

Medical Bankruptcy: Myth vs. Fact

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Abstract

Himmelstein, Warren, Thorne and Woolhandler recently contended that medical problems contribute to 54.5 percent of personal bankruptcies and threaten the solvency of solidly middle class Americans. They propose comprehensive national health insurance (NHI) as a solution. A re-examination of their data suggests that medical bills are a contributing factor in just 17 percent of personal bankruptcies and that those affected tend to have incomes closer to poverty level than to middle class. Moreover, for NHI to have an impact it would have to define "medical" expenses in a much broader way than is now typical of either private or government-funded plans.

Introduction

"The great enemy of the truth is very often not the lie - deliberate, contrived and dishonest - but the myth: persistent, persuasive and unrealistic."

- President John F. Kennedy, Commencement Address at Yale University, June 11, 1962.

It is no secret that bad health and bad debt often coincide. Unexpectedly large medical bills can impose a significant burden on those who are already physically and economically fragile. In some cases, medical debt can contribute to a collapse of creditworthiness that forces some individuals to declare personal bankruptcy.

David U. Himmelstein, Elizabeth Warren, Deborah Thorne and Steffie Woolhandler (HWTW) contend that this scenario is pervasive. "Medical problems contribute to about half of all bankruptcies," they write in "Illness and Injury as Contributors to Bankruptcy," which appeared on the *Health Affairs* Web site in early 2005.¹ They warn that "solidly middle-class Americans...face impoverishment following a serious illness," and they propose a solution -

comprehensive national health insurance (NHI) such as that offered in Canada and Western Europe.

The authors' research credentials and prestigious affiliations; the genuine human tragedy of illness and bankruptcy; and the attention given to their findings by the news media, policymakers and researchers have helped make their conclusions "persistent and persuasive," to use former President Kennedy's formulation.² Unfortunately, a closer examination of their article suggests three reasons their conclusions are also "unrealistic."

First, HWTW fail to provide a causal relationship to support the claim that medical expenditures contribute to "half of all bankruptcies" (54.5 percent). Our analysis of their data finds a causal link in only 17 percent of personal bankruptcies. Nor do HWTW's data support their contention that "solidly middle-class Americans" are threatened. Four decades of studies that have explicitly addressed the bankruptcy-medical expenditure connection lend credibility to our conclusion. These studies support a much smaller figure than "half," as does a more recent national consumer survey sponsored in part by the Harvard School of Public Health. As for the "solidly middle class"

citizens who face "impoverishment," HWTW themselves report an average household income level of \$25,000 for their respondents, a level much more accurately characterized as "marginally middle class."

Second, HWTW's methodology does not provide a definitive answer to the policy question they implicitly pose - how would NHI affect the rate of personal bankruptcy. HWTW at best show that medical bills are a cause of 17 percent of bankruptcies, but are not necessarily the most important cause. HWTW fail to perform the multivariate statistical analysis necessary to determine the magnitude of the causal relationship, or to rule out other factors such as loss of job, education expenses, or housing costs. Indeed, an economic study cited in part by HWTW concludes (in a portion not mentioned by HWTW) that there is little support for the theory that households file for bankruptcy when "adverse events" - including health problems - reduce their ability to repay debts.³

Lastly, HWTW's suggestion that NHI would significantly reduce the number of bankruptcies linked to medical expenditures is misleading. They themselves acknowledge that the impact would depend on the "comprehensiveness" of

the plan. Our analysis shows that "comprehensiveness" in this context would require defining "medical" expenses in a way that is much broader than is now typical of either private or government-funded plans.

HWTW's suggestions about the magnitude of the link between medical bills and personal bankruptcy are neither supported by their data nor credible in light of published econometric studies. The assertion that "solidly middle-class" Americans are the bankruptcy victims is a myth, and the suggestion that NHI can ride to the financial rescue is unrealistic, distracting attention from the truly vulnerable Americans most in need of help.

Background

Traditionally, many physicians charged little or nothing to treat those who possessed little or nothing. Hospitals continued the charitable tradition, albeit sometimes with a twist. In early 19th century America, poor patients were expected to begin working off their debt as soon as they were ambulatory. At New York's Bellevue Hospital, for

example, "expectant mothers...scrubbed floors within hours of delivery."⁴

Modern health insurance originated during the Great Depression. As hospitals and physicians saw their income plummet, they began to accept the idea of reliable third-party payment through health insurance. Post World War II advances in medical technology and the expense of those advances prompted the public at large to clamor for reliable coverage. The result was widespread diffusion of health insurance as an employee benefit and the passage of Medicare for the elderly and Medicaid for the indigent.

