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Health Insurance, Household Debt, and Inequality: Evidence from the Survey of Consumer Finances

Brian Bucks

For additional information please contact:

Brian Bucks Federal Reserve Board Mail Stop 153 20th and C Street Washington, DC 20551 brian.k.bucks@frb.gov

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# Introduction<sup>1</sup>

An extensive literature spanning several disciplines has established the correlation between health and a variety of measures of socioeconomic status.<sup>2</sup> This paper complements this literature by examining the relationships between health status, health insurance, medical debt, and household wealth in data from the Survey of Consumer Finances (SCF). The SCF is widely regarded as a key source of information on the balance sheets of U.S. families, but comparatively little research has taken advantage of health-related data in the SCF. Using these data, I examine how factors that may leave households vulnerable to medical expenditure shocks—poor health and lack of health insurance—vary with household characteristics and how these factors are correlated with indicators of financial distress, such as delinquency on debt payments. By pooling data across 15 years, I am able to assess how rates of health insurance coverage, health status, and, for uninsured households, reported reasons for not having health insurance coverage have changed over time.

I also take advantage of the SCF's detailed information on household debts and focus particular attention on the relative prominence of debt owed for medical expenditures on the household balance sheet. Further, the paper provides evidence on the importance of medical concerns in households' finances by examining information on families' motives for savings, anticipated expenses, and reasons for income fluctuations. The paper concludes with a brief discussion of the potential implications of these descriptive findings and, in particular, how estimates of inequality based on the distribution of wealth or income alone may differ from those

<sup>&</sup>lt;sup>1</sup> The views in this paper are mine alone and not necessarily those of the Board of Governors or its staff. This draft is preliminary and incomplete. Please do not cite or circulate without permission of the author.

<sup>&</sup>lt;sup>2</sup> Recent contributions include Adams *et al* (2003), Deaton (2002), Hurd and Kapteyn (2001), Smith (1999, 2004) and Wenzlow *et al* (2004); see also the references in each of these, particularly to contributions from non-economists.

using a broader measure of inequality that additionally encompasses health-related measures of well-being such as insurance coverage.

It is difficult to isolate the causal mechanisms underlying the observed correlations between, say, self-reported health and socioeconomic status (SES). The "health-SES gradient" may reflect a wide array of influences, including potential linkages by which SES affects health, routes by which health status affects SES, and correlation of both health and wealth with unmeasured factors. The determinants of health insurance coverage, medical debt, and health status are likely similarly complex and inter-related. Thus, the initial results presented here are intended as descriptive and take advantage of the rich and nationally representative data in the SCF—including a number of medical- and health-related measures not generally available in other data sources—to establish basic facts and to highlight patterns in health indicators, insurance coverage, indebtedness, and financial vulnerability across households.

#### Data

The analysis uses data from the 1989 through 2004 Surveys of Consumer Finances (SCF). The SCF provides the most comprehensive and highest quality wealth data for U.S. households and has been conducted by the Board of Governors of the Federal Reserve System every three years since 1983.<sup>3</sup> Since the 1989 survey, the SCF has utilized a consistent dual-frame sample design with both a standard, geographically based random sample and a list sample; the list sample draws on statistical records derived from tax returns to oversample households that are likely to be wealthy (Kennickell, 2001). This design yields efficient measurement of both widely held types of assets and debts, such as cars and car loans, and

<sup>&</sup>lt;sup>3</sup> Bucks, Kennickell, and Moore (2006) provide an overview of results from the 2004 SCF and additional information about the survey.

narrowly held wealth components, such as private businesses. In addition, information available for both respondents and non-respondents in the list sample provides a means of adjusting for differential rates of non-response, which tend to increase with income and wealth (Kennickell, 2007). Non-response adjusted weights are used throughout the paper so that estimates are representative of the overall U.S. household population (Kennickell and Woodburn, 1999).

The SCF includes detailed data on households' assets and liabilities as well as information on income, demographics, expectations and attitudes, use of financial institutions, current and past employment, and pensions. In addition, the SCF collects information on the health insurance status of individuals who live in the household and self-reported assessments of health for the household head and, in the case of couples, his or her spouse or partner. Of particular interest to this study, for nearly all debts, the survey asks about the purpose for which the money was borrowed and the type of institution that made the loan. These two pieces of information are key to identifying "medical debt" analyzed below.

Medical debt is defined as debt for which either: i) the loan purpose was "Medical/ dental/veterinary expenses; attorney's fees" and for which the lender was not reported to be a lawyer, or: ii) debt owed to a "doctor or hospital; dentist; veterinarian". Under this definition, medical debt may appear in several categories of loans in the SCF, namely, second mortgages, home equity loans, lines of credit, and "other loans." The "other loan" category captures nonmortgage installment loans taken out for a reason other than educational expenses or the purchase of a vehicle (which are recorded elsewhere in the survey) and includes outstanding bills that are more than 30 days past due.

