EMPLOYMENT AND HEALTH INSURANCE: VIEWS FROM FIVE SURVEYS

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Abstract: Five national surveys offer similar accounts of employment-based health insurance and the subset of the uninsured who have declined employment-based health insurance. While offering similar stories, the surveys are far from identical in the number of people they place at each turn in the story, with the relative size of the difference tending to grow as the subset becomes smaller. In disentangling sources of disagreement, we find no survey has an absolute advantage. The advantages are comparative. Thus we see nothing in the differences across the surveys that is likely to disturb the current equilibrium of economists who look at health insurance relying on the Current Population Survey and health services researchers the Medical Expenditure Panel Survey. Nonetheless, this equilibrium leaves unused some of the information that can be had from other surveys, and we close with some of that information.

At least five surveys can be used to look at the relationship between jobs and health insurance in the US. This paper compares estimates from these surveys at each step in the decision process that culminates in health insurance through an employer.

The five surveys considered here draw a similar picture : three-quarters of workers ages 18 to 64 inclusive are offered health insurance by their employers; two-thirds of those offered accept the offer. The process that produces this result can be described with at least four branch points: individuals choose to work, the job they obtain is with an employer that offers health insurance, the worker satisfies the employer's requirements to be offered health insurance such as working full time or meeting a tenure requirement, and the worker decides to accept the offer, including paying the worker's share of the premium, if any. Among those who decline, four out of five obtain health insurance elsewhere, most often through a spouse. Those who decline and were uninsured numbered between 2.9 and 3.6 million in 1996 and 1997, about seven percent of the total number without health insurance at that time (Table 1.)

While the surveys' estimates are consistent, they are not identical. For example, the largest estimate of the number offered health insurance who are without health insurance is 25 percent larger than the smallest. If one had to choose a survey to use to estimate the cost of a policy targeted to the uninsured who decline an employer offer, the survey with the largest estimate would suggest the policy is 25 percent more costly than data from the survey with the smallest estimate.

The degree of consistency across the surveys varies at each step (Figure 1.) Across the surveys, two generalizations appear to hold. First, the smaller the quantity measured, the smaller the absolute difference across surveys. Second, the smaller the quantity measured, the larger the relative difference across surveys.

Variability comes from variation in measurement at each step on the path to being an uninsured decliner. Variability at each step can influence the estimated size of the group of uninsured decliners, expressed either as an absolute number or as a share of all decliners, as a share of all who are offered health insurance, or as a share of all who work. Thus this paper seeks both to describe uninsured decliners and to illustrate how differences in surveys shape the picture that emerges.

Data and Methods

After examining many nationally representative surveys, we believe that at most seven ask questions that get at each step from the decision to work through the response to an employer offer of health insurance and, in particular, take up of offers. The five surveys used here are the Current Population Survey (CPS), the Community Tracking Survey (CTS), the Medical Expenditure Panel Survey (MEPS), the National Longitudinal Survey of Youth (NLSY), and Survey of Income and Program Participation (SIPP.) NLSY has not previously been used to examine offer and take up; CTS (Cunningham et al., 1999), CPS (Long and Marquis, 1993; Thorpe and Florence, 1999), MEPS (Cooper and Schone, 1997), and SIPP (Bhandari, 2002) have been used before. Appendix A provides additional details on each survey and its measurement of employment and health insurance.

Not all five surveys have been fielded each year. We chose 1997 because it was an early year for MEPS and more surveys cover that year than adjacent years.[1] While that year is the best fit across surveys, at least one year elapsed between the earliest and latest interviews in the samples. Four of the five surveys cover the entire population. NLSY focuses on one age cohort, those who were ages 14 to 21 in 1979 and thus 31 to 39 in 1996; we include estimates from that survey in tables but do not discuss them in the narrative to avoid the repeated caveat that the NLSY estimate represents only one age band.

These five are not the only surveys that have been used to look at the labor market processes that result in health insurance. Two other surveys with the same capacity are the National Health Interview Survey (NHIS) and National Survey of America's Families (NSAF.) NHIS provides the "parent" sampling frame used to create the MEPS sample. NHIS has been used to look at physical and mental health as well as demographic and economic characteristics of decliners (Blumberg and Nichols, 2001.) NSAF asks a broader set of well-being questions that extend beyond health or economic well-being. Other surveys allow one to discern who works, who has health insurance, but do not distinguish the source of coverage or whether a person without health insurance declined an employer offer. For example, in both the Behavioral Risk Factor Surveillance System and the National Health and Nutrition Examination Survey, individuals who do not have health insurance are asked to name one reason why they do not have health insurance. In both cases, "employer offers, can't afford" is one of the reasons that is coded; in neither case can the source of employment-related health insurance (own employment v. dependent on someone else's coverage) be distinguished.

Findings

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[1] NLSY asks about employment and health insurance as of a time in 1996. MEPS is available for both 1996 and 1997; SIPP data on employer offers is for 1997; offer questions are part of the employer-provided health benefits topical module asked as part of wave 5 of the 1996 panel and reflect respondents' status in one month from July to October 1997. The CTS was fielded over 1996 and 1997. CPS analysis is based on February 1997 Contingent Worker Survey (CWS) responses, with some characteristics used in cross tabulations derived from merging the March 1997 Annual Demographic Supplement. Unlike the March questions about health insurance where the recall period is the previous calendar year, the CWS asks about current health insurance.

