initial mailings were sent between June and December, 2001 on joint University of California San Diego (UCSD) and Sharp Health Plan letterhead.

We followed up the initial mailing with telephone calls to determine whether the employer offered insurance and to gather information about the insurance status of employees. The callers identified themselves as UCSD staff members.⁹ When a staff member identified a business that did not offer

insurance and had uninsured workers, he or she attempted to set up an in-person appointment with another UCSD employee trained in selling the subsidized insurance product.¹⁰

After the initial round of telephone calls, 13 percent of the sample refused to provide any information, 8 percent reported that they offered insurance but refused to provide further information on the insurance status of employees, and 4 percent reported that they did not provide insurance, but also refused to provide any further information. Between 1 and 5 months after the first round of contacts, we attempted to re-contact the 13 percent of firms that had initially refused to provide any information, as well as the 12 percent of firms that had only reported whether they offered insurance but refused to provide any additional information. We obtained additional information from approximately one-third of the firms in each of these groups, and we used the information obtained in the second round of contacts to estimate the status of the remaining firms that refused both rounds of contacts.¹¹

We asked the owner (or other knowledgeable respondent) about the insurance status of the employees. At businesses that did not offer insurance and that had ten or fewer employees, we conducted a "small employer census," in which we gathered detailed information on each employee's age, marital status, number of children, race/ethnicity, wage rate, hours worked, and health insurance status. The data collected from these small employer censuses seemed to be of high quality: most owners were confident that they knew whether their employees had health insurance, and the responses had considerable face validity. For example, almost all the employees who were reported to be covered as a dependent were also reported as married; as a second example, the average income of employees reported to be covered by nongroup policies was approximately \$30,000 higher than the average income of employees reported to be uninsured. Only 1.3 percent of employees were reported as "insurance status unknown."

At firms that offered insurance, at firms that did not offer insurance but had more than 10 employees, and at non-offering firms with fewer than 10 employees that refused to complete the small employer census, we gathered information on an "insurance grid," in which we asked how many employees were covered by the company plan, how many by nongroup coverage, how many as a dependent, how many were uninsured, and how many were covered by a public program. Among firms not-offering insurance, we obtained small employer census information from 274 firms, insurance grid information from 218 firms, and had no information on the insurance status of workers from 297 firms. Controlling for firm size, we weight the responses of

the firms for whom we had information to be representative of all sampled firms that did not provide insurance.

We use data from the California Employment Development Department (EDD) to estimate the total number of employers and employees in San Diego.¹² Controlling for firm size, we weight the firms in our sample to be representative of all firms in San Diego County.

Response Rate Calculations

Following the second round of contacts, there were 449 outright refusals, or 8 percent of the original sample of 5,720 businesses (Table 1). Among the businesses that were reached and screened, 70 percent were in scope. Among businesses that D&B reported as having three FTEs, the proportion in scope (among those reached and screened) was 54 percent, increasing to 84 percent among businesses that D&B reported as having 11–50 FTEs (data not shown). Controlling for firm size, we assume that the proportion of “refusals,” “no answer,” and “answering machine only” businesses that are in scope is the same as the proportion of in-scope businesses that were reached and screened.¹³ We estimate that there were 3,558 in-scope businesses in the D&B sample.

Table 1: Survey Completion Rates

	<i>Number of Firms</i>		<i>Letters Returned (%)</i>
	<i>Count</i>	<i>%</i>	
Outcome categories			
Reached and screened, 2–50 FTEs	2,830	49.5	6.6
Reached and screened, not 2–50 FTEs*	1,206	21.1	12.3
Refused	449	7.8	15.4
No contact made			
Disconnected/wrong number	530	9.3	41.1
No answer/busy signal/fax	228	4.0	40.4
Answering machine only	477	8.3	23.5
Total	5,720	100	14.4

Source: UCSD survey of San Diego employers, 2001.

Note: “Letters Returned” indicates percent of letters returned as undeliverable by the U.S. Postal Service.

*Includes 902 businesses with fewer than two FTEs; 122 with more than 50 FTEs; 156 out of business; and 26 moved out of area.

FTE, full-time employee.

We calculate two response rates—one for the purpose of estimating the proportion of businesses that offer insurance, and a second for estimating the insurance status of workers at small businesses. We obtained information on whether the firm offered insurance from 2,830 firms. The response rate for the estimate of the proportion of firms that offer insurance is 79.5 percent (i.e., $2,830/3,558$). Among the 2,830 firms that reported whether the firm offered insurance, 2,176 owners provided information on the insurance status of the firm's employees. The response rate for the tables that estimate the insurance status of workers is 61 percent, quite respectable for a survey of small employers.