This measure of medical debt may understate the actual fraction of household debt attributable to medical expenditures for two reasons. First, although respondents are generally

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reminded to include medical bills as well as similar loans when asked about "other loans," it is possible that some SCF respondents may not consider outstanding bills to service providers as loans and consequently may not report them.<sup>4</sup> Second, it is not possible to identify the types of debt charged to credit cards, so outstanding medical debt owed on credit cards is excluded. Nonetheless, by calculating the amount of household debt owed for medical purposes, the paper provides a rough—albeit likely conservative—estimate of how much aggregate consumer debt statistics, which do not capture debts owed to service providers, might change if this type of debt were included in the aggregate estimate.

To my knowledge, only a handful of studies have examined the association between wealth, on the one hand, and health indicators or health insurance status, on the other, in the Survey of Consumer Finances.<sup>5</sup> Researchers interested in these questions for the U.S. have more frequently turned to panel data from the Health and Retirement Study (HRS), the Asset and Health Dynamics of the Oldest Old survey (AHEAD), the Panel Study of Income Dynamics (PSID), or the Medical Expenditure Panel Survey (MEPS). These surveys have at least two important advantages relative to the SCF. Perhaps most importantly, as noted by Hurd and Kapteyn (2001), Smith (1999, 2004), and others, these longitudinal data sources provide critical leverage in potentially identifying causal links between wealth and health by allowing researchers to isolate innovations to health or wealth. Second, these surveys include more detailed information on specific health conditions, health expenditures (as opposed to outstanding medical debt), and health insurance than is available in the SCF. In examining the

<sup>&</sup>lt;sup>4</sup> Specifically, the SCF asks "Do you have any other loans?," and, at the interviewer's discretion, this question is followed up with "These may be loans for household appliances, furniture, hobby, or recreational equipment, medical bills, loans from friends or relatives, loans for a business or investment, or other loans." The latter portion is optional but reportedly is generally read by interviewers.

<sup>&</sup>lt;sup>5</sup> Starr-McCluer (1996), Wenzlow *et al* (2004), Lyons and Yilmazer (2005), and Kennickell (forthcoming) each consider questions in this vein using the SCF; relevant results from each of these are discussed throughout the remainder of the paper.

relationship between wealth and health, Smith (1999, 2004) and Levy (2002) take advantage of both of these strengths by focusing on the effect of a new diagnosis of a chronic health condition on households' finances; to the extent its realization or timing is not anticipated, the new diagnosis may represent an exogenous "shock" to health.<sup>6</sup>

On the other hand, the detailed information in the SCF on the value of individual assets and debts within narrow categories yields a more complete picture of households' financial position and the relative importance of medical debt. The AHEAD, HRS, MEPS, and PSID each collect information on about a dozen or fewer categories of assets, and for many non-financial assets only the net value is reported.<sup>7</sup> Juster *et al* (1999) conclude that, by and large, this modest set of questions provides reasonably accurate measures of net worth for all but the wealthiest households. Of course, the less-extensive wealth modules can preclude analysis of narrower questions; for example, in this study I use the information on the loan purpose and lender in the SCF to identify medical debt and the sources of these loans. In contrast, medical debt in these other surveys is combined with a variety of other types of debts that are captured by a single question regarding debts not specifically covered elsewhere in the interview questionnaire.

The SCF also includes a number of measures of financial vulnerability as well as indicators of the role that medical expenses and health concerns play in households' finances and financial decision-making. These indicators include households' reasons for saving, major

<sup>&</sup>lt;sup>6</sup> In this spirit, Lyons and Yilmazer (2005) use the retrospective SCF question about income last year compared to a "normal" year to construct a measure of "income shocks". This variable is key to identification of their simultaneous probits of health status and indicators of financial strain since it (as well as some other variables) is excluded from one of the equations.