The surveys produce different estimates at each decision point on the path to being an uninsured decliner (Table 1.) Three of the surveys (CPS, MEPS, and SIPP) produce estimates that tend to be closer to each other than does the fourth survey, CTS, but this relationship is not uniform. SIPP produces the highest estimate of most quantities and CTS the lowest. However, when each quantity is considered as a share rather than a count, there is no consistent pattern (Table 1, lower panel.)

While variable in number, the surveys offer a consistent portrait of the uninsured who have declined an offer of coverage. This picture mirrors the portrait of the uninsured overall: younger, poorer, and more likely to be a member of a racial or ethnic minority group (Table 2.)

Surveys can differ in their estimates of the same quantity for at least three reasons:

-   *Sampling variability*. Each survey interviewed a different sample. Chance differences make estimates unlikely to be identical across surveys. An additional sampling factor is at work in each of the surveys except CTS: for some or all of the sample used to make the estimates reported here, the responses are based on a second or subsequent interview. Those who continue to participate may be systematically different from those who were in the original sample but attrited.[2]
-   *Change in the true quantity*. The surveys did not conduct their interviews at the same time. The true quantities being measured may have changed in the year plus period interviews for the five surveys took place. For example, the true share of the population in the work force likely increases during periods of economic expansion.
-   *Differences in concept*. The surveys do not use the same questions to establish who is a worker, who is offered, and who declines coverage.

In the next section, we consider how survey methods and approach vary at each stage, from estimating the size of the population on to the smallest subset, the uninsured who decline an offer of insurance from an employer.

Population ages 18 - 64

We look at those ages 18 to 64. In this age range the individual's current work is most important for obtaining health insurance. Younger people most often obtain work-based coverage through the work of a parent. Those over age 65 most often obtain coverage through Medicare. These facts create a rationale for excluding the young and the old from analyses of work and health insurance. (Some analyses exclude all under age 21 (e.g., Cooper and Schone, 1997) while others include a broader group (e.g., Bhandari (2002) who includes all over age 15.)

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[2] Weinberg (2003) notes that the overlapping panel structure of the CPS means that each monthly sample, usually thought of as a cross-section, includes both some people being interviewed for the first time and others who are the remnant of an earlier cohort. A similar observation applies to MEPS. Both SIPP and NLSY are longitudinal surveys.

The surveys are closest in their estimates of how many people are ages 18 to 64. The population estimate is the one estimate from the surveys not subject to sampling variability. Each survey uses Bureau of the Census estimates as control totals. The control totals assure that the weighted total in each group matches a Census Bureau estimate for that group.

The surveys differ in part because they use different months from the Census monthly total population series. In the Census monthly estimates, the total US population of all ages rose from 265.2 to 268.3 million over the period from July 1996 to September 1997. The surveys produce estimates of the population ages 18 to 64 that range from 161.3 to 164.1 million. The estimate of the population ages 18 to 64 rises with the date of the Census estimate used as a control total. The lowest number comes from CTS. CTS totals are tied to the Census Bureau population estimates for July 1996. CPS and MEPS are tied to March 1997 estimates of total population size. SIPP interviews that covered employer offers ask about months from June through September 1997. Even if the surveys were otherwise identical, the estimates would vary across the surveys because of the use of different control totals. Table 2, comparing SIPP and MEPS, shows two surveys that are very close in characteristics for which they are control totals (age, gender) but further apart for population characteristics for which there are not control totals (marital status, income.)

The rising trend in Census estimates used as control totals provides a mechanical explanation for why CTS, using the earliest point for control totals, produced the smallest estimate of the population, and SIPP, using the latest, the largest (Table 1, lower panel.) The population size difference carries forward into estimates of subgroup sizes, with CTS most often smallest and SIPP most often largest.

Workers

Across the measures, the estimates of the number of workers from age 18 to 64 have the greatest range, 100.9 to 111.6 million (Table 1.) Just as SIPP reports the largest and CTS the smallest population count, SIPP reports the largest and CTS the smallest number and share of the population ages 18 to 64 counted as workers.

The true fraction of the population in the workforce likely rose as the interviews took place. During this period, the economy strengthened. Economic performance likely reinforced population growth as a factor that results in the smallest estimate of the number of workers coming from earliest interviews (those in the CTS sample) and the largest from the latest interviews (SIPP sample.) In estimates from the monthly CPS, the share of the population in the labor force tended upward in 1996 and 1997, beginning 1996 at 66.4 percent and ending 1997 at 67.2 percent (Bureau of Labor Statistics, 2003.) A growing share of the labor force was employed. The seasonally adjusted unemployment rate dropped over 1996 to 1997. It stood at 5.6 percent as 1996 began, fell to 5.1 percent in August, rose to 5.4 percent at the end of the year, and fell to 4.9 percent the following July as the SIPP interviews began.

Worker v. in the labor force. The focus on those ages 18 – 64 who currently work for an employer (our "worker" definition) excludes those under age 18, those 65 and over, and the self-employed. Some of these groups are counted as part of the labor force and some

have health insurance that is tied to their labor force participation. In the benchmark estimates from the CPS, the survey used to produce the unemployment rate, the total US labor force ranged from 132.6 to 137.2 million in monthly observations over 1996 and 1997. The four surveys of all age groups produce estimates of workers ages 18 to 64 that are 16 to 26 percent smaller than the labor force overall.