RESULTS

Among all of the uninsured in the United States, just over 20 percent are full-time workers at a small firm (fewer than 100 employees) that does not offer employer-sponsored insurance, or are the dependent of such a worker (Figure 1). An additional 16 percent of the uninsured work full time at a small business that does offer insurance, or are the dependent of such a worker. The employment status of the uninsured is heterogeneous: many work for a large employer, and substantial fractions are self-employed, part-time workers, or have no workers in the household. The distribution of the uninsured in San Diego County is very similar to the national distribution (data not shown).

A more expansive view of the portion of the uninsured that is accounted for by employees of small firms would include part-time workers, although relatively few part-time workers have primary coverage from employer-sponsored insurance regardless of firm size. Among the 12 percent of the uninsured who are part-time employed (or the dependents of a part-time employed worker), approximately 60 percent work for an employer with fewer than 100 employees, and among these, just over 50 percent work for an employer who does not offer coverage (data not shown). Thus, if we were to add part-time workers and dependents at small businesses that do not offer coverage to similarly situated full-time workers, we would conclude that 25 percent of the uninsured are workers (or their dependents) at small firms that do not offer coverage.

The results from the survey of employers that we conducted in San Diego show that 73 percent of the employers with between two and 50 full-time workers in San Diego offer insurance to their employees (Figure 2). The

Figure 1: Distribution of the Uninsured in the U.S., by Employment Status of the Head of Household

Source: Employment status of the uninsured from the March 2001 Current Population Survey. Uninsured part-time workers, nonworkers, and children are assigned to the insurance and employment status of the family head, using analysis of data from the merged February and March 2001 Current Population Survey. Uninsured full-time workers are characterized by their own employment status.

percentage offering increases markedly with firm size: of the firms with 2 percent employees, 50 percent offer insurance; of the firms with more than 10 employees, over 85 percent offer insurance.

Our estimate of the percentage of small businesses offering insurance is similar to, but slightly higher than, two estimates for California as a whole (Figure 3). Employer-reported data collected by William M. Mercer Inc. with the California Health Care Foundation (CHCF) found an offering rate of 71 percent among small employers in 2001; the 2001 Kaiser Family Foundation/Health Research and Education Trust (KFF/HRET) survey of California employers reports that 64 percent of small employers offered insurance. The minor differences between our results and the CHCF/Mercer and KFF/HRET data may reflect real differences between San Diego employers and those in the rest of the state in offering behavior, or, more likely, small differences in question wording or analytic methods. For example, our San Diego survey categorizes businesses by the number of FTEs, while the CHCF/Mercer and the KFF/HRET surveys count the number of full- and part-time

Figure 2: Percent of San Diego Small Businesses Offering Insurance, by Firm Size

Source: UCSD survey of San Diego employers, 2001.

Note: Unweighted $N = 2,830$.

employees. Further, the estimate of the percentage of employers offering insurance is sensitive to assumptions made about the distribution of businesses by firm size.¹⁴

Although our results on the percentage of employers offering coverage are similar to the CHCF/Mercer and the KFF/HRET results, they are quite different from the results from the MEPS-Institutional Component (MEPS-IC) establishment survey.¹⁵ The MEPS-IC includes businesses with only one employee, while our survey is limited to businesses with at least two FTEs, and this certainly accounts for some of the difference in results among the very smallest businesses. However, even among businesses with more than 10 employees, the MEPS-IC estimates of the percent of businesses offering coverage are substantially below estimates from the other three surveys. The reasons for these differences are not clear. Response rates for MEPS are higher than for the other surveys, and this might account for some of the differences in results; however, as discussed in footnote 11, the San Diego survey achieved a relatively high response rate, and the overall estimate of the percentage of employers offering coverage is not very sensitive to moderately sized errors in the imputed offering status of nonrespondents. MEPS characterizes businesses by the size of the establishment, while our survey, like the KFF/HRET

Figure 3: Percent of Small Businesses Offering Coverage, By Firm Size and Data Source

Source: FOCUS: UCSD survey of San Diego employers, 2001. CHCF/Mercer: Employer-sponsored health insurance among small businesses: The 2000 CHCF/Mercer Survey. MEPS-IC data are from www.meps.ahrq.gov/MEPSDATA/ic/2001/Index101.htm.

