Trends in Hospital Lawsuits Filed Against Patients for Unpaid Bills Following Published Research About This Activity

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Abstract

IMPORTANCE Suing patients and garnishing their wages for unpaid medical bills can be a predatory form of financial activity that may be inconsistent with the mission of a hospital. Many hospitals in the state of Virginia were discovered to be suing patients for unpaid medical bills, as first presented in a 2019 research article that launched 2.5 months of media attention on hospital billing practices and a grassroots public demand for hospitals to stop the practice.

OBJECTIVE To evaluate the association of a research publication and subsequent media coverage with the number of hospital lawsuits filed against patients for unpaid medical bills.

DESIGN, SETTING, AND PARTICIPANTS This cross-sectional study of Virginia hospitals that sued patients for unpaid medical bills used an interrupted time series analysis. Data on hospitals suing patients for unpaid medical bills were collected during a preintervention period (June 25, 2018, to June 24, 2019), an intervention period (June 25, 2019, to September 10, 2019), and a postintervention period (September 11, 2019, to September 10, 2020).

EXPOSURES Publication of a research article and subsequent media coverage.

MAIN OUTCOMES AND MEASURES The total number of warrant in debt and wage garnishment lawsuits filed by Virginia hospitals and the frequency of those lawsuits filed before, during, and after the intervention period on a weekly basis.

RESULTS A total of 50387 lawsuits, filed by 67 Virginia hospitals, were included; 33204 (65.9%) were warrant in debt lawsuits, and 17183 (34.1%) were wage garnishment lawsuits. From the preintervention period to the postintervention period, there was a 59% decrease in the number of lawsuits filed (from 30760 lawsuits to 12510 lawsuits), a 55% decrease in the number of warrant in debt cases filed (from 19329 to 8651), a 66% decrease in the number of wage garnishments filed (from 11431 to 3859), and a 64% decrease in the dollar amount pursued in court (from $38,700,209 to $13,960,300). During the study period, 11 hospitals banned the practice of suing patients for unpaid medical bills. The interrupted time series analysis showed a significant decrease of 5% (incidence rate ratio, 0.95; 95% CI, 0.94-0.96) in the total weekly number of lawsuits in the postintervention period.

CONCLUSIONS AND RELEVANCE The findings of this study suggest that research leading to public awareness can shift hospital billing practices.

Key Points

Question Was the research on and subsequent public awareness of hospitals suing patients for unpaid medical bills in the state of Virginia associated with changes in hospital policies?

Findings In this cross-sectional analysis of 50,387 lawsuits filed by 67 Virginia hospitals, Virginia hospitals filed 59% fewer lawsuits in the year after a research article and subsequent media coverage exposed the practice compared with the year before publication. Overall, 11 hospitals banned the practice altogether.

Meaning These findings suggest that research and public health initiatives rooted in media exposure can increase public accountability for hospital billing practices and result in meaningful changes that benefit patients.

Author affiliations and article information are listed at the end of this article.

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Introduction

A modern billing practice in health care has been to sue patients for unpaid medical bills. As insurance deductibles increase, patients have become responsible for a larger portion of their bills. Furthermore, inflated chargemaster prices have made a fair price more elusive for many patients. At the same time, an increasing amount of care is being deemed out-of-network, resulting in a surge in surprise medical bills. Patients with low income are particularly affected by these billing trends, which may lead to financial hardship, bankruptcy, avoidance of future medical care, and potentially worse health outcomes. A 2018 survey found that 64% of US residents say they have avoided or delayed medical care in the last year due to anticipated costs.

Compounding the lack of transparency in medical billing, the high cost of health care is a strain for many patients. A 2020 report from Consumer Reports indicated that approximately 30% of insured US residents have had an unpaid medical debt in collections. In the year prior, 137 million US residents reported facing medical financial hardship. Additionally, a 2019 study found that 66.5% of bankruptcies were tied to medical care. To investigate how aggressive hospitals can be in pursuing medical debt, we previously reported in *JAMA* that 36% of Virginia hospitals collectively filed 20,054 warrant in debt lawsuits and 9,232 wage garnishment cases. We found that hospitals pursued patients for inflated medical charges in court and garnished paychecks from US residents with low income. Through popular news and media outlets, this research article helped to start a national conversation on aggressive hospital billing practices. To date, this study has been cited by 82 different news stories, highlighting medical debt lawsuits in Virginia and other states. Increased public awareness on this issue brought a demand for hospitals to stop suing patients with low income.