Age and labor force status account for about half the difference between the overall workforce and the subset who are included in our comparison across surveys. Between 2.3 and 3.1 million 16 and 17 year olds were counted in the labor force in monthly data over 1996 and 1997. For the same period, the CPS monthly estimate of individuals over age 65 in the labor force ranged between 3.6 and 3.9 million. The unemployed are part of the labor force but do not have a current employer to offer them coverage. The unemployed ranged between 5.6 and 6.4 million in the 1996-97 monthly data.

The remaining workforce, after excluding those under age 18, over age 65 and the unemployed, numbered between 120.5 and 123.4 million over 1996 and 1997, still more than the 100.9 to 111.6 million range of workers across the surveys. The one remaining group included in the labor force definition but not our definition of "workers" is the self-employed.

After excluding the young, old, and unemployed, the monthly CPS benchmark for the workforce is 7 to 18 percent above the count of workers ages 18 to 64 in the four surveys. However, there is one distinct outlier, CTS, 7.2 million below the next highest number of workers, from CPS. Apart from CTS, the estimates are within 3.5 million or 2.1 percent of each other and the gap between the CPS benchmark and the three remaining surveys is between 7 and 12 percent.

Self-employed. Analyses of the employment-health insurance relationship usually exclude the self-employed. The health insurance literature emphasizes the differences between health insurance purchased in the individual market and health insurance obtained as part of employment. Farmers who operate their farms without other workers, for example, play the role of employer and employee in deciding to purchase or not purchase health insurance. If they purchase, they likely do not have access to the scale economies that come with purchasing health insurance through an employer group and in the past did not have favorable tax treatment of premia. However, another portion of the self-employed is more like those who obtain health insurance through groups formed at the workplace. Self-employed proprietors such as physicians or plumbers may employ people in their establishment and, if they offer health insurance, can get it through the group market.

Differences in approach make the surveys inconsistent in their treatment of the self-employed. NLSY and SIPP capture multiple forms of labor force participation; SIPP asks about up to two jobs and two businesses. CPS, CTS, and MEPS focus on a single main job or business. Responses that apply to a single job or self-employment do not require deciding what to do about respondents who say they both work for wages or salaries and have self-employment income.

The SIPP estimate of workers in Table 1, already highest in number and share of the population, excludes both those who report only self-employment and those who report

both self-employment and having a job. If SIPP respondents were asked about a single "main job," then some who combine employment with self-employment would likely call their employment rather than their self-employment their "main job." Rather than explaining SIPP's highest estimate, the self-employed make SIPP's estimate of the number of workers more extreme. As a result, the SIPP estimate of workers we present is a lower bound on the number in the SIPP sample who would be classified as "workers" by the other surveys.

The higher workforce participation in SIPP may be a result of differential attrition. Questions about health insurance offers came as part of the fifth time SIPP sought out respondents in the 1996 panel. By the fifth interview, 24.6 percent of the original sample did not provide responses (Weinberg, 2003.) While the SIPP weighting process accounts for differences in attrition across age, sex, and racial groups, in does not account for differential rates of attrition within those groups. If young, African-American males who work or who have health insurance are more likely to participate in subsequent survey rounds than young, African-American males who do not, then SIPP overstates work and health insurance among young African-American males.

The composition of workers differs across surveys even where totals are close. MEPS and SIPP are within one percent in the share of the population included in our workers definition. Table 3 suggests differences in workers provide precursors to differences in health insurance. Fewer of the poor are counted as workers in SIPP than in MEPS, as are those with poor, fair, or good health.

Offers, declined offers, and uninsured decliners.

Across the four surveys covering all age groups, between 73.5 and 82.1 percent of workers were offered health insurance, representing between 74.8 and 82.1 million workers (Table 1.) Between 15.4 and 21.9 percent of those offered coverage declined the offer.

If the goal was to find all offers, the "main job" approaches of CTS and MEPS may miss some offers. For example, an individual may view self-employment through farming as her or his "main job" but be offered health insurance through employment, e.g., working as a school bus driver. In MEPS, health insurance offer questions are not asked of those who say self-employment in their "current main job." CPS is similar.

Individuals may still obtain health insurance through their own work effort even if they do not meet the definition of "workers, ages 18 to 64." A person who is a proprietor of a small business may be self-employed and acquire a group plan that covers all who work in his or her establishment. Physicians or plumbers can be self-employed and employ people in their establishments; both are examples of the self-employed who might have coverage through self-employment. In SIPP, for example, about one-third of those who are self-employed (and not counted here as a worker, even if they combine self-employment and employment, and thus not included in the universe described in the tables) report an offer of health insurance.

The numerical differences across that began with population count repeat themselves. SIPP estimates the highest number of offers and acceptances and CTS the

lowest. The share of workers offered and who accept is highest in CPS, while the share of workers offered is lowest in MEPS and the share who accept lowest in the CTS. The CPS share calculation excludes 6.7 million workers whose offer status is unknown. With the most severe assumption, that none of those with unknown offer status were, in fact, offered health insurance, the CPS coverage rate would fall to 72.4 percent, below the SIPP offer rate.

In workforce participation rates, MEPS and SIPP are within a percentage point (Table 3) The differences are greatest across income, with MEPS showing a higher workforce participation rates among lower income groups and SIPP a higher workforce participation rate at higher income levels.

The two surveys show much larger differences in the share of workers offered coverage (Table 4.) While the estimate of the share of the population that meets the worker definition is within one percent between the two surveys, the difference in offer rates is far greater. SIPP offers a more positive picture of the share of workers from disadvantaged groups that obtain offers of health insurance. Younger workers, African American, Hispanic, lower income, and lower wage workers all report having offers at a higher rate in SIPP than in MEPS data.

