POPULATIONS AT RISK

Medical Debt and Aggressive Debt Restitution Practices

Predatory Billing Among the Urban Poor

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BACKGROUND: **Health care providers are increasingly relying on collection agencies to recoup charges associated with medical care. Little is known about the prevalence of this practice in low-income communities and what effect it has on health-seeking behavior.**

METHODS: **Cross-sectional survey at 10 "safety net" provider sites in Baltimore, Md. Specific queries were made to underlying comorbidities, whether they had a current medical debt, actions taken against that debt, and any effect this has had on health-seeking behavior.**

RESULTS: **Overall, 274 adults were interviewed. The average age was 43.9 years, 77.3% were African American, 54.6% were male, 47.2% were homeless, and 34.4% had less than a 12th grade education. Of these, 46.2% reported they currently had a medical debt (average, $3,409) and 39.4% reported ever having been referred to a collection agency for a medical debt. Overall, 67.4% of individuals reported that either having a current medical debt or having been referred to a collection agency for a medical debt affected their seeking subsequent care: 24.5% no longer went to that site for care; 18.6% delayed seeking care when needed; and 10.4% reported only going to emergency departments now. In the multiple logistic regression model, having less than a 12th grade education (odds ration [OR], 2.5; 95% confidence interval [CI], 1.0 to 6.0) and being homeless (OR, 4.1; 95% CI, 1.4 to 12.3) were associated with a change in health-seeking behavior while having a chronic medical condition (OR, 0.2; 95% CI, 0.1 to 0.5) and going to a community clinic for usual care (OR, 0.2; 95% CI, 0.1 to 1.0) were protective.**

CONCLUSIONS: **Aggressive debt retrieval for medical care appears to be indiscriminately applied with a negative effect on subsequent health-seeking behavior among those least capable of navigating the health system.**

Providing health care to the most needy and destitute in our society has traditionally been a collective and pluralist effort in the United States. Charity care by private providers, free clinics, and care provided at academic health centers and teaching hospitals complement the care provided by public hospitals and clinics, community health centers, and by designated federal programs for special-needs populations such as homeless persons or individuals with HIV/AIDS. However, managed care penetration, reduced third-party reimbursements, and the ownership structure and size of primary care practices have all been associated with lower rates of charity care.[1–3] Academic health centers face increasingly perilous economic conditions, in large measure due to the increasing proportion of uncompensated care they provide.[4]

While charity care is reportedly declining,[5] uncompensated care, defined as both charity care and bad debt, has been increasing over the past 2 decades.[6] In 2000, health industry bad debt was estimated to be $20 billion.[7] Replacing charity care has been a much more deliberate and aggressive effort to collect on medical bills when unpaid,[8] often independent of a patient's financial means and realistic capacity to repay that debt.[9] A recent *New York Times* article noted that more and more physicians and clinical groups are referring outstanding medical bills to collection agencies much earlier than previously noted.[10]

But what happens to the patient who accumulates a medical debt and has no way of paying for it? Nationally, medical debt accounts for 40% of all personal bankruptcies[11] and in one Midwest community, medical debt accounted for 58% of all personal bankruptcies.[12] It is less clear, however, what effect medical debt and collection practices have on subsequent health care-seeking behavior and, ultimately, health status.

The goals of this study were to identify 1) the prevalence of medical debt in an urban, low-income community; 2) attempts at collection patients have experienced; and 3) self-reported consequences from having that debt. These

findings are critical to gauging the effectiveness of our current pluralist system for indigent care and to exerting accountability within our publicly financed private and not-for-profit health care system.

METHODS

Overview

The study was conducted as part of the Soros Service Program for Community Health summer program and was funded by the Open Society Institute. The design and implementation of this survey followed the principles of community-based participatory research[13] including community leader participation in development of the study question, study design, and survey instrument and assistance in data collection and interpretation. A face-to-face survey was conducted at 10 community-based organizations in Baltimore City, Md, during June and July, 2002. All surveys were strictly voluntary and anonymous.

