Avoiding Free Care at All Costs: A Survey of Uninsured Patients Choosing Not to Seek Emergency Services at an Urban County Hospital

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ABSTRACT *The purpose of this case study was to understand why many uninsured patients opt not to make use of a free public hospital when it is available, instead seeking emergency department care at sites where they will be billed for the services they receive. One hundred fifty seven uninsured patients were interviewed over an 8-week period at three emergency departments that bill for services near a county hospital that provides free care. Data was gathered on income, health status, and credit history. Subjects were also asked if they had previously sought care at the county hospital and, if they had, how satisfied they were with the quality of care and with the wait time. Seventy two percent of the subjects reported household incomes of <\$20,000, 48% reported they were in fair or poor health, and 33% said they were unable to pay at least one medical bill at the site where they were seeking care. 65% reported they had previously received care at the county hospital, and of these 61% said they were not-too-likely or not-at-all likely to return. In a regression analysis, experience with wait time correlated with subjects willingness to return, whereas their satisfaction with quality, their income, problems with debt, and reported health status did not. Access involves more than geographic proximity and affordability. Excessive wait times can deter even patients who are poor, in ill health and in debt from making use of services that are intended for their benefit.*

KEYWORDS *Access to care, Emergency care.*

INTRODUCTION

Background In order to remain compliant with federal law, emergency departments are required to evaluate and treat patients regardless of ability to pay.¹ As a result, they provide vital access to care to the uninsured. Most emergency departments, however, do bill uninsured patients for services rendered immediately

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following the visit.² Given the high costs of ED care it is not surprising that many, if not most individuals without insurance are unable to pay these bills. The resulting bad debt is not only costly to providers but may have a devastating impact on patients' finances. Unpaid medical bills are now the leading cause of personal bankruptcy.³

A relatively small number of providers termed "core safety net provider" by the Institute of Medicine have a "legal mandate or explicitly adopted mission" to offer available and affordable services through the provision of charity care.⁴ Charity care is based on ability to pay and is provided to the most indigent patients at no charge. Although charity care and bad debt care are forms of uncompensated care, the latter burdens individuals with financial hardship and a disincentive to seek further services—while the former does not. Hence emergency departments that offer charity care are advantageous to indigent patients on a financial basis.

There is ample evidence that financial concerns are a barrier to emergency care, even though patients are not turned away because of inability to pay. In a recent population based survey identifying 2.8 million adults who reported ED access problems, 26.1% cited lack of insurance and cost as a cause.⁵ By far the most frequently reported barrier to ED care, however, is excessive wait time, cited by 53.9% in the same survey. While prolonged wait times are widespread, the problem is more severe in low income communities with higher levels of uninsurance where core safety net providers are located.^{6–8} Not surprisingly, patients must be prepared to wait longer in order to get free or reduced fee care.^{9–11}

How willing are indigent patients to endure prolonged waiting times to avoid shouldering the expense of ED care? We felt the question to be significant because, in gauging the functionality of the safety net, one must determine whether it is serving those who need it. In a national study of ED overcrowding in academic medical centers, waiting times ranged from 0 to over 40 h "from triage until called from waiting room."¹² As wait times begin to approach two days many patients, regardless of financial need, may simply regard services as inaccessible.¹³ They will "spillover" into neighboring non-safety net facilities, with the potentially deleterious implications for the finances of patients and providers alike.

We set out to test the hypothesis that excessive wait times can drive even the poorest and most indigent patients away from charity care services to costly ED care. We postulated that such spillover could be measured regionally by gathering data from uninsured patients seeking care *near* a safety net provider, where geographic proximity is not an element in decisions about where to seek medical services. Before concluding that patients seen at EDs near a core safety net provider reflect "spillover" due to excessive wait times, however, it is first necessary to exclude two alternative explanations for why uninsured patients might opt out of free care: (a) that they are choosing not to use the safety net because they view themselves as financially secure, with only minor medical needs, or (b) that they regard the quality of care to be unsatisfactory. If, however, those avoiding free care at the county hospital are, in fact, predominantly poor with high medical costs and financial debt and report that they would like to use it but perceive it to be inaccessible because of overcrowding, then the problem is, indeed, spillover.

In its report assessing the ability of the safety net to continue to serve medically indigent patients, *America's Health Care Safety Net: Intact but Endangered*, the Institute of Medicine addressed the inadequate geographic distribution of core safety net providers as jeopardizing its mission: For free care to be accessible it must be reasonably near to those who need it.⁴ However, excessive wait times, already a

national problem but disproportionately severe at sites that offer free care, may pose an additional barrier. The benefits of access to a site of care may be offset by prolonged delays to receipt of care.