Differential attrition may SIPP's picture. Shailesh (2002), using a definition of employed that is broader than our definition of worker, finds there is no gap in offer rates between African Americans and non-Hispanic whites. This again may be a result of differential attrition in the SIPP, where the potential for differential attrition to produce biased estimates of health insurance was first noted by Klerman (1991.)

Of those who declined an offer, between 2.9 and 3.6 million were then uninsured. CTS provides the highest estimate of the number who are uninsured after declining. Apart from CTS, the estimates are strikingly close: within .3 million of each other.

Those who decline the offer of employment tied to their own job and instead obtain coverage elsewhere outnumber those who decline and then have no health insurance (Table 5.)   Being a dependent on someone else's employment-related offer is the "better offer" most often reported. Between one in five and one in ten decliners has coverage from non-employment-related sources, sources that include Medicaid (crowding out of private coverage by public coverage in its purest form), Medicare, and privately-purchased coverage.

The number of uninsured decliners appears to have grown from the late 1980's to the late 1990's. Using CWS/CPS data from 1988, Long and Marquis (1993) find "about 2 percent" of workers are uninsured decliners. Their 1988 universe of workers numbered about ninety-nine million. Two percent of 99 million is 1.9 million; depending on where in the range from 1.6 to 2.4 "about 2 percent" falls, the number of decliners would be 1.6 to 2.4 million. The number of uninsured decliners in 1997, nine years later, measured in the CWS/CPS reached 2.9 million, an increase of between 17 and 81 percent from 1.6 to 2.4 million. The total number of uninsured, as measured in the March supplement to the CPS, grew by about one third over the same period (from 32.7 million in 1988 to 43.4 million in 1997.)   The growth in the number of uninsured decliners is a part but a small part in the story of the growth in the number of uninsured over the 1990's.

Characteristics of uninsured decliners.

Table 2 shows how characteristics of uninsured decliners vary across surveys. Uninsured decliners are similar to the overall population of persons without health insurance. Each survey depicts uninsured decliners as younger, lower income and more likely to be African American or Hispanic than the population overall.

Other characteristics are less consistent across surveys. While each survey reports more men than women among uninsured decliners, the gap between them is 1.0 percent in MEPS, 7.4 percent in CPS, 16.0 percent in SIPP and 17.0 percent in CTS. Marital status also shows more inconsistency, with SIPP and CPS estimating 39.2 and 42.3 percent married and MEPS 51.3 percent.

The surveys are least consistent in how they describe the size of firms where uninsured decliners work. CPS and CTS each suggest that half of uninsured decliners work in larger firms (100 or more workers); MEPS and SIPP find a much smaller share. These results suggest that employees may not always have a firm understanding of how many people work with them and that subtle differences in question can lead to large changes in response.

Uninsured decliners are both worse off and more numerous in CTS than other surveys. The CTS uninsured are more likely to be a member of a racial or ethnic minority, live in a low-income household, have lower wage jobs, and have poorer self-perceived health status.

Lower income among uninsured decliners suggests uninsured decliners may view the premium they were asked to pay as being too high. CPS and SIPP ask those who decline why they declined their employer's offer. Among those who decline and are uninsured, the most common reason cited is coverage being too expensive, cited by 1.4 million of the 2.9 million uninsured decliners in CPS and 1.5 million of the 3.2 million uninsured decliners found in SIPP.

Other aspects of the relationship of work and health insurance

The steps from choosing to work to declining an employer offer of health insurance discussed above are measured in each of the surveys. There are other steps such as whether, contingent on working, one works at least the number of hours required to qualify for health benefits where employers make health benefits contingent on working some minimum number of hours. Several of these points are measured in CPS and SIPP but not the other surveys.

CPS and SIPP ask similar questions to individuals who do not have health insurance from their own employer. One question asks if the employer offered health insurance to anyone. Among the 16.7 million uninsured workers in SIPP, 5.1 million or 31 percent report that their employer does offer health insurance but they do not work enough hours to qualify. An additional 3.4 million (20 percent) report they have not yet worked a long enough period of time to qualify for the employer's plan. These "will soon be offered" uninsured are, by SIPP's measure, a larger group within the uninsured than "uninsured

decliners." CPS finds a smaller number of uninsured workers at the cusp of health insurance eligibility. Of the 16.3 million uninsured workers in CPS, 1.1 million state they could not be covered by their employers' plan because they do not work enough hours to qualify, and 1.1 million more state they have not worked for their employer for long enough. An additional .5 million uninsured workers state they could be on their employers' insurance if they wanted to, but aren't because they have not yet worked for employer long enough to qualify.

Another aspect of the experience of being an uninsured decliner is how long the spell without health insurance lasts. Using the longitudinal perspective available from SIPP, the median spell without health insurance is eight months among the uninsured decliners whose spell without health insurance is fully observed. The beginnings and endings can be observed for only one-third (34.8 percent) of uninsured decliners. Incomplete spells include those in progress when either the survey began or ended or the person began or ended his or her participation in the survey. Very few (fewer than 300,000, or 10 percent of uninsured decliners) are clearly among the long-term uninsured, that is, they are both without health insurance in all months they participate in the survey and they participate in all 48 months of the survey.

