Online Appendix for
"Bankruptcy as Implicit Health Insurance"

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A. Exogeneity of Asset Exemptions

The legislative origins of state asset exemptions provides further support for the exogeneity of the identifying variation. Homestead exemptions emerged over the second half of the 19th century as the result of an idiosyncratic set of historical circumstances. Describing the key factors that led to the establishment of state homestead exemption levels, Goodman (1993) cites no less diverse a list than "Texas colonizers and western developers, labor and land reformers, antimonopoly Jacksonian egalitarians, defenders of family security and women's property rights, Southern planters and yeomen devastated by the Civil War."

Since then, states have added vehicle and wildcard exemptions to keep up with changes in asset ownership. But, by and large, the real generosity of asset exemptions has been remarkably stable. In his book *Debt's Dominion: A History of Bankruptcy Law in America*, Skeel Jr. (2001) notes that most of the changes in asset exemptions over the 20th century have been inflation updates. The downside of this stability is that it precludes an identification strategy that uses state-by-year difference-in-differences. Yet there is an upside as well. Because asset exemptions are largely the result of historical idiosyncrasies, they are less likely to be correlated with contemporaneous political or economic factors.

Appendix Figure A1 provides quantitative support for this argument. To assess the stability of asset exemptions, I construct a historical analogue to the cross-state instrument: mean seizable home equity under inflation-adjusted 1920 homestead exemptions for the nationally representative sample of households as though they lived in each state.[1] Panel A plots the cross-state instrument (y-axis) against its cross-state historical analogue (x-axis) for the 38 states that had homestead exemptions in 1920. If asset exemptions grew proportionally, the slope of this relationship would be 1. The corresponding regression has a slope (standard error) of 1.18 (0.32) and is not statistically distinguishable from 1. The R-squared is 0.43, with the New England states in the lower right corner being the most prominent outliers.[2]

[1] An earlier draft of this paper showed estimates of the coverage effect using a simulated instrument that isolated this historical variation. The estimates are qualitatively similar.

[2] A keyword search of newspaper articles in a six-month window around major changes in Mas-

Panels B and C examine the relationship between contemporaneous asset exemptions and contemporaneous political and economic factors. Panel B shows there is no correlation between the cross-state simulated instrument and the share of the electorate that voted for John Kerry in the 2004 presidential election; Panel C shows that the cross-state simulated instrument and 2005 unemployment rate are similarly uncorrelated.[3]

B. Data

In the SIPP, home equity is defined as equity in the primary residence or mobile home; vehicle equity is defined as the sum of equity in all vehicles; retirement assets are defined as value in IRA, Keogh, and 401K accounts; financial assets are the sum of interest-earning assets, equity in stocks and mutual fund shares, equity in other assets, equity in other real estate, and business equity. Dischargeable debt is defined as total unsecured debt.

In the PSID, home and vehicle equity are defined as these variables; retirement assets are defined as the value in private annuities or IRAs; financial assets are defined as wealth in checking and saving accounts and in stock; other assets are defined as farm/business wealth, equity in other real estate, and other savings or assets. Dischargeable debt is defined as other debt.

In the MEPS, home equity and vehicle equity are defined as these variables; retirement assets are defined as the value in IRA, Keogh, and 401K accounts; financial assets are defined as the equity in farms or businesses, equity in other real estate, equity in a second home, equity in recreational vehicles, the value of CDs, stocks, government or corporate bonds or mutual funds, the value in checking or savings accounts, and other assets. Dischargeable debt is defined as other debt.

In the post-BAPCPA period, households that do not pass the means test may still qualify for Chapter 7 if their seizable income is low enough. Following Elias (2007), I define seizable income as annual income minus expense allowances for food and clothing, mortgage payments or rent, home and cellular telephones, transportation, insurance, and taxes. The Department of Justice website provides information on expense allowances for food and clothing, mortgage payments or rent, and transportation.[4] Food and clothing expenses vary by household size and transportation expenses vary by number of vehicles and region of residence. These data can be merged with the SIPP data at the household level. Mortgage payments and rent expense allowances vary by household size and county of residence. Because I do not observe county of residence in the SIPP, I assign each household the average expense allowance in its state of residence. I

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sachusetts and Connecticut asset exemptions failed to reveal any information on the reasons for these increases.

[3] I have also examined and found no correlation between asset exemptions and measures of firm size, household income, racial composition, and wage-garnishment levels.

[4] See http://www.justice.gov/ust/eo/bapcpa/20080101/meanstesting.htm for the most recent data.

assign households a communications expense of \$990 and an insurance expense of \$390 based on the mean values for these expenses in Current Expenditure Survey data reported in the Statistical Abstract of the United States. Tax expenses are calculated at the household level using NBER TaxSim (v9).

I construct three key medical cost variables. Annual charges are defined as the sum of charges for office-based visits, outpatient care, emergency room care, inpatient care, home health care, other care, and prescription drugs. Total payments are defined as the total expenditure variable, which is the sum of payments from all sources. Out-of-pocket payments are defined as the sum of out-of-pocket payments for office-based visits, outpatient care, emergency room care, inpatient care, home health care, other care, and prescription drugs.

C.   Sensitivity of the Effect on Coverage

Appendix Table A7 shows alternative specifications of the effect on coverage. Panel A shows estimates from the SIPP; Panel B shows estimates from the PSID. As a point of reference, column 1 displays the pooled IV marginal effects from Table 3. Column 2 shows linear probability model estimates of the same specification. The estimates are very similar. Column 3 examines the exclusion of households with public insurance from the sample. Recall that these households were excluded because households with public insurance typically face nominal premiums and are less likely to make active decisions about coverage. When these households are included, the estimates barely change.

Columns 4 and 5 examine two intervening channels through which bankruptcy law could impact health insurance coverage. Asset exemptions affect the incentive to accumulate wealth, because households with more wealth have less generous implicit insurance from bankruptcy. If wealth directly impacts insurance coverage, then part of the effect of asset exemptions on insurance could be mediated through a wealth response. Similarly, there is a literature that argues that bankruptcy law affects the incentives to start a small business due to the fact that debts of non-corporate firms can be discharged in personal bankruptcy (Fan and White, 2003). If small-business ownership affects the probability of obtaining health insurance coverage, then part of the effect could work through this channel. Columns 4 and 5 show the estimates are similar when I add controls for wealth and business ownership, suggesting that these potential channels are not particularly important.

Appendix Table A8 shows reduced-form regressions which combine coverage data from the 1996-2005 CPS with simulated instruments from the 1996-2005 SIPP, and implied IV estimates calculated by taking the ratio of these reduced-form estimates and the first-stage estimates from Table 1. The baseline IV specifications of the effect on coverage range from 0.017 to 0.046 (columns 3 to 5 of Table 3). In the merged CPS-SIPP, the reduced-form effects range from 0.018 to 0.029. Since the first stage is close to 1, the implied IV estimates range from 0.015 and 0.027, and are therefore similar to the baseline estimates.

Appendix Table A9 replicates the specifications in Table 3 including a fourth-order polynomial in wealth as additional control variables. Controlling for wealth does not weaken the IV relationships but does seems to affect some of the non-IV specifications.

Appendix Table A10 shows the results are robust to dropping observations that belong to demographic groups with fewer than 100 observations. The dropped observations account for 1.0 percent of the baseline sample in the SIPP and 10.0 percent of the baseline sample in the PSID.

Appendix Table A11 examines potential issues that arise from pooling multiple observations for each household over time by replicating the baseline specifications with restrictions on the underlying sample. Panels A and B replicate the baseline specifications from Table 3 with the SIPP and PSID samples restricted to one randomly chosen observation per household. The point estimates are practically identical. Because the standard errors are clustered at the level of the instrument, the precision of the estimates is not substantially affected. A related concern in the SIPP is the presence of seam bias. Households in the SIPP are surveyed every four months and are known to give identical responses over the four-month look-back period. Panel C of Appendix Table A11 replicates the SIPP specifications from Table 3 restricting the sample to interview months. Table A12 shows estimates restricting the sample to SIPP data from 2002. The results are unaffected.

The baseline specifications drop households with public insurance, because these households are not reliant on the implicit insurance from bankruptcy. However, households that report Medicaid coverage in the survey may not be the only households that are implicitly insured by Medicaid. It is well known that some households that are eligible for Medicaid do not sign up for coverage but might be retroactively signed up if they were to experience a health shock. Ignoring these "conditional eligible" households could bias the estimates if Medicaid eligibly thresholds are correlated with the variation in bankruptcy laws I use for identification.

To address this concern, I collect data from the Kaiser Family Foundation on the income thresholds for Medicaid eligibility by age of youngest child for each state-year in the data. I merge these thresholds with the baseline SIPP and PSID samples so that for each household I know the relevant income threshold to quality for Medicaid. As a first step to examining the interaction between the implicit insurance from bankruptcy and Medicaid eligibility, I examine the correlation in the data between the generosity of bankruptcy law and the generosity of Medicaid eligibility. The data show virtually no relationship between these variables, with a correlation of 0.040 between the cross-state instrument and the Medicaid eligible threshold measured as a percent of the Federal Poverty Line (FPL).