This Investigation In 2003, uninsured patients made approximately 20,000 visits to three hospital EDs at non-core safety net providers that were sites for this study, all within four miles of John H. Stroger Jr Hospital of Cook County where there were approximately 125,000 visits by self-pay patients during the same time period. Data was gathered to determine whether the uninsured patients opting out of free service for costly care do so because they are in a relatively stable financial situation and can afford to self-pay, because of concerns about the quality of care at the safety net provider, or because overcrowding is making access overly burdensome.

MATERIALS AND METHODS

Study Design The goal of this study was to examine barriers to the use of the safety net by medically indigent patients in a single metropolitan region after controlling for the well described problems of geographic proximity and cost. The design was based on the premise that by enrolling uninsured patients seeking care *near* a provider that offers *free* services, we could eliminate these variables, enabling us to gather data on two others: concerns about quality and problems with excessive wait time. In addition, we solicited data on income, reported credit history and perceptions of health status from each subject to determine whether those interviewed were truly indigent, or simply uninsured but capable of paying for their care.

A survey instrument was designed to gather basic demographic data along with information on insurance, income, self-reported health status and problems with unpaid bills. With regard to the latter two, we were particularly interested in how patients *perceive* their health status and how much they *worry* about their credit, rather than on objective measures, since our focus is on the factors that drive decisions about where to seek care.

Validated questions were collated from the National Health Interview Survey,¹⁴ the Current Population Survey,¹⁵ and the Survey of Consumer Finances.¹⁶ Questions about seeking care in the safety net were drafted *de novo*. The survey was translated into Spanish and English, prepared for administration on a laptop computer using the CASES system developed by the Computer Assisted Survey Methods program at the University of California-Berkley, and refined with cognitive interviews and field testing at each of the sites. All steps in the development and administration process were carried out with assistance from the UIC Survey Research Laboratory, which has over 40 years of experience in health services survey research.¹⁷

Study Setting and Population Subjects were enrolled in three emergency departments near a county hospital that is a core-safety net provider in a large metropolitan area. Two of the emergency departments are at institutions within 1/8th mile of the county hospital, and the third is approximately four miles away. One is for-profit, another not-for-profit and the third publicly owned. All routinely bill for ED services regardless of patients' insurance status—in contrast to the county hospital that does not.

Study Protocol The study was conducted over an eight-week period from August 15th to November 13th 2003. Interviewers attempted to sample all ED shifts but were predominantly present during the day and evening hours, 3 days a week. In accordance with EMTALA requirements, data regarding insurance status was solicited only after patients had been fully processed through triage to receive care.¹⁸ Clerical personnel in the emergency departments were instructed to provide all self-pay patients, excluding those who were medically unstable, with a flyer informing them about the study during all shifts when an interviewer was present. They also kept track of the number of uninsured patients coming through the ED when an interviewer was present. In addition, interviewers handed out a flyer to all patients entering the ED, to provide an opportunity for self-pay patients to self-identify. Interested patients then met with an interviewer who was bilingual in Spanish and English to screen for eligibility and to discuss the study. An IRB approved protocol was followed that included a process of obtaining written informed consent, coding of interviews to protect confidentiality, and remuneration of \$10 for a 15-minute interview for those who consented to participate. In instances where the patient was less than 18 years of age, the parent or guardian served as subject both for informed consent and data collection.

Key Outcome Measures and Data Analyses The dependent variable for our analysis was subjects' reported likelihood of returning to the county hospital for future care. Those who said they had never been to the county hospital were analyzed separately. Hypothesized predictors were initially entered into a binary logistic model utilizing the full range of responses on a Likert scale for the dependent variable: "very likely," "somewhat likely," "not too likely," "not at all likely." To obtain adjusted odds ratios (ORs), we re-estimated the final model utilizing predictors identified as significant in the first run with dichotomized variables such that patients who were "Not too likely" or "Not at all likely" to return to the county hospital were in one group and those who were "Somewhat likely" or "Very likely" to return were in another. For categorical variables with "very satisfied," "somewhat satisfied," "not too satisfied," and "not at all satisfied" categories, the "very..." and "somewhat satisfied" categories were compared with the "not too" and "not at all" satisfied categories. All analyses used the SPSS statistical program (SPSS Inc, version 12.0, Chicago, Ill).