<sup>&</sup>lt;sup>7</sup> For example, the 2003 PSID Supplemental Wealth Files asked the value of: owner-occupied real estate; first and second mortgages and other home-secured debt; non-owner occupied real estate (net value); business or farm equity, (net value); vehicles (net value); stock in publicly held corporations, mutual funds, and investment trusts; transaction accounts (e.g., checking, savings, CDs); other assets (e.g., bond funds, cash value of life insurance); equity in IRAs; and debt other than mortgages or vehicle loans (e.g., credit cards, student loans, medical or legal bills) (See http://simba.isr.umich.edu/Zips/ZipMain.aspx, http://psidonline.isr.umich.edu/data/Documentation/wlth2003.html). MEPS includes the values of assets in similar categories and, for non-financial assets, collects both the market value of the asset and debt owed (Bernard *et al* (2007)). Asset modules in the HRS and the AHEAD survey are also similar to those in the PSID (See http://hrsonline.isr.umich.edu/concord/index.html and Smith (1995)).

foreseeable expenses, and sources of income fluctuations. Further, in contrast to the HRS and AHEAD, which capture information only on older households, the SCF is representative of all U.S. households and therefore allows analysis of both differences by age and changes over time. Because the SCF is a cross-section, researchers cannot use identification strategies such as first-differencing to estimate the causal effect of health on wealth, for example. However, it is worth noting that panel data approaches may come at a cost, since first-differencing and similar strategies can exacerbate the role of measurement error, as underscored by Juster *et al* (1999), resulting in less precise estimates and potentially misleading conclusions.

#### Results

#### The health-SES gradient in the SCF

The well established inverse relationship between health and socioeconomic status is apparent for several SES measures in the Survey of Consumer Finances (Table 1). The first row and column of the table indicate that for 30 percent of households in the SCF samples pooled from 1989 through 2004, either the head or spouse/partner, if applicable, assessed his or her health as fair or poor. This percentage falls monotonically with income, wealth, and education, as shown in the next three panels of the table.<sup>8</sup> For example, 50 percent of households in the bottom income quintile have a head or spouse/partner that reported being in either fair or poor health, compared to roughly 15 percent of households in the top income quintile.

The relatively high proportion of households with low income that report fair or poor health partially reflects declines in health associated with age, as illustrated in the bottom portion of the table, since retired households tend to have lower incomes. However, excluding households with a head aged 65 or older does not affect the qualitative findings; even over this

<sup>&</sup>lt;sup>8</sup> Tests of the statistical significance of this and other results will be available in a forthcoming draft.

sample, the share of households reporting fair or poor health declines steadily with income, net worth, and education (not shown). The findings are in line with those of Wenzlow *et al* (2004) and Kennickell (forthcoming). Both of these studies use the SCF to examine the relationship between household characteristics and self-reported health status in a multivariate framework and conclude that wealth and income are positively and statistically significantly correlated with self-reported health after controlling for other factors such as age, education, and marital status.

Differences in health insurance coverage across income, net worth, and education categories mirror the differences in self-reported health status. The middle column of Table 1 shows the share of households within each of these groups for which some but not all family members have coverage, and the third column presents the share of households for which nobody in the household is covered. Households with net worth in the bottom quartile, for example, are about seven times more likely than those in top net worth decile to have at least one member who is uninsured and ten times more likely to have no coverage for any family member.<sup>9</sup> The share of households that do not have health insurance for some or all family members declines with age. The high rates of insurance coverage among the oldest group likely reflect in large part the near-universal Medicare coverage of individuals who are 65 or older.<sup>10</sup>

## Trends in the health-SES gradient and in the role of health issues in household finances

The first three rows of Table 2 consider the same indicators—self-reported health and lack of insurance coverage for some or all family members—across survey years. These results

<sup>&</sup>lt;sup>9</sup> These relationships between health insurance coverage and socioeconomic indicators again hold when excluding households with a head who is 65 years old or older.

<sup>&</sup>lt;sup>10</sup> The fact that the share of households in the oldest age group without any insurance is not zero likely reflects both the fact that a small fraction of older individuals is not eligible for Medicare and potential respondent error (e.g., confusion regarding eligibility versus enrollment) that could not be resolved in review and editing of these data.

offer little evidence of a clear time trend in these measures.<sup>11</sup> In contrast, the third panel of the table suggests the reasons that household members are not covered by insurance may have shifted over time. The share of such households that reported the cost of obtaining insurance was the primary impediment to obtaining health insurance coverage rose from 72 percent in 1989 to 80 percent in 2004, after hovering around 73 percent in the earlier years. Conversely, the fractions reporting that they did not have insurance due to age or health conditions or that they were uninsured by choice both appear to have fallen somewhat on net between the 1989 and 2004 surveys.