Uninsured decliners appear to experience spells without insurance that are similar to the uninsured overall. A majority of new spells are comparatively short. In contrast, among those who are uninsured at a point in time, a majority are experiencing spells that last much longer. Among the incomplete spells in SIPP, the median length is 23 months, and the complete spells are surely longer.

Conclusion

No survey produces an unequivocally superior depiction of the relationship of work and health insurance. SIPP and CTS appear to systematically diverge. For SIPP, the best explanation for why it is different appears to be attrition bias. CTS differs from the other surveys in how the survey sample is drawn and surveyed. MEPS focuses on a "current main job" to the exclusion of other combinations of labor force participation and health insurance, possibly undercounting offers. In the course of trying to field a survey without undue respondent burden, each survey has limitations in its ability to capture the range of possibilities. Each survey has unique strengths to capture aspects of labor force participation and health insurance.

CPS, MEPS, and SIPP tend to be closer to each other than to CTS. Except for CTS, the surveys are within ten percent of each other in their estimates of the number of uninsured decliners. CTS produces the lowest estimate of the size of the workforce, the lowest number and percent of workers who accept health insurance offers, and the highest number of decliners who are uninsured. CTS differs both in results and survey methodology from the other surveys. CPS, MEPS, and SIPP rely to some degree on in person interviews; CTS uses telephone interviews supplemented by in-person interviews of households without telephones. CPS, MEPS, and SIPP have a sample frame derived from a roster of dwelling places; the CTS sample frame is derived from a roster of telephone numbers.

Survey procedures introduce variation across the surveys. Six percent of the matched sample of CPS respondents lack responses on employer offers. While we make the assumption that offers follow a similar pattern among respondents and non-respondents, they may not. (Long and Marquis (1993) cite evidence that those who accept offers are likely to know if they have been offered coverage; there are probably few accepted offers among the unknowns.) Attrition almost surely leads to SIPP estimates of work and health insurance offers being upwardly biased.

Which survey works best for which purpose?

- CTS is least consistent with the other surveys. There appear to be two paradigms for measuring employment and health insurance. One is the CTS paradigm and the other is the CPS-MEPS-SIPP paradigm.

- Attrition appears to make SIPP a biased source of cross-sectional estimates. SIPP may be best for estimates of relationships where SIPP alone asks the relevant questions, (e.g., questions that ask about the eligibility of other family members for coverage under the employee's plan) or where SIPP's longitudinal data can be exploited, e.g., duration of spells among uninsured decliners.

- The remaining two surveys are the perennial favorites, CPS for economists and MEPS for health services researchers. CPS may be comparatively weaker because of the decisions left to the analyst by the 6.7 million with unknown offer status and the assumptions required when matching across February and March interviews, with, for example, offer information coming from the February interview and characteristics such as income coming from March but with a reference period that is the year before the February interview. The primary virtue of MEPS may be that answers to questions about health insurance status, employment, employment-related insurance, and personal characteristics all come from the same interview. Counteracting simplicity is sample size; MEPS has a smaller sample, 34,000 observations, compared to 59,000 for CPS/CWS (but only 75 percent or 44,200 are present in both the February and March sample.)

Finally, while NLSY's limited age group makes its estimates incomparable to those from other surveys, it has been neglected as a source of information about how young people navigate from youth and coverage under parents' plans and the higher income limits for Medicaid coverage for children to having coverage on their own. This transition occurs across the age group where the share without health insurance is highest. How young people move from being a group with relatively higher health insurance coverage through young adulthood with relatively lower coverage and then back to the relatively higher coverage of middle age has not been well explained.

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Appendix A. Survey Specific Characteristics

CPS. Data is from the February 1997 Current Population Survey Contingent Work Survey (CWS) Supplement and the March 1997 Annual Demographic Supplement (ADS.)   Data on health insurance offer, age, race, sex, and marital status comes from the CWS and income, wage, health status, and employer size from the ADS. In the ADS, the questions about particular sources of health insurance use the entire previous year as a reference period. There is a substantial literature about the reliability of recall for the one year ADS health insurance questions. The CWS, in contrast, asks about current health insurance offer and holding.

   The rotating panel design of the CPS results in one-quarter of those interviewed in any month not being interviewed in the following month, so for some of the March CWS sample, characteristics that rely on April CWS responses are not available. We assume that the group not interviewed is a random sample, a plausible assumption given the construction of the CPS sample, and rescale weights proportionately to maintain the population total.

   Offer. The CWS asks, "Does [employer] offer health insurance to any of its employees?" (Question S53.) The next question is, "Could you be in this plan if you wanted to?" (S54.) Those who say "yes" are counted as being offered. Among CPS workers, 6.9 million had unknown offer status. We make the assumption that those with unknown offer status have the same distribution as those with known offer status and proportionally rescale the weights of those with known offer status to preserve the total number.

   Wage. Calculated as personal earnings for 1996 divided by 2000 hours in the work year.

   Income as a percent of FPL: Income for 1996 reported in the March 1997 ADS, divided by 1996 poverty threshold for relevant size household.

CTS. Interviews took place over the period from July 1996 to July 1997. Unlike each of the other surveys, the sample frame for the CTS is based on telephone numbers and the weights are based on control totals from a proprietary source, although that source used estimates from the Bureau of the Census to derive control totals (Center for Studying Health System Change, 1998.)

   Worker. Respondents are asked if they did any work for pay in the previous week.

MEPS. Data is for the beginning of 1997. MEPS has an overlapping cohort structure; the data is from the third interview for the 1996 cohort and the first interview for the 1997 cohort.