Health insurance initially focused on catastrophic expenses. Over time, benefits increased and consumer cost sharing shrank. Rising medical costs coupled with recent increases in consumer cost sharing are raising anxiety that the average 14.2 percent of income that went to personal health care expenditures in 2001 will grow rapidly. The addition of a Medicare outpatient drug benefit on January 1, 2006 will lower out-of-pocket spending for the average senior; however, some elderly, including some who are chronically ill, may find that substantial medication expenses continue to accumulate.⁵ Medicaid's budget woes are

even more pronounced, as states restrict benefits or tighten eligibility requirements.

Private employer spending on employee health benefits, meanwhile, jumped 51.4 percent from 1998 to 2003, to \$330.9 billion.⁶ As economic theory would predict, employers are responding by holding the line on salaries; real wages and salaries declined in 2004 by about 1 percent while overall benefit expenses increased 3.5 percent.⁷ Employers are also requiring employees to make larger contributions to premiums and cutting back on the retiree medical coverage that has been a critical supplement to Medicare.

As benefits costs have risen, the percentage of full- and part-time employees covered by and participating in employer-sponsored health insurance has declined -- from 53 percent in 1999 to just 45 percent in 2003.⁸

Simultaneously, the hiring of eligible participants -- new permanent employees -- appears to have slowed.⁹

As a result of these trends, the potentially dire consequences of large medical bills is a topic of acute interest to millions of Americans. The two broad policy questions underlying the HWTW article are important: what

is the impact of the rising consumer share of medical costs, and what changes to our health insurance system could alleviate the financial burden of medical care? However, the specific questions addressed by the HWTW article are narrower: to what extent do high medical bills precipitate personal bankruptcy, and to what extent is a Canadian-style health-care system a likely solution to such a problem? We address their research in detail below.

What HWTW Find

HWTW surveyed 1,771 individuals who filed for personal bankruptcy in 2001. They also interviewed 332 debtor households (in part to put a human face on the problem), but these interviews did not contribute to the computation of the number of medical bankruptcies. Thus, we will focus on the survey responses.

HWTW summarize the responses in Table 2 of their paper, which is organized into three sections. The first section reports the percentage of households who cite one of the following as a specific reason for their personal bankruptcy: illness or injury, a birth or death in the family, and problems with alcohol, drugs or gambling. This

is the only part of their survey in which one might infer a causal relationship between medical problems and bankruptcy. The most frequently cited reason for bankruptcy is illness or injury, mentioned by 28.3 percent of respondents.

The second section of Table 2 reports the number of respondents who had a variety of medical-related problems such as illness causing a loss of at least 2 weeks of income, and medical bills in excess of \$1000 in the previous two years. HWTW count these problems as medical-related reasons for bankruptcy *even if the respondents did not state that illness or injury was a reason for bankruptcy*. As a result, HWTW conclude that 54.5 percent of respondents had medical bankruptcies.

Criticisms of HWTW

A conservative critique of the HWTW study quickly appeared in *National Review Online*, while additional criticism and

praise appeared in the online response section of *Health Affairs*.¹⁰

Most of the criticism centered upon the definition of medical bankruptcy, particularly the inclusion of individuals reporting medical bills exceeding \$1,000 over a two-year period. Critics say that many of these individuals may have paid their medical bills well before another event (e.g., loss of job) precipitated bankruptcy. Himmelstein offers two responses. First, he notes that average medical bills for this group exceeded \$11,000, a figure that seems to show that outstanding medical bills were burdensome. However, the average of \$11,000 may be influenced by a few outliers. For example, Conwell and Cohen report that 20 percent Americans spent over \$3200 on health care in 2002, but just 5 percent spent over \$11,500.¹¹ Even so, the latter small group accounted for half of all U.S. expenditures. It would be more informative to know the median and other percentiles of the distribution of spending by HWTW's respondents.

Second, Himmelstein agrees that some respondents may have paid off their medical debts, but he argues that without medical debts, they would have had more money available to

pay other expenses. He also argues that the level of medical debt may be understated, as some medical expenses may have been paid by credit card. The first argument could be made for *all* expenditures prior to bankruptcy, leading to the meaningless conclusion that all expenditures are responsible for all bankruptcies. The second argument merely reinforces the fact that since all debts are fungible, it is inappropriate to single out any one form of debt as the proximate cause of bankruptcy.