Survey Instrument

The survey instrument was developed with the Baltimore Community Health Consortium and reflected issues anecdotally identified by those providers as pertinent to this population. It was piloted extensively at each of the study sites to ensure that the questions were appropriate and comprehensible. Questions were also used from previously administered surveys that had been specifically designed for this type of urban poor population.[14–16] The question domains included: demographics, including residence status and history; self-reported physical and mental health comorbidities and medications currently prescribed; self-reported social service needs; difficulties accessing health care in the past and the type of health care sought but not received; and whether they currently owed any medical debt, had been referred to a collection agency for a medical debt, and what effect, if any, having a medical debt or being referred to a collection agency has had on seeking subsequent health care. The survey itself took 20 minutes to complete and no financial compensation was provided to those who participated. The medical student assigned to that site administered the survey in a face-to-face interview. All medical student interviewers received an extensive orientation on how to conduct a research survey and participated in weekly debriefings to discuss any problems or issues encountered in administering the surveys and to ensure that the questions were being asked in a consistent manner across sites.

Survey Sites

The 10 study sites were all not-for-profit, multiservice sites with an established policy and community reputation for caring for un- and underinsured poor populations in Baltimore City. No sites were affiliated with or owned by area hospitals or health systems or were government owned. The sites included five community health centers, two of these sites primarily serving working poor and uninsured families, two sites serving the HIV-positive community in Baltimore, and one site primarily serving persons who are homeless. The remaining sites included two soup kitchens, one drop-in center, and two substance abuse outreach centers.

Participant Selection

Individuals were selected for interview using a consecutive sampling scheme within the common areas at each site. On designated times and days during the week, the interviewers positioned themselves within the site common or waiting area and consecutively approached potential respondents to request participation. Individuals were excluded if they were less than 18 years of age or incoherent or visibly intoxicated or inebriated, abusive, or combative. Individuals were also excluded if they were not active consumers of services at that site. Upon receiving verbal consent, study subjects were taken to as secluded an area as possible where they were interviewed. All responses were anonymous.

Data Analysis

Data were entered using a double-entry approach to an Excel database (Microsoft Corporation, Seattle, Wash). Statistical analyses were conducted using STATA Intercooled 6.0 software (STATA Corp., College Station, Tex). Chi-square analyses were used for categorical data and analysis of variance (ANOVA) was used for continuous data. Separate multiple logistic regression models were developed for three dependent variables: 1) having an active medical debt; 2) being referred to a collection agency for a medical debt; and 3) reporting a delay, avoidance, or change in health-seeking behavior as a result of a collection agency experience or having a medical debt. Independent variables considered in the model included age, race, gender, education, income, health insurance status, source for usual care, housing status, co-occurring medical and mental health needs, self-reported social service needs, and whether the interview took place at a clinical or nonclinical site.

RESULTS

Demographics

Overall 274 adults were interviewed, representing a response rate of 78%. Data are not available on nonrespondents. The average age of respondents was 43.9 years, 77.3% were African American, and 54.6% were male. Almost half (47.2%) were homeless at the time of interview, 34.4% had less than a 12th grade education, and 31.0% had dependent children for whom they were responsible.

Table 1. Demographics

Mean age, y	43.9
African American race, %	77.3
Male gender, %	54.6
Homeless housing status, %	47.2
Mean monthly income, $	7,864/yr
<12th grade education, %	34.4
Dependent children, %	31.0
Source for usual care, %	77.7
Community health clinic, %	73.7
Emergency department, %	10.4
Hospital-based/affiliated clinic, %	15.9

The mean annual income was $7,864/year, well below the federal poverty level (Table 1).

Self-reported Comorbidities

Overall, 75.4% of the sample reported having been diagnosed with a chronic medical condition and 27.5% reported 3 or more co-occurring medical conditions; 42.9% reported a chronic mental health condition. The most commonly reported conditions reported were depression (34.1%), hypertension (31.1%), arthritis or other chronic musculoskeletal conditions (29.7%), and asthma or other chronic respiratory conditions (21.2%). Over 60% reported currently being prescribed a medication and 36.1% of the sample reported being prescribed 3 or more medications at the time of the interview.