Notes: Kaiser reporting categories are “3–9,” “10–24,” and “25–49” full-time employees (FTEs). MEPS-IC includes establishments with one employee, and reporting categories are < 10, 10–24, and 25–49. MEPS-IC characterizes businesses by the size of the establishment; the other surveys by the size of the firm. FOCUS survey counts FTEs only, while other surveys include both full-time and part-time employees. FOCUS estimates are for San Diego County; CHCF/Mercer and KFF/HRET data are for California; MEPS-IC data are for the U.S.

and CHCF/Mercer surveys, characterizes businesses by the size of the firm. However, this difference should cause estimated offer rates among small businesses to be higher in MEPS than in the other surveys, as there are some small establishments that are part of large firms that are included in the MEPS count of small businesses but are excluded from the other surveys, and these establishments presumably have higher offer rates than small establishments that are not part of a larger firm.

Employer-reported data indicate that 56 percent of FTEs at firms that do not offer insurance are uninsured (Table 2). The remainder are divided evenly between those with nongroup coverage and those covered by a spouse, with small numbers covered by public programs. Among firms that do not offer coverage, the percentage of workers who are uninsured increases with firm size: among very small firms that do not offer coverage, approximately one-

Table 2: Insurance Status of Employees at San Diego Small Businesses Not Offering Insurance, by Firm Size

<i>Employee Insurance Status</i>	<i>Firm Size (# of Full-Time Employees)</i>			<i>Total</i>	<i>Total # of Full-Time Employees</i>
	<i>2-4</i>	<i>5-10</i>	<i>11-50</i>		
Uninsured	31.2%	46.9%	77.5%	55.7%	34,904
Non-group coverage	33.9%	20.2%	9.6%	19.4%	12,131
Spouse/relative	27.0%	25.4%	7.3%	18.2%	11,386
MediCal/Medicare	2.7%	3.4%	3.1%	3.1%	1,915
Other/unknown	2.5%	2.8%	1.5%	2.2%	1,383
DK insurance status	2.6%	1.2%	1.1%	1.5%	948
Total	100%	100%	100%	100%	
Mean number of full-time employees	2.70	6.62	17.90	5.89	—
Total # of full-time employees	16,900	19,089	26,689	62,678	—
Total # of uninsured full-time employees	5,274	8,961	20,680	34,904	
Number of businesses not offering insurance	6,263	2,883	1,491	10,636	—

Source: UCSD survey of San Diego employers, 2001.

Note: Unweighted $N = 492$. Insurance status of workers as reported by owner.

third of workers are uninsured; among firms with more than 10 employees that do not offer insurance, over three-quarters of full-time workers are uninsured.

The relatively low proportion of uninsured among full-time workers at the very smallest firms that do not offer coverage is related, in part, to the presence of the owner as a FTE. Approximately 83 percent of owners in businesses not offering coverage are themselves insured (data not shown), and, as a result, in almost all two-employee businesses, at least one of the employees is insured.

While the higher coverage rates in firms of five to 10 employees compared with firms with 11 or more is partially explained by the fact that the owner is a larger fraction of employees at the smaller firms than in the larger firms, it also reflects a substantial degree of selection. Most firms with 11 or more employees offer coverage; among the relatively few firms that do not, most employees are uninsured. In contrast, although the offer rates in firms with five to 10 employees are slightly lower, among the firms of this size that do not offer coverage, a larger fraction of employees purchases nongroup coverage or is covered by a spouse.

Although there are 40,000 small businesses in San Diego, and 10,000 of these businesses do not offer insurance, there are only a small number of firms

Figure 4: Distribution of San Diego Small Businesses Not Offering Insurance by Number of Uninsured Workers

Source: UCSD survey of San Diego employers, 2001.

Note: Unweighted $N = 492$ businesses. Weighted $N = 10,636$ businesses.

that have substantial numbers of uninsured workers. Approximately 37 percent of the small firms that do not offer coverage have no uninsured, FTEs, and an additional 14 percent have only one uninsured employee (Figure 4). Many of the firms that have no or only one uninsured employee are extremely small, with only a few workers; however, even among firms with five full-time workers, 25 percent of the owners report that there were no uninsured FTEs (data not shown). Only 9 percent of the small firms that do not offer coverage have at least 10 uninsured FTEs.¹⁶

The very small number of firms with at least 10 uninsured FTEs accounts for over one-half of all the uninsured, FTEs at firms that do not offer coverage. Of the 40,000 small businesses in San Diego County, the 4 percent of businesses that do not offer insurance and that have at least 10 FTEs employ 7 percent of all the FTEs at small businesses in the county, but account for 39 percent of the uninsured small business workers in the county (Figure 5).