The next three sets of rows in Table 2 consider the frequency with which households cite medical expenses as a reason for saving, an anticipated major expense, or the source of a recent drop in income. At least when looking over all households, medical expenses are rarely reported as the primary motive for saving. In the pooled sample, only 3 percent of households cite the need to save in case of illness or for medical/dental expenses as the most important reason for saving; another 3 percent mention these as an additional reason for saving, after the primary motive. By comparison, roughly a quarter of households in the 1989–2004 surveys report that their primary reason for saving is for retirement, and about 10 percent cite education expenses as the most important reason for saving (not shown). Just over 20 percent of households reported that the most important reason for saving was for emergencies, "rainy days," or other similar unexpected needs, a broad category which of course could include medical contingencies. The fraction of households that specifically cite medical expenses as the primary reason for

<sup>&</sup>lt;sup>11</sup> Chernew, Cutler and Seliger Keenan (2005) document the rise in the share of uninsured non-elderly individuals in the U.S. over the 1990s as measured by the Current Population Survey. They attribute most of this rise to increases in premiums, an effect that was only partially offset by expansion of Medicaid over this period. In most instances it is possible in the SCF to identify which individual household members are not covered by insurance, and one can distinguish government and private coverage. In a future draft, I intend to examine whether the roughly steady overall percentages of households with partial or no insurance coverage between 1989 and 2004 mask variation in individual coverage and in coverage by government versus private insurance.

saving is similar to the shares citing saving for family-related reasons (4 percent) or for purchase of a home (5 percent).

A comparison across years suggests that the prevalence of medical expenses as a reason for saving may have fallen slightly, with most of this apparent drop occurring between the 1989 and 1995 surveys. The estimated share of households that report health care expenses as a major foreseeable expense has likewise declined over time. The final rows of the table indicate that a small fraction of households—2 percent or less in any given year—report that their income in the prior year was unusually low compared to a "normal" year due to illness or disability. Looking only over households that reported that their prior year's income was comparatively low, nearly half reported the income drop was due to lower labor earnings, e.g., having worked less, loss of a job, or lower salary (not shown); illness or disability, cited by 9 percent of households with lower-than-normal income, is among the most common of the remaining reasons.

#### Differences in household finances by health insurance status and self-reported health

Table 3 examines how household balance sheets and debt burdens vary with health insurance coverage and health status.<sup>12</sup> Consistent with the results for net worth groups shown in Table 1, median net worth is much higher among households in which all family members have insurance than among households in which some or all members lack coverage. Similarly, households in which both the head and the spouse/partner (if applicable) report being in excellent or good health have a median net worth over twice the median for households where one or both reports being in relatively poorer health. Families with insurance for all members and those reporting better health are more likely to have assets, and the median value conditional on having assets is also higher for these families.

<sup>&</sup>lt;sup>12</sup> To avoid potential confounding results due to life-cycle effects and near-universal Medicare coverage, this and subsequent tables exclude households in which either the head or spouse is aged 65 or older.

Both the fraction of households with debt and the median debt (for those with any debt) show a similar pattern to that for assets: better reported health and more complete insurance coverage are associated with higher rates of debt ownership and with higher median levels of debt. However, this pattern does not hold in the case of medical debt specifically. Instead, the incidence of outstanding medical debt is lower for households in which all family members are insured (4 percent) compared with those in the uninsured categories (6–7 percent), for example. In addition, the median amount of medical debt for families that have any is more similar across the groups. The incidence of medical debt is likewise higher among families in the "fair/poor" health status category than for those with better self-assessed health.

The remaining rows of the table indicate that households lacking health insurance coverage of all family members and those with worse health status may be more financially vulnerable. For example, over 20 percent of households without complete insurance coverage or reporting fair or poor health spent more than their income in the prior year, compared with 14 percent of other households. Similar disparities by insurance status and self-reported health are evident in the shares that have been turned down for credit (including having received less credit than they had applied for) at some time in the past five years and in the percentage of households with financial assets less than the reported desired level of buffer savings, a potential indicator of savings adequacy.<sup>13</sup> In contrast, there is little difference in the shares of households that had filed for bankruptcy in the last five years, a conclusion that holds for shorter time horizons as well (not shown).

Finally, looking over families with debt, those reporting worse health or lacking health insurance for at least one household member are roughly twice as likely to have missed a loan

<sup>&</sup>lt;sup>13</sup> The desired level of buffer savings level is measured by the SCF question "About how much do you think you (and your family) need to have in savings for emergencies and other unexpected things that may come up?".

payment by 60 days or more at some time in the past year than other households. The share of households with regular debt payments exceeding 40 percent of their income, a common measure of high household debt burden, also declines with better self-reported health and more complete health insurance coverage.