   Insurance status. MEPS is the most straightforward of the surveys. "Offered" is the response recorded in OFFER31X.   Decliners are individuals for whom OFFER31X is coded as "yes" and HELD31X, the variable for holding insurance from a current main job, is coded as "no."

NLSY. Data is from the 1996 round of the National Longitudinal Study of Youth – 1979 cohort. The 1996 survey year was the seventeenth time respondents were interviewed; 8636 of the original 12686 original sample were reached in 1996 (Center for Human Resource Research, 2001).

   Insurance status.   The NLSY follows the CPS in identifying a main job but also asks about other jobs an individual might hold. The survey process tracks up to five jobs. Surveyors show respondents a card listing a variety of employment benefits and ask which of those benefits it is possible to receive as part of that job. The "offered" are those with "yes" answers to questions R52910, R53306, or R53690 about jobs 1, 2, and 3, respectively.

   Uninsured decliners are taken to be those who indicate that health insurance is available through one of their jobs but do not affirm having health insurance when asked if they are covered (i.e., recorded as "no" in response to R56235, "…are you covered by any kind of private or governmental health or hospitalization plans or HMO plans?")

   Other decliners are identified from R56237, which asks those who affirm coverage what is the source of that coverage. The survey allows for seven possible responses: a current employer, a previous employer, a spouse or partner's current or previous employer, a policy bought directly from an insurance company, Medicaid and Medicaid-like programs, and other.

   Wages and firm size. For individuals with multiple jobs, the wage level is the highest wage level and the firm size is the largest firm size reported.

   Health status. The NLSY does not ask the five level health status (poor, fair, good, very good, excellent.) As a result, we report no health status measure for uninsured decliners.

SIPP. SIPP combines a "core" set of questions asked at each of three interviews per year and a set of "topical modules" that may be asked once or more often over the course of a multi-year panel. The fifth wave of interviews of the 1996 panel included questions about employment-related health insurance. Interviews asked respondents about their situation in one of the months from July through October 1997.

Worker. The SIPP survey instrument records information on up to two jobs and two businesses. Health insurance questions are not linked to a specific job. Those classified as "workers" meet two tests. First, their employment status (RWKESR1, employment status recode for week 1) is either "with job/business, working" or "with job/working, not on layoff, absent without pay". Second, the person must not have a business (that is, individuals with positive values for EBUSCNTR, number of businesses owned during reference period are dropped.)

Insurance. SIPP asks if each person was covered by health insurance other than Medicare, Medicaid, or military related health care (i.e., private coverage.) Each person is also asked about the source of coverage: covered in one's own name; by someone else's plan; both; or not covered. Those covered in their own name are asked to identify the source of coverage: a current employer or work; a former employer; a union; military-related coverage such as CHAMPUS, CHAMPVA, or direct services; and finally other (including, presumably, individually purchased coverage.)

Those "offered" satisfy one of two conditions. First, those who say they are covered by a private health plan in their own name are asked to identify the source of that coverage (EHEMPLY.) Those with a source of "current employer or work" are the first group "offered." The second group is those who are offered and did not take the offer. These individuals are identified from questions in the health benefits topical module. In the topical module, all who work and have not said they have private coverage through a current employer (i.e., the value for EHEMPLY is other than "current employer or work") are first asked if the person's employer "offer[s] a health insurance plan to any of its employees" (ENOTPLAN.)   Those who say yes, their employer offers a plan to any workers are then asked, "Why is …. not covered by this plan?" Responses to this question are coded into four categories: ineligible, denied coverage, elected not to be covered, and other. Those coded as denied, elected not to be covered, and other are included make up "decliners."

"Uninsured decliners" satisfy the requirement for being a decliner and report "no, not covered" in response to questions about coverage by private coverage, Medicare, Medicaid, or military related health care.

Firm size and wage. For individuals with two jobs, wage is the larger wage reported; firm size is the larger firm size reported. The public use file reports firm size (at the worker's location) in three categories: under 25; 25 to 99 employees; and 100 and more employees.

Table 1.
Workers: Offered, Accept and Decline Health Insurance
(number in millions)

	Age 18 - 64	Workers		Offered Own		Accept Own		Uninsured Decliner		
		Number	% of all age 18-64	Number	% of workers	Number	% of offered	Number	% of workers	% of decliners
CPS*	162.8	108.1	66.4%	78.3	77.3%	66.3	84.6%	2.9	2.7%	24.4%
CTS	161.3	100.9	62.6%	73.5	72.8%	57.4	78.1%	3.6	3.6%	22.4%
MEPS	163.3	109.7	67.1%	74.8	68.2%	63.0	84.3%	3.0	2.8%	25.6%
SIPP	164.1	111.6	68.0%	82.1	73.6%	66.6	81.1%	3.1	2.8%	20.3%
NLSY	33.6	21.9	65.3%	17.7	80.7%	14.0	64.0%	1.3	5.7%	34.4%

Highest and Lowest Estimate (exlcuding NLSY)

Highest

Number	SIPP	SIPP		SIPP		SIPP		CTS		
Percent			SIPP		CPS		CPS		CTS	MEPS

Lowest

Number	CTS	CTS		CTS		CTS		CPS		
Percent			CTS		MEPS		CTS		CPS	SIPP

* CPS estimate of number and share offered excludes 6.7 million workers for whom offer is unknown.