There are many small businesses in the county, and approximately 25 percent of these businesses do not offer insurance. However, most of the

Figure 5: Distribution of San Diego Small Businesses, Uninsured Full-Time Employees (FTEs), and All FTEs, by Offering Status and Firm Size, 2001

businesses that do not offer insurance have only a few workers, and thus, even though there are many very small businesses that do not offer insurance, they do not account for much total employment. Further, relatively large fractions of the FTEs at these very small businesses have other sources of insurance. As a result, very small businesses that do not offer insurance do not account, in total, for very many uninsured workers. Most of the uninsured workers at small businesses that do not offer insurance are found in the relatively few businesses that do not offer insurance and have more than 10 employees.

DISCUSSION

This paper has presented three major findings:

- Full-time workers (and their dependents) who work at a small business and are not offered insurance account for approximately 20 percent of all the uninsured in the United States (including part-time workers and dependents at these businesses increases the fraction to 25 percent). Even if we were somehow able to get all small firms to

offer insurance to all their workers, and get all the full-time workers (and dependents) who work at a firm that does not currently offer insurance to accept coverage, the number of uninsured would be reduced by approximately 20 percent. This would be a valuable accomplishment, but would still leave four-fifths of the problem untouched. This suggests that the main part of the problem is not simply that there are many small businesses that do not offer insurance, but rather that there are many uninsured people in other situations: workers at large and small businesses who are not eligible for employer-sponsored coverage; those who are offered insurance, but cannot afford the coverage for themselves or their dependents; and the self-employed, the part-time employed, and people in households with no workers.

- Although there are many small businesses that do not offer coverage, most of them have very few employees, and even fewer uninsured employees. Over 50 percent of businesses that do not offer coverage have either zero or one uninsured worker.
- There are very few small businesses that do not offer coverage and that have substantial numbers of uninsured workers. These businesses are not quite as rare as a needle in a haystack, but they are very difficult to find.

The finding that “only” 21 percent of the uninsured are full-time workers (or their dependents) at a small business that does not offer insurance is based on household survey data for the U.S. as a whole. The results on the insurance status of workers in small businesses are based on a survey of small businesses in San Diego, and it is possible that results in other parts of the nation would be different. However, household survey data on the distribution of the uninsured in San Diego are similar to the results for the U.S. as a whole, and this increases confidence that the main employer-based findings—that there are few small businesses with substantial numbers of uninsured workers, and that uninsured workers in small firms are concentrated in a very small number of firms—may be characteristic of the U.S. as well as of the San Diego sample on which the findings are based.

Our results make it clear that policies aimed at increasing the rate at which small businesses offer insurance to their employees will have, at best, quite limited effects on the overall number of uninsured.

We have shown in this paper that small business is not the problem. Rather, the problem is that in a system that relies on voluntary employer-

sponsored insurance alongside a threadbare, patchwork quilt of public programs, there are a large number of people in a wide variety of circumstances who end up without coverage. Many are not eligible for employer-sponsored coverage, even though they work in a business that offers coverage to some workers. Others cannot afford the coverage that is offered to them. If substantial progress is to be made in increasing employer-sponsored coverage among workers, we must do much more than increase the number of small businesses that offer coverage to their workers.

ACKNOWLEDGMENTS

This work was supported by a grant from the California HealthCare Foundation. Analysis of the 2001 CHIS data was supplied by Shana Alex Lavarreda of the UCLA Center for Health Policy Research, in consultation with Professor E. Richard Brown. Analyses of Current Population Survey data were conducted by Kathrine Jack of Columbia University, with consultation from Sherry Glied, as part of the Commonwealth Fund Task Force on the Future of Health Insurance.