Access to Care and Self-reported Service Needs

Overall, 77.7% reported having a source for usual care. Among those with a source for usual care, most reported going to a community clinic (73.7%), followed by a hospital-based or affiliated clinic (15.9%), and an emergency department (10.4%). Almost half of the sample reported that they had difficulty accessing health care in the past 12 months, with dental services the most commonly cited (30.0%), followed by specialty medical care (15.0%), prescription medication (15.0%), primary care (13.9%), and mental health/substance abuse treatment (10.2%). Overall, 76.2% of respondents reported having at least one active service need; the most commonly reported were food assistance (49.1%), followed by housing assistance (47.2%), transportation assistance (37.4%), and case management (30.4%) (Table 2).

Medical Debt and Access to Care

Overall, 46.2% of the sample reported that they currently owed money for medical care they had received. The average debt load per person was $3,409, almost half of the annual reported income. In addition, 39.4% reported that they had ever been referred to a collection agency for a medical debt and 67.4% of individuals reported that either having a current medical debt or having been referred to a collection agency has affected their seeking subsequent care: 24.5% reported they no longer went to that site for care; 18.6% reported they delayed seeking care when needed; and 10.4% reported they only use emergency departments now.

Having a medical debt was significantly associated with having no health insurance (60.1% vs 31.5%; $P < .01$), being homeless (53.7% vs 38.5%; $P = .01$), having a chronic medical condition (52.1 vs 41.7; $P = .03$), a history of substance abuse (53.1% vs 39.3%; $P = .03$), and a current social service need (51.9% vs 27.7%; $P < .01$). In the multiple logistic regression model, only having no health insurance (odds ratio [OR], 4.1; 95% confidence interval [CI], 1.7 to 9.8), and having co-occurring social service needs (OR, 3.4; 95% CI, 1.2 to 9.6) were independently associated with medical debt while having less than a 12th grade education was protective (OR, 0.3; 95% CI, 0.2 to 0.8) (Table 3).

Having been referred to a collection agency for a medical debt was significantly associated with having at least a 12th grade education (46.8% vs 25.3%; $P < .01$), no health

Table 2. Health Care and Social Service Needs

Chronic medical condition, %	75.4
>3 conditions, %	27.5
Top 3 conditions, %	
Hypertension	31.1
Chronic muscle or joint problem	29.7
Asthma or chronic respiratory condition	21.2
Chronic mental health condition, %	42.9
≥3 conditions, %	8.4
Top 3 conditions, %	
Depression	34.1
Anxiety	12.8
Bipolar disorder	10.3
Currently prescribed medications, %	61.4
≥3 medications, %	36.1
Social service needs, %	76.2
Food assistance, %	49.1
Housing assistance, %	47.2
Transportation assistance, %	37.4
Case management, %	30.4
Information available, %	30.4
Difficulties accessing care, %	49.0
Dental care, %	30.0
Specialty medical care, %	15.0
Prescription medications, %	15.0
Primary care, %	13.9
Mental health/substance abuse treatment, %	10.2
Current medical debt, %	46.2
Average debt per person, $	3,409.9
Referred to a collection agency for a medical debt, %	39.4
Having a current medical debt or having been referred to a collection agency changed their health-seeking behavior, %	67.4
Goes to a different provider than where debt is owed, %	24.5
Delayed seeking care, %	18.6
Now only goes to emergency dept for care, %	10.4
Other, %	13.9