Table 2.
Composition of Uninsured Decliners
(in %; sums to 100% within groups)

	CPS	CTS	MEPS	NLSY	SIPP
number (millions)	2.9	3.6	3.0	1.3	3.1
Age					
18-24	24.4	25.6	22.9		18.7
25-34	34.8	39.3	33.3	48.2	38.2
35-54	36.6	31.8	39.6	51.8	37.6
55-64	4.2	3.2	4.2		5.5
Race/Ethnicity					
White	62.2	57.3	64.2	72.3	57.3
African American	16.0	19.4	18.6	19.1	17.4
Hispanic	17.1	20.5	15.0	8.5	20.3
Other	4.8	2.7	2.3		5.0
Sex					
Female	46.3	41.5	49.5	48.1	42.0
Male	53.7	58.5	50.5	51.8	58.0
Marital Status					
Divorced/Separated	18.4		19.1	35.6	18.9
Married	42.3		51.3	35.6	39.2
Never married	38.7		28.5	28.5	40.4
Widowed	0.7		1.2	0.0	1.6
Income as % of FPL					
<100	13.1	21.3	11.4	17.3	10.9
100-125	8.1	7.4	3.2	9.5	6.2
125-200	26.5	25.2	20.9	24.2	26.0
200-400	33.8	32.6	44.5	38.5	35.7
400+	18.6	13.6	20.0	10.5	21.1
Wage					
< $7/hr	38.2	42.7	40.7	24.9	40.9
$7.01-$10/hr	28.7	33.5	31.6	40.9	24.7
$10.01-$15/hr	19.3	15.5	19.8	17.7	13.4
>$15/hr	11.7	8.4	8.0	16.6	7.2
Self-Perceived Health Status					
Poor	0.9	2.3	1.2		0.1
Fair	5.4	12.4	6.0		5.2
Good	28.1	26.9	31.3		27.6
Very Good	35.9	32.5	33.0		35.7
Excellent	29.8	25.9	28.5		30.9
Firm Size					
Fewer than 10 workers	11.0	8.7	16.8	32.3	
10 - 24 workers	9.7	12.7	22.7	19.2	36.7
25 - 99 workers	17.7	18.0	40.0	28.9	31.9
100 + workers	59.6	60.6	20.5	19.6	31.4

Table 3.
Population and Workers: SIPP v. MEPS
(number in millions)

| | Total | | | Workers | | | | |
| | | | | Number | | % of population | | SIPP as % |
	SIPP	MEPS	SIPP as % of MEPS	SIPP	MEPS	SIPP	MEPS	of MEPS
Total	164.1	163.3	100.5%	111.6	109.7	68.0%	67.1%	101.7%
Age								
18-24	25.0	25.1	99.6%	15.9	16.4	63.8%	65.4%	97.2%
25-34	39.7	39.6	100.3%	30.0	29.7	75.5%	75.1%	100.8%
35-54	77.8	77.7	100.2%	55.3	54.0	71.0%	69.5%	102.4%
55-64	21.6	21.0	102.6%	10.4	9.6	48.1%	45.4%	108.6%
Race/Ethnicity								
White	119.8	118.8	100.8%	83.2	80.8	69.5%	68.0%	103.0%
African American	19.3	19.7	97.8%	12.4	13.1	64.2%	66.4%	94.5%
Hispanic	17.8	18.0	99.2%	11.3	11.4	63.6%	63.5%	99.4%
Other	7.2	6.9	105.0%	4.7	4.4	64.5%	63.2%	107.0%
Sex								
Female	83.2	83.2	100.0%	53.0	52.7	63.7%	63.3%	100.7%
Male	80.8	80.2	100.8%	58.5	57.0	72.4%	71.1%	102.7%
Marital Status								
Divorced/Separated	21.5	16.9	127.5%	15.0	11.6	69.6%	68.5%	129.6%
Married	95.2	89.9	105.9%	65.2	59.3	68.5%	66.0%	110.0%
Never married	44.2	44.7	98.9%	29.8	30.8	67.4%	69.0%	96.6%
Widowed	3.2	2.6	121.8%	1.6	1.3	49.6%	49.4%	122.5%
Income as % of FPL								
<100	17.4	17.8	97.5%	5.5	6.2	31.7%	34.8%	88.8%
100-125	6.5	6.2	104.6%	3.1	3.2	47.5%	52.0%	95.6%
125-200	22.1	20.0	110.2%	13.1	12.6	59.4%	63.0%	104.0%
200-400	55.8	52.5	106.2%	40.4	38.6	72.5%	73.4%	104.8%
400+	62.4	66.8	93.4%	49.5	49.1	79.3%	73.5%	100.8%
Self-Perceived Health Status								
Poor	4.7	4.8	96.8%	0.7	1.0	15.8%	21.2%	72.2%
Fair	10.8	13.1	82.5%	4.6	6.7	43.1%	51.1%	69.5%
Good	37.5	40.5	92.8%	24.7	26.6	65.7%	65.8%	92.6%
Very Good	56.5	53.3	106.2%	41.3	38.8	73.1%	72.8%	106.6%
Excellent	54.5	51.6	105.7%	40.2	36.5	73.7%	70.8%	110.0%
Firm Size								
Under 25				35.6	35.2			101.2%
25 - 99 workers				27.9	26.4			105.7%
100 + workers				47.1	42.5			110.9%
Wage								
< $7/hr				34.3	26.6			129.0%
$7.01-$10/hr				21.1	23.6			89.3%
$10.01-$15/hr				23.6	25.8			91.5%
>$15/hr				32.5	32.2			101.0%