RESULTS

Respondent Characteristics One hundred sixty-two patients who expressed an interest were identified as eligible for the study. In addition, there were about eight instances in which patients who were likely to have been eligible, based on clerical data, declined to self-identify to the interviewers or informed the clerks they were not interested in the participating in the study—so the total likely eligible pool was 170. Following a process of informed consent, 157 agreed to participate (92% participation rate). Their demographic, financial, and health status characteristics are presented in Table 1. Overall, almost half (48%) of the respondents rated their health as either "fair" or "poor." Sixty (38%) reported that they had a health condition that required obtaining care on a regular basis. The most common chronic diseases were respiratory conditions including asthma and COPD (35%), cancers (18%), diabetes (13%), depression (12%), hypertension (12%), and heart

TABLE 1. Demographic, financial, and health status characteristics of subjects ($n = 157$)

Mean age		36 (18–86 Range)
Gender	Male	75 (48%)
	Female	82 (52)
Race	White	14 (9)
	Black	113 (72)
	Hispanic	22 (14)
	Other	8 (5)
Education	<H. School grad.	55 (35)
	H. School grad.	56 (36)
	>H. School grad	46 (29)
Citizenship	U.S citizen	132 (84)
Employment	Full time	35 (22)
	Part time	23 (15)
	Not at All	99 (63)
Household Income	<10K	64 (41)
	10–20K	49 (31)
	20–30K	33 (21)
	>30	11 (7)
Worry about Credit	A lot	86 (55)
	Somewhat	16 (10)
	A little	28 (18)
	Not at all	27 (17)
Experiences with debt	Any history of debt going to collection	129 (82)
	Any history of debt at current site of care	52 (33)
Health status	Excellent	16 (10)
	Very good	18 (12)
	Good	47 (30)
	Fair	60 (38)
	Poor	16 (10)

disease (8%). Respondents' financial situations were often precarious, as suggested by the clear majorities who indicated earning less than \$20,000 per year, worrying about personal credit, and having a prior history of debt going to collection.

Care Experiences Of the participants in the study, 65% reported obtaining care at the county hospital in the previous five years and commented on their experience(s) and likelihood of returning to that hospital for future care (Fig. 1). Of these, a majority (35+29=64%) reported being at least "somewhat satisfied" by the quality of care they received. However, only 25% (14+11) were similarly satisfied with the wait time experienced in seeking care. Most importantly for the purposes of this study, only 39% (24+15) indicated that they were "somewhat" or "very" likely to return to the county hospital for future care needs.

Multivariable Analyses In the initial ordinal regression model, perceptions about the quality of care and satisfaction with wait time were the only significant predictors of the likelihood that a patient would return to the county hospital (Table 2). All other demographic, financial, and health status or attitudinal factors were not nearly significant, with P values ranging from 0.42 to 0.97. When the analysis was

FIGURE 1. Care experiences of those seeking care at a county hospital ED.

carried out using dichotomized variables and the predictors that were significant in the first run, those who were satisfied with the wait time encountered at the county hospital were more than three times as likely to report they would return for future care needs than those who were not (OR 3.4; 95% confidence interval [CI], 1.18–9.81). Perception of quality of care, however, had less of a correlation, with a confidence interval range falling just short of significance as a predictor of willingness to return to the county hospital (OR 2.59; 95% CI, 0.908–7.38) (Table 3).

To assess the possibility that satisfaction with quality might be correlated with satisfaction with wait time, we re-ran the regression analysis with the former as the dependent variable to ascertain the proportion of its variance that could be accounted for by the latter. We found that 24% of the variance in satisfaction with quality of care was attributable to satisfaction with wait time, lending additional support to primacy of wait times in determining respondents’ willingness to return to the county hospital.

TABLE 2. Results of an initial ordinal regression model used to determine significant factors associated with patients’ likelihood of returning to a county hospital ED

Patient characteristics	Wald	Significance (P value)	95% Confidence interval	
			Lower bound	Upper bound
Gender	0.231	0.631	−0.655	1.082
Race	0.002	0.965	−1.418	1.483
Education	0.001	0.972	−0.554	0.574
Citizenship	0.225	0.635	−2.304	1.406
Employment status	0.075	0.784	−0.627	0.473
Income	0.438	0.508	−0.698	0.346
Health status (self report)	1.382	0.240	−0.651	0.163
Worry about credit	0.123	0.726	−0.462	0.322
Any history of debt to collection	0.455	0.500	−0.668	1.368
Any debt at current site of care	0.649	0.421	−1.258	0.525
Satisfaction with wait time	5.451	0.020	−0.899	−0.078
Satisfaction with quality of care	9.959	0.002	−1.094	−0.256

TABLE 3. Results of multivariate logistic regression model used to determine significant factors associated with patients' likelihood of returning to a county hospital ED*

Variables	Adjusted odds ratio	95% Confidence interval
Satisfaction with the quality of care received [†]	2.59	0.908–7.381
Satisfaction with the wait time experienced [†]	3.40	1.179–9.808

*Dependent variable dichotomized such that patients who were “Not too likely” or “Not at all likely” to return to the county hospital were in one group and those who were “Somewhat likely” or “Very likely” to return were in another.