Data from the U.S. Census Bureau demonstrate the broader financial problems facing many lower-income Americans. An American household with annual income between \$22,000 and \$40,000 will in the course of two years spend an average of \$20,000 on housing, \$9,000 on food, \$8,000 on transportation, \$2,500 on clothing and \$4,500 on health care. This income level is comparable to the average income in the HWTW sample and is most accurately characterized as "marginally middle class," rather than the "solidly middle class" characterization of the HWTW narrative. Census Bureau data show that a household annual income of \$25,000 is closer to the poverty level for a family of four - a little above \$18,000 in 2002 -- than to

the median U.S. household income of about \$44,000 the same year.

For most households in the \$22,000 to \$40,000 income range, health care spending amounting to a few thousand dollars in the two years prior to bankruptcy would represent just the tip of the iceberg threatening to sink their creditworthiness. They have many other bills to pay. Moreover, it would be reasonable to budget for at least some health care expenses. Health care spending of a few thousand dollars may be unpredictable in terms of when it occurs, but it is not unpredictable that at some point it is likely to occur.

Moreover, while historical comparisons should be used cautiously, studies since the mid-1960s have consistently concluded that medical bills are a relatively part of the debt problem.¹² More recently, a study in Cincinnati of bankruptcy filers seeking Legal Aid Society assistance in 2000-2001 found that 47 percent had "substantial" medical debt, but that medical debt accounted for just 12 percent of their debt total.¹³

This past year, the U.S. Department of Justice responded to a request by Republican senator Charles Grassley by examining 5,203 bankruptcy cases from the files of the U.S. Trustee Program. The DoJ filings occurred between 2000 and 2002, the same time frame as the HWTW filings. The DoJ reported 90 percent of filers had medical debt of less than \$5,000. Of those reporting medical debts, those debts accounted for only 13 percent of total unsecured debt.

The DOJ summarizes the evidence against the thesis of the HWTW article as follows: "The conclusion that almost (cq) 50 percent of consumer bankruptcies are 'medical related' requires a broad definition and generally is not substantiated by the official documents filed by debtors." Taking all four surveys under consideration, we observe that while medical costs have risen sharply over four decades, medical debt remains a small part of the overall burden of those filing for bankruptcy.

Refining the Research Methods

The debate over HWTW's numbers should not obscure a deeper methodological issue. It is insufficient to show that medical problems are *associated* with bankruptcy; one must

also determine whether, and to what extent, medical expenditures *cause* bankruptcies. That is, one must move beyond correlation to causation and magnitude. In an attempt to do so, we have reanalyzed the HWTW data.

The only portion of HWTW that addresses causality is the first part of Table 2, which identifies individuals who stated that illness or injury was a cause of bankruptcy (though not necessarily the most important cause). If we seek to learn the role of health insurance in bankruptcies, we must identify those individuals who stated that illness or injury was a cause of bankruptcy *and* also stated that medical bills contributed to bankruptcy. We call these "medical expenditure bankruptcies."

According to HWTW, 28.3 percent of respondents stated that illness or injury was a cause of bankruptcy. HWTW also report that medical bills contributed to the bankruptcy of 60 percent of this group. Multiplying the two figures together, *we conclude that 17 percent of the HWTW sample had medical expenditure bankruptcies.*

Even for that 17 percent, we cannot state with any degree of certainty whether medical expenditures were the most

important cause of bankruptcy. To move from causation to magnitude, it is necessary to perform multivariate statistical analysis on a sample of bankrupt and solvent individuals. The dependent variable would be a bankruptcy indicator. Predictors, in addition to those measured by HWTW, would include economic and demographic variables such as employment and marital status. Only in this way could we make the kind of "all else equal" statements required to assess how medical debt affects bankruptcy rates. HWTW fall well short of the mark. They do not interview a control population of solvent households. They do not collect economic control variables.

Several published studies of bankruptcy that do use multivariate analysis studies paint a different picture than the one depicted by HWTW. We summarize key research below.

*Congressional Budget Office*¹⁴

The Congressional Budget Office analyzed the 75 percent increase in personal bankruptcy filings between 1994 and 1998 by reviewing the "voluminous" literature on personal bankruptcy in a 2000 report.

By all accounts the period under review was one of flat to expanding health insurance coverage. The total health benefit cost per active employee rose less than 5 percent, with the cost of health benefits for active and retired workers actually declining in 1994 for the first time in memory.¹⁵ The fact that bankruptcy rates nonetheless rose sharply suggests something besides medical factors was to blame.