The current study evaluates the association of the 2019 article, subsequent media coverage, and advocacy efforts with the weekly number of medical debt lawsuits filed by 67 Virginia hospitals. By showing how this research and activity affected medical debt lawsuit practices in Virginia, similar efforts to influence the way hospitals pursue patient debt in other states could be encouraged. Our hope is that by understanding the efficacy of research, media coverage, and patient advocacy, hospitals can be better held accountable to maintain equitable financial policies.

Methods

Court Record Analysis

We searched 2018, 2019, and 2020 court records in the Virginia state court system to identify cases in which a hospital sued a patient for payment of a medical bill. These data are publicly available and therefore do not constitute human participant research. Per the Common Rule, the study was exempt from institutional review board approval. This study followed Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) reporting guideline. We filtered all court records to include warrant in debt or garnishment cases in which the plaintiff was 1 of the 127 Virginia hospitals listed in the American Hospital Directory (AHD). The 2019 analysis reviewed 135 hospitals because 8 hospitals consolidated since the initial publication. The 67 hospitals selected for this study included those with a history of filing lawsuits against patients during the preintervention period. A warrant in debt lawsuit against a patient was defined as a hospital suing an individual for an unpaid debt. Garnishment was defined as a court order to obtain money owed to the hospital from the defendant’s paycheck.

Hospital Characteristics

Using data from the AHD, we extracted the following hospital characteristics: location, ownership type (nonprofit, for profit, or government owned), size (number of beds), annual net revenue, and mean cost-to-charge ratio. A hospital’s price markup was calculated by taking the inverse of the hospital’s reported cost-to-charge ratio. We linked the zip code of each hospital to geocode data.
provided by the SAS version 9 package sashelp.zipcode (SAS Institute) to obtain the corresponding state and county Federal Information Processing Standards code. Federal Information Processing Standard codes were further mapped to Core Based Statistical Area codes to determine whether a hospital was in an urban or rural setting, based on the Core Based Statistical Area to Federal Information Processing Standard county crosswalk available from the National Bureau of Economic Research.18

**Intervention**

The intervention period for this study was from June 25, 2019, to September 10, 2019, with a preintervention period and postintervention period 12 months before and after (ie, June 25, 2018 to June 24, 2019, and September 11, 2019 to September 10, 2020). The intervention period start date was the June 25, 2019, publication date of the *JAMA* study13 revealing the practice of Virginia hospitals suing patients. Prior to publication, the study authors (W.E.B. and M.A.M) met in person with representatives from National Public Radio (NPR), *The New York Times*, *The Wall Street Journal*, *The Washington Post*, and Kaiser Health News, inviting them to investigate Virginia hospitals that sued patients to create public accountability. The study authors (W.E.B. and M.A.M) requested media outlets embargo any story until after the *JAMA* publication in accordance with JAMA Network standards. In the 2.5 months following this study’s release, the aforementioned media outlets published a series of widely circulated news articles exposing hospital lawsuits against patients.19-22 Throughout the intervention period, clinicians, students, and lawyers made regular visits to courthouses within the state to advocate pro bono for patients who had been sued by hospitals for an unpaid medical bill.17 To further augment public awareness around this issue at the patient level, 1 medical student created a short film series highlighting individual stories of patients who had been sued by a hospital and had their wages garnished to pay for the debt (M.J.B.).23

**Outcomes**

The outcome of this analysis included the total number of warrant in debt and wage garnishment lawsuits filed by hospitals during the study period and the weekly number of lawsuits. These numbers were stratified into the preintervention period, the intervention period, and the postintervention period.

