Characteristics of US hospitals using extraordinary collections actions against patients for unpaid medical bills: a cross-sectional study

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ABSTRACT

Objective This study aims to characterise and evaluate the largest 100 hospitals in the USA that have adopted aggressive collection tactics to pursue patients with unpaid medical bills, such as lawsuits, wage garnishments and liens.

Design Cross-sectional study.

Setting We examined state and county court record systems to measure the magnitude and prevalence of these practices at the largest 100 hospitals in the USA between 1 January 2018 and 31 July 2020.

Main outcomes measures The main outcome of this study was the number of lawsuits, wage garnishments and liens. A secondary outcome was the characterisation of a hospital's safety, charity, size and financial practices.

Results Between 1 January 2018 and 31 July 2020, 26 hospitals filed 38965 court actions (lawsuits, wage garnishments and liens) against patients for unpaid medical debt. For 16 of 26 hospitals, the dollar amount pursued in the court claim was available for 100% of cases, totalling US$71.8 million. The average aggregate amount sought by hospital lawsuits during the study period was US$4.5 million. Three hospitals filed US$56.2 million in amounts pursued in court, or 78.3% of the total amount pursued by all hospitals in the sample. In the remaining 74 hospitals, the study team did not identify extraordinary collection actions through the court system.

Conclusions Standardised medical debt collections best practices and metrics of medical debt collections quality are needed to increase public accountability for hospitals, particularly non-profit hospitals. There is a need to re-evaluate Internal Revenue Service rules pertaining to non-profit hospitals' tax-exempt status to ensure tax-exempt hospitals provide community benefits commensurate with the value of tax exemption.

INTRODUCTION

A recent trend of hospitals suing patients for unpaid medical bills has eroded the public’s trust in the medical system. A 2020 report by the Consumer Financial Protection Bureau indicated that medical debt comprises 58% of debt collections and has caused hundreds of thousands of Americans to file for bankruptcy. Compounding this problem with increasing healthcare costs and record high deductibles, 64% of patients have said they have delayed or avoided medical care out of fear for a bill. Predatory billing or extraordinary collection actions, as defined by the Internal Revenue Service (IRS), are actions taken by a hospital facility against an individual to obtain payment that require a legal or judicial process. The predatory practice of hospitals filing lawsuits against patients for unpaid medical bills has highlighted through publications profiling the states of Virginia, Wisconsin, New Mexico and Texas. The current study evaluates the national prevalence of this practice by analysing the billing and collection patterns of the largest 100 hospitals in the USA.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ A strength of this study is that it reviewed billing and collection practices at 100 large hospitals.
⇒ We developed a novel predatory billing grade to assess the magnitude for which a hospital filed debt collection lawsuits, wage garnishments and liens against patients for unpaid medical bills.
⇒ One limitation of this cross-sectional study is that hospitals are actively reforming their predatory debt collection processes on an ongoing basis.
⇒ Some hospitals may use third-party collections agencies that may be filing lawsuits in the name of the collections agency; however, it is our experience that lawsuits brought against patients are nearly universally filed in the name of the hospital.

METHODS

Study design, setting and participants

The largest 100 hospitals were defined by hospital revenue in 2018 according to the
American Hospital Directory (AHD) were chosen to provide a national overview of the prevalence of medical debt lawsuits.9

We searched state and county court records online to identify cases between 01 January 2018 and 31 July 2020 in which a hospital sued a patient for an unpaid medical bill. For counties where an online search is not available, we contacted the court directly by phone or in-person to conduct the equivalent search. We filtered all court records to include cases in which the plaintiff was 1 of the 100 hospitals extracted from the AHD. Court records search terms included ‘hospital’, ‘medical centre’ and ‘health centre’. We only included lawsuits against a patient from a hospital for rendered medical services, and excluded breach of contract lawsuits against other vendors or corporations. Court cases were categorised within the court system as lien, wage garnishment or other lawsuit. Liens and wage garnishments are court actions to recover medical debt and are all lawsuits. Cases with more than one filing per patient or with multiple categories but one unique case number were counted once. Two authors (FH, CMW) reviewed each court action document independently to ensure data accuracy. Liens were defined as a legal claim on assets that allows the holder to seize the property if the debts are not paid. Wage garnishments were defined as actions seeking a court order to withhold a portion of the debtor’s wages to pay the medical debt. Other lawsuits were defined to include other legal actions to recover unpaid medical debt other than through liens or wage garnishment. The dollar amount pursued by the hospital in the court claim were extracted from court filings when available.