Table 4
Offered and Accept Health Insurance: SIPP v. MEPS
(number in millions)

	Offered					Accept Offer				
	Number		% of workers		Difference:	Number		take up (% of offered)		Difference:
	SIPP	MEPS	SIPP	MEPS	SIPP-MEPS (% points)	SIPP	MEPS	SIPP	MEPS	SIPP-MEPS (% points)
Total	82.1	74.8	73.6%	68.2%	5.4%	66.6	63	81.1%	84.2%	-3.1%
Age										
18-24	7.5	5.9	47.3%	36.0%	11.3%	5.5	4.2	73.1%	71.6%	1.5%
25-34	22.4	20.4	74.7%	68.7%	6.0%	18.3	17.3	81.7%	84.6%	-3.0%
35-54	44.2	41.5	80.0%	77.0%	3.0%	36.3	35.7	82.1%	85.9%	-3.9%
55-64	7.9	6.9	76.4%	72.2%	4.2%	6.5	5.8	81.9%	84.4%	-2.5%
Race/Ethnicity										
White	63.0	57.5	75.7%	71.2%	4.6%	51.3	48.4	81.3%	84.1%	-2.8%
African American	9.0	8.5	72.7%	64.7%	8.1%	7.3	7.2	80.8%	85.3%	-4.6%
Hispanic	6.9	6.0	61.0%	52.9%	8.1%	5.5	5.1	80.1%	84.4%	-4.3%
Other	3.2	2.8	67.9%	63.3%	4.6%	2.5	2.3	80.0%	84.4%	-4.4%
Sex										
Female	37.5	34.6	70.7%	65.7%	5.0%	28.6	27.5	76.1%	79.3%	-3.1%
Male	44.6	40.2	76.2%	70.5%	5.7%	38.0	35.6	85.3%	88.6%	-3.3%
Marital Status										
Divorced/Separated	11.6	8.7	77.3%	75.5%	1.9%	10.6	8.0	91.1%	91.2%	-0.1%
Married	51.3	44.4	78.7%	74.8%	3.9%	39.6	36.0	77.2%	81.1%	-3.9%
Never married	18.1	16.3	60.6%	52.8%	7.8%	15.4	14.4	85.1%	88.5%	-3.3%
Widowed	1.1	0.9	73.0%	66.6%	6.4%	1.0	0.8	90.7%	90.2%	0.5%
Income as % of FPL										
<100	2.4	1.8	42.6%	29.0%	13.6%	1.8	1.1	74.6%	63.8%	10.7%
100-125	1.5	1.1	49.0%	35.7%	13.3%	1.2	0.9	77.2%	81.4%	-4.3%
125-200	8.0	6.8	60.8%	53.8%	7.0%	6.3	5.5	78.9%	80.9%	-1.9%
200-400	29.6	26.9	73.3%	69.7%	3.6%	24.2	22.7	81.6%	84.6%	-3.0%
400+	40.7	38.2	82.2%	77.8%	4.4%	33.2	32.7	81.7%	85.7%	-4.0%
Wage										
< $7/hr	16.3	9.6	47.4%	36.2%	11.2%	10.9	6.5	67.0%	67.7%	-0.7%
$7.01-$10/hr	15.5	15.1	73.6%	64.1%	9.5%	12.3	11.7	79.4%	77.0%	2.3%
$10.01-$15/hr	20.2	19.9	85.4%	77.2%	8.1%	17.0	17.3	84.2%	86.7%	-2.6%
>$15/hr	30.1	28.7	92.6%	89.3%	3.3%	26.4	26.3	87.7%	91.6%	-3.9%
Self-Perceived Health Status										
Poor	0.4	0.6	56.8%	62.7%	-5.9%	0.3	0.6	82.4%	88.2%	-5.9%
Fair	3.2	4.2	69.3%	63.0%	6.3%	2.6	3.7	81.3%	87.2%	-5.8%
Good	17.7	17.8	71.7%	67.0%	4.8%	14.3	14.9	80.7%	83.6%	-2.9%
Very Good	31.0	26.9	74.9%	69.5%	5.4%	25.1	22.5	81.2%	83.6%	-2.4%
Excellent	29.8	25.1	74.2%	68.8%	5.4%	24.2	21.3	81.3%	84.9%	-3.7%
Firm Size										
Under 25	19.8	17.6	55.6%	49.9%	5.8%	15.0	13.5	75.6%	77.0%	-1.4%
25 - 99 workers	21.1	19.0	75.6%	72.2%	3.4%	16.6	15.3	79.0%	80.6%	-1.5%
100 + workers	40.8	35.6	86.6%	83.9%	2.7%	34.7	32.1	85.0%	90.0%	-5.0%

Table 5
What Happens to Decliners
(number in millions)

| | Declined Own ESI, Total | | Declined Own, Covered Elsewhere | | | | Declined Own, Uninsured | |
| | | | Covered by ESI | | Non-ESI Coverage | | | |
	Number	% of offered	Number	% of decliners	Number	% of decliners	Number	% of decliners
CPS	12.1	15.4%	*	*	*	*	2.9	24.4%
CTS	16.1	21.9%	9.5	59.2%	3.0	18.4%	3.6	22.4%
MEPS	11.7	15.7%	7.0	59.8%	1.7	14.5%	3.0	25.6%
SIPP	15.5	18.9%	11.2	72.2%	1.3	8.5%	3.1	20.3%

Figure 1. Difference: Highest and Lowest Estimate