#### Importance of medical debt on the household balance sheet

Table 4 examines in greater depth the relative importance of medical debt in the context of households' finances. The table indicates that, for households as a whole, medical debt is generally a small component of the balance sheet, but its importance varies across groups. As shown in the first row, just over 4 percent of families in the pooled 1989–2004 data have any outstanding medical debt, and the median and 75<sup>th</sup> percentile amounts of medical debt for these households are \$1,200 and \$3,300, respectively. The next two sets of columns measure medical debt balances and payments relative to other balance sheet components to provide an indication of the proportion of families for whom medical debt may represent a significant financial burden. Among households with medical debt, loans for medical expenses account for at least half of all debt for 23 percent of families and for at least half of non-mortgage debt for 32 percent of families. The fraction of such families for whom outstanding medical debt totals at least 50 percent of assets is 14 percent. Payments on medical debt account for at least half of debt payments for 18 percent of families that have medical debt, and for 5 percent of such families, payments on medical loans total 20 percent or more of total household income.<sup>14</sup> Finally, the right-most columns show that, aggregating across all households, medical debt is estimated to

<sup>&</sup>lt;sup>14</sup> The smaller proportion of families for whom medical debt payments represent at least half of debt payments compared with the proportion with outstanding medical debt totaling at least half of all debt may in part reflect the fact that medical loans are more likely than other loans in the same debt categories in the SCF (lines of credit, second mortgages, home equity loans, and "other loans") to be reported as having no regular or "typical" payment.

represent only a fraction of a percent of all outstanding debt and about 1.5 percent of nonmortgage debt.

The significance of medical debt as a component of the household balance sheet differs by household demographics, health status, and insurance coverage, however. The incidence of medical debt, for example, is greater among families with a head or spouse/partner in fair or poor health and among families without complete health insurance coverage compared with other families. Differences in the median amount of medical debt are less pronounced, particularly when comparing households by health insurance status, but the 75<sup>th</sup> percentile value rises steadily across these groups. Similarly, the proportions of households for whom medical debt or medical debt payments are large relative to other balance sheet components are greater among households with poorer self-reported health or incomplete insurance coverage.

There is even greater variation by income and net worth in the shares of families with large amounts of medical debt relative to other types of debt, assets, or income. For instance, among families with any medical debt, medical debt accounts for at least 50 percent of all debt for nearly one third of families in the bottom net worth quartile, whereas the corresponding fraction among households in the top quartile is less than one tenth. The gradient is steeper across income ranges. Interestingly, the shares of households for whom medical debt accounts for 50 percent or more of all debt or for whom medical debt payments are more than 50 percent of debt payments ticks up in the top net worth and income groups. Households in the upper portions of the net worth and income distributions are less likely than other families to have medical debt, but the conditional medians and 75<sup>th</sup> percentiles are notably higher for these families than for other households. The estimated proportions of families with medical debt equal to at least half of assets falls to zero for households with net worth above the 25<sup>th</sup>

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percentile, and the share for whom medical debt payments are 20 percent or more of income is essentially zero for families with income above the 60<sup>th</sup> percentile.

The share of families with medical debt generally declines with age, whereas the conditional median and 75<sup>th</sup> percentile values tend to rise for the older age groups. The percentages of families with high levels of medical debt or medical debt payments when measured as shares of other balance sheet components typically fall slightly with age before rising to a peak among households in the oldest age group. The differences by age, however, tend to be smaller than those across other categories. As shown in the final rows of the table, the estimates of the incidence, amount, and aggregate shares of medical debt do not suggest a clear trend between 1989 and 2004 in the importance of medical debt on the household balance sheet.

The findings that households without full insurance coverage are more likely to have medical debt than fully insured families and that conditional medians of medical debt vary little by insurance status generally hold within subgroups defined by demographic characteristics or self-reported health (Table 5). Comparing the first two columns, uninsured households are more likely to have outstanding debt for medical expenditures than insured households within each of the demographic categories.<sup>15</sup> Differences by insurance status in the median amount of medical debt, conditional on having any, are often small. More often than not, the conditional median for uninsured households is lower than that for insured households, and the instances where the gap reverses may entirely reflect sampling variability of the estimates. Nonetheless, it is notable that these exceptions to the general pattern occur for households that may be more vulnerable to health shocks, specifically families in the lowest income and net worth groups and those in which either the head or spouse/partner reports being in fair or poor health.

<sup>&</sup>lt;sup>15</sup> To ensure sufficient sample sizes within cells, the table combines net worth categories above the median and income categories above the 60<sup>th</sup> percentile. Similarly, households with some uninsured family members are combined with those for which all family members are uninsured.

The conclusions that uninsured households with medical debt are more likely than households with full insurance to have high ratios of medical debt to non-mortgage debt and high ratios of medical debt payments to all debt payments are more sensitive to conditioning on demographic characteristics. Moreover, these conclusions generally do not hold across survey years. For example, within subgroups defined by age, net worth, or self-reported health status, medical debt is more likely to be half or more of all non-mortgage debt for uninsured households than for insured households, in line with the overall differences shown in Table 4. However, for households in the second and third income quintiles that have medical debt, the share of uninsured families with high levels of medical debt by this measure is slightly lower than the share among fully insured families. In addition, the gap in this measure for the pooled 1989-2004 sample appears to be driven by differences in the 1992 and 1995 surveys that are not apparent in other years. Similarly, after conditioning on the subgroups considered in the table, the shares of families with medical debt for whom the majority of debt payments are attributable to medical loans, shown in the final columns, do not show a consistent pattern by insurance coverage.