**Variables**

Using the AHD, we recorded a hospital’s charge markup, ownership type (non-profit, for-profit and government-owned), gross revenue and size (bed number); using Leapfrog Group metrics,10 their hospital safety grade; and using Lown Institute rating,11 their Five-Star Charity Care rating, a star rating between 1 and 5. Leapfrog’s safety grade is an independent and established hospital ratings organisation that publicly reports hospital safety data. This metric reflects hospitals’ billing practices and is integral to the quality of rendered medical services. The Lown Institute’s Five-Star rating system is the most comprehensive dataset of hospitals’ charity care practices. Charity care indicates a hospital’s willingness to provide free or discounted care to patients who cannot afford care rather than take extraordinary collection actions against them. A hospital or health system in the top quintile (top 20%) in terms of generosity of charity care received a 5-star rating, and a hospital or system in the bottom quintile (bottom 20%) of hospitals, received a 1-star rating. Charge markup was calculated by taking the inverse of a hospital’s total cost to charge ratio, as listed in the AHD. This grading criteria quantifies how much hospitals are charging over the cost of care. High charge markups can affect underinsured and uninsured patients’ ability to afford care.12

We developed a novel Predatory Debt Collection Grade to assess the extent for which a hospital filed lawsuits against patients for unpaid medical bills. The total number of lawsuits and the total dollar amount pursued in court were individually divided into quintiles and individually assigned to a grade A–F. Wage garnishments and liens were added together and divided into quintiles, which were then assigned a grade A–F. Hence, the hospital grading criteria in table 1 corresponds with their assigned Predatory Debt Collection Grade.

To provide a holistic review of a hospital’s billing performance, we ranked the hospitals that sued patients according to their overall Billing Quality Score. This score was calculated using a hospital’s 2020 Predatory Debt Collection Grade, charge markup and Lown Institute Charity Care 5 Star Rating. Each component comprised one-third of the Billing Quality Score, a number out of 100. A hospital’s Predatory Debt Collection Grade and Lown Institute Charity Care 5 Star Rating were treated as quintiles, which served as the score for the respective component. For charge markup, hospitals were divided into percentiles according to their assigned value. Hospitals with lower charge markup values had a higher Billing Quality Score. Each score was added together and divided by three to provide the overall Billing Quality Score. Hospitals were reported based on their ranking in table 2 with a higher Overall Billing Quality Score ranking reflecting poorer performance. Variables not included

| Table 1 Criteria for Predatory Debt Collection Grade |
|------------------------------------------------------|
| **Letter grade** | **Number of lawsuits per year** | **Number of wage garnishments/property liens per year** | **Total lawsuit amount, US$** | **Confirmed media reports/class action lawsuits** |
| A | 0 | 0 | US$0 | 0 |
| B | 1–10 | 1–50 | US$1–US$50,000 | 1–20 cases reported |
| C | 11–100 | 51–500 | US$50,001–US$450,000 | 21–100 cases reported |
| D | 101–500 | 501–2000 | US$450,001–US$2,000,000 | 101–500 cases reported |
| F | >501 | >2000 | >US$2,000,001 | >500 cases reported |

Hospital received grade in first column if exhibiting any of the column categories. Source: State and County Public Court Records.
in the score ranking (Leapfrog Safety Grade, ownership type, geographic location and size) were deemed important to include in the table to further characterise hospitals’ overall standing in relation to their calculated grade.