**Statistical Analysis**

To estimate the association of the intervention on the number of lawsuits filed, we treated the weekly number of lawsuits among all hospitals as a time series and the week that the intervention started and ended as possible interruptions in the time series. Thus, the total number of lawsuits can be divided into 3 periods: preintervention, intervention, and postintervention, with 2 interruptions separating these segments. We modeled the time series using a negative binomial regression to handle the overdispersion, which was caused by hospitals’ variation. We also did a model with standard robust error adjusted for 67 hospitals to evaluate the number of lawsuits for each hospital to compare the result. All statistical analyses were conducted using Stata version 14.0 (StataCorp) with a statistical significance level of *P* < .05. All tests were 2-tailed.

**Results**

We identified 50,387 lawsuits that were filed by 67 Virginia hospitals from June 25, 2018, to September 10, 2020. Of those lawsuits, 33,204 (65.9%) were warrant in debts and 17,183 (34.1%) were wage garnishments. In the preintervention period, there were 30,760 lawsuits, 19,329 warrant in debts, and 11,431 wage garnishments cases filed. In the postintervention period, there were 12,510 lawsuits, 8,651 warrant in debts, and 3,859 wage garnishments filed (Figure 1). Hospitals sued for a total of $38,700,209 during the preintervention period and $13,960,300 during the postintervention period. Comparing the preintervention period with the postintervention period,
there was a 59% decrease in the number of lawsuits filed, a 55% decrease in the number of warrant in debt cases filed, a 66% decrease in the number of wage garnishments filed, and a 64% decrease in the dollar amount pursued in court.

Eleven hospitals (16.4%) that filed lawsuits during the preintervention period stopped doing so during the intervention period. Of the 56 hospitals that continued to sue patients after the intervention period, 40 (71%) were nonprofit, 15 (27%) were for profit, and 1 (2%) was government owned. The mean amount sued for was $1 067 000 per hospital (range, $0-$11 281 000) and $1134 per patient (range, $0-$6047) during the study period. Of the 11 hospitals that stopped suing patients during the intervention period, 8 (73%) were nonprofit, 2 (18%) were for profit, and 1 (9%) was government owned. Hospitals that continued suing patients had a higher mean (range) price markup than hospitals that stopped (5.3 [1.9-13.0] vs 3.5 [1.3-6.4]). Hospitals that continued suing patients had a lower mean annual net revenue ($255.5 million per hospital) than hospitals that stopped suing patients ($285.5 million per hospital) (Table 1). Of the hospitals that did not sue patients in the preintervention period, none filed a wage garnishment or warrant in debt lawsuit in the postintervention period.

The top 5 hospitals that sued patients in the preintervention period filed 15 251 lawsuits, 9285 warrant in debts, and 5966 wage garnishments for a total of $18.7 million. These same 5 hospitals filed 7321 lawsuits, 5440 warrant in debts, and 1881 wage garnishments for $9.2 million during the postintervention period (Table 2).

The interrupted time series analysis identified an initial estimation of 513.66 (95% CI, 392.96-671.43) total lawsuits filed the week of June 25, 2018, with no significant change over time during the preintervention period (incidence rate ratio [IRR], 1.01; 95% CI, 1.00-1.01, P = .24) (Figure 2). The start of the intervention, ie, the week of June 25, 2019, was not significantly associated with a change in the weekly number of lawsuits during the intervention period (IRR, 0.97; 95% CI, 0.89-1.07; P = .56). After the intervention period, a significant decrease of 5% (IRR, 0.95; 95% CI, 0.95-0.96) was observed in the total weekly number of lawsuits in the postintervention period (Table 3). The model adjusted with a standard robust error suggested the same IRR with a narrower standard error on individual hospital’s level (Table 3).
Discussion

We found that the number of medical debt lawsuits filed decreased in after the JAMA publication, associated public awareness, and patient advocacy. When comparing the number of lawsuits filed in the preintervention period with the postintervention period, there was a 55% decrease in warrant in debt cases and a 66% decrease in wage garnishments.

The data from the research article in conjunction with the media coverage brought a problem to light that few people were aware existed, enabling people to advocate for affected individuals. The negative attention brought by the media, coupled with individual patient testimonies, may have resulted in the decreased number of lawsuits in the postintervention period. This was evident through 1 hospital pledging to suspend the practice of suing patients after various media outlets and advocacy groups revealed the effect that their lawsuits had on the surrounding community. Our data confirmed this pledge by showing that this hospital filed 4090 lawsuits in the preintervention period and only 1 lawsuit in the postintervention period. Similarly, a large health system in Virginia pledged to change its billing policies after receiving negative attention from the media for an excessive number of medical debt lawsuits. In this news release, the 2019 article that initiated the intervention period of this study is cited, further indicating the association of this research had with medical debt lawsuit trends in the state. As such, it is likely that the 2019 article, subsequent media coverage, and patient advocacy efforts influenced the decreasing trend in medical debt lawsuits.