Panels A and B of Appendix Table A13 further examine this issue by estimating the baseline specifications from Table 3, additionally dropping conditionally eligible households from the sample. The estimates for this restricted sample are similar. For example, the pooled IV estimates are 0.020 in the SIPP and 0.038

in the PSID for this sample, and these estimates are 0.25 in the SIPP and 0.036 in the PSID under the baseline specification. Panels C and D shows estimates of the baseline regressions that include a linear control for the relevant income eligibility threshold as a percentage of the Federal Poverty Line (FPL). Again the estimates are similar to those from the baseline specification. This indicates that interactions between the implicit insurance from bankruptcy and Medicaid eligibility are not biasing the results.

D. Microsimulation Model

I simulate the model by separately calculating the willingness to pay (WTP) and premium for a conventional health insurance plan for each household in a nationally representative sample of households excluding those with public health insurance or conditional access to Medicaid. Households purchase insurance if and only if their WTP is greater than the premium.[5] The model is based on the sample of households in the 2005 PSID.

For a given household, WTP for conventional insurance with deductible $\bar{m}$ is the value v that equates that household's expected utility with conventional insurance to its expected utility with the implicit insurance from bankruptcy:

$$(1) \qquad \mathbb{E}_m\Big[u\big(w - v - \min\{m, \bar{m}\}\big)\Big] = \mathbb{E}_m\Big[u\big(w - \min\{m, w^S\}\big)\Big].$$

I assume each household is represented by a single member with constant relative risk-aversion (CARA) utility.[6] I show results with risk-aversion parameters of $\alpha = 2.5 \times 10^{-5}$ (low risk aversion), $\alpha = 5.0 \times 10^{-5}$ (moderate risk aversion), and $\alpha = 7.5 \times 10^{-4}$ (high risk aversion). Multiplying by the median wealth level of $40,318, these parameters can be interpreted as relative risk coefficients of $\gamma = 1$, 2, and 3.

I construct the household-level medical cost distributions using individual-level medical cost data from the 2005 MEPS for age $\times$ sex $\times$ insurance status cells.[7] For insured individuals, costs are defined as total payments. For uninsured individuals, my measure of costs is constructed in the following way: I start with medical charges, because this variable accounts for medical services written off as charity care or bad debt. I then scale down charges by the cost-charge ratio (CCR) for the privately insured population to account for the discount typically extended to the uninsured.[8] Finally, I subtract out payments made by work-

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[5]Implicit in this formulation is the assumption that households with employer-sponsored insurance pay for this coverage with a wage offset. Summarizing the empirical literature, Gruber (2000) concludes that the costs of healthcare are fully shifted to wages on average, justifying this approach.

[6]Using a CARA specification avoids the problems associated with nonpositive wealth. Calibrations with CRRA utility and a consumption floor generate stronger results.

[7]The age-by-sex groups are 18 years old or younger, males age 19 to 34, females age 19 to 34, males age 35 to 64, and females age 35 to 64.

[8]Recall from Panel A of Figure 1 that privately insured and uninsured households make similar payments for low charges.

ers' compensation, the Veterans Administration, and other such sources, as the uninsured are not exposed to these costs.

Household-specific medical cost distributions are constructed numerically by summing over 10,000 independent draws from the appropriate individual-level distributions. To calculate counterfactual cost distributions that insured households would face without coverage, I deflate the empirical cost distributions by a moral hazard factor of 1.25, the change in utilization found in the Oregon Health Insurance Experiment (Finkelstein et al., 2012). I inflate costs for the uninsured by the same factor.

These changes in medical utilization also have a direct effect on household utility. I approximate the consumption value of changes in utilization by assuming that health insurance decreases the price of medical care from 1 to 0 on the margin and that households have linear demand between these points.[9] These assumptions imply that the consumption value of changes in utilization is simply the triangle under the demand curve or 0.5 of the change in expenditure.[10] The WTP for conventional insurance is calculated with 0.5 of the increase in utilization added to wealth inside the utility function.

Premiums are based on expected costs above the deductible and are also allowed to vary at the household level according to the household-specific medical cost distributions. To account for administrative costs, I scale up these costs by the factor $\lambda = 1.1$.[11,12] For a given deductible, premiums are given by:

$$p = \lambda \cdot \mathbb{E}_m \Big[\max\{m - \bar{m}, 0\} \Big].$$

Appendix Table A18 compares premiums from the microsimulation model to quoted premiums in the individual market.[13] The calibrated and market premiums are similar. The calibrated premiums are slightly less expensive for low deductible levels and somewhat more expensive for high deductibles. Selection or by heterogeneity in the moral hazard parameter across the expenditure distribution could explain this difference.

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[9] A log-log demand curve does not seem appropriate, since I want to model demand when the marginal price is zero.

[10] Consumer surplus with linear demand is given by $\Delta CS = \frac{1}{2}\Delta p \cdot \Delta q$. Since $\Delta p = 1$, $\Delta CS = \frac{1}{2}\Delta q$.

[11] This value is taken from Pauly and Nichols (2002).

[12] There is an argument that raising insurance coverage will generate positive feedback effects. According to the argument, the increase in coverage will reduce cross-subsidization from the insured, lowering insurance premiums and thereby further raising insurance coverage. Empirically, the results from Section IV suggest the costs of unpaid care to a first approximation are equally borne by insured and uninsured households and therefore do not generate this positive feedback loop. In the preferred pooled IV specifications, the uninsured cross-subsidize between 8 and 23 percent of the cost of the implicit insurance from bankruptcy with higher out-of-pocket payments when they have lower charges. Since the uninsured are about 20 percent of the population, it seems reasonable to assume that a reduction in unpaid care will be equally incident on insured and uninsured households and therefore not generate the hypothesized general equilibrium response.

[13] Individual market premiums are for a 30-year-old male for policies starting in May 2010 listed on www.eHealthInsurance.com. These policies include 20 coinsurance and are adjusted to 2005 values using the Medical Care component of the CPI-U.

E. Perceptions of Financial Risk

A. Survey

I conduct a survey to examine perceptions of the implicit and explicit ways in which the threat-point of bankruptcy might limit the financial risk from being uninsured. The sample is designed to target households that are more likely to be on the margin of insurance choice. The sample is composed of single, childless adults age 27 to 49, screening out occupations with less than 10 percent uninsured in the 2010 CPS. The survey was conducted online by members of a commercial survey panel in September 2011. Due to the pre-screening criteria and selection into the survey panel, the sample is not nationally representative and the survey results are not intended to be extrapolated out of context.[14]

The survey asks three main questions on financial risk and 22 questions on demographic and financial characteristics to be used as covariates. (A complete copy of the survey is included as Online Appendix Section D.) Appendix Table A5 shows that survey participants are most likely to be age 30 to 34 (31.5 percent), female (65.1 percent), white (80.0 percent), and college educated (63.8 percent). One-third of participants are unemployed or not in the labor force; the median income is between $10,000 and $25,000; the median wealth is between $0 and $10,000.[15]

The screening on occupation and demographics—combined with selection into the commercial panel—does a good job isolating individuals on the margin of insurance choice: Slightly more than half (56.6 percent) of the sample has insurance coverage. And 52.5 percent know someone who has declared personal bankruptcy.

The three main questions on financial risk are ordered in the manner that an uninsured individual might chronologically go through the negotiation process with a medical provider. While the primary intention is to examine how responses to these questions covary with bankruptcy laws, the novelty of the questions makes simple tabulations of separate interest.

The first question asks, "*Average medical costs for a broken leg are $12,000. Suppose you are uninsured, break your leg, and receive medical treatment at the nearest hospital. If you negotiate with the hospital, how much do you think you would end up owing?*" Responses to this question vary, with the sample split evenly between less than $4,000; between $4,000 and $8,000; and greater than $8,000.

The next question examines whether, and to what degree, hospitals are perceived as following through on unpaid bills. It asks, "*Suppose you ignore the medical bills. Which of these outcomes do you think is most likely?*" Approx-

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[14]I thank Steve Collupy at C&T Marketing for helping administer the survey.

[15]Wealth is constructed by aggregating across car value and remaining loan payment, home value and remaining mortgage payment, money in checking and savings account, and unsecured debt. Since survey responses are categorical (e.g., $2,000-$5,000), I assign each categorical response the central value in its bin.

imately two-thirds of survey participants choose "*The hospital will send a debt collector to come after your paycheck and/or property (e.g., car, home).*" Approximately one-third select "*The debt collector will bother you for a while but then eventually give up.*" Less than 5 percent pick "*You probably won't hear from the hospital or debt collector at all.*"

The final question examines perceptions about bankruptcy law. Survey participants are asked, "*Suppose you declare bankruptcy to get rid of the medical bills. Which one of these outcomes do you think is most likely?*" The responses indicate that bankruptcy is viewed to be highly creditor-friendly. Approximately half of the respondents choose "*You will have to fill out a bunch of paperwork and pay a filing fee but you can keep your money and your property.*" One-quarter select "*You will have to give up any money in your checking or savings account but can keep your property.*" And one-quarter choose "*You will have to give up any money in your checking or savings account and your property (e.g., car, home).*"

B.   Results

Appendix Figure A4 plots the responses to the main questions (y-axis) against the cross-state simulated instrument (x-axis).[16] Survey responses are ordered from the bottom to the top by increasing perception of financial risk. The plots are created by averaging the data by the categorical y-axis variable.