Table 3. Factors Associated with Current Medical Debt

	Active Debt	No Debt	P Value	MLR OR (95% CI)
Demographic characteristic				
Age, y				
17 to 44	46.6	53.4		1.0
45 to 84	46.8	53.2	.97	1.3 (0.6 to 2.9)
Race, %				
African American	45.0	55.0		1.0
White	56.1	43.9	.19	0.8 (0.3 to 2.2)
Gender, %				
Male	47.7	52.4		1.0
Female	44.7	55.3	.63	1.5 (0.7 to 3.5)
Education, %				
<12th grade	42.1	57.9		0.3 (0.2 to 0.8)
≥12th grade	49.7	50.3	.24	1.0
Income, %				
Below federal poverty level	47.2	52.8		2.0 (0.8 to 4.9)
Above federal poverty level	43.3	56.7	.55	1.0
Insurance status, %				
Yes	31.5	68.5		1.0
No	60.1	39.9	<.01	4.1 (1.7 to 9.8)
Source for usual care, %				
Emergency room	59.1	40.9		1.0
Community/ outpatient clinic	45.0	55.0	.21	2.6 (0.5 to 12.4)
With dependent children, %				
No	50.9	49.1		1.0
Yes	42.5	57.5	.23	0.8 (0.3 to 2.0)
Housing status, %				
Homeless	53.7	46.3		0.6 (0.2 to 1.8)
Housed	38.5	61.5	.01	1.0
Chronic medical condition, %				
No	34.3	65.7		1.0
Yes	50.0	50.0	.03	2.5 (0.9 to 6.7)
Chronic mental health condition, %				
No	41.7	58.3		1.0
Yes	52.1	47.9	.09	1.1 (0.5 to 2.6)
History of substance abuse, %				
No	39.3	60.7		1.0
Yes	53.1	46.9	.03	2.1 (0.8 to 5.7)
Current social service needs, %				
No	27.7	72.3		1.0
Yes	51.9	48.1	<.01	3.4 (1.2 to 9.6)
Site of interview, %				
Clinical	51.1	48.9		2.3 (0.7 to 7.6)
Nonclinical	35.3	64.7	.02	1.0

OR, odds ratio; CI, confidence interval.

insurance (49.3% vs 28.8%; *P* < .01), a self-reported social service need (43.7% vs 25.0%; *P* = .01), and whether the interview took place in a clinical site (43.4% vs 30.5%; *P* = .05). In the multiple logistic regression model, having no health insurance (OR, 2.4; 95% CI, 1.0 to 5.9), a current social service need (OR, 3.4; 95% CI, 1.1 to 10.5), a chronic medical problem (OR, 4.5; 95% CI, 1.5 to 13.8), and having an income above the federal poverty level (OR, 2.9; 95% CI, 1.2 to 7.3) were all significant. Having less than a 12th grade education was again protective, with an OR of 0.2 (95% CI, 0.1 to 0.6) (Table 4).

Those individuals reporting that having a current medical debt or having been referred to a collection agency for a medical debt changed their health-seeking behavior were more likely to be between 45 and 84 years old (73.4% vs 62.3%; *P* = .05), with less than a 12th grade education (77.3% vs 62.0%; *P* = .01), an income above the federal poverty level (75.6% vs 62.0%; *P* = .03), with health insurance (73.2% vs 61.5%; *P* = .04), and with no chronic medical conditions (77.6% vs 64.1%; *P* = .04) in the bivariate analysis. However, in the multiple logistic regression model, only having less than a 12th grade education (OR, 2.5; 95% CI, 1.0 to 6.0) and being homeless (OR, 4.1; 95% CI, 1.4 to 12.3) were significant while having a chronic medical condition (OR, 0.2; 95% CI, 0.1 to 0.5) and going to a community clinic or outpatient center for usual care (OR, 0.2; 95% CI, 0.1 to 1.0) were protective (Table 5).

DISCUSSION

These data suggest that medical debt and the use of collection agencies to pursue that debt within this very poor urban sample of medically ill adults is both a very common practice and one that has a deleterious effect for many individuals in need of subsequent care. These findings are notable for two important reasons. First, the aggressive pursuit of medical debt accrued by individuals who have no reasonable capacity to pay is unethical. It is a violation of Medicare regulations,[17] although the majority of those affected did not have health insurance and any inherent protections associated with it. The second reason why this finding is troubling is the effect it has on subsequent health-seeking behavior. Over two thirds of those who either had a current medical debt or had been referred to a collection agency reported that it caused them to seek alternative sites of care or to delay or avoid seeking subsequent care when needed. Those individuals most likely to report this were less well-educated and homeless, features reflecting a more limited capacity to navigate the health system and greater susceptibility to intimidation or dissuasion from seeking needed care. It is noteworthy that having a medical condition and going to a primary care site for usual care were protective, which may reflect a better relationship with the treating clinician, assurances that care will continue to be provided, or greater insight to the need for medical care, regardless of the financial consequences. Similarly, education levels less than the

Table 4. Factors Associated with Having Been Referred to a Collection Agency for a Medical Debt