Our findings indicate that hospitals can respond to public awareness that is data driven. The combination of research, media coverage, and patient advocacy resulted in a statewide decrease of

| Table 1. Characteristics of Hospitals That Continued to Sue and Stopped Suing Patients After the Intervention Period |
|-------------------------------------------------|-------------------------------------------------|
| Characteristic                                  | No. (%)                                         |
|                                                | Hospitals that continued to sue patients (n = 56) | Hospitals that stopped suing patients (n = 11) |
| Ownership type                                   |                                                |
| Nonprofit                                       | 40 (71)                                        | 8 (73)                                        |
| For profit                                       | 15 (27)                                        | 2 (18)                                        |
| Government owned                                 | 1 (2)                                          | 1 (9)                                          |
| Location                                         |                                                |
| Urban                                            | 34 (61)                                        | 8 (73)                                        |
| Rural                                            | 22 (39)                                        | 3 (27)                                        |
| Beds, No.                                        |                                                |
| Mean (SD) [range]                               | 211.9 (189.7) [11-793]                         | 208.5 (230.4) [14-859]                        |
| Median (IQR)                                     | 151.5 (83-298)                                 | 147 (70-237)                                  |
| Annual net revenue, millions of $                |                                                |
| Mean (SD) [range]                               | 255.5 (278.7) [7.8-1314.0]                     | 285.5 (487.5) [15.5-1721.6]                   |
| Median (IQR)                                     | 132.7 (49.1-346.7)                             | 110.7 (82.0-248.2)                            |
| Overall price markup                             |                                                |
| Mean (SD) [range]                               | 5.3 (2.5) [1.9-13.0]                           | 3.5 (1.3) [1.3-6.4]                           |
| Median (IQR)                                     | 4.7 (3.6-6.3)                                  | 3.4 (2.7-4.2)                                 |
| Lawsuits                                         |                                                |
| Mean (SD) [range]                               | 866.5 (1551.2) [6-8021]                        | 169.5 (387.2) [1-1306]                        |
| Median (IQR)                                     | 292.5 (134-839)                                | 13 (5-145)                                    |
| Amount pursued in court per patient, $           |                                                |
| Mean (SD) [range]                               | 1133.5 (911.9) [0-6046.5]                      | 1026.0 (726.7) [0-1932.8]                     |
| Median (IQR)                                     | 984.3 (639.9-1351.1)                           | 1287.0 (182.2-1539.2)                         |
| Total amount pursued in court per hospital, thousands of $ |                                                |
| Mean (SD) [range]                               | 1066.8 (2094) [0-11 281.5]                     | 249.4 (572.6) [0-1900.4]                      |
| Median (IQR)                                     | 340.2 (98.7-906.5)                             | 17.2 (0.6-186.6)                              |

Abbreviation: IQR, interquartile range.
warrant in debt and wage garnishment lawsuits filed against patients. In New Mexico, Wisconsin, and Texas, individual hospitals have demonstrated their use of aggressive debt collection techniques. In response to a CNN article, a New Mexico hospital pledged to “no longer sue patients who earn below 150% of the poverty level,” and a large hospital system in Wisconsin stated that they would markedly decrease the number of medical debt lawsuits they filed because of increased