Panel A shows that survey respondents perceive the uninsured will owe more in states with higher financial cost of bankruptcy. Panel B shows that hospitals are perceived to more aggressively pursue unpaid bills in states where more assets can be seized. Panel C shows that survey respondents perceive that more assets can be seized in bankruptcy in states with higher financial cost of bankruptcy, although the relationship is more noisy than the two above.

Appendix Table A17 shows regression analogues to these plots. In columns 1 to 6, the dependent variable is an indicator for increased financial risk, defined at the categorical level that most closely splits the sample.[17] Columns 7 and 8 show the effect on a standardized summary index that takes a weighted average of the three outcomes, where the weights are given by the inverse of the covariance matrix of the normalized outcome variables (Anderson, 2008). Odd columns show bivariate regressions of the outcome variable on the simulated instrument; even columns include controls for household demographic and financial factors. Standard errors in all specifications are clustered by state.

The standardized summary index estimates (columns 7 and 8) show a robust, positive relationship between perceptions of financial risk and cross-state variation in bankruptcy law. A log increase in the financial cost of bankruptcy is

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[16]Since these questions are about a hypothetical individual, examining how these questions vary with the survey respondents' actual financial cost of bankruptcy is inappropriate. I find similar effects when I control for financial characteristics in the regression specifications.

[17]The indicator is 1 if the response is greater than $6,000 owed for a broken leg, seize assets for what would happen if ignore bills, and seize financial assets and property or seize financial assets for what is seized in a bankruptcy filing.

associated with a 0.09 standard deviation increase in perceptions of financial risk. This magnitude seems reasonable. The preferred coverage estimates of 2.5 to 3.6 percentage points imply effects of 0.16 ($=0.025/(0.806 \times 0.194)$) to 0.26 ($=0.036/(0.836 \times 0.164)$) standard deviations. The effect is virtually unchanged with the inclusion of the demographic and financial controls and statistically significant at the 5 percent level in both specifications. The estimates for the three individual questions are all positive, although only the effect for the second question is statistically distinguishable from zero. The estimates are too similar to permit an ordering of their relative importance.

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FIGURE A1. LEGISLATIVE ORIGINS OF ASSET EXEMPTION LAWS

A Cross-State IV vs. Historical Exemptions   B Kerry Vote vs. Cross-State IV

C Unemployment Rate vs. Cross-State IV
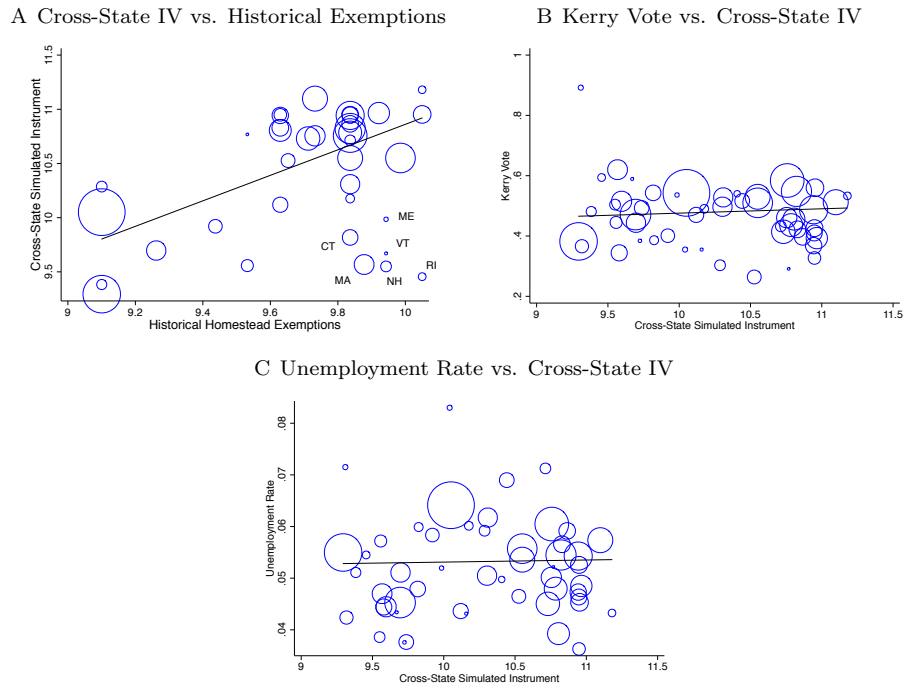
Note: Panel A plots the cross-state simulated instrument against historical homestead exemptions by state. Panel B plots the share of the electorate that voted for the Democratic candidate John Kerry in the 2004 presidential elections against the cross-state simulated instrument by state. Panel C plots the unemployment rate against the cross-state simulated instrument by state. The cross-state simulated instrument is the mean log financial cost of bankruptcy for the entire sample of households as though this sample faced the asset exemption laws of each state. The circles in each plot are proportional to the number of observations in each state. The historical homestead exemptions variable is analogously constructed using variation in inflation-adjusted 1920 homestead exemption levels. Votes shares are from Federal Election Commission (2005). Unemployment rate is from the pooled 1996 to 2005 March Supplements to the Current Population Survey.

FIGURE A2. FINANCIAL COST OF BANKRUPTCY FOR SELECTED DEMOGRAPHIC GROUPS
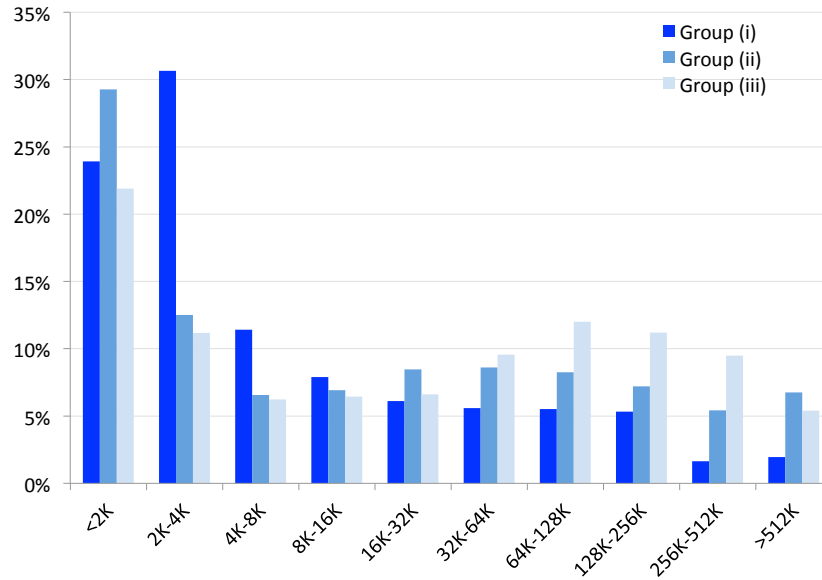
Note: Figure shows histograms of the financial cost of bankruptcy for three selected demographic groups: (i) 18- to 34-year-old, white, high-school-educated single adults without children; (ii) 18- to 34-year-old, non-white, college-educated couples without children; and (iii) 35- to 44-year-old, non-white, high school educated couples with at least one child. I selected these groups by sorting the K demographic groups in the data by the mean financial cost of bankruptcy and choosing the groups at the population-weighted 5th, 25th, and 45th percentiles. Since approximately 20 percent of households are uninsured in my sample, this provides me with demographic groups within an approximately 20 percentage point window of marginal demographic group.

FIGURE A3. PLOTS OF THE FIRST STAGE

A SIPP: Financial Cost vs. Cross-State IV   B PSID: Financial Cost vs. Cross-State IV
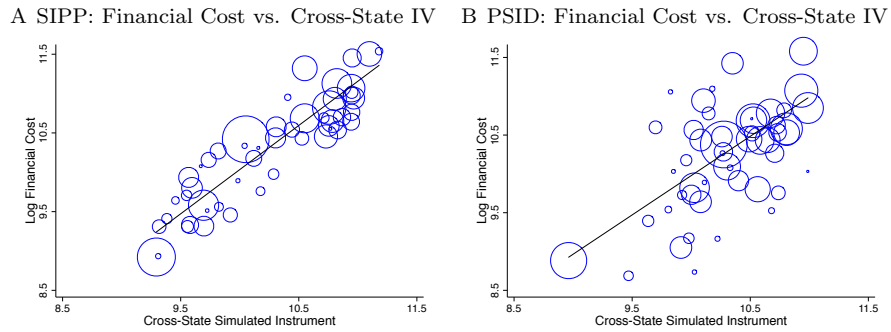
Note: Panel A plots the log financial cost of bankruptcy against the cross-state simulated instrument averaged by state using data from the SIPP. Panel B shows the same plot using data from the PSID. The cross-state simulated instrument is the mean log financial cost of bankruptcy for the entire sample of households as though this sample faced the asset exemption laws of each state. The circles in each plot are proportional to the number of observations in each state. Pooled 1996-2005 SIPP and 1999-2005 PSID, excluding households with public insurance or a member age 65 or older, inflation-adjusted to 2005 using the CPI-U.

FIGURE A4. SURVEY RESPONSES ON PERCEPTIONS OF FINANCIAL RISK

A What Would Uninsured Owe for $12K Medical Bill?

B What Would Happen If Uninsured Ignore Bills?

