

# Medical Bankruptcy in Massachusetts: Has Health Reform Made a Difference?

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## ABSTRACT

**BACKGROUND:** Massachusetts' recent health reform has decreased the number of uninsured, but no study has examined medical bankruptcy rates before and after the reform was implemented.

**METHODS:** In 2009, we surveyed 199 Massachusetts bankruptcy filers regarding medical antecedents of their financial collapse using the same questions as in a 2007 survey of 2314 debtors nationwide, including 44 in Massachusetts. We designated bankruptcies as "medical" based on debtors' stated reasons for filing, income loss due to illness, and the magnitude of their medical debts.

**RESULTS:** In 2009, illness and medical bills contributed to 52.9% of Massachusetts bankruptcies, versus 59.3% of the bankruptcies in the state in 2007 ( $P = .44$ ) and 62.1% nationally in 2007 ( $P < .02$ ). Between 2007 and 2009, total bankruptcy filings in Massachusetts increased 51%, an increase that was somewhat less than the national norm. (The Massachusetts increase was lower than in 54 of the 93 other bankruptcy districts.) Overall, the total number of medical bankruptcies in Massachusetts increased by more than one third during that period. In 2009, 89% of debtors and all their dependents had health insurance at the time of filing, whereas one quarter of bankrupt families had experienced a recent lapse in coverage.

**CONCLUSION:** Massachusetts' health reform has not decreased the number of medical bankruptcies, although the medical bankruptcy rate in the state was lower than the national rate both before and after the reform.

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**KEYWORDS:** Health care financing; Health care reform; Health economics; Medical bankruptcy

Massachusetts' landmark health care reform passed in 2006 and was fully implemented by January 2008. According to Census Bureau figures, the share of state residents who were uninsured decreased by approximately half between 2006 and 2008, from 10.4% to 5.5%, the lowest rate of any state.<sup>1</sup>

Recently, Governor Deval Patrick wrote, "Because of our reform . . . families are less likely to be forced into bankruptcy by medical costs."<sup>2</sup> However, no published data on medical bankruptcy rates in Massachusetts are available. Moreover, past studies have found substantial rates of medical bankruptcy among insured families, often because of

gaps in coverage.<sup>3,4</sup> Thus, shrinking the number of uninsured is not necessarily tantamount to protection from medical bankruptcy.

To examine the impact of health reform on medical bankruptcy, we surveyed a random sample of Massachusetts bankruptcy filers in July 2009. In addition, we compared the 2009 Massachusetts findings with those from an early 2007 national sample and with the subsample of Massachusetts debtors included in the 2007 national sample.

## MATERIALS AND METHODS

We relied on 2 data sources: questionnaires mailed to debtors immediately after their bankruptcy filing and publicly available court records. We also reanalyzed the questionnaire and court record data from our national study carried out in early 2007 ( $n = 2314$ ), with special attention to the Massachusetts respondents ( $n = 44$ ) in that earlier survey.

**Funding:** None.

**Conflict of Interest:** None of the authors have any conflicts of interest associated with the work presented in this manuscript.

**Authorship:** All authors had access to the data and played a role in writing this manuscript.

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## Sample Design

In early August 2009, Automated Access to Court Electronic Records provided us with a list of all personal bankruptcy filers in Massachusetts during July 2009. We identified 494 debtors who filed between July 28 and 31 and mailed a self-administered questionnaire to each of them within 4 weeks of their filing. Eleven questionnaires were returned as undeliverable. Non-respondents received a second questionnaire approximately 5 weeks later. Of the 483 questionnaires mailed to those with valid addresses, 199 (41.2%) were completed and returned, 36 (7.5%) declined to participate, and 249 (51.6%) did not respond.

## Questionnaire

A cover letter accompanying each questionnaire described the project and human subjects protections; a token payment (a \$1 bill) was included. Respondents were also invited to respond via a secure Internet site. The questionnaire included a subset of questions from our 2007 national survey regarding demographics; health insurance; employment; the specific reasons for the bankruptcy filing; the range of out-of-pocket medical expense (none, <\$1000, \$1000-\$5000, or >\$5000); loss of work-related income; borrowing to pay medical bills; and home ownership.

## Court Records

We obtained the bankruptcy court records of respondents from the federal court's electronic filing system for each respondent whose questionnaire provided insufficient information to determine the magnitude of their medical debts relative to income. A trained research assistant abstracted each record to determine the debtor's income and the total amount of identifiably medical debts. The court records often substantially understate the amount of medical debt because they indicate the creditor to whom money is currently owed, but not why the debt was incurred.<sup>5</sup> Thus, a debt still owed to a hospital or other medical provider at the time of filing could be identified as medical, but a medical debt that had been turned over to a collection agency, charged to a credit card, or incorporated into mortgage debt could not be identified as "medical" from the court records.