NOTES

1. Text of President Bush's remarks to the Republican National Convention, as published in the *New York Times*, September 2, 2004.
2. John Kerry's Plan To Make Health Care Affordable To Every American. Accessed from: www.johnkerry.com/issues/health_care/health_care.html, September 10, 2004.
3. Kaiser Daily Health Policy report, May 5, 2005. Accessed from www.kaisernet-work.org/daily_reports/rep_index.cfm?hint=3&DR_ID=29852, May 10, 2005.
4. There is likely to be some error in the respondent's report of firm size and of whether or not the firm offers insurance, but these errors are likely to cause us to overestimate the number of uninsured workers who are employed by small firms that do not offer coverage. For multi-establishment firms, the CPS asks respondents about the number of employees in the firm (not just at the establishment at which the respondent works), but some respondents may not know how many employees work at other establishments, and may underestimate the size of the firm. Further, some respondents may not know whether their employer offers insurance. To the extent that reports of employer-offering status are in error, it seems more likely to us that respondents incorrectly report that their employers do not offer insurance when the truth is the employer does offer insurance to at least some workers, than that respondents report their employer does offer insurance when in fact the

employer does not offer coverage. On balance, errors in respondent report of firm size and of employer-offering behavior are likely to bias upward our estimates of the percentage of the uninsured who work for small employers who do not offer insurance.

5. Analysis of data from the February and March supplements to the 2001 Current Population Survey was supplied by Kathrine Jack of Columbia University in consultation with Sherry Glied as part of the Commonwealth Fund Task Force on the Future of Health Insurance. The March survey contains information on the insurance and employment status of all respondents, but does have information on whether respondents were offered insurance by their employer. The February survey has information on whether respondents worked at a firm that offered insurance for the subset of respondents who were employed at the time of the February survey. The merged data exclude approximately one-quarter of the March sample (who were not included in the February sample) as well as those March respondents who were not working in February. We assume that the proportion of employees working at a firm that offered insurance among March respondents with no February data on offering status is the same as the proportion among those respondents for whom the February offering question was asked. The March workers not included in the February sample because they were in the outgoing rotation group are extremely similar to the workers included in the merged sample, and this assumption is fully justified for them. For March workers who were not working in February, we may be slightly overestimating the proportion working at a firm that offered insurance.
6. Analysis of the 2001 CHIS data was supplied by Shana Alex Lavarreda of the UCLA Center for Health Policy Research, in consultation with E. Richard Brown.
7. The D&B data on the number of employees primarily were provided by the business owner at the time the owner filed for a business license. The D&B data on the number of employees included both part-time and FTEs.
8. The initial mailing was sent to firms that D&B thought had between three and 50 workers, but we considered as “in scope” those firms with at least two FTEs. In earlier work, we determined that a very large percentage of firms that D&B reported as having two employees were either out of business or did not have at least two employees, and that it was not an efficient use of resources to include firms with two employees (as reported by D&B) in the initial mailing.
9. The protocol to start the call was: “Hello, My name is [FIRSTNAME & LASTNAME], from the UCSD Department of Family and Preventive Medicine, am I speaking with [CONTACT]? We are conducting a short survey of small businesses to estimate the number of uninsured employees working in San Diego. We sent you a letter describing the project and a program called FOCUS. If you have just a couple minutes, I’d like to ask you a few questions to determine the number, if any, of uninsured workers employed there.”
10. We asked employers whether the establishment was part of a larger firm. For multi-establishment firms, we asked for the number of FTEs at all establishments included in the firm, and characterized the firm by the total number of FTEs at all establishments. For multi-establishment firms, we asked whether decisions about

health benefits were made at the establishment we reached, or at another site; if decisions were made at another site, we did not include the establishment in the survey (because the other site also had a chance of being included in the sample). Following Sharp Health Plan's rules, we asked owners how they defined full-time work—most owners reported 35 hours per week as full-time work. We asked owners how many paid FTEs worked at the business. If the owner worked full time, we included the owner in the count of employees.