The CBO review cites many factors that contribute to bankruptcy, including large medical bills, divorce, loss of income as a result of unemployment and poor debt management. Legislative changes making it easier for individuals to recover from bankruptcy may also have been a factor. Even so, the CBO reports that "researchers have made little progress in judging the *relative importance* of the factors that lead people to file" (emphasis added).

*Fay, Hurst, and White*¹⁶

A 2002 study by Fay, Hurst, and White (FHW) in *American Economic Review* is the only paper in an economics or finance journal to be cited by HWTW. HWTW refer only to an

observation by FHW about survey data. A more thorough reading of FHW, however, reveals several findings at odds with HWTW's conclusions.

Using data from a 1996 panel survey that included information about household bankruptcy filings, FHW employ multivariate probit regression to determine the contributing factors. Among those factors were whether the household head or spouse experienced health problems in the previous year.

Controlling for debt levels, FHW find no statistical link between bankruptcies and health problems. This finding is consistent with the idea that medical debt is like any other debt - a cause but not the most important cause of bankruptcy. They conclude that bankruptcy is the response to an accumulation of debt, not to one particular factor such as a health problem.

Data from the 2005 Commonwealth Fund biennial health survey support this. The survey found that 41 percent of adults aged 19 to 64 had a high rate of medical bill problems or incurred medical debt. Sixty-two percent of these non-elderly adults had insurance when the medical bill or debt

problem occurred. Yet while a substantial minority of these adults put off filling a prescription or going to the doctor, only one in ten of the non-elderly adults who were insured all year said they had to "change [their] way of life to pay medical bills." Even for those who were uninsured for some period during the year, only 28 percent reported a lifestyle change.¹⁷

The FHW and Commonwealth Fund studies confirm the basic economic concept that all liabilities are fungible. There is no one category of liability that is more likely than others to dictate a lifestyle change or even crossing over the brink into bankruptcy.

*Domowitz and Sartain*¹⁸

A 1999 study by Domowitz and Sartain (DS) in the *Journal of Finance* examines 827 households who filed for bankruptcy in 1980 matched against 1,862 households not in bankruptcy. DS perform multivariate nested logit regression to isolate the specific causes of bankruptcy. They first report that "high medical debt (in excess of two percent of income) has the greatest single impact of any household condition variables in raising the conditional probability of

bankruptcy." They temper this finding with two further observations. First, only a tiny percentage of the population had high medical debt. Second, they point out that medical problems may be correlated with employment disruptions; if the latter contribute to bankruptcy, the coefficient on medical debt is biased upward. Accounting for prevalence of various sources of debt, DS find that "the largest single contribution to bankruptcy at the margin is credit card debt."

Other data on credit card payments support our previous contention that those with trouble paying all their bills, not just medical expenses, are most vulnerable to bankruptcy. The most recent Federal Reserve Board survey of consumer finances found an overall 1.1 percentage point decline from 1998-2001 in the proportion of debtors who were sixty or more days late with their payments on any of their loans in the preceding year, but an increase of 1.6 percentage points in late payment for families whose net worth was in the lowest 25 percent of the distribution.¹⁹

*Gross and Souleles*²⁰

A 2002 study by Gross and Souleles (GS) in the *Review of Financial Studies* is the first, to our knowledge, that uses a methodology that could directly determine the effect of insurance status on personal bankruptcy. GS use multivariate regression to predict personal bankruptcies, with one of their predictors being health insurance coverage. While the study uses individual level bankruptcy data, its measure of insurance is at the state level. This leads to two potential biases. First, state-level insurance coverage is a noisy measure of each individual's insurance status. This might reduce the measured impact of insurance. Second, inter-state variation in insurance coverage may be correlated with unmeasured variation in the social safety net. This would increase the measured impact of insurance. Overall, it is difficult to draw firm conclusions from GS's analysis.

There is one methodological problem that occurs in all the papers cited above, including HWTW. They fail to address the problem of reverse causality; that is, whether medical spending causes bankruptcy or whether financial turmoil causes medical problems (e.g., due to stress). The resulting endogeneity bias will therefore overstate the extent to which medical bills cause bankruptcy.