### Conclusion

This paper highlights relationships between self-reported health, health insurance, medical debt, and household finances using data from the U.S. Survey of Consumer Finances. In addition to illustrating the health-SES gradient found in numerous studies, the paper draws on several components of the SCF to provide a more-detailed picture of the role that health and medical concerns play in household finances. First, the paper examines how measures of financial vulnerability vary with self-reported health status and with health insurance coverage. Second, the paper extends prior studies by utilizing the detailed information on debts in the SCF

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to examine how the amount and shares of debt and debt payments attributable to medical expenditures vary across households.

I find that, on the whole, medical debt is generally a small component of household liabilities; less than 5 percent of all households reporting outstanding medical debt at the time of the interview. Analysis of families' reported reasons for savings, for instance, similarly suggest that, although medical expenses are among households' most important savings motives, they appear to be less prominent reasons than retirement or educational expenditures, at least when looking across all households. Importantly, however, medical debt is a substantial portion of debt for some select subgroups; for example, medical debt totals at least half of all debt for onethird or more of low-income and low-wealth households that have medical debt. Medical debt generally also plays a larger role in the balance sheets of uninsured households and of households in which either the head or spouse reports being in only fair or poor health, though some of these difference may of course reflect correlations with other household characteristics.

These descriptive results are intended to form the basis of a more in-depth analysis of the role that medical expenses and health concerns play in households' finances and financial decision-making. Like empirical associations between health and SES indicators, the correlations between health and health insurance, on the one hand, and medical debt and financial vulnerability, on the other, could be driven by a variety of mechanisms. For example, a pre-existing medical condition may both prevent an individual from obtaining insurance and lead to high medical bills. Alternately, households who choose to self-insure may have comparatively high levels of medical debt because all medical costs are paid out of pocket, not necessarily because they face particularly frequent or expensive medical shocks. These households may also choose to finance their medical expenses rather than to pay for them out of

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savings or income; their medical debt may therefore indicate a payment choice rather than financial or health vulnerability. This preliminary analysis cannot disentangle the variety of potential causal relationships.

Finally, the results suggest that incorporating indicators of households' vulnerability to medical expenditure shocks would likely lead to estimates of greater inequality in household well-being than would be obtained from inequality measures based only on income or wealth. In particular, differences across groups in self-reported health, insurance coverage, and the magnitude of medical debt suggest these factors tend to reinforce disparities in income and wealth. Consequently, lower-income and lower-wealth families may be more likely to experience a negative health shock and may face greater financial consequences if such a shock occurs. A number of approaches to defining multi-dimensional measures of inequality have been developed in recent years, and identifying the merits and drawbacks of each and refinement of these techniques is an area of ongoing research.<sup>16</sup> Drawing on this literature to quantify the extent to which estimates of inequality would change when considering a broader measure of well-being that encompasses health-related indicators would be an important extension of the results presented here.

<sup>&</sup>lt;sup>16</sup> See, for example, Nilsson (2007) and Justino (2005) for empirical applications and comparisons of techniques for analyzing inequality in multiple dimensions.

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Percent	Head or Spouse/Partner	Health Insurance Coverage				
Household Characteristic	in Fair/Poor Health	Partial	No Coverage			
All Households	30	19	9			
Income Percentile						
Less than 20	50	32	18			
20-39.9	37	28	15			
40-59.9	27	19	9			
60–79.9	22	11	4			
80-89.9	17	6	2			
90–100	12	4	1			
Net Worth Percentile						
Less than 25	38	36	21			
25-49.9	32	22	10			
50-74.9	28	12	5			
75-89.9	24	8	2			
90–100	19	5	2			
Education of Head						
No high school diploma	57	31	15			
High school diploma	33	22	11			
Some college	25	19	9			
College degree	16	10	5			
Age of Head						
Less than 35	18	29	16			
35–44	21	20	11			
45–54	27	20	9			
55-64	39	18	8			
65 or older	51	7	2			

# Table 1: Self-Reported Health and Health Insurance Status by Selected Household Characteristics

Notes: Pooled data from 1989–2004 Surveys of Consumer Finances. "Partial" health insurance coverage refers to households in which at least one but not all household members are uninsured. "No Coverage" refers to households in which no household member has health insurance.