C What is Seizable in Bankruptcy Filing?
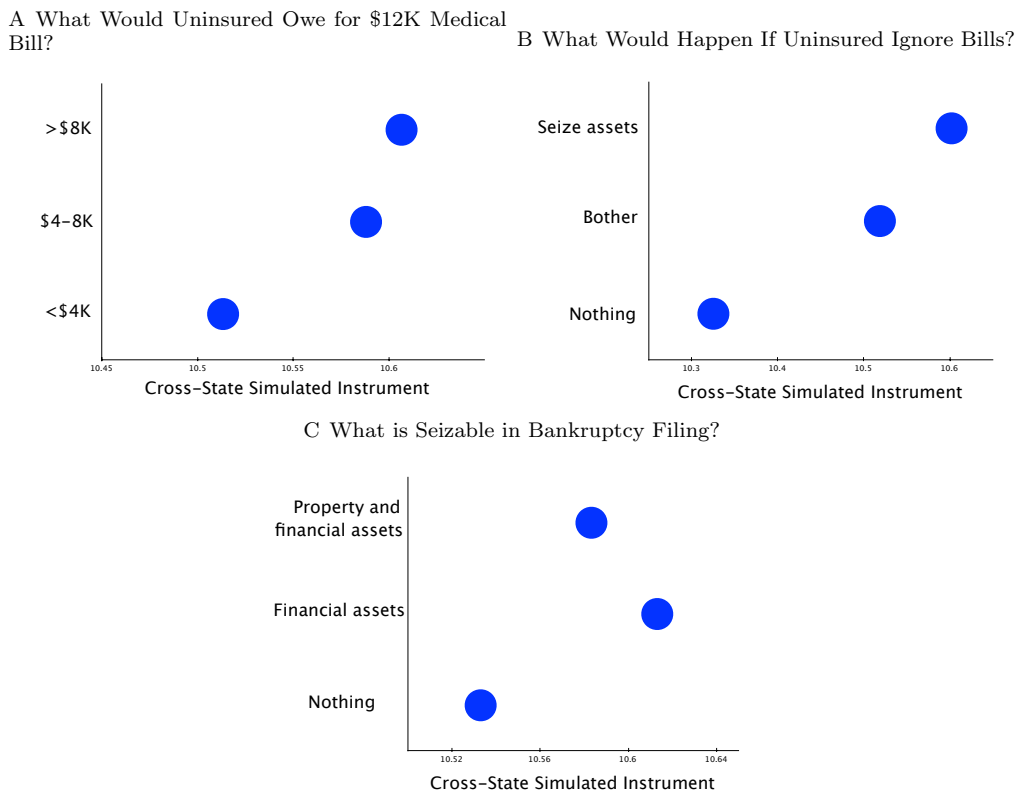
Note: Plots show survey responses on the perceptions of financial risk from being uninsured (y-axis) against the cross-state simulated instrument (x-axis). Larger y-axis values are indicative of ordinally greater financial risk. Panel A shows responses to the question: *Average medical costs for a broken leg are $12,000. Suppose you are uninsured, break your leg, and receive medical treatment at the nearest hospital. If you negotiate with the hospital, how much do you think you would end up owing?* Panel B shows responses to the question: *Suppose you ignore the medical bills. Which of these outcomes do you think is most likely?* Answers to this question are ranked in severity from (a) *you probably won't hear from the hospital or debt collector at all* to (b) *the debt collector will bother you for a while but then eventually give up* to (c) *the hospital will send a debt collector to come after your paycheck and/or property (e.g., car, home)*. Panel C shows responses to the question: *Suppose you declare bankruptcy to get rid of the medical bills. Which one of these outcomes do you think is most likely?* Responses are ordered in severity from (a) *you will have to fill out a bunch of paperwork and pay a filing fee but you can keep your money and your property* to (b) *you will have to give up any money in your checking or savings account but can keep your property* to (c) *you will have to give up any money in your checking or savings account and your property (e.g., car, home)*. The cross-state simulated instrument is the mean log financial cost of bankruptcy for the entire sample of households as though this sample faced the asset exemption laws of each state. The points are constructed by averaging the data by the categorical y-axis variables. The survey was conducted in September 2011 on a web-based commercial panel of single, childless adults age 27 to 49, screening out occupations with less than 10 percent uninsured in the 2010 Current Population Survey. N = 800.

TABLE A1—ASSET EXEMPTIONS

	Contemporaneous exemptions							Homestead Exemptions for Town Lots in 1920
State	Homestead	Vehicle	Retirement	Other Financial Assets	Wildcard	Wildcard No Homestead	Federal Available	
Alabama	10,000	0	Unlimited	0	6,000	6,000	No	2,000
Alaska	67,500	7,500	Unlimited	3,500	0	0	No	n/a
Arizona	150,000	10,000	Unlimited	300	0	0	No	4,000
Arkansas	Unlimited	2,400	40,000	0	500	500	Yes	2,500
California, system 1	75,000	4,600	Unlimited	1,825	0	0	No	5,000
California, system 2	0	2,975	Unlimited	0	19,675	19,675	No	n/a
Colorado	90,000	6,000	Unlimited	0	0	0	No	2,000
Connecticut	150,000	3,000	Unlimited	0	2,000	2,000	Yes	1,000
Delaware	0	0	Unlimited	0	500	500	No	0
District of Columbia	Unlimited	5,150	Unlimited	0	17,850	17,850	Yes	n/a
Florida	Unlimited	2,000	Unlimited	0	2,000	2,000	No	n/a
Georgia	10,000	7,000	Unlimited	0	11,200	11,200	No	1,600
Hawaii	40,000	5,150	Unlimited	0	0	0	Yes	n/a
Idaho	50,000	6,000	Unlimited	0	1,600	1,600	No	5,000
Illinois	15,000	2,400	Unlimited	0	4,000	4,000	No	1,000
Indiana	0	0	Unlimited	0	20,000	20,000	No	600
Iowa	Unlimited	1,000	Unlimited	0	200	200	No	n/a
Kansas	Unlimited	40,000	Unlimited	0	0	0	No	n/a
Kentucky	10,000	5,000	Unlimited	0	2,000	2,000	No	1,000
Louisiana	25,000	0	Unlimited	0	0	0	No	2,000
Maine	70,000	10,000	Unlimited	0	12,800	12,800	No	500
Maryland	0	0	Unlimited	0	22,000	22,000	No	0
Massachusetts	1,000,000	1,400	Unlimited	1,250	0	0	Yes	800
Michigan	7,000	0	Unlimited	0	0	0	No	1,500
Minnesota	200,000	7,600	Unlimited	0	0	0	Yes	n/a
Mississippi	150,000	0	Unlimited	0	10,000	10,000	No	3,000
Missouri	15,000	6,000	Unlimited	0	1,250	1,250	No	1,500
Montana	200,000	5,000	Unlimited	0	0	0	No	n/a
Nebraska	12,500	0	Unlimited	0	0	5,000	No	2,000
Nevada	400,000	30,000	1,000,000	0	0	0	No	5,000
New Hampshire	200,000	8,000	Unlimited	0	8,000	8,000	Yes	500
New Jersey	0	0	Unlimited	0	2,000	2,000	Yes	1,000
New Mexico	60,000	8,000	Unlimited	0	1,000	4,000	Yes	1,000
New York	20,000	0	Unlimited	0	10,000	10,000	No	1,000
North Carolina	13,000	3,000	Unlimited	0	8,000	8,000	No	1,000
North Dakota	80,000	2,400	200,000	0	0	15,000	No	n/a
Ohio	10,000	2,000	Unlimited	800	800	800	No	1,000
Oklahoma	Unlimited	6,000	Unlimited	0	0	0	No	n/a
Oregon	33,000	3,400	15,000	15,000	800	800	No	n/a
Pennsylvania	0	0	Unlimited	0	600	600	Yes	300
Rhode Island	200,000	20,000	Unlimited	0	0	0	Yes	0
South Carolina	10,000	2,400	Unlimited	0	0	2,000	No	1,000
South Dakota	Unlimited	0	500,000	0	4,000	4,000	No	n/a
Tennessee	7,500	0	Unlimited	0	8,000	8,000	No	1,000
Texas	Unlimited	0	Unlimited	0	60,000	60,000	Yes	5,000
Utah	40,000	5,000	Unlimited	0	0	0	No	2,000
Vermont	150,000	5,000	Unlimited	1,400	8,400	8,400	Yes	2,000
Virginia	0	4,000	35,000	0	32,000	32,000	No	500
Washington	40,000	5,000	Unlimited	0	4,000	4,000	Yes	1,000
West Virginia	0	4,800	Unlimited	0	51,600	51,600	No	1,000
Wisconsin	40,000	0	Unlimited	2,000	10,000	10,000	Yes	n/a
Wyoming	20,000	4,800	Unlimited	0	0	0	No	2,500
Federal	18,500	5,900	Unlimited	0	20,450	20,450	n/a	n/a
Averages*	58,821	4,884	298,333	501	6,592	7,073	27%	1,679

Note: Contemporaneous exemptions for couples filing jointly from Elias (2007) and historical exemptions for couples filing jointly from Goodman (1993). Under contemporaneous law, California residents can choose between system 1 and 2, and residents can choose federal exemptions in states where federal exemptions are available. Wildcard no-homestead exemption is available to households that do not take the homestead exemption. For the historical exemptions, states that did not exist and states that had acre-based exemptions are denoted as n/a. States that did not have homestead exemptions are assigned a value of zero.