**Outcomes**

The primary outcome of this analysis was the occurrence of a court action against a patient for an unpaid medical bill. The secondary outcome was the characterisation of hospitals that sued patients compared with hospitals that did not. For all cases, we extracted the file date, name of the plaintiff and, when available, the principal amount for which a patient was sued.

**Table 2** Characteristics of hospitals that sued patients for unpaid medical bills

| Overall Billing Quality Score ranking | Hospital name | State | Tax status | Charge markup | Predatory Debt Collection Grade 2018 | Predatory Debt Collection Grade 2019 | Predatory Debt Collection Grade 2020 | Lown Institute Charity Care Rating | Leapfrog Hospital Safety Grade |
|--------------------------------------|--------------|-------|------------|---------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------|-----------------------------|
| 26                                   | NY           | Government-owned | 6.21       | F             | F                                    | F                                    | D                                    | ★★                             | D                           |
| 25                                   | KS           | Government-owned | 5.78       | F             | F                                    | F                                    | F                                    | ★★★                            | A                           |
| 24                                   | NY           | Non-profit      | 8.30       | F             | F                                    | F                                    | D                                    | ★★★                            | D                           |
| 23                                   | NY           | Non-profit      | 5.09       | F             | F                                    | F                                    | D                                    | ★★                             | A                           |
| 22                                   | KY           | Non-profit      | 5.09       | D             | D                                    | D                                    | D                                    | ★★                             | A                           |
| 21                                   | FL           | Government-owned | 6.61       | D             | D                                    | D                                    | D                                    | ★★★★                           | B                           |
| 20                                   | NY           | Non-profit      | 4.73       | F             | F                                    | F                                    | D                                    | ★★                             | B                           |
| 19                                   | NC           | Government-owned | 4.74       | D             | B                                    | A                                    | ★★★                               | C                            |
| 18                                   | PA           | Non-profit      | 8.77       | B             | C                                    | B                                    | ★★★                             | B                            |
| 17                                   | WI           | Non-profit      | 5.04       | D             | D                                    | C                                    | ★★                             | A                            |
| 16                                   | MN           | Government-owned | 2.95       | D             | D                                    | D                                    | ★                         | A                            |
| 15                                   | NY           | Non-profit      | 5.46       | B             | A                                    | A                                    | ★                        | A                            |
| 14                                   | KY           | Non-profit      | 3.94       | F             | F                                    | F                                    | ★★★                                   | C                           |
| 13                                   | VA           | For-profit      | 12.97      | D             | D                                    | C                                    | ★★★★                                | A                           |
| 12                                   | WI           | Non-profit      | 3.77       | F             | F                                    | F                                    | ★★                             | A                           |
| 11                                   | VA           | Non-profit      | 4.13       | F             | F                                    | F                                    | ★★★★                           | B                            |
| 10                                   | PA           | Non-profit      | 4.30       | A             | A                                    | B                                    | ★★                             | A                           |
| 9                                    | OH           | Non-profit      | 4.18       | D             | D                                    | C                                    | ★★★                             | D                           |
| 8                                    | NJ           | Non-profit      | 5.61       | A             | B                                    | A                                    | ★★★                           | A                            |
| 7                                    | FL           | Government-owned | 5.49       | A             | D                                    | C                                    | ★★★★★                              | A                           |
| 6                                    | LA           | Non-profit      | 3.80       | B             | C                                    | B                                    | ★★                             | A                           |
| 5                                    | PA           | Non-profit      | 4.64       | C             | B                                    | B                                    | ★★                             | C                           |
| 4                                    | OH           | Non-profit      | 4.20       | C             | D                                    | A                                    | ★★                             | A                           |
| 3                                    | NY           | Non-profit      | 3.99       | D             | D                                    | A                                    | ★★★                             | C                           |
| 2                                    | IA           | Government-owned | 3.99       | B             | B                                    | A                                    | ★★★                            | D                           |
| 1                                    | VA           | Government-owned | 4.81       | F             | F                                    | A                                    | ★★★★★                             | C                           |

Source: the American Hospital Directory,9 the Leapfrog Group,10 the Lown Institute.11 FL, Florida; IA, Iowa; KS, Kansas; KY, Kentucky; LA, Louisiana; MN, Minnesota; NC, North Carolina; NJ, New Jersey; NY, New York; OH, Ohio; PA, Pennsylvania; VA, Virginia; WI, Wisconsin.