## Data Analysis

As in the 2007 national study, a bankruptcy was categorized as medical if one or more of the following condi-

tions were met: the debtor reported uncovered medical bills of at least \$5000 or more than 10% of income, or listed medical illness or medical bills as a reason for the bankruptcy; the debtor or spouse lost 2 or more weeks of work-related income because of illness or was completely disabled by a medical problem; the debtor or spouse lost 2 or more weeks of work-related income to care for a sick family member; or the debtor mortgaged a home to pay medical bills.

To arrive at representative estimates, we weighted the 2009 data to adjust for the slight overrepresentation of respondents who filed under Chapter 13 (bankruptcies with repayment plans) and underrepresentation of Chapter 7 filers (liquidation bankruptcies) compared with all Massachusetts bankruptcy filers in fiscal 2009. To calculate the number of individuals affected by each cause of bankruptcy in each year, we multiplied the proportion of debtors citing that cause by the number of Chapter 7 and Chapter 13 personal bankruptcy filings in that fiscal year and then multiplied

by the average household size for the group (ie, all debtors, medical debtors, or non-medical debtors).

Chi-square and 2-tailed t tests were used for statistical comparisons. Human subject committees at Harvard Law School and the Cambridge Health Alliance approved the project protocols.

## RESULTS

In 2009, illness or medical bills contributed to 52.9% of bankruptcies in Massachusetts. In contrast, in early 2007, medical bankruptcies accounted for 59.3% of personal bankruptcies in the state ( $P = .44$  for comparison with 2009 proportion) and 62.1% nationally ( $P < .02$ ). Because the total number of personal bankruptcy filings in Massachusetts increased by 51% between fiscal years 2007 and 2009,<sup>6</sup> the absolute number of medical bankruptcies in the state actually increased by more than one third during that period, from 7504 to 10,093.

Most of the recent Massachusetts debtors were female (Table 1). Their average age was 48.2 years, two thirds of them had attended college, and 70.5% owned a home or had owned one within the past 5 years. The average debtor household included 2.94 persons; in three quarters of them, at least 1 adult was employed at the time of bankruptcy filing. The medically bankrupt were similar to other Massachusetts debtors in most respects, although fewer of the

### CLINICAL SIGNIFICANCE

- Massachusetts' health reform, enacted in 2006, served as the model for the 2010 nationwide reform that will not be fully implemented until 2014.
- Although the Massachusetts reform has covered many of the uninsured, underinsurance remains widespread, and illness and medical bills still contribute to 52.9% of all bankruptcies in the state. The number of medical bankruptcies has not decreased.
- The recently enacted national health reform is unlikely to adequately address the widespread problem of medical bankruptcy.

**Table 1** Demographic Characteristics of Debtors in 199 Massachusetts Bankruptcy Filings and Comparison of Medical and Non-Medical Filers, 2009

|   | All Bankruptcies | Medical Bankruptcies | Non-Medical Bankruptcies | P Value, Medical vs Non-Medical Bankruptcies |
|---|------------------|----------------------|--------------------------|--|
| Mean age                                    | 48.2 y           | 48.4 y               | 48.0 y                   | NS   |
| Debtor or spouse/partner female             | 54.1%            | 54.9%                | 53.2%                    | NS   |
| Married                                     | 47.3%            | 47.9%                | 46.6%                    | NS   |
| Mean family size – debtors + dependents     | 2.94             | 3.07                 | 2.79                     | NS   |
| Attended college                            | 68.1%            | 63.1%                | 73.7%                    | NS   |
| Homeowner or lost home within past 5 y      | 70.5%            | 68.7%                | 72.5%                    | NS   |
| Debtor or spouse/partner currently employed | 74.9%            | 65.3%                | 85.9%                    | <.001  |

NS = not significant.

\*Bankruptcies meeting at least one of the following criteria: illness, injury, or medical bills listed as specific reason for filing, OR uncovered medical bills > \$5000 or > 10% of annual family income, OR lost ≤ \$ 2 wk of work-related income due to illness/injury, OR depleted home equity to pay medical bills.

medically bankrupt were employed ( $P < .001$ ), likely reflecting their higher rates of disability.

**Table 2** displays the specific contributors to medical bankruptcy in Massachusetts in 2007 and 2009. In both years, unaffordable medical bills and income shortfalls due to illness were common. In 2009, 45.6% of the entire sample (86.2% of the medically bankrupt) had high medical bills or specifically cited illness as a cause of their bankruptcy, proportions that did not vary by insurance status. The remaining 13.8% of the medically bankrupt (7.3% of the entire sample) were classified as medically bankrupt because they had lost significant work-related income because of illness or had mortgaged a home to pay medical bills. Overall, the 19,079 personal bankruptcies in Massachusetts in 2009 involved an estimated 58,573 debtors and dependents (~1% of the Massachusetts population), including 30,985 in households affected by medical bankruptcy.