	Yes	No	P Value	MLR OR (95% CI)
Demographic characteristic				
Age, y				
17–44	39.7	60.3		1.0
45–84	39.1	60.9	.92	0.9 (0.4 to 2.0)
Race, %				
African American	38.2	61.8		1.0
White	51.3	48.7	.13	1.5 (0.5 to 4.6)
Gender, %				
Male	37.8	62.2		1.0
Female	41.7	58.3	.52	1.3 (0.5 to 3.1)
Education, %				
<12th grade	25.3	74.7		0.2 (0.1 to 0.6)
≥12th grade	46.8	53.2	<.01	1.0
Income, %				
Below federal poverty level	37.1	62.9		1.0
Above federal poverty level	42.7	57.3	.40	2.9 (1.2 to 7.3)
Insurance status, %				
Yes	28.8	71.2		1.0
No	49.3	50.7	<.01	2.4 (1.0 to 5.9)
Source for usual care, %				
Emergency room	45.5	54.5		1.0
Community/ outpatient clinic	39.8	60.2	.43	2.5 (0.5 to 14.0)
With dependent children, %				
No	37.1	62.9		1.0
Yes	45.7	54.3	.22	2.5 (0.9 to 6.6)
Housing status, %				
Homeless	40.6	59.4		0.6 (0.2 to 1.7)
Housed	38.7	61.3	.75	1.0
Chronic medical condition, %				
No	33.3	66.7		1.0
Yes	41.2	58.8	.27	4.5 (1.5 to 13.8)
Chronic mental health condition, %				
No	34.7	65.3		1.0
Yes	45.2	54.8	.09	1.3 (0.5 to 3.4)
History of substance abuse, %				
No	34.9	65.1		1.0
Yes	42.3	57.8	.24	2.2 (0.7 to 7.0)
Current social service needs, %				
No	25.0	75.0		1.0
Yes	43.7	56.3	.01	3.4 (1.1 to 10.5)
Site of interview, %				
Clinical	43.4	56.6		2.3 (0.6 to 8.4)
Nonclinical	30.5	69.5	.05	1.0

OR, odds ratio; CI, confidence interval.

12th grade were protective for accumulating a bad debt and for being referred to a collection agency but significant for reporting an adverse health care-seeking consequence once referred. We suspect this may reflect different health-seeking behaviors, with better-educated persons more apt to seek care when needed and lesser-educated persons more likely to be dissuaded from seeking further care if faced with aggressive debt retrieval tactics.

While individuals with income levels above the federal poverty level were significantly more likely to report being referred to a collection agency in the multiple logistic regression model, it is important to note that over 37% of respondents being referred had incomes below this threshold and over 40% were homeless. Given the low likelihood of debt restitution from this urban poor sample, aggressively pursuing medical debt appears to mainly provide a strong deterrent to those patients who may want or need additional care at that facility. Ironically, the reported consequences of this practice were delayed and deferred treatment for 18.6% of respondents, preferential use of emergency department services by 10.4%, and going to a different provider for care where a diagnostic work-up and evaluation would need to be repeated by 24.5% of respondents. All of these scenarios increase the cost of subsequent health care episodes, which ultimately will be assumed by individual hospitals and providers, cost-shifted to full-pay patients, and result in unnecessary personal suffering and harm.

While we do not know where the individuals acquired their debt, it is important to consider these findings in the context of how the health care delivery system is structured in Baltimore. All of the hospitals in Baltimore City are not for profit and there are two academic health centers but no public hospital *per se*, with 17.6% of all uncompensated and Medicaid discharges concentrated in "high-burden" hospitals.[18] There is also a network of community health centers and federally qualified health centers and uncompensated care pooling of funds in the region. The state of Maryland is regulated by the Health Services Cost Review Commission and is an "all-payer" system, which sets in-patient rates based on projected bad debt and charity care levels among other variables at each hospital.[19] Earlier research on the New Jersey "all-payer" system indicated that the volume of care provided to self-pay patients increased when the system was introduced.[20]

The high cost of medical care and the precarious financial circumstances of many of our traditional "safety net" providers and academic health centers[21,22] make debt collection a necessity. However, given the societal expectations, system accommodations, and public support given to institutions that provide the bulk of all care to low-income persons, the indiscriminate pursuit of bad debt does not appear justifiable. Including the extreme poor and destitute in collection agency referrals, litigation, and other tactics represents, at best, an insensitive approach to community care, and, at worst, a predatory and market-driven response to adverse patient selection in urban health care settings. If these measures are to be employed, they should