# Table 2: Trends in Health, Health Insurance, and Medical-Related Financial Indicators:1989–2004 Surveys of Consumer Finances

Danaant

Percent							
Percent of				Ye	ear		
Households With:	1989-2004	1989	1992	1995	1998	2001	2004
Head or Spouse/Partner in							
Fair/Poor Health	30	30	29	30	30	31	30
Health Insurance							
Someone uninsured	19	19	20	18	19	17	21
All uninsured	9	9	9	9	10	9	10
Reason no health insurance <sup>1</sup>							
Too expensive	75	72	74	73	74	75	80
Can't get: ineligible	11	8	10	13	12	13	10
Can't get: Age or health	3	5	5	3	2	2	2
Don't want or need	7	10	8	6	8	4	7
Illness or medical/dental expen	uses as savings real	son					
Primary reason for saving	3	5	4	3	3	3	2
Any reason for saving	6	9	7	6	5	6	5
Expect major health care/medi	cal expenses in nex	ct 5–10 years	$s?^{2}$				
Yes	17	21	20	18	13	14	15
Income unusually low last year	· due to illness or d	isability <sup>3</sup>					
All households			_	2	2	1	1
Households with unusually							
low income last year	9			10	11	7	7

Notes: <sup>1</sup> "Can't get: Age or health" includes those who said they could not get insurance due to poor health, age, illness, or a pre-existing condition. "Can't get: ineligible" includes families without insurance due to job loss, lack of coverage on the job, loss of parental coverage, or loss of public assistance. "Don't want or need" consists of those reporting they did not believe in health insurance or did not need it because there was not much sickness in the family as well as those reporting they self-insured or could manage their health without insurance. Columns do not sum to 100 due to omission of other categories.

<sup>2</sup> Respondents could provide up to 6 anticipated financial obligations in the 1995–2004 surveys, up to 5 in 1992 survey, and up to 3 in 1989 survey.

<sup>3</sup> Question was not asked in 1989 and 1992 SCFs.

		Health Insurance Sta	Self-Reported Health			
	All Covered	Some Uninsured	All Uninsured	Excellent/Good	Fair/Poor	
Median net worth	86.4	19.8	7.9	76.4	30.2	
Have any assets	97%	95%	90%	97%	92%	
Median assets	163.9	54.4	21.0	151.0	71.7	
Have any debt	86%	81%	68%	85%	76%	
Median debt	49.9	19.7	11.4	48.0	20.6	
Have medical debt	4%	7%	6%	3%	7%	
Median medical debt	1.3	1.1	1.2	1.1	1.4	
Spending exceeded						
income last year	14%	22%	22%	14%	21%	
Filed for bankruptcy in						
past five years <sup>1</sup>	5%	4%	5%	5%	6%	
Turned down for credit						
in past five years	23%	36%	31%	25%	28%	
Financial assets <						
desired buffer savings <sup>1</sup>	25%	53%	65%	27%	47%	
Debtors						
Payment 60+ days						
past due in last year	6%	16%	16%	6%	14%	
Debt payments $> 40$	100/	170/	100/	110/	1.40/	
percent of income	10%	17%	18%	11%	14%	

Table 3: Household Balance Sheet Components and Selected Financial Characteristics by Health Insurance Status and Self-Reported Health

Notes: Medians are thousands of 2004 dollars. Median assets, debt and medical debt conditional on having any; late payments and payment-to-income ratio > 40 percent condition on having debt. Pooled data from 1989–2004 Surveys of Consumer Finances for households with both head and spouse/partner (if applicable) under 65. <sup>1</sup> Bankruptcy question first asked in 1998 SCF, and desired buffer savings level first asked in 1995 SCF.