### Table 2. Comparison of the Number of Medical Debt Lawsuits Before and After the Intervention Period for the 5 Hospitals With the Highest Number of Court Actions in the Preintervention Period

| Hospital | Preintervention (06/25/2018-06/24/2019) | Postintervention (09/11/2019-09/10/2020) | Change, % |
|----------|---------------------------------------|----------------------------------------|-----------|
| Total lawsuits, No. | | | |
| A | 3604 | 3244 | −9.99 |
| B | 3743 | 1831 | −51.08 |
| C | 4090 | 1 | −99.98 |
| D | 2194 | 1200 | −45.31 |
| E | 1620 | 1045 | −35.49 |
| Wage garnishments, No. | | | |
| A | 1194 | 523 | −56.20 |
| B | 1972 | 945 | −52.08 |
| C | 1744 | 1 | −99.94 |
| D | 1030 | 406 | −60.58 |
| E | 26 | 6 | −76.92 |
| Warrants in debt, No. | | | |
| A | 2410 | 2721 | 12.90 |
| B | 1771 | 886 | −49.97 |
| C | 2346 | 0 | −100.00 |
| D | 1164 | 794 | −31.79 |
| E | 1594 | 1039 | −34.82 |
| Judgment amount, $ | | | |
| A | 3 614 102 | 4 792 000 | 32.59 |
| B | 4 894 432 | 1 703 361 | −65.20 |
| C | 4 532 180 | 0 | −100.00 |
| D | 4 576 398 | 1 958 993 | −57.19 |
| E | 1 120 227 | 772 045 | −31.08 |

### Figure 2. Interrupted Time Series Analysis of the Association of Research and Public Awareness With the Weekly Rate of Lawsuits 12 Months Before, During, and 12 Months After the Intervention Period
media attention.28 Our data suggest that increased media attention, research, and patient advocacy efforts could potentially affect lawsuit trends for both individual hospitals and the whole state.

Our results suggest that hospitals responded positively to research and public awareness. However, there is currently no recognized standard to ensure fair and quality medical billing practices among hospitals. A 2020 article29 on medical billing quality recommends 6 metrics that address service quality, transparency, surprise medical billing, and predatory billing practices, which would help to sustain fair billing practices within hospitals.

It is important to note that media articles have highlighted hospitals outside of Virginia suing patients for unpaid medical bills prior to the intervention period in this study.30-33 It is possible that the decrease in lawsuits seen in this study were a response to the attention brought by these articles. However, this is unlikely, since 2 of these articles were published in 2012 and 2014, and only 1 highlights a hospital suing patients in early 2019. Additionally, there was no change in legislation or regulations surrounding debt collection practices in Virginia during the study period that could have caused the decrease in medical debt lawsuits seen in our data. Furthermore, it is more likely that the decrease in weekly lawsuits is associated with the 2019 publication13 and subsequent media attention and advocacy efforts.

The Nonprofit Mission

We found that 72% of the hospitals studied are classified as nonprofit entities. However, suing patients with low income and garnishing their wages may be inconsistent with the nonprofit mission of a medical organization. Through the 1960s, the Internal Revenue Service (IRS) gave tax exemption status to hospitals based on a requirement to give free or highly discounted care to patients who could not afford it. The standard stated that this exemption from paying taxes would be permitted so long as the hospital operated to the extent of its financial ability for those not able to pay for the services rendered and not exclusively for those who are able and expected to pay.34 In 1969, the IRS became less clear on what qualifies a hospital for tax exemption when the Revenue Ruling 69-545, which remains the current standard, created the community benefit standard, which recognizes the promotion of health in and of itself as a charitable purpose.35 Based on this ruling, hospitals were no longer required to have a demonstrated level of charity care to become tax exempt.

The current standard for granting tax exemptions to hospitals ushered in a discourse regarding the minimum conditions required to establish a community benefit. In 2008, the IRS started to require nonprofit hospitals to quantify the funds allocated toward charitable causes, such as free care, in the Schedule H section of an organization’s Form 990.36 However, the reported amount does not distinguish discounted care from truly free care. In response to public concerns that nonprofit hospitals lacked accountability in delivering community benefits, the Patient Protection and Affordable Care Act (ACA) established requirements for nonprofit hospitals to have a written financial assistance policy that clearly indicates who is eligible for free or discounted care and that these policies must be widely published for patients to see.37 Furthermore, the ruling states that nonprofit hospitals should not engage in “extraordinary collection actions” on unpaid debts until the