*Excludes states with unlimited or n/a exemptions.

TABLE A2—SUMMARY STATISTICS: FINANCIAL COST OF BANKRUPTCY

	Pooled			Privately Insured			Uninsured		
	Mean	Std. Dev.	Median	Mean	Std. Dev.	Median	Mean	Std. Dev.	Median
Panel A: SIPP									
Financial Cost	$242,611	$3,221,280	$42,071	$264,364	$3,165,853	$61,350	$152,448	$3,440,051	$6,000
Seizable Assets	$250,027	$3,221,875	$48,005	$272,178	$3,166,453	$67,559	$158,218	$3,440,574	$7,400
Seizable Home Equity	$54,537	$104,026	$0	$60,059	$108,146	$1,061	$31,651	$80,917	$0
Dischargeable Debt	$9,572	$23,787	$2,000	$9,971	$24,462	$2,123	$7,919	$20,674	$1,000
Panel B: PSID									
Financial Cost	$232,589	$1,151,082	$42,616	$267,283	$1,249,990	$58,600	$56,369	$285,831	$4,081
Seizable Assets	$235,143	$1,148,558	$44,888	$270,032	$1,247,168	$60,944	$57,934	$285,980	$3,985
Seizable Home Equity	$55,303	$137,873	$0	$63,492	$147,534	$318	$13,707	$54,175	$0
Dischargeable Debt	$4,723	$16,653	$584	$4,914	$17,747	$784	$3,752	$9,222	$0
Panel C: MEPS									
Financial Cost	$163,120	$460,811	$32,120	$163,579	$477,988	$47,300	$53,827	$329,190	$4,026
Seizable Assets	$167,470	$512,210	$38,371	$185,513	$529,901	$55,193	$62,616	$377,285	$4,670
Seizable Home Equity	$66,767	$194,081	$0	$74,252	$201,422	$12,447	$23,269	$136,302	$0
Dischargeable Debt	$6,601	$17,497	$0	$6,935	$17,662	$0	$4,662	$16,371	$0

Note: Household-level statistics on the pre-BAPCPA financial cost of bankruptcy calculated using the 1996-2005 SIPP, 1999-2005 PSID, and 1996-2005 MEPS and weighted to be nationally representative. Samples exclude households with public insurance or a member age 65 or older. Values are inflation-adjusted to 2005 dollars using the CPI-U.

Table A3—Summary Statistics: Medical Costs

	Mean	Std. Dev.	Percentile		
			25th	50th	75th
Pooled					
Charges	$7,113	$17,781	$691	$2,339	$7,103
Total Payments	$4,539	$9,761	$530	$1,778	$4,986
Out-of-Pocket Payments	$839	$1,687	$127	$405	$976
Privately Insured					
Charges	$7,501	$18,117	$839	$2,598	$7,611
Total Payments	$4,819	$10,037	$655	$1,996	$5,358
Out-of-Pocket Payments	$849	$1,662	$143	$427	$995
Uninsured					
Charges	$2,876	$12,843	$13	$419	$1,752
Total Payments	$1,475	$5,046	$0	$257	$1,125
Out-of-Pocket Payments	$739	$1,935	$0	$181	$696

Note: Household-level statistics on annual medical costs calculated using the 1996-2005 MEPS and weighted to be nationally representative. Charges are the list price of medical care received, total payments are the sum of payments made for this care, and out-of-pocket payments are the payments made by households. Samples exclude households with public insurance or a member age 65 or older. Values are inflation-adjusted to 2005 dollars using the CPI-U.

Table A4—Summary Statistics: Insurance Coverage

	SIPP	PSID	MEPS
Privately Insured	80.6%	83.6%	81.8%
Employer-sponsored or Union Provided	75.5%	78.2%	78.3%
Individually Purchased	5.1%	5.3%	3.5%
Uninsured	19.4%	16.4%	18.2%

Note: Household-level statistics calculated using the 1996-2005 SIPP, 1999-2005 PSID, and 1996-2005 MEPS and weighted to be nationally representative. Samples exclude households with public insurance or a member age 65 or older.

TABLE A5—SUMMARY STATISTICS: SURVEY ON PERCEPTIONS OF FINANCIAL RISK FROM FORGOING HEALTH INSURANCE

	N	Percent		N	Percent
Age group			Income group		
26-29	175	21.9%	<$10,000	195	24.4%
30-34	252	31.5%	$10,000-25,000	232	29.0%
35-39	164	20.5%	$25,000-50,000	252	31.5%
40-45	103	12.9%	$50,000-100,000	99	12.4%
45-49	106	13.3%	>$100,000	22	2.8%
Gender			Wealth group		
Female	521	65.1%	<$0	286	35.8%
Male	279	34.9%	$0-10,000	211	26.4%
Race			$10,000-50,000	134	16.8%
American Indian, Eskimo, or Aleut	5	0.6%	>$50,000	169	21.1%
Asian or Pacific Islander	23	2.9%	Self-report health		
Black	107	13.4%	Excellent	116	14.5%
White	640	80.0%	Very good	261	32.6%
Other	25	3.1%	Good	265	33.1%
Education			Fair	134	16.8%
College	510	63.8%	Poor	24	3.0%
High school	166	20.8%	Health insurance		
Post-graduate	124	15.5%	Yes	453	56.6%
Occupation			No	347	43.4%
Administrative	76	9.5%	Health insurance		
Agricultural	6	0.8%	CHAMPUS, TRICARE,		
Clerical	34	4.3%	VA, or other military	4	0.5%
Construction	21	2.6%	Employer	233	29.1%
Education related	57	7.1%	Individually purchased	90	11.3%
Electrician	2	0.3%	Other, please specify	21	2.6%
Health care/Medical related	77	9.6%	Public	127	15.9%
Homebased business	13	1.6%	n/a	325	40.6%
Hospitality	12	1.5%	What would uninsured owe for $12K medical bill?*		
Human resources	7	0.9%	<$4K	297	37.1%
Real estate	5	0.6%	$4K-8K	222	27.8%
Restaurant	34	4.3%	>$8K	281	35.1%
Retail	46	5.8%	What would happened if ignore bills?*		
Sale manager	11	1.4%	Nothing	36	4.5%
Sales/Marketing	46	5.8%	Bother	218	27.3%
Self-employed	100	12.5%	Seize assets	546	68.3%
Unemployed/Not in labor force	253	31.6%	What is seized in bankruptcy filing?*		
Do you know someone who has declared bankruptcy?			Nothing	390	48.8%
Yes	420	52.5%	Financial assets	215	26.9%
No	380	47.5%	Property and financial	195	24.4%

Note: Respondents are single, childless adults age 27 to 49, screening out occupations with less than 10 percent uninsured. Survey was conducted online on a commercial survey panel in September 2011. N = 800.
*Paraphrased survey questions and responses. See text and Appendix Section E for full questions and answers.

TABLE A6—EFFECT ON COSTS: OUT-OF-POCKET COSTS IN LEVELS

	OLS		Pooled IV		Within-State IV		Cross-State IV	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Dep Var: Out-of-Pocket Payments								
Charges ≥ $5,000								
Log Financial Cost	477***	409***	619*	552*	403	150	771	755
	(147)	(146)	(330)	(323)	(430)	(421)	(521)	(553)
Mean Out-of-Pocket Payments	$1,268	$1,268	$1,268	$1,268	$1,268	$1,268	$1,268	$1,268
Panel B: Dep Var: Out-of-Pocket Payments								
0 < Charges < $5,000								
Log Financial Cost	89**	83***	52	51	-96	-118	107	120
	(38)	(28)	(122)	(95)	(176)	(148)	(190)	(130)
Mean Out-of-Pocket Payments	$149	$149	$149	$149	$149	$149	$149	$149
Instruments and Controls: All Panels								
Instrument								
Pooled Simualted Instrument			X	X	X	X		
Cross-State Simulated Instrument							X	X
Controls								
Charges			X	X	X	X	X	X
Demographic Controls	X	X	X	X	X	X	X	X
Year FE	X	X	X	X	X	X	X	X
State FE					X	X	X	X

Note: Table replicates Table 2 with the dependent variable in levels instead of logs. Panel A shows estimates from regressions of out-of-pocket payments on the log financial cost of bankruptcy in the sample of uninsured households with at least $5,000 in annual charges. Panel B shows estimates of the same regression in the sample of uninsured households with charges between $0 and $5,000 non-inclusive. The cross-state simulated instrument is the mean log financial cost of bankruptcy for the entire sample of households as though this sample faced the asset exemption laws of each state. The within-state simulated instrument is similarly constructed by predetermined demographic group, where groups are defined by the full interaction of age group, race, education group, and family structure. Demographic controls are demographic-group dummies and a fourth-order polynomial in annual income. Charge polynomial is fourth order as well. Samples sizes are 431; 2002; and 3,201 across the three panels. Pooled 1996-2005 MEPS, excluding households with insurance or a member age 65 or older, inflation-adjusted to 2005 using the CPI-U. Robust standard errors clustered by state are in parentheses. *$p < 0.10$, **$p < 0.05$, ***$p < 0.01$