Table 5. Factors Associated with Reporting a Change in Health-seeking Behavior After Being Referred to a Collection Agency or Having a Current Medical Debt

	% Reported Change	% No Effect	*P* Value	MLR OR (95% CI)
Age, y				
17–44	62.3	37.7		1.0
45–84	73.4	26.6	.05	2.0 (0.9 to 4.4)
Race, %				
African American	67.3	32.7		1.0
White	63.4	36.6	.63	0.7 (0.3 to 2.1)
Gender, %				
Male	65.8	34.2		1.0
Female	69.1	30.9	.56	1.0 (0.4 to 2.3)
Education, %				
<12th grade	77.3	22.7		2.5 (1.0 to 6.0)
≥12th grade	62.0	38.0	.01	1.0
Income, %				
Below federal poverty level	62.0	38.0		1.0
Above federal poverty level	75.6	24.4	.03	2.1 (0.8 to 5.3)
Insurance status, %				
Yes	73.2	26.8		1.0
No	61.5	38.5	.04	0.6 (0.2 to 1.4)
Source for usual care, %				
Emergency room	54.6	45.4		1.0
Community/ outpatient clinic	68.8	31.2	.18	0.2 (0.1 to 1.0)
With dependent children, %				
No	65.6	34.4		1.0
Yes	64.4	35.6	.85	0.9 (0.3 to 2.4)
Housing status, %				
Homeless	67.7	32.3		4.1 (1.4 to 12.3)
Housed	66.7	33.3	.86	1.0
Chronic medical condition, %				
No	77.6	22.4		1.0
Yes	64.1	35.9	.04	0.2 (0.1 to 0.5)
Chronic mental health condition, %				
No	68.6	31.4		1.0
Yes	65.8	34.2	.63	0.9 (0.4 to 2.3)
History of substance abuse, %				
No	72.7	27.3		1.0
Yes	63.5	36.5	.11	0.8 (0.3 to 2.5)
Current social service needs, %				
No	76.9	23.1		1.0
Yes	64.4	35.6	.06	0.6 (0.2 to 1.6)
Site of interview, %				
Clinical	66.7	33.3		0.6 (0.3 to 2.1)
Nonclinical	69.4	30.6	.65	1.0

OR, odds ratio; CI, confidence interval.

be linked to means testing with safeguards to ensure that it does not preclude subsequent health care delivery. Additionally, the disproportionate representation of uninsured persons with medical debt calls for greater availability of sliding scales, payment plans, and charity care, and ultimately, expanded insurance coverage. Earlier research identified inconsistent offerings of financial services within primary care settings[2] and to people of color.[16] Additional research is needed to better delineate these practices and their consequences.

There are several limitations to this study that need to be recognized. First, the findings are from a cross-sectional survey of self-reported data. We did not verify the reports of medical debt or collection agency referrals. Nor do we document actual health-seeking behaviors or outcomes associated with deferred treatment. These findings do confirm, however, the anecdotal reports made by providers within the Baltimore Community Health Consortium and are supported by earlier research that found similar adverse consequences attributed to the cost of medical care.[23,24] The data presented also only reflect findings from one east-coast urban community. However, the proportion of respondents reporting they had been referred to a collection agency in this study is consistent with that found in a similar study in Pittsburgh, Pa[16], and, based on available personal bankruptcy data, likely reflects a common problem nationally. Finally, the study population is comprised of individuals who were identified in safety net sites specifically established to care for poor and traditionally underserved populations and presumably overrepresent the prevalence of this problem compared with a community-based sample of the general population.

In summary, aggressively pursuing medical debt appears to be both widespread and indiscriminate and to have a substantial effect on subsequent health-seeking behavior among indigent patients. Short of universal health insurance, the success of our pluralist and collective system of caring for indigent and vulnerable populations is contingent on all segments of our health care system being accountable to practice standards and medical ethics, including the handling of medical debt, to ensure timely and affordable health care.

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