Policy Implications

The HWTW article is intended to go beyond the generalization that personal bankruptcy represents a human tragedy and address specific questions: to what extent do high medical bills precipitate bankruptcy filings in the middle class, and to what extent is a Canadian health-care system a likely solution? It is precisely in regard to these policy issues that the article too often leaves fact behind and creates unrealistic myth.

HWTW conclude that half of all personal bankruptcies are linked to health problems and that solidly middle-class Americans face "impoverishment." Our analysis of their data shows that medical expenditures were a cause of personal bankruptcy -- not necessarily the most important -- in 17 percent of filings. The average filer was closer to poverty than to solid middle-class status.

HWTW suggest the "low rate of medical bankruptcy in Canada" is to the credit of its health care system. The only source given for the rate is a *Texas Law Review* article attributing between 7.1 and 14.3 percent of Canadian

bankruptcies to "health/misfortune." More broadly, HWTW's support for a Canadian model assumes a robust link between medical costs and bankruptcy that numerous econometric studies show is unjustified. Indeed, research specifically analyzing soaring bankruptcy rates in both countries attributed the increased filings primarily to easier access to credit through "financial liberalization."²¹

The role of easy credit was explicitly acknowledged by one HWTW author (Warren) in a 2000 interview: "Today families are carrying so much more consumer debt that even a modest medical bill can put them over the edge financially."²²

Given that reality, the press-release prescription from Physicians for a National Health Plan, a group co-founded by Himmelstein and Woolhandler, is difficult to justify. It says HWTW shows "only national health insurance can solve the problem."

In *Health Affairs*, HWTW acknowledge that NHI's impact would require it being "much more comprehensive than many current policies." They do not delve into detail, but a 2004 study of women's expenses after being diagnosed with breast cancer illustrates just how comprehensive NHI would have to be.

The study found that mean monthly direct medical costs of insured women undergoing cancer therapy were \$597, or 41 percent of the \$1,455 monthly total costs of the disease.²³ This includes \$134 for miscellaneous expenses (such as speech therapy) and "supplies" (such as lotions and laxatives). Direct non-medical costs were \$131 (for child care and the like), while indirect costs were \$727, including time lost from work by the patient and family members. In other words, miscellaneous medical and non-medical costs accounted for two-thirds of the monthly financial burden of this one cancer. NHI would have to be far more comprehensive than any current single-payer system to substantially limit that economic impact.

HWTW omit any reference to personal choices, such as taking on debt, even in their household interviews. In this they act more like good doctors than good economists or policymakers. For while it is good medical practice to work as hard to save the life of a careless drunk driver as a sober careful one, it is equally good economics and public policy to penalize the careless driver with higher insurance rates and possible criminal prosecution.

Finally, any form of NHI must be paid for. As economist Victor Fuchs points out, that process creates winners and losers whose identity may not be obvious. He writes:

The ultimate cost falls on families and individuals, even when the payment mechanism makes it appear the bill is being sent elsewhere...[N]o magic wand of finance can divert labor, capital and other resources to medical care without resulting in a reduction in resources available for food, housing, education, recreation, or other goods and services...The average family will have to pay the same share under any system²⁴.

Put differently, weaving a medical cost safety net that could protect virtually every individual from bad behavior or bad luck may actually poke holes in the safety net of other vulnerable citizens. Good intentions are not enough. The Book of Job, far older than the Roman laws cited by HWTW, teaches the hard lesson that *no* amount of good fortune is irreversible. Some combination of illness, job loss and personal problems can assuredly dislodge even the most firmly rooted member of the middle class.

Unfortunately, expansive proposals to protect all of us distract from the pressing need to protect some of us; i.e., 45 million Americans with no health insurance and millions of others who are underinsured and vulnerable. "First, do no harm" is not just good advice for physicians; it should apply to those who would make health policy, as well.

We are grateful to America's Health Insurance Plans for supporting this research.

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<http://content.healthaffairs.org/cgi/content/full/hlthaff.w5.63/DC1> (25 August 2005).

² See 2 February 2005 California Healthline summary of news coverage and the Commonwealth Fund Issue Brief of August 2005 summary of research.
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requested an analysis of the relationship between medical debt and bankruptcy from the Justice Department's Executive Office for United States Trustees.

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⁸ Employment Policy Foundation Fact Sheet, 2004.

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¹⁶ Fay, Hurst and White, 2002.

¹⁷ M.M. Doty, J.N. Edwards, and A.L. Holmgren, "Seeing Red: Americans Driven into Debt by Medical Bills," *Commonwealth Fund Issue Brief*, August, 2005.

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