TABLE A7—EFFECT ON COVERAGE: ALTERNATIVE SPECIFICATIONS

	Dep Var: Insurance Coverage				
	Baseline	Linear Probability Model	Publicly Insured	Wealth Polynomial	Business Owner
	(1)	(2)	(3)	(4)	(5)
			Panel A: SIPP		
Log Financial Cost	0.025***	0.024***	0.017***	0.025***	0.023***
	(0.006)	(0.005)	(0.003)	(0.004)	(0.005)
			Panel B: PSID		
Log Financial Cost	0.036**	0.024**	0.038***	0.042***	0.036***
	(0.015)	(0.010)	(0.014)	(0.012)	(0.009)
		Controls and Instrument: All Panels			
Controls					
Demographic Controls	X	X	X	X	X
State Controls	X	X	X	X	X
Year FE	X	X	X	X	X
Wealth Polynomial				X	X
Business Owner Indicator					X
Instrument					
Pooled Simulated Instrument	X	X	X	X	X

Note: Columns 1, 3, 4, and 5 shows marginal effects calculated at the mean of a log-point increase in the financial cost of bankruptcy on insurance coverage from IV probit regressions. Column 2 shows coefficients from a linear probability model. The pooled simulated instrument is the mean log financial cost of bankruptcy for households in each demographic group as though this sample faced the asset exemption laws of each state, where groups are defined by the full interaction of age group, race, education group, and family structure. State controls are for individual market insurance regulations (see text for details), hospital ownership structure, DSH payments and FQHC per capita, and the presence of a charity-care pool or fund. Pooled 1996-2005 SIPP and 1999-2005 PSID, excluding households with a member age 65 or older, inflation-adjusted to 2005 using the CPI-U. Mean insurance coverage is 80.6 percent SIPP and 83.6 percent in the PSID in the baseline sample. Block bootstrap standard errors calculated using 200 draws clustered at the level of the instrument in parentheses. $^{*}\ p < 0.10$, $^{**}\ p < 0.05$, $^{***}\ p < 0.01$

TABLE A8—EFFECT ON COVERAGE: MERGED CPS-SIPP DATA

	Dep Var: Insurance Coverage		
	Pooled IV	Within-State IV	Cross-State IV
	(1)	(2)	(3)
Pooled Simulated Instrument	0.029***	0.018***	
	(0.002)	(0.004)	
Cross-State Simulated Instrument			0.027***
			(0.006)
First Stage	1.072***	1.179***	1.056***
	(0.023)	(0.053)	(0.074)
Implied IV	0.027***	0.015***	0.026***
	(0.002)	(0.004)	(0.006)
Controls			
Demographic Controls	X	X	X
Year FE	X	X	X
State FE		X	

Note: Table shows marginal effects calculated at the mean from reduced-form probit regressions of health insurance on the simulated instruments and controls, and implied IV estimates calculated by taking the ratio of these reduced-form estimates and the first-stage estimates from Table 1. The cross-state simulated instrument is the mean log financial cost of bankruptcy for the entire sample of households as though this sample faced the asset exemption laws of each state. The within-state simulated instrument is similarly constructed by predetermined demographic group, where groups are defined by the full interaction of age group, race, education group, and family structure. Demographic controls are demographic-group dummies and a fourth-order polynomial in annual income. Health insurance and demographics are from the 1997-2006 CPS and are lagged because questions ask about coverage in the previous year. Simulated instruments are from the 1996-2005 SIPP. Both samples exclude households with public insurance or a member age 65 or older; monetary values are inflation-adjusted to 2005 using the CPI-U. Standard errors clustered at the level of the instrument are in parentheses. Implied IV standard errors are calculated using the Delta Method. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$

TABLE A9—EFFECT ON COVERAGE: FOURTH-ORDER WEALTH POLYNOMIAL

			Dep Var: Insurance Coverage		
	Non-IV		Pooled IV	Within-State IV	Cross-State IV
	(1)	(2)	(3)	(4)	(5)
	Panel A: SIPP				
Log Financial Cost	-0.0019	-0.0060	0.025***	0.019*	0.027**
	(0.003)	(0.003)	(0.004)	(0.010)	(0.012)
	Panel B: PSID				
Log Financial Cost	0.014***	0.008**	0.042***	0.026	0.049***
	(0.005)	(0.004)	(0.012)	(0.028)	(0.017)
	Instrument and Controls: All Panels				
Controls					
Demographic Controls	X	X	X	X	X
State Controls	X	X	X	X	X
Year FE	X	X	X	X	X
State FE		X	X	X	X
Fourth-Order Wealth Polynomial	X	X	X	X	X
Instrument					
Pooled Simulated Instrument			X		
Cross-State Simulated Instrument				X	X

Note: Table replicates the specifications in Table 3 including a fourth-order polynomial in wealth as an additional control. See Table 3 note for additional details. $^{*} p < 0.10$, $^{**} p < 0.05$, $^{***} p < 0.01$

TABLE A10—EFFECT ON COVERAGE: DROPPING DEMOGRAPHIC GROUPS WITH FEWER THAN 100 OBSERVATIONS

	Non-IV		Pooled IV	Within-State IV	Cross-State IV
	(1)	(2)	(3)	(4)	(5)
	Panel A: SIPP				
Log Financial Cost	0.018***	0.018***	0.026***	0.021**	0.027*
	(0.002)	(0.002)	(0.005)	(0.010)	(0.015)
	Panel B: PSID				
Log Financial Cost	0.022***	0.021***	0.032***	0.023	0.046**
	(0.002)	(0.002)	(0.015)	(0.034)	(0.022)
	Instrument and Controls: All Panels				
Controls					
Demographic Controls	X	X	X	X	X
State Controls	X	X	X	X	X
Year FE	X	X	X	X	X
State FE		X		X	
Instrument					
Pooled Simulated Instrument			X	X	
Cross-State Simulated Instrument					X

Note: Table replicates the specifications in Table 3 dropping observations that belong to demographic groups with fewer than 100 observations. The dropped observations account for 1.0 percent of the baseline sample in the SIPP and 10.0 percent of the baseline sample in the PSID. See Table 3 note for additional details. $^* p < 0.10$, $^{**} p < 0.05$, $^{***} p < 0.01$

Table A11—Effect on Coverage: One Observation per Household and Accounting for Potential Seam Bias

	Dep Var: Insurance Coverage				
	Non-IV		Pooled IV	Within-State IV	Cross-State IV
	(1)	(2)	(3)	(4)	(5)
Panel A: Random Observation, SIPP					
Log Financial Cost	0.022***	0.022***	0.031***	0.028**	0.033***
	(0.002)	(0.002)	(0.006)	(0.014)	(0.008)
Panel B: Random Observation, PSID					
Log Financial Cost	0.026***	0.025***	0.041***	0.018	0.053**
	(0.003)	(0.003)	(0.020)	(0.049)	(0.017)
Panel C: Interview Month, SIPP					
Log Financial Cost	0.018***	0.017***	0.024***	0.017*	0.027***
	(0.002)	(0.002)	(0.005)	(0.010)	(0.005)
Instrument and Controls: All Panels					
Controls					
Demographic Controls	X	X	X	X	X
State Controls	X	X	X	X	X
Year FE	X	X	X	X	X
State FE		X	X	X	X
Instrument					
Pooled Simulated Instrument			X	X	
Cross-State Simulated Instrument					X

Note: Table replicates the specifications in Table 3 with sample restrictions on the underlying data. The baseline SIPP and PSID samples use multiple observations from each household over time. Panels A and B restrict these samples to a randomly chosen observation per household. The SIPP asks about health insurance coverage over a four-month look-back period, potentially leading to seam bias. Panel C restricts the sample to interview months to avoid measurement error that can result from this survey methodology. See Table 3 note for additional details. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

TABLE A12—EFFECT ON COVERAGE: SINGLE YEAR OF DATA

	Non-IV		Dep Var: Insurance Coverage Pooled IV	Within-State IV	Cross-State IV
	(1)	(2)	(3)	(4)	(5)
Log Financial Cost	0.020***	0.019***	0.033***	0.026	0.031**
	(0.002)	(0.002)	(0.009)	(0.017)	(0.012)
Controls					
Demographic Controls	X	X	X	X	X
State Controls	X	X	X	X	X
State FE		X		X	
Instrument					
Pooled Simulated Instrument			X	X	
Cross-State Simulated Instrument					X

Note: Table replicates the specifications in Table 3, restricting the sample to SIPP data from 2002. See Table 3 note for additional details. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$

Table A13—Effect on Coverage: Robustness Checks of Medicaid Eligibility

	Dep Var: Insurance Coverage				
	Non-IV		Pooled IV	Within-State IV	Cross-State IV
	(1)	(2)	(3)	(4)	(5)
Panel A: Dropping conditionally eligible, SIPP					
Log Financial Cost	0.015***	0.016***	0.020***	0.018*	0.022*
	(0.002)	(0.002)	(0.005)	(0.011)	(0.014)
Panel B: Dropping conditionally eligible, PSID					
Log Financial Cost	0.022***	0.021***	0.038***		0.046**
	(0.002)	(0.002)	(0.013)		(0.020)
Panel C: Medicaid threshold controls, SIPP					
Log Financial Cost	0.018***	0.018***	0.025***	0.019	0.027*
	(0.002)	(0.002)	(0.005)	(0.012)	(0.015)
Panel D: Medicaid threshold controls, PSID					
Log Financial Cost	0.023***	0.023***	0.038**	0.029	0.049**
	(0.002)	(0.002)	(0.016)	(0.037)	(0.022)
Instrument and Controls: All Panels					
Controls					
Demographic Controls	X	X	X	X	X
State Controls	X	X	X	X	X
Year FE	X	X	X	X	X
State FE		X	X	X	X
Medicaid Threshold Controls*		X	X	X	X
Instrument					
Pooled Simulated Instrument			X	X	
Cross-State Simulated Instrument					X

Note: Table replicates the specifications in Table 3 with the following modifications. Panels A and B drop households that are eligible for Medicaid based on income thresholds that vary by state, year, and family structure. Panels C and D are estimated on the baseline sample from Table 3 but include a linear control for the Medicaid income threshold as a percent of the Federal Poverty Line. See Table 3 note for additional details. $^*p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$

*Medicaid threshold controls are only included in the bottom two panels.