As would be expected in a state where medical insurance is mandatory, the overwhelming majority (89.0%) of debtors had health insurance for themselves and all of their dependents at the time of bankruptcy filing (**Table 3**). However, one quarter of households had experienced a gap in coverage during the 2 years before filing (which would include a period before the state enforced the health insurance mandate). The insurance coverage rates of medical debtors were no different than those of other bankrupt debtors. The 2009 coverage rates in Massachusetts were higher than those for Massachusetts debtors in 2007 (before the coverage mandate was enforced), when 84.1% had insurance at the time of filing and approximately one third (34.1%) had experienced a coverage gap. In both 2007 and 2009, Massachusetts debtors' had higher coverage rates than in our 2007 national sample, in which only 69.7% of bankrupt families were insured at the time of filing and 37.4% had experienced a gap.

**Table 2** Medical Causes of Bankruptcy in Massachusetts, 2007 and 2009

|   | Percent of All Bankruptcies, 2007 (N = 44) | No. of Debtors and Dependents in Affected Families, 2007* | Percent of All Bankruptcies, 2009 (N = 199) | No. of Debtors and Dependents in Affected Families, 2009* |
|---|--|---|---|---|
| Debtor cited medical illness/bills as a specific cause of bankruptcy or had large unpaid medical bills† | 38.6%                                      | 12,700  | 45.6%§                                      | 26,709  |
| Debtor or spouse lost ≤ \$ 2 wk of income because of illness or complete disability                     | 34.1%                                      | 11,219  | 32.1%§                                      | 18,802  |
| Debtor or spouse lost ≤ \$ 2 wk of income to care for ill family member                                 | 6.8%                                       | 2237  | 8.2%§                                       | 4803  |
| Mortgaged home to pay medical bills‡  | 8.1%                                       | 2665  | 5.3%§                                       | 3104  |
| Any of above  | 59.3%                                      | 19,510  | 52.9%§                                      | 30,985  |
| Any personal bankruptcy   | 100%                                       | 32,268  | 100%  | 58,573  |

\*Extrapolation based on number of personal bankruptcy filings during that fiscal year (from reference 6) and household size of medical/non-medical debtors.

†Unpaid medical bills > \$5000 or > 10% of family income.

‡Percentage based on homeowners rather than all debtors.

§Difference between percentages in 2007 and 2009 nonsignificant,  $P > .40$  for all comparisons.

**Table 3** Health Insurance Status of Debtor Households With and Without Medical Causes of Bankruptcy, Massachusetts, 2009

|   | Medical Bankruptcy | Non-Medical Bankruptcy | P Value |
|---|--------------------|------------------------|---------|
| Debtor or a dependent uninsured at time of bankruptcy filing  | 11.1%              | 10.9%                  | NS      |
| Debtor or a dependent had a lapse in coverage during past 2 y | 26.5%              | 25.1%                  | NS      |

NS = not significant.

## DISCUSSION

Despite a marked decline in the uninsurance rate in Massachusetts since the implementation of health reform, the proportion of bankruptcies that occurred in the wake of medical problems has not decreased significantly, and the absolute number of medical bankruptcies has actually increased by one third. The deep recession beginning in 2008 surely played an important role in increasing the bankruptcy rate and left many families more vulnerable to financial shocks from illness. However, our findings are incompatible with claims that health reform has cut medical bankruptcy filings significantly.

On the other hand, Massachusetts residents had slightly lower rates of medical bankruptcy (as a share of overall bankruptcy filings) than the US average even before the state's health reform, and Massachusetts has long enjoyed overall bankruptcy filing rates that are well below the national average. Moreover, although the number of filings in Massachusetts has increased sharply during the current recession—a 51% increase between 2007 and 2009—this increase is smaller than that experienced by 54 of the 93 other federal bankruptcy jurisdictions. Thus, the state's per capita medical bankruptcy rate remains lower than the nationwide rate.

The low overall bankruptcy rate may reflect the state's relative prosperity (it ranks third among all states for personal income<sup>7</sup>); its relatively old population<sup>8</sup> (the elderly have minimum guaranteed incomes through social security, Medicare coverage, and low bankruptcy rates); a comparatively robust social safety net; restrictions on payday lending and wage garnishments; and perhaps cultural proclivities—virtually all New England states have low bankruptcy filing rates. Although Massachusetts' slower than average increase in filings since 2007 raises the possibility that health reform may have attenuated the recession's impact, this effect was at best modest, and the milder than average housing crisis in the state seems a likelier explanation.