**Statistical analysis**

Detailed cross-tabulations of hospitals’ characteristics were performed. Pearson $\chi^2$ test, paired t-test and Mann-Whitney U test were used to test the distribution differences for categorical variables, continuous variables and ordinal variables. The mean (SD) and median (IQR) of the yearly change in lawsuit characteristics from 2018 to 2020 were also addressed. Univariable and multivariable logistic regressions were conducted to identify the OR of hospitals suing patients. ORs and 95% CIs were reported for characteristics that showed statistical significance. The OR was statistically significant at $\alpha=0.05$ level. Statistical analysis was performed in Stata (V.14.0).
Patient and public involvement
There was no patient or public involvement in this study.

RESULTS
Between 1 January 2018 and 31 July 2020, 26 of the largest 100 hospitals in the USA filed 38,965 court actions (lawsuits, wage garnishments and liens) against patients for unpaid medical debt, 74 hospitals in the sample did not file any lawsuits against patients to recover unpaid debt. For 16 of 26 hospitals, the dollar amount pursued in the court claim was available for 100% of cases, totaling US$71.8 million. The average aggregate amount sought by hospital lawsuits during the study period was US$4.5 million. Three hospitals filed US$56.2 million in amounts pursued in court, or 78.3% of the total amount pursued in court.

Among the hospitals that sued patients for unpaid medical debt, 65.4% (n=17) were non-profit hospitals, 30.8% (n=8) were government-owned hospitals and only 3.8% (n=1) were for-profit hospitals. The median (IQR) charge markup and gross revenue for these 26 hospitals that sued patients were 4.78 (4.13, 5.61) and US$6401 (5631, 8922) millions, respectively, with an average total patient revenue of US$4.5 billion. The median (IQR) number of beds was 889 (693, 1220). The mean (SD) Lown Institute Charity Care rating was 2.8 (1.13). Of the hospitals that did not sue, 64.9% (n=48) were non-profit hospitals, 14.9% (n=11) were for-profit and 20.3% (n=15) were government-owned hospitals. The charge markup and gross revenue for hospitals that did not sue patients were not statistically significantly different from those that sued with a median (IQR) of 5.31 (4.14, 6.95) and 6619 (5476, 8649) (p=0.27 and p=0.98), respectively.

The median (IQR) number of beds was 805 (649, 1046). The mean (SD) Lown Institute Charity Care rating was 3.7 (1.2), which was significantly higher than the hospitals that sued patients (p<0.003) (table 3).

Figure 1 showed the yearly change of lawsuit characteristics for hospitals that sued patients. The median Predatory Debt Collection Grade in 2020 was a C, which

