

Medical Bankruptcy Literature Review

Himmelstein et al., 2005 (Health Affairs)

- Widely-cited (controversial) study surveying 1,711 personal bankruptcy filers from five federal courts in 2001, with subsequent in-depth interviews of 931 individuals
- Findings:
 - **46.2%** met criteria for a “major medical bankruptcy” – extrapolate to **1.9-2.2 million** medical bankruptcy cases per year
 - Defined as debtors who: (1) cite illness/injury as specific bankruptcy reason, (2) report uncovered medical bills exceeding \$1,000, (3) lost 2+ weeks of income from illness/injury, and/or (4) mortgaged home to pay medical bills
 - **54.5%** met authors’ criteria for a “medical bankruptcy”
 - Defined as an of the above, plus addiction, uncontrolled gambling, birth, or death of a family member
 - For those with illnesses leading to bankruptcy, out-of pocket costs averaged **\$11,854** since start of illness
 - **75.7%** had insurance at the start
 - Conclude that roughly half of bankruptcies have medical causes, including significant impact to the middle class. Suggest that Canadian-style social insurance reforms could help ameliorate problems

Dranove and Millenson, 2006 (Health Affairs)

- Article directly challenging Himmelstein’s findings, asserting that Himmelstein’s study fails to establish causality, and that medical debt is a small proportion of overall burden for bankruptcy filers
- Authors point out that Himmelstein’s study only found **28.3%** of respondents who specifically cite illness or injury as the reason for bankruptcy, the remainder come from the authors’ other definitions of medical bankruptcy
- Authors also point out that 60% of this group actually reported that their medical bills contributed to their bankruptcy
 - Using these numbers, Dranove and Millenson re-estimate what they consider to be the proportion of “medical expenditure bankruptcy” as **17%**
 - Argue that other definitions are invalid because they doesn’t establish causal relationship between medical bills and bankruptcy
 - Additionally warn of “reverse-causality” conclusions from studies like this (financial stress exacerbating medical problems)
- Authors cite DOJ report that was also critical of Himmelstein’s definition of medical bankruptcy, finding that medical debt accounted for **13%** of total unsecured debt

Himmelstein et al., 2006

- The intrigue continues – Himmelstein et al. publish fiery viewpoint accusing Dranove and Millenson (D&M) of “ignoring most of their data and misrepresenting the rest”, and of “manipulating the data far beyond legitimate reinterpretation”
- Authors argue that D&M’s reinterpretation of their results ignores complexity of medical bankruptcy

- For example, some respondents filed for bankruptcy citing “save our home” as the reason, though the reason is mortgage they took to pay off medical bills. Under D&M re-interpretation, this wouldn’t count.
- Assert that by ignoring any case that doesn’t explicitly cite “illness/injury” as the cause of bankruptcy, D&M underestimate the prevalence
 - D&M recalculation also doesn’t consider medication costs

Dranove and Millenson respond once more to defend their approach

- Argue that Himmelstein’s response does not discredit D&M’s revised methodology, and that their paper still doesn’t establish the relative importance of medical causes compared to other debt

Seifert and Rukavina offer a “neutral” viewpoint in the same issue of *Health Affairs*, casting bankruptcy as an “extreme example” of the larger issue of endemic medical debt

Himmelstein et al., 2009 (The American Journal of Medicine)

- Citing changes in costs, # of uninsured, and tightened bankruptcy laws since their previous study, Himmelstein and colleagues essentially repeated their earlier Health Affairs study, this time with a national sample
 - Survey 2314 bankruptcy filers in 2007, followed by 1,032 interviews
 - Same definition of medical bankruptcy as 2001 (“major medical bankruptcy”) used for time trend analysis
 - Other analyses altered definition to included debtors forced to quit work due to illness/injury, and replaced \$1,000 medical debt qualifier with a “\$5,000 or 10% of household income” threshold
 - Adopting these conservative
- Findings:
 - Medical bills and illness contribute to a “large and increasing share of US bankruptcies”
 - **62.1%** of bankruptcies met the “new” definition, **69.1%** met the old definition
 - **92%** of these debtors had medical debt exceeding **\$5,000** or **10%** of pre-tax income
 - **3/4** had health insurance
 - Using identical definitions as previous study, share of bankruptcies from medical problems rose **49.6%** from 2001-2007
 - Controlling for demographic factors, odds of medical cause for a bankruptcy increased **2.38X**

Himmelstein, Thorne, and Woolhandler, 2011 (The American Journal of Medicine)

- Study to determine whether medical bankruptcy rates in Massachusetts diminished following state implementation of health reform
- Survey of 199 MA bankruptcy filers in 2009, compared with MA respondents from their 2007 national survey
- Medical bankruptcy definition, one or more of: Debtor reports uncovered medical bills of \$5,000 or >10% of income; debtor lists medical illness/bills as reason for bankruptcy;

family member lost 2+ weeks of income due to illness; mortgaged home to pay medical bills

- Findings:
 - Illness and injury contributed to **52.9%** of MA bankruptcies, versus **58.3%** in 2007
 - Total number of medical bankruptcies in MA increased by **>33%** over this time
 - **89%** of debtors and dependents had health insurance at time of filing
 - **25%** had experienced recent coverage gap
 - Concluded that MA health reform did not decrease number of medical bankruptcies

A [2013 JGIM editorial](#) from Wooldhandler and Himmelstein makes the case that these findings don't bode well for the ACA's ability to curb bankruptcy rates, given that the actuarial value of a Massachusetts "bronze" plan is 70% compared to ACA's 60%, and Medicaid in MA is relatively comprehensive