11. See "Technical Appendix: Description of FOCUS employer-survey methods and analysis" March 2003, available from the authors. Because the response rates to the survey were relatively high, the overall estimate of the percentage of employers offering coverage is not very sensitive to modest errors in the imputations we made of the offering status of employers who refused to respond to both the first and second rounds of the survey. As an example of sensitivity, among the 721 businesses that refused the first round of the survey, we converted 272 businesses to some other status during the second round of the survey. Among these 272 businesses that were successfully converted, approximately one-third reported that they did not have at least two FTEs, and of the remaining two-thirds, approximately 40 percent reported that they did not offer coverage. Among the 449 initial refusals that we were unable to convert, we estimate that 303 had between two and 50 employees, and that 113, or approximately 40 percent, did not offer coverage. If the 40 percent estimate is incorrect, and in fact 50 percent did not offer coverage, then we would be underestimating the number of businesses not offering coverage by approximately 30 businesses, or less than 1 percent of the sample.
12. Data obtained from the California EDD website for third quarter of 2000. Available at <http://www.calmis.ca.gov/file/indsize/0sfcoru.htm>, accessed May 11, 2004.
13. This assumption likely leads to a substantial overestimate of the number of businesses that were in scope. The introductory letters were "returned as undeliverable" at 40 percent of the "no-answer" businesses, and close to one-quarter of the "machine-only" businesses, suggesting that many of these businesses were out of business. Further, it seems unlikely that there would be many businesses with at least two FTEs in which it was not possible to ever talk with a real person.
14. For example, in 2001, the KFF/HRET results are weighted to match the distribution of businesses, by firm size, as reported by D&B. However, for 2003, the KFF/HRET results were weighted to match the distribution of businesses, by firm size, as reported by the Bureau of the Census. The D&B list has proportionally more very small businesses (i.e., three- and four-employee businesses) than does the Census, so the reweighting of the sample to the Census Bureau distribution results in an increase in the estimated proportion of small businesses that offer insurance. Some of the differences between surveys might be accounted for by sampling error: with a sample size in our San Diego survey of 2,830 businesses providing a response to the question of whether they offer health insurance, the 95 percent confidence interval for the estimate that 73.5 percent of businesses offer coverage stretches from 71.9 to 75.1 percent.

15. MEPS-IC data are available from: www.meps.ahrq.gov/MEPSDATA/ic/2001/Index101.htm (accessed May 11, 2005).
16. As was shown in Table 2, only 14 percent of the small firms that do not offer coverage have more than 10 FTEs. The fact that only 9 percent of small firms that do not offer coverage have at least 10 uninsured FTEs is largely a reflection of how few firms there are in this size range that do not offer coverage.

REFERENCES

- Butler, P. A. 1992. *Flesh or Bones? Early Experience of State Limited Benefit Health Insurance Laws*. Portland, ME: National Academy for State Health Policy.
- Curtis, R., S. Lewis, K. Haugh, and R. Forland. 1999. "Health Insurance Reform in the Small-Group Market." *Health Affairs* 18 (3): 161–60.
- Families USA Foundation. 1993. *No Sale: The Failure of Barebones Insurance*. Washington, DC: Families USA Foundation.
- Fronstin, P. 2004. "Sources of Health Insurance and Characteristics of the Uninsured: Analysis of the March 2004 Current Population Survey." *EBRI Issue Brief* (276, December): 1–31.
- Garrett, B., L. Nichols, and E. Greenman. 2001. *Workers Without Health Insurance: Who Are They and How Can Policy Reach Them?* Washington, DC: Urban Institute.
- Glied, S., J. Lambrew, and S. Little. 2003. *The Growing Share of Uninsured Workers Employed by Large Firms*. New York: The Commonwealth Fund.
- Hoffman, C., and M. Wang. 2003. *Health Insurance Coverage in America, 2001 Data Update*. Menlo Park, CA: Kaiser Family Foundation.
- Kaiser Family Foundation and Health Research Education Trust. 2003. *Employer Health Benefits Survey*. Menlo Park, CA: Kaiser Family Foundation.
- Marquis, M. S., and S. H. Long. 2001/2002. "Effects of 'Second Generation' Small Group Health Insurance Market Reforms, 1993 to 1997." *Inquiry* 38: 365–80.
- Silow-Carroll, S., S. E. Anthony, and J. A. Meyer. 2000. *State and Local Initiatives to Enhance Health Coverage for the Working Uninsured*. New York: The Commonwealth Fund (issue brief #424, November).
- Silow-Carroll, S., E. K. Waldman, and J. A. Meyer. 2001. *Expanding Employment-Based Health Coverage: Lessons from Six State and Local Programs*. New York: The Commonwealth Fund (issue brief #445, February).
- Swartz, K. 2001. *Healthy New York: Making Insurance More Affordable for Low-Income Workers*. New York: The Commonwealth Fund (issue brief #484, November).
- Wicks, E. K. 2002. *Health Insurance Purchasing Cooperatives*. New York: The Commonwealth Fund (issue brief #567, November).
- Wicks, E. K., and M. A. Hall. "Purchasing Cooperatives for Small Employers: Performance and Prospects." *Milbank Quarterly* 2000; 78 (4): 511–46.
- Yegian, J. M., T. Buchmueller, J. C. Robinson, and A. F. Monroe. 1998. *Health Insurance Purchasing Alliances for Small Firms: Lessons from the California Experience*. Oakland, CA: California HealthCare Foundation.