| Table 3 | Characteristics for 100 hospitals categorised by hospitals that sue and hospitals that did not sue patients |
|---------|---------------------------------------------------------------|
| Type of hospital, N (%) | Hospitals that did sue (N=26) | Hospitals that did not sue (N=74) |
| Non-profit | 17 (65.4) | 48 (64.9) |
| For-profit | 1 (3.8) | 11 (14.9) |
| Government-owned | 8 (30.8) | 15 (20.3) |
| Charge markup | | |
| Mean (SD) (range) | 5.33 (2.04) (2.95, 12.97) | 6.00 (2.60) (2.64, 12.94) |
| Median (IQR) | 4.78 (4.13, 5.61) | 5.31 (4.14, 6.95) |
| Gross revenue (in millions of dollars, 2018) | | |
| Mean (SD) (range) | 8101.06 (4373.89) (4943.12, 21841.09) | 7799.64 (3353.17) (4890.96, 20880.95) |
| Median (IQR) | 6400.50 (5630.72, 8921.54) | 6618.59 (5475.69, 8648.53) |
| Number of beds | | |
| Mean (SD) (range) | 1001 (454) (511, 2650) | 901 (407) (237, 2826) |
| Median (IQR) | 889 (693, 1220) | 805 (649, 1046) |
| Lown Institute Charity Care 5 Star Rating | | |
| Mean (SD) (range) | 2.8 (1.13) (1, 5) | 3.7 (1.23) (1, 5) |
| Median (IQR) | 3 (2, 3) | 4 (3, 5) |
| Leapfrog Quality Safety Score, N (%) | | |
| A | 11 (42.3) | 31 (41.9) |
| B | 5 (19.2) | 16 (21.6) |
| C | 7 (26.9) | 18 (24.3) |
| D | 3 (11.5) | 2 (2.7) |
| Unknown | 0 | 7 (9.5) |
| Amounts for lawsuits | | |
| Mean (SD) (range) | 4486528 (7372811) (13127, 24020284) |  |
| Median (IQR) | 1022068 (3021241, 3913720) | |
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The ORs from univariable and multivariable logistic regressions showed that the Lown Institute Charity Care 5 Star Rating was the only characteristic that significantly differed between hospitals that sued and hospitals that did not sue patients. Hospitals with a higher Lown Institute Charity Care Ratings were less likely to sue (aOR: 0.51, 95% CI: 0.31 to 0.85) (online supplemental appendix table 1).

From 2018 to 2020, there was a 92.0% decrease in the number of court actions filed (table 4). In 2018, 26 hospitals filed 20,794 court actions pursuing patients for unpaid medical bills. Specifically, hospitals filed 14,671 lawsuits, and 6,123 wage garnishments/liens. The following year, they filed 12,687 lawsuits, 3,823 wage garnishments/liens totalling 16,510 court actions. In the first half of 2020, hospitals filed 1,450 lawsuits, and 211 wage garnishments/liens, totalling 1,661 court actions. There was a 20.6% decrease in the number of court actions filed from 2018 to 2019 and an 89.9% decrease between 2019 and 2020.

Some hospitals demonstrated significant improvement in reducing court actions against patients across the time period. Of the five hospitals that most improved their Predatory Debt Collection Grade between 2018 and 2020, two earned F’s at the beginning of the study period and three earned D’s. At the end of the study period, two earned A’s, two earned C’s and one earned a D. One hospital decreased their dollar amount pursued in court by 93%, US$422,859 in 2018 to US$28,582. Another hospital ceased their predatory billing practices altogether, filing no court actions in the first half of 2020 compared with 6,391 lawsuits and 3,085 wage garnishments in 2018 (online supplemental appendix table 2).

**DISCUSSION**

Our study found that 26 of the top 100 hospitals by gross revenue took legal action against patients to collect debt for unpaid medical bills. Hospitals filed 28,808 lawsuits and 10,157 wage garnishments/liens. Among hospitals for which amounts pursued in court were available, patients were sued for an average of US$1,842. When comparing these figures to existing studies, there is widespread variation. A 2017 study in JAMA showed that 36% of hospitals pursued patients in court for an average of US$2,783.15 per patient in the state of Virginia. From 2018 to 2020, 28 (7%) hospitals in Texas sued patients for unpaid medical debt. Consistent with the current literature, about 70% of US hospitals in our study did not have evidence of extraordinary collection actions. Given that the vast majority of hospitals do not participate in these predatory debt collection practices, this would suggest that it is not