TABLE A14—EFFECT ON COVERAGE: AVERAGE MARGINAL EFFECTS

	Non-IV		Pooled IV	Within-State IV	Cross-State IV
	(1)	(2)	(3)	(4)	(5)
		Panel A: SIPP			
Log Financial Cost	0.018***	0.018***	0.024***	0.017*	0.026**
	(0.002)	(0.002)	(0.005)	(0.011)	(0.013)
		Panel B: PSID			
Log Financial Cost	0.023***	0.022***	0.034**	0.022	0.045**
	(0.002)	(0.002)	(0.015)	(0.034)	(0.019)
	Instrument and Controls: All Panels				
Controls					
Demographic Controls	X	X	X	X	X
State Controls	X	X	X	X	X
Year FE	X	X	X	X	X
State FE		X		X	
Instrument					
Pooled Simulated Instrument			X	X	
Cross-State Simulated Instrument					X

Note: Table replicates the specifications in Table 3 except that it shows average marginal effects instead of marginal effects calculated at the mean. See Table 3 note for additional details. $^*p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$

TABLE A15—SUMMARY STATISTICS: CHANGE IN THE FINANCIAL COST OF BANKRUPTCY DUE TO BAPCPA

	Mean	Std. Dev.	Min.	Max.
Δ Log Financial Cost	0.47	1.16	0.00	7.96
Δ Pooled Simulated Instrument	0.54	0.32	0.00	3.11
Δ Cross-State Simulated Instrument	0.53	0.24	0.23	1.06

Note: First row shows summary statistics on the household-level change in the log financial cost of bankruptcy, constructed by calculating the financial cost for each household in its actual state of residence under pre- and post-BAPCPA laws. The second and third rows show the change in the pooled and cross-state simulated instruments. The change in the cross-state simulated instrument is calculated as the difference between the mean log financial cost of bankruptcy for the entire sample of households under the pre- and post-BAPCPA laws of each state. The change in the pooled simulated instrument is similarly constructed by predetermined demographic group, where groups are defined by the full interaction of age group, race, education group, and family structure. Pooled 1996-2011 SIPP, excluding households with public insurance or a member age 65 or older, and inflation-adjusted to 2005 using the CPI-U.

TABLE A16—FIRST STAGE: USING VARIATION FROM BAPCPA

	Dep Var: Log Financial Cost of Bankruptcy		
	(1)	(2)	(3)
Pooled X BAPCPA Simulated Instrument	1.190***	1.196***	
	(0.035)	(0.039)	
Cross-State X BAPCPA Simulated Instrument			1.165***
			(0.095)
Controls			
Demographic Controls	X	X	X
Year FE	X	X	X
State FE	X	X	X
State-Specific Time Trends		X	
R-Squared	0.370	0.372	0.362
F-Statistic on Instrument	1,156	940	150

Note: Table shows the coefficient on the instrument from OLS regressions that isolate difference-in-differences variation in the financial cost of bankruptcy due to BAPCPA. The cross-state × BAPCPA simulated instrument is constructed by calculating the mean log financial cost of bankruptcy for the entire sample of households under the pre- and post-BAPCPA laws of each state. The pooled× BAPCPA simulated instrument is similarly constructed by predetermined demographic group, where groups are defined by the full interaction of age group, race, education group, and family structure. Demographic controls are demographic-group dummies and a fourth-order polynomial in annual income. Pooled 1996-2011 SIPP, excluding households with public insurance or a member age 65 or older, and inflation-adjusted to 2005 using the CPI-U. Sample size is 2,201,086. Robust standard errors clustered at the level of the instrument are in parentheses. $^*p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$

TABLE A17—PERCEPTIONS OF FINANCIAL RISK: REGRESSIONS OF SURVEY RESPONSES ON SIMULATED INSTRUMENT

	What would uninsured owe for $12K medical bill?		What would happen if ignored bills?		What is seized in bankruptcy filing?		Standardized Summary Index	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Log Financial Cost	0.037	0.041	0.056**	0.054**	0.038	0.036	0.090**	0.089**
	(0.034)	(0.031)	(0.026)	(0.023)	(0.025)	(0.027)	(0.043)	(0.040)
Demographic and Financial Controls		Yes		Yes		Yes		Yes
R-Squared	0.002	0.069	0.006	0.073	0.003	0.076	0.008	0.104

Note: Table shows the coefficient on the cross-state simulated instrument from OLS regressions of measures of increased financial risk on the cross-state simulated instrument. The dependent variables in columns 1 to 6 are indicators for increased perceptions of financial risk (e.g., higher amounts owed for $12K medical bill). See Figure A4 or Section E for the full questions and responses. The dependent variable in columns 7 and 8 is a standardized summary index, constructed by taking the weighted-mean of the outcomes where the weights are given by the inverse of covariance matrix (Anderson, 2008). The cross-state simulated instrument is mean log seizable assets for a constant, nationally representative sample of households as though they lived in each state. The survey was conducted in September 2011 on a commercial sample of single, childless adults age 27 to 49, screening out occupations with less than 10 percent uninsured in the 2010 CPS. N = 800. Robust standard errors clustered by state are in parentheses. $^*p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$

TABLE A18—MICROSIMULATION AND INDIVIDUAL MARKET PREMIUMS

	Simulated Premiums			Individual Market Premiums	
Deductible	Uninsured	Insured	Both	Aetna	United
$0	$1,204	$3,233	$2,689	$2,140	n/a
$1,000	$983	$2,707	$2,245	$2,061	$1,498
$2,500				$1,021	$1,001
$5,000	$715	$1,740	$1,465	$874	$526
$7,500				$736	$455
$10,000	$558	$1,230	$1,050	n/a	$405

Note: Table shows simulated premiums from the microsimulation model and individual market premiums by deductible level. Simulated premiums are for a 25- to 34-year-old single, male, calculated as medical costs above the deductible scaled up by 10 percent to account for administrative loading. Insured households have their medical costs scaled up by a further 25 percent to account for moral hazard. Individual market premiums are for a 30-year-old male for policies starting in May 2010 listed on eHealthInsurance.com. These policies include 20 percent coinsurance and are adjusted to 2005 values using the Medical Care component of the CPI-U. See Appendix Section D for additional details.

TABLE A19—MICROSIMULATION: ALTERNATIVE SAMPLES

	Penalty	Take-up	Δ WTP	Δ Cost	Δ Surplus
Panel A: Keeping Conditionally Eligible for Medicaid					
Pigovian Penalty					
Low Risk Aversion	$343.44	93.8%	$371.57	$313.68	$57.89
Moderate Risk Aversion	$343.44	96.5%	$256.01	$138.31	$117.70
High Risk Aversion	$343.44	90.3%	$180.72	$87.31	$93.41
ACA Penalty					
Low Risk Aversion	$444.97	33.0%	$162.25	$135.29	$26.96
Moderate Risk Aversion	$444.97	37.1%	$93.89	$49.68	$44.21
High Risk Aversion	$444.97	39.8%	$89.27	$39.29	$49.98
Panel B: Dropping Medicaid Eligible under ACA* (≤138% FPL)					
Pigovian Penalty					
Low Risk Aversion	$325.02	96.0%	$361.73	$307.29	$54.43
Moderate Risk Aversion	$325.02	97.8%	$243.67	$131.74	$111.93
High Risk Aversion	$325.02	93.9%	$173.98	$83.62	$90.36
ACA Penalty					
Low Risk Aversion	$461.79	34.3%	$162.89	$137.48	$25.40
Moderate Risk Aversion	$461.79	41.6%	$96.51	$51.33	$45.17
High Risk Aversion	$461.79	44.5%	$88.96	$39.21	$49.75

Note: Microsimulation estimates of insurance take-up, willingness to pay (WTP), costs, and social surplus from Pigovian and ACA penalties relative to a baseline in which households can choose bankruptcy at no cost. Panel A expands the Table 7 sample to include households that are "conditionally eligible" for Medicaid. Panel B further restricts the Table 7 sample by dropping households with income below 138 percent of the Federal Poverty Line (FPL), which will be eligible for Medicaid in states that fully implement the ACA Medicaid expansion. The Pigovian penalty is the household-specific social cost of the implicit insurance from bankruptcy. The ACA penalty is the inflation-adjusted, fully phased-in penalty under the ACA, defined as the greater of $625 or 2.5 percent of income, up to a maximum of $2,085 per household. Take-up is the percentage of uninsured individuals that take up coverage. WTP is calculated using CARA utility with parameters of 2.5×10^{-5} (low risk aversion), 5.0×10^{-5} (moderate risk aversion), and 7.5×10^{-5} (high risk aversion). Microsimulation is based on the financial cost of bankruptcy in the 2005 PSID and distributions of medical costs in the 2005 MEPS. Household-level estimates weighted to be nationally representative at the individual level.
*Assumes all states implement Medicaid expansion.