- Cites [Magge et al., 2013 \(JGIM\)](#) finding that **34.5%** of low-income adults are "underinsured" (OOP expenditures exceed 5% income, delay/failure to receive care/medications due to cost"
- Megan McArdle [article](#) faults study for lack of accounting for confounding factors, broad definition of medical bankruptcy, low sample size for longitudinal comparison
- Authors reconcile their finding of a higher bankruptcy rate than other studies by citing [Jacoby & Holman, 2010](#) study, which found that using court filings alone can lead to underestimates since medical debts don't always show up in court records
 - Medical debts, for example, can be obscured as credit card debt or mortgages, and thus don't directly show up in court records

[Ramsey et al., 2013 \(Health Affairs\)](#)

- Retrospective cohort analysis examining incidence, relative risk, and time course of bankruptcy for individuals diagnosed with cancer using records from a Washington State bankruptcy court for 1995-2009
- Findings:
 - Cancer patients 21+ were **2.65X** more likely to experience bankruptcy than individuals without cancer
 - Absolute risk, however, was not particularly high – **0.52%** of cancer patients vs **0.16%** filed for bankruptcy within one year of diagnosis; **1.7%** vs. **0.7%** after five years
 - Younger cancer patients had bankruptcy rates **2-5X** greater than patients aged 65+
 - Authors hypothesize that Medicare and Social Security may mitigate bankruptcy risk

[Hollingworth et al., 2007 \(Medical Care\)](#)

- Retrospective cohort analysis of bankruptcy incidence following brain/spinal cord trauma among consecutive sample of 6,345 Western Washington State patients from 1991-2004
- Findings:
 - 5 year incidence of bankruptcy post-injury was **3.5%**

- Bankruptcy more frequent for commercially-insured patients than Medicaid patients (Hazard Ratio **1.99**)
- Not consistently related to injury severity, though those with milder injuries were more likely to experience bankruptcy than severe injuries. Also higher for younger patients and individuals who had positive toxicology upon admittance

Relyea-Chew et al., 2009 (Archives of Physical Medicine and Rehabilitation) also studied medical debt/bankruptcy after brain and spinal injury

- **26%** of patients had medical debt exceeding 20% of unsecured debt at time of bankruptcy filing (authors propose this as an alternative to Himmelstein's use of \$1,000 for defining "medical bankruptcy")

Brotman, 2006 (Journal of Health Care Finance)

- Follow-up to original Himmelstein study, seeks to identify whether personal bankruptcy filing rates in the United States are linked to medical costs and levels of health insurance using regression models
- Findings:
 - Authors conclude that their models "seem to add statistical support to the conclusions reached in the Himmelstein study"
 - Null hypothesis with regard to cost and bankruptcy filing is rejected
 - Cost of medical care is a more important than insurance status in predicting bankruptcy; therefore suggests that broader coverage is needed to prevent medical bankruptcy, not simply "yes or no" coverage

Zhu, 2011 (The Journal of Legal Studies)

- A follow-up to the Himmelstein/Dranove debate using a sample of randomly selected Delaware households filing for bankruptcy
- Seeks to "assess the relative merits of the two competing arguments", and finds "some support for both positions"
- Findings:
 - Adverse events like injury/illness can trigger personal bankruptcy, but overall consumption patterns contribute more
 - Comparing bankrupt and control groups, finds that a much greater proportion of bankrupt households report being "affected by disability of personal injury" than control group (**6.02% vs. 1.37%**)
 - Households with medical conditions twice as likely to file for bankruptcy
 - Consistent with findings that medical events can lead to bankruptcy; however, much lower proportion found to be in "grave medical situations"
 - Does not find evidence of a significant effect from labor market adverse events
 - "consumption patterns make household financially overstretched and more susceptible to adverse events"

Baicker et al., 2013 (New England Journal of Medicine)

- Well-publicized results from Oregon Health Study
- (Relevant) Findings:
 - "Medicaid coverage almost completely eliminated catastrophic out-of-pocket expenditures"

- **80%** relative reduction in catastrophic expenditures (out-of-pocket expenditures exceeding 30% household income)
- Reduction in overall medical debt, overall OOP spending

Other Studies

[Mathur, 2006 \(American Enterprise Institute Working Paper\)](#)

- Examination of percentage of medical bankruptcy, partially in response to Himmelstein 2005 study and their belief that Himmelstein's definition of "medical bankruptcy" was too broad
 - Used household level data from Panel Study of Income Dynamics (PSID)
- Findings/argument:
 - Medical costs are indeed rising and important in explaining bankruptcy filings, but economic impact is less than Himmelstein estimates
 - Estimate **27%** of filings involve cases where medical bills were the primary form of debt, and a maximum of **36%** of cases involving any kind of medical debt
 - Assert that other papers suffer from not isolating impact of medical bills from other debtor problems, such as job loss, low earnings, and credit card debt
 - Similar argument to Dranove and Millenson

[CDC Study – “Problems Paying Medical Bills: Early Release of Estimates from the National Health Interview Survey, January 2011-June 2012”](#)

- Findings:
 - Percentage of adults 18-64 in families having difficulty paying medical bills decreased from **21.7%** to **20.3%**

[Cunningham, 2008 \(Center for Studying Health System Change – Tracking Report No. 21\)](#)

- Data from HSC's 2007 Health Tracking Household Survey
- Findings:
 - **19.4%** of families had problems paying medical bills (up from **(15.1%** in 2003) – translates to **57 million** people
 - **1/5** of those with medical bill problems considered filing for bankruptcy; **2.2 million** did (a little under **1%**)

Past TIE Posts

- [“News Flash! Medical bankruptcies haven't gone away” \(March 9, 2011\)](#)
 - Aaron responding to Megan McArdle skepticism over ACA's bankruptcy limitations