The period covered by our study (2007-2009) provides an appropriate window for examining the short-term impact of Massachusetts' health financing reform on medical bankruptcy. Bankruptcy filings generally follow, by at least several months, the precipitants of financial disaster. Thus, our

2007 sample (which was drawn in February and March of that year when the reform had made little impact on coverage rates in the state) reflects financial problems incurred before the implementation of reform. Conversely, few filings in the summer of 2009 would result from medical problems in the pre-reform period.

What accounts for the seemingly paradoxical trends of increasing coverage yet stable, or even increasing (on a per capita basis), medical bankruptcy rates? Health costs in the state have increased sharply since reform was enacted.<sup>9</sup> Even before the changes in health care laws, most medical bankruptcies in Massachusetts, as in other states, affected middle-class families with health insurance. High premium costs and gaps in coverage—copayments, deductibles, and uncovered services—often left insured families liable for substantial out-of-pocket costs. None of that changed. For example, under Massachusetts' reform, the least expensive individual coverage available to a 56-year-old Bostonian carries a premium of \$5256 and a deductible of \$2000, and covers only 80% of the next \$15,000 in costs for covered services.<sup>10</sup> Thus, an insured couple with medical problems and an income greater than \$44,000 (ie, >300% of poverty, the eligibility threshold for insurance subsidies) might pay \$20,512 in annual medical expenses, a figure that far exceeds the financial capacities of the average American family.<sup>11</sup> Uncovered services, such as physical therapy, drugs, or home care, might push out-of-pocket costs even higher.

Although high medical bills per se often lead to financial disaster, lost income due to illness or caregiving responsibilities also plays an important role. Many families experience multiple simultaneous blows; some lose their jobs when they get sick, and others get sick after they have lost jobs. Either way, medical bills arrive just as the paycheck stops. In recent years, these problems have been compounded by increasing unemployment and decreasing home values that have made borrowing more difficult.

Several caveats apply to our findings. As in previous bankruptcy studies, many debtors failed to respond to our survey, although we see little reason to think that medical debtors were especially likely (or unlikely) to respond. One possible exception is that people who have very serious medical problems may be less likely to respond either because they are too unwell or because they are deceased by the time of the survey. Many bankruptcies involve a complex web of causation, with multiple interacting causes. Teasing out the precise role of illness and medical bills is necessarily imprecise. Because we used the same survey questions and definitions in 2007 and 2009, however, time trends should be reliable. Finally, in 2007 we supplemented our written survey with phone interviews with many debtors; approximately 1% of debtors identified large medical debts during these phone interviews that were omitted from their survey responses. Thus, our survey-only data collection in 2009 may slightly understate the medical bankruptcy rate compared with our 2007 methods.

Our results seem in keeping with those from other sources. A 2008 *Boston Globe* survey<sup>12</sup> found that 14% of



Massachusetts residents had accrued new medical debts in the past year. A series of surveys by the Urban Institute found modest improvement in financial access to care during the first year of health insurance reform, but not during its second year when 19.8% of state residents reported paying off medical bills over time.<sup>13</sup> An agency that counsels Massachusetts medical debtors documented ongoing problems in paying medical bills for both the insured and the uninsured in the state.<sup>14</sup> In contrast, national estimates of medical bankruptcy rates based exclusively on review of court records have found lower rates of medical bankruptcy.<sup>15</sup> Unfortunately, as Jacoby and Holman<sup>5</sup> demonstrated, such studies are unreliable because medical debts are often charged to credit cards, financed through second mortgages, or turned over to collection agencies, and these medical debts cannot be identified in court records. Although only 52% of bankruptcy filers' court records show any evidence of medical debts, 78% report such debts when specifically surveyed.<sup>5</sup> Similar problems beset studies that use general population surveys,<sup>16</sup> in which respondents seem to markedly underreport bankruptcies,<sup>17,18</sup> perhaps reflecting the stigma attached to bankruptcy.

## CONCLUSIONS

The recently enacted national health reform law closely mirrors Massachusetts' reform. That reform expanded the number of people with insurance but did little to upgrade existing coverage or reduce costs, leaving many of the insured with inadequate financial protection. Our data do not suggest that health care reform cannot sharply reduce the number of medical bankruptcies. Indeed, medical bankruptcy rates appear lower in Canada,<sup>19</sup> where national health insurance provides universal, first dollar coverage. Instead, these data suggest that reducing medical bankruptcy rates in the United States will require substantially improved—not just expanded—insurance, as well as better disability insurance programs to provide income support to ill individuals and family caregivers.

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