| Period                  | Overall IRR (95% CI) | P value | Hospital level IRR (95% CI) | P value |
|-------------------------|----------------------|---------|-----------------------------|---------|
| Intercept               | 513.66 (392.97-671.43) | <.001   | 7.67 (4.67-12.58) | <.001   |
| Preintervention period  | 1.01 (1.00-1.01) | .24     | 1.01 (1.00-1.01) | .19     |
| (06/25/2018-06/24/2019) |                      |         |                            |         |
| Intervention start date | 1.08 (0.59-1.96) | .81     | 1.08 (0.84-1.38) | .56     |
| (06/25/2019)            |                      |         |                            |         |
| Intervention period     | 0.97 (0.89-1.07) | .56     | 0.97 (0.95-1.00) | .07     |
| (06/25/2019-09/10/2019) |                      |         |                            |         |
| Intervention end date   | 1.19 (0.65-2.18) | .57     | 1.19 (0.89-1.58) | .24     |
| (09/10/2019)            |                      |         |                            |         |
| Postintervention period | 0.95 (0.94-0.96) | <.001   | 0.95 (0.94-0.96) | <.001   |
| (09/11/2019-09/10/2020) |                      |         |                            |         |

Abbreviation: IRR, incidence rate ratio.
hospital makes “reasonable efforts” to determine whether an individual is eligible for financial assistance.37 Our finding that some hospitals sue and garnish the wages of many patients who are likely low-income workers suggests that some hospitals might be engaging in extraordinary collection actions banned in the IRS 501(r) rule.

For a hospital to garnish a patient’s wages, the patient must be employed. The description of employers found in the 2019 article13 on which this study is centered suggests that these are working individuals who may have insurance yet remain in a low-income population. In that study, Walmart employees and food service workers collectively comprised the most common and second most common groups, respectively, for which wages were garnished in Virginia. While the ACA mandated the use of a financial aid policy in every nonprofit hospital, hospitals have the discretion to determine their own eligibility criteria (for example, based on a patient’s income level), and it is unclear whether eligible patients are subject to obstacles in learning about the policy and applying for financial aid.

In 2020, the Government Accountability Office38 found that the IRS faces substantial challenges in overseeing nonprofit hospitals’ community benefit delivery and determining their tax-exempt eligibility. In light of the recent finding that nonprofit hospitals provided less charity care than for-profit hospitals and government-owned hospitals,39 it is important for policy makers to revisit the tax exemption rules for nonprofit hospitals or clarify nonprofit hospitals’ obligations for concurrent and prospective charity care eligibility decisions and initiate effective enforcement.

To increase patient protections from predatory billing, 4 states (North Carolina, South Carolina, Pennsylvania, and Texas) have banned creditors from garnishing wages except in certain circumstances, such as unpaid taxes or alimony. Several other states, such as New Hampshire, have enforced regulations that make it more challenging to collect on unpaid medical debts, such as only allowing a one-time wage garnishment or limiting garnishment to a maximum of 10% of disposable income as opposed to the 25% limit set by federal law. Other potential solutions include a grassroots effort among clinicians to ask their hospitals to cease lawsuits against any patient with low income or demanding that hospitals use the Medicare allowable amount when seeking collections.

Limitations
This study has limitations. First, hospitals may use aggressive debt collection practices that do not appear in court records, such as harassing debt collections, unilaterally collecting debt through a patient’s income tax return, and negatively affecting credit scores through outsourced debt collection agencies. These are outside of the scope of this study yet important to consider in understanding medical debt collection. Second, it can take months or years to settle a warrant in debt case; thus, a portion of the cases obtained from the court records could have been initiated in prior years and then settled between June 25, 2018, and September 10, 2020. Third, the changes seen in the postintervention period may be due to factors that could not be measured or were not included during the intervention period. Fourth, this study does not discuss the individual effects of specific events during the intervention period but only addresses the collective impact of research, media attention, and patient advocacy. Fifth, the outcomes seen in this study are associated with medical debt lawsuit trends and cannot necessarily be applied to other hospital behavior that is harmful to patients.

Conclusions
The findings of this study suggest that hospitals can—and do—change their billing practices because of public awareness. The adaptability of hospitals suggest the value of a feedback model of public accountability. In the future, a ratings system for hospital billing quality could enable a more sustained and transparent approach when addressing hospital actions that may be concerning to health care leaders, hospital employees, or members of the community.
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