[†]Odds ratios compare those responding “very satisfied” or “somewhat satisfied” with those responding “not too satisfied” and “not at all satisfied.”

Of the remaining patients who reported no prior experiences at the county hospital (35%), the most frequent reason given for never having been there was that they had heard the wait time is too long (33%). The next three most common explanations were, respectively, concerns about quality (19%), not knowing the care is free (16%), and never having needed care before (14%).

DISCUSSION

In this study, uninsured individuals who opted not to obtain care at the county hospital, where services are free to indigent patients, but to seek care at nearby sites where they will have to pay, were typically poor, ill and in debt. Nearly three-quarters had household incomes of less than \$20,000, almost half reported fair or poor health, and a third said they were already in debt at the site where they were seeking care. In sum, these were not well off or healthy individuals who did not need the security of the safety net, but the truly indigent.

Our findings suggest that satisfaction with wait time may have a dominant effect on patients' willingness to return to a county hospital for care. Concerns about quality of care appear to be a factor as well, though less so; over 2/3rds of the patients who had been to the county hospital reported that they were either “very” or “somewhat” satisfied with the quality of care. Satisfaction with quality of care was substantially correlated with satisfaction with wait time, adding further support for our finding that wait time experience is a key driver of willingness to return. Remarkably, patients' decisions about whether they would seek free care were insensitive to their financial concerns, including worry about credit and bad debt.

The finding that a high number of indigent patients have opted not to use the safety net even when a core safety net provider is nearby and free, is an illustration of spillover, of how the safety net can fail even when it is present, affordable, and perceived by most to be of good quality. Some have used the analogy of adding water to a glass that is already filled to illustrate this failure—it simply overflows. According to Derlet, “in the case of EDs, when they are filled with critically, urgently ill, and injured patients, other patients, mostly non-urgent, leave after waiting what may be long periods of time in overcrowded waiting rooms.”¹⁹

LIMITATIONS

There are a number of limitations to our study design common to studies based on survey data, particularly those that include patient perceptions: First, our outcome

measure “Likelihood of returning for future care” is a surrogate outcome; the true outcome, future revisits to the county hospital ED, was not measured. The correlation between where patients say they will go and where they will actually go for future care episodes is not known. Second, satisfaction with wait time is a surrogate marker for actual wait time. Experience with wait time can be influenced, for instance, by whether ED staff keeps patients and families informed about delays, although this effect has only been demonstrated for relatively short wait times.^{20,21} Third, the associations we identified in our multivariate model do not prove causation; it is possible that unmeasured variables associated with both perceived wait times and revisit plans are the real salient variables in site choice. Fourth, this is a regional study, raising questions about generalizability. It is possible that other safety net institutions are avoided primarily for reasons excluded in this study, such as concerns about quality, or that bad debt and credit worries play a greater role in decisions about where to seek care among other populations. Those with higher incomes and net asset worth, for instance, might perceive that they have more to lose by damaging their credit. Furthermore, we only sampled three EDs near the core safety net provider when there are several others within a 4-mile radius. As a result we are likely underreporting the number of indigent patients who have opted not to seek care at the county hospital. Also, we do not know whether the sociodemographic and health characteristics of patients who sought care elsewhere were similar. It is possible that patients with different demographic and clinical characteristics would weigh factors such as wait time, quality of care and health status differently when deciding whether they would return to the County Hospital. Finally, our research did not include medically indigent individuals who forgo care altogether—including free care—for a wide variety of reasons. Studies modeling health care utilization suggest that multiple factors can influence whether an individual seeks medical services, including health beliefs, cultural practices, language barriers, competing priorities, low health literacy, social networks, and the perceived need for care.^{22–24} Exploring these variables was beyond the scope of our study, which focused on active users of the health care system.

CONCLUSIONS

Our present study illustrates a nested effect in which experiences with overcrowding at an urban safety net provider steer individuals who are already deeply worried about their medical costs toward EDs that bill and collect for services. Access involves more than geographic proximity and affordability. Excessive wait times can make medical care functionally inaccessible, and should be regarded as a component of access to care at core safety net providers.

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