Health Insurance Survey v4

Created: July 08 2011, 2:18 PM
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Button Options: Custom: Start Survey: "Start Survey!" Submit: "Submit"
Disable Browser "Back" Button: True

Health Insurance Survey

Page 1 - Heading

Purpose of the research: To better understand health insurance coverage decisions.   What you will do in this research: If you decide to participate, you will complete a survey. Some of the questions will be about the financial risk from being uninsured. Others will be about your demographics and financial resources. Time required: The survey will take approximately 8 minutes to complete. Compensation: Your compensation will be determined following the standard procedures of the firm that administers your panel. Confidentiality: Your responses will be kept entirely anonymous. To preserve your anonymity the data will be transmitted using encrypted Secure Sockets Layer (SSL) technology. Researchers working with the data will be completely unaware of your identity and will be unable to link the data to any other information about you. The data you provide may be made available to the research community for related research projects. Participation and withdrawal: Your participation is completely voluntary. You may quit at any time without penalty.   To Contact the Researcher: If you have questions or concerns about this research, please contact: Neale Mahoney, PhD. Phone: (413) 575-6931. Address: 1730 Cambridge Street, S410, Cambridge, Massachusetts 02138. Email: nmahoney@rwj.harvard.edu.   Whom to contact about your rights in this research, for questions, concerns, suggestions, or complaints that are not being addressed by the researcher, or research-related harm: Jane Calhoun, Harvard University Committee on the Use of Human Subjects in Research, 1414 Massachusetts Avenue, Second Floor, Cambridge, MA 02138. Phone: 617-495-5459. E-mail: jcalhoun@fas.harvard.edu. Please print or save a copy of this page for your records.

Description

Page 1 - Question 1 - Choice - One Answer (Bullets)   [Mandatory]

Do you wish to participate in this survey?

○ Yes, I would like to continue
○ No, I would like to exit [Screen Out]

Page 2 - Question 2 - Choice - One Answer (Drop Down)   [Mandatory]

What is your age?

○ <18 [Screen Out]
○ 18 [Screen Out]
○ 19 [Screen Out]
○ 20 [Screen Out]
○ 21 [Screen Out]
○ 22 [Screen Out]
○ 23 [Screen Out]
○ 24 [Screen Out]
○ 25 [Screen Out]
○ 26 [Screen Out]
○ 27
○ 28
○ 29

- ○ 30
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- ○ 57 [Screen Out]
- ○ 58 [Screen Out]
- ○ 59 [Screen Out]
- ○ 60 [Screen Out]
- ○ 61 [Screen Out]
- ○ 62 [Screen Out]
- ○ 63 [Screen Out]
- ○ 64 [Screen Out]
- ○ >64 [Screen Out]

Page 2 - Question 3 - Choice - One Answer (Drop Down)   [Mandatory]

What is your gender?

- ○ Male
- ○ Female

Page 2 - Question 4 - Choice - One Answer (Drop Down)   [Mandatory]

What is your race/ethnicity?

- ○ White
- ○ Black
- ○ American Indian/Eskimo/Aleut
- ○ Asian or Pacific Islander
- ○ Other

What is your education level?

- ○ High school or less
- ○ Some college or a college degree (e.g., associates, bachelors)
- ○ Some post-graduate or a post-graduate degree (e.g., masters, PhD)

What is your marital status?

- ○ Married [Screen Out]
- ○ Separated [Screen Out]
- ○ Divorced
- ○ Widowed
- ○ Never married/single

How many children do you have?

- ○ None
- ○ 1 [Screen Out]
- ○ 2 [Screen Out]
- ○ 3 [Screen Out]
- ○ 4 or more [Screen Out]

What is your occupation?

- ○ Administrative (e.g., secretary)
- ○ Agricultural (e.g., farm worker, gardener, groundskeeper)
- ○ Construction (e.g., laborer, carpenter, electrician)
- ○ Clerical (e.g., office clerk)
- ○ Education related (e.g., teacher, child care worker)
- ○ Electrician
- ○ Health care/Medical related (e.g., health aide, attendant)
- ○ Homebased business
- ○ Hospitality (e.g., maid, lodging quarters cleaner)
- ○ Human resources
- ○ Real estate
- ○ Restaurant (e.g., waiter, cook)
- ○ Retail (e.g., sales clerk, cashier)
- ○ Sale manager
- ○ Sales/Marketing
- ○ Self-employed
- ○ Unemployed
- ○ Other [Screen Out]

What is your state of residence?

- ○ Alabama

- Alaska
- Arizona
- Arkansas
- California
- Colorado
- Connecticut
- Delaware
- District of Columbia
- Florida
- Georgia
- Hawaii
- Idaho
- Illinois
- Indiana
- Iowa
- Kansas
- Kentucky
- Louisiana
- Maine
- Maryland
- Massachusetts
- Michigan
- Minnesota
- Mississippi
- Missouri
- Montana
- Nebraska
- Nevada
- New Hampshire
- New Jersey
- New Mexico
- New York
- North Carolina
- North Dakota
- Ohio
- Oklahoma
- Oregon
- Pennsylvania
- Rhode Island
- South Carolina
- South Dakota
- Tennessee
- Texas
- Utah
- Vermont
- Virginia
- Washington
- West Virginia
- Wisconsin
- Wyoming

Are you currently employed?

- ○ No
- ○ Yes, full time (> 30 hours per week)
- ○ Yes, part time (<= 30 hours per week)

What was your total income last year?

- ○ < $10,000
- ○ $10,000-25,000
- ○ $25,000-50,000
- ○ $50,000-100,000
- ○ > $100,000

Do you own a car(s)?

- ○ No
- ○ Yes

What is the total value of your car(s)?

- ○ n/a
- ○ < $5,000
- ○ $5,000-10,000
- ○ $10,000-15,000
- ○ > $15,000

How much do you owe in loan payments on your car(s)

- ○ n/a
- ○ < $2,000
- ○ $2,000-5,000
- ○ $5,000-10,000
- ○ > $10,000

Do you own a home?

- ○ No
- ○ Yes

What is the value of your home?

- ○ n/a

- ○ < $50,000
- ○ $50,000-100,000
- ○ $100,000-200,000
- ○ > $200,000

How much do you owe in mortgage payments on your home?

- ○ n/a
- ○ < $25,000
- ○ $25,000-50,000
- ○ $50,000-100,000
- ○ > $100,000

How much money in total do you have in your checking/savings accounts?

- ○ < $2,000
- ○ $2,000-5,000
- ○ $5,000-10,000
- ○ $10,000-25,000
- ○ > $25,000

How much do you owe in credit card, department store, and bank loans (other than car and home equity loans)?

- ○ < $2,000
- ○ $2,000-5,000
- ○ $5,000-10,000
- ○ > $10,000

Average medical costs for a broken leg are $12,000. Suppose you are uninsured, break your leg, and receive medical treatment at the nearest hospital. If you negotiate with the hospital, how much do you think you would end up owing?

- ○ < $2,000
- ○ $2,000-4,000
- ○ $4,000-6,000
- ○ $6,000-8,000
- ○ $8,000-10,000
- ○ > $10,000

Suppose you ignore the medical bills. Which of these outcomes do you think is most likely?

- ○ The hospital will send a debt collector to come after your paycheck and/or property (e.g., car, home).
- ○ The debt collector will bother you for a while but then eventually give up.
- ○ You probably won't hear from the hospital or debt collector at all.

Page 4 - Question 22 - Choice - One Answer (Bullets)   [Mandatory]

Do you know someone who has declared bankruptcy?

- ○ Yes
- ○ No

Page 4 - Question 23 - Choice - One Answer (Bullets)   [Mandatory]

Suppose you declare bankruptcy to get rid of the medical bills. Which one of these outcomes do you think is most likely?

- ○ You will have to give up any money in your checking or savings account and your property (e.g., car, home)
- ○ You will have to give up any money in your checking or savings account but can keep your property.
- ○ You will have to fill out a bunch of paperwork and pay a filing fee but you can keep your money and your property.

Page 5 - Question 24 - Choice - One Answer (Bullets)   [Mandatory]

How would you describe your health status?

- ○ Excellent
- ○ Very good
- ○ Good
- ○ Fair
- ○ Poor

Page 5 - Question 25 - Choice - One Answer (Bullets)   [Mandatory]

Do you currently have health insurance coverage?

- ○ Yes
- ○ No

Page 5 - Question 26 - Choice - One Answer (Bullets)   [Mandatory]

What is your source of health insurance coverage?

- ○ n/a
- ○ Employer or union
- ○ Medicare, Medicaid, or other public insurance program
- ○ CHAMPUS, TRICARE, VA, or other military insurance program
- ○ Individually purchased
- ○ Other, please specify

Thank You Page

Redirect: <http://www.testspin.com/endpages/success.php>

Screen Out Page

Redirect: <http://www.testspin.com/endpages/disqualify.php>

Over Quota Page

Redirect: <http://www.testspin.com/endpages/quotafull.php>

Thank you, but this survey is now closed.