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**Table 4** Annual breakdown of court case details and Predatory Debt Collection Grade

|                      | 2018                        | 2019                        | 2020                        |
|----------------------|-----------------------------|-----------------------------|-----------------------------|
| Billing Integrity Score | D                           | D                           | C                           |
| Number of court actions            | Mean (SD) (range) 799.8 (2028.1) (0.0–9476.0) | 635.0 (1656.6) (0.0–8330.0) | 63.9 (105.7) (0.0, 388.0) |
| Number of lawsuits            | Mean (SD) (range) 564.3 (1332.3) (0–6391) | 488.0 (1248.9) (0–6348) | 55.8 (102.8) (0–388) |
| Number of wage garnishments/liens | Mean (SD) (range) 227.2 (726.4) (0–3085) | 135.4 (438.1) (0–1982) | 0.8 (4.1) (0–21) |
| Number of liens            | Mean (SD) (range) 8.3 (40.4) (0, 206) | 11.7 (58.8) (0, 300) | 7.3 (37.3) (0, 190) |
| Yearly judgement amount          | Mean (SD) (range) 2,077,371.0 (3,508,594.0) (0.0–10,928,639.0) | 1,991,016.0 (3,334,635.0) (0.0–11,161,331.0) | 446,016.5 (886,924.4) (0.0–3,096,262.0) |

Source: the American Hospital Directory.
standard practice and there are other less aggressive debt collection processes that may be adopted.

While collection practices are not uniform, there was an overall decrease in extraordinary collection practices nationally from 2018 to 2020. The mean number of yearly court actions decreased from 829.4 in 2018 to 143.8 in 2020. Similarly, the mean Predatory Debt Collection Grade increased from a D in 2018 and 2019 to a C in 2020. A 2021 study in JAMA Network Open showed that increased research and public health initiatives rooted in media exposure resulted in Virginia based hospitals changing their medical debt collection practices. It is likely that the nationwide improvement seen in this study can be attributed to increased public awareness and media attention that shed light on extraordinary collection measures. However, the sustainability of this improvement is uncertain due to it being rooted in momentary awareness rather than regulatory and policy change.

Currently, a standardised medical billing practice standard does not exist. During the time period of this study, hospitals did not disclose real cash prices for services. Demanding payment using legal channels without a legal agreement on a price is a violation of contract law and a common reason why patients win in court when they present this argument. A 2020 JAMA article recommends standard metrics that address service quality, transparency, surprise medical billing and predatory billing practices. Broad adoption of these metrics, accompanied with transparent public reporting, would incentivise hospitals with high-billing quality and motivate improvement effort for hospitals with low billing quality. Moreover, fair billing practices ensure that vulnerable, uninsured and underinsured individuals are not discouraged to seek medical care on the basis of financial status.

We found that 65.4% of hospitals suing patients were non-profit designation. This debt collection practice might not be aligned with the mission and purpose of non-profit organisations. Originally, the IRS awarded tax exemptions to hospitals that operate ‘to the extent of its financial ability for those not able to pay for the service rendered’. In 1969, the IRS adopted the ‘community benefit standard’, which included the ‘promotion of health’ as a charitable measure. In 2010, the Affordable Care Act required hospitals to provide a written financial assistance policy and discouraged ‘extraordinary collection actions’ on medical debt. Our findings, coupled with the findings of a recent analysis that non-profit hospitals continue to take legal action against patients to collect unpaid medical bills in the form of lawsuits, wage garnishments and liens. These debt collection measures reflect a lack of regulatory constraints and oversight in predatory billing practices against patients. Our results suggest a need to re-examine IRS rules related to non-profit hospitals’ tax-exempt status as well as introduce clear standards for fairness in medical billing.

CONCLUSION
Although there is evidence of improvement in the billing patterns of the largest 100 hospitals in the USA, a large proportion of non-profit hospitals continue to take legal action against patients to collect unpaid medical bills in the form of lawsuits, wage garnishments and liens. These debt collection measures reflect a lack of regulatory constraints and oversight in predatory billing practices against patients. Our results suggest a need to re-examine IRS rules related to non-profit hospitals’ tax-exempt status as well as introduce clear standards for fairness in medical billing.

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