Fercent unless noted	Have	Medical Debt	$(\text{Thous. } 2004 \)^1$	Ν	fedical Debt $\geq 50\%$	of <sup>1</sup>	Medical Debt Payments <sup>1</sup> Med		Medic	lical Debt Share of	
	Medical		75th	All	Non-Mortgage		$\geq$ 50% of Debt	≥ 20% of	All	Non-Mortgage	
	Debt	Median	Percentile	Debt	Debt	Assets	Payments	Income	Debt	Debt	
All Households	4.4	1.2	3.3	23	32	14	18	5	0.3	1.5	
Health Status											
Excellent/Good	3.5	1.1	2.8	17	27	11	15	4	0.2	0.8	
Fair/Poor	7.2	1.4	4.3	31	38	18	22	7	1.4	4.6	
Health Insurance											
All insured	3.7	1.3	3.0	19	29	10	16	4	0.2	1.1	
Some insured	7.3	1.1	3.5	27	33	16	20	8	1.1	3.5	
None insured	6.3	1.2	3.9	32	41	24	21	9	1.5	4.4	
Net Worth Percent	tile										
Less than 25	6.9	1.2	3.6	32	35	31	22	7	2.6	4.0	
25-49.9	5.0	1.3	2.6	18	32	0	17	4	0.3	1.2	
50-74.9	3.7	1.2	3.5	14	25	0	12	5	0.2	1.0	
75-89.9	1.5	2.5	7.2	3	22	0	5	2	0.1	0.7	
90–100	0.7	2.6	4.7	8	29	0	8	0	0.0	0.2	
Income Percentile											
Less than 20	5.8	1.0	4.4	43	46	36	30	14	2.3	5.0	
20-39.9	6.2	1.1	2.9	25	37	13	20	6	1.3	3.8	
40-59.9	5.7	1.4	3.5	19	29	7	13	2	0.8	2.4	
60-79.9	3.5	1.2	2.6	8	15	5	10	0	0.2	1.0	
80-89.9	2.4	1.8	5.3	8	26	0	9	0	0.1	0.7	
90–100	1.0	1.3	7.2	10	14	0	12	0	0.0	0.2	
Age of Head											
Less than 35	5.7	0.9	2.6	23	31	14	17	4	0.5	1.9	
35–44	4.2	1.3	3.3	21	30	13	16	6	0.2	1.2	
45-54	3.4	1.6	4.6	22	34	10	15	4	0.3	1.3	
55-64	3.5	1.2	5.1	28	34	17	26	11	0.4	1.6	
Year											
1989	5.4	1.5	3.6	23	34	12	22	10	0.6	1.7	
1992	7.7	1.0	2.6	26	33	15	16	5	0.5	2.0	
1995	4.4	1.1	3.8	14	22	6	12	2	0.3	1.4	
1998	3.1	1.2	3.0	21	37	10	18	2	0.3	1.0	
2001	3.6	1.5	2.8	29	37	17	18	7	0.3	1.4	
2004	2.8	1.5	4.3	23	27	22	19	5	0.3	1.6	

Table 4: Relative Magnitude of Medical Debt and Medical Debt Payments by Selected Household Characteristics Percent unless noted

Note: Pooled data from 1989–2004 Surveys of Consumer Finances for households with both head and spouse/partner (if applicable) under 65. <sup>1</sup> Debt percentiles and percentages of households conditional on having any medical debt.

	Percent with		Median Medical Debt			the best $\geq 50\%$ of	Medical Debt Pmts $\geq$	
	<u>Medi</u> Insured	<u>cal Debt</u> Uninsured	(Thous. of Insured	2004 Dollars) Uninsured	<u>Non-Mo</u> Insured	rtgage Debt Uninsured	50% of De Insured	ebt Payments Uninsured
Health Status	moured	Ollinsured	moured	Chinistiled	msured	ennisured	mourea	Chinistitee
Excellent/Good	3.1	4.9	1.2	0.9	25	33	13	19
Fair/Poor	5.8	10.3	1.3	1.6	37	40	22	21
Net Worth Percentile	е							
Less than 25	6.5	7.7	1.1	1.3	31	41	20	25
25-49.9	4.6	6.3	1.3	1.0	31	35	18	16
50-100	2.1	5.4	1.3	1.3	24	27	10	13
Income Percentile								
Less than 20	5.6	6.0	0.7	1.3	39	54	30	30
20-39.9	5.3	7.6	1.3	1.0	37	36	21	19
40–59.9	5.0	8.0	1.4	1.4	30	26	15	9
60–100	2.3	5.4	1.4	1.1	17	22	7	24
Age of Head								
Less than 35	5.1	7.2	1.0	0.9	29	34	17	17
35–44	3.6	6.6	1.3	1.1	28	35	12	25
45–54	2.8	5.9	1.7	1.5	31	40	15	14
55–64	2.7	7.1	1.5	1.1	28	46	24	29
Year								
1989	4.3	9.0	1.8	1.2	34	34	21	23
1992	6.1	12.8	0.9	1.3	25	45	13	21
1995	4.1	5.5	1.1	1.1	17	37	11	17
1998	2.8	4.2	1.4	0.6	39	31	18	16
2001	2.8	6.4	1.2	1.7	37	38	20	16
2004	2.5	3.7	1.5	1.0	29	22	16	27

Table 5: Relative Magnitude of Medical Debt among Household Liabilities by Selected
Household Characteristics and Health Insurance Status

 2004
 2.5
 5.7
 1.5
 1.0
 29
 22
 10
 27

 Note: "Insured" includes households in which all members have health insurance coverage. "Uninsured" includes households in which at least one member is uninsured. Median debt and percentages of households conditional on having any medical debt. Pooled data from 1989–2004 Surveys of Consumer Finances for households with both head and spouse/partner (if applicable) under 65.