Unmet Need for Medical Care and Safety Net Accessibility among Birmingham's Homeless

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ABSTRACT *Although homeless individuals often experience health problems requiring care, there are limitations to available research concerning the scale of their needs and the accessibility of safety net agencies to meet them. Traditional access-to-care surveys calculate unmet need among all persons queried (rather than persons needing care), making it difficult to calculate what percentage of persons requiring care actually obtain it. Additionally, no research has compared the relative accessibility of safety net programs to homeless persons in need. This cross-sectional, community-based survey assessed the prevalence of unmet need for several specific types of health care and compared the accessibility of agencies in Birmingham, AL. Substantial proportions of respondents reported unmet needs for general medical care (46 %), specialty care (51 %), mental health care (51 %), dental care (62 %), medications (57 %), and care of a child (23 %). The most commonly mentioned sites where care was sought included a federally funded Health Care for the Homeless (HCH) program (59 %), a religious free clinic (31 %), and a public hospital emergency department (51 %). The HCH program was most commonly cited as the location where care, once sought, could not be obtained (15 %), followed by the county hospital primary care clinics (13 %). In this survey, unmet need was common for all types of care queried, including primary care. Key components of the safety net, including a federally funded homeless health care program, had suboptimum accessibility.*

KEYWORDS *Homeless persons, Safety net, Primary care, Survey research*

INTRODUCTION

Homelessness poses serious challenges to health and well-being and remains a common experience among Americans, affecting an estimated 649,917 persons on a single night in 2010.¹ Although previous research has documented problems with

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Preliminary findings of this survey, without the statistical analysis, were prepared for the Birmingham Coalition for the Homeless and described in the Birmingham News on 27 September 2010.

access to health care within the homeless population,²⁻⁴ our present understanding is limited in two ways. First, available health survey research questions to assess unmet health care need include a “hidden contingency” which effectively masks deficits in service adequacy. Classic questions take this form: “Since (time), has there been a time when you needed health care but were unable to obtain it?”^{5,6} The “hidden contingency” is that, in order for a respondent to affirm an unmet need, the need must be present in the first place.⁷ However, because the percentage of persons with unmet need is calculated with respect to a denominator of all survey respondents, rather than persons having the need (which the question is not designed to assess), the adequacy of service availability may be overestimated. Additionally, the most prominent national estimate of unmet need recruited clients who had successfully obtained care from federally funded homeless health programs.⁸ It is possible that estimates for unmet need would be higher if persons not utilizing such health programs were included.

Second, there has been little effort to compare the accessibility of different safety net health service providers, even though homeless persons may turn to any of several potential sources of care. Federally funded Health Care for the Homeless (HCH) programs are one major component that has evolved since the original establishment of these programs in the late 1980s. Appropriations have expanded over the years, totaling \$188.3 million nationally in 2009.⁹ This funding stream underwent a major evolution in 1996, when it was consolidated with that of all other federally supported community health centers, a legislative move that simplified oversight while reducing requirements for HCH programs to offer homeless-specific services.¹⁰ Even in the 208 communities where HCH programs operate, homeless individuals may access nonfederal free clinics, of which there are estimated to be over 1,100 nationally,¹¹ in addition to emergency departments (EDs) and private practitioners. However, little research has assessed whether any of these providers are in fact more or less accessible to homeless persons, a population whose acute care hospital services are seen as costly and sometimes excessive.¹² In Birmingham, AL, the dominant safety net providers available to homeless persons are similar to what is seen in many communities, including an HCH program, as well as county and university hospitals, and a nongovernmental free clinic. Understanding homeless persons’ ease of access to these providers has potential to inform national policy debates about the optimal strategy for meeting the health care needs of this vulnerable population.

This survey, focused on homeless persons in Birmingham, AL, was motivated in part by a prior more limited project reporting that the percentage of Birmingham homeless with unmet medical need of any kind had risen from 35 to 54 % between 1995 and 2005, despite the fact that there had been no major increase in the number of homeless persons and funding for the local HCH program and county hospital had increased.¹³ In light of changes to Birmingham’s health care safety net and disputes within local media regarding the accessibility of the local safety net system,¹⁴ this new survey was devised to clarify the types of medical needs commonly requiring care, to assess the percentage who had been unable to obtain care for each need, and to compare safety net provider accessibility.

METHODS

This study is based on a survey of a random sample of homeless individuals utilizing four shelters in Birmingham, AL conducted in May and June 2010. The study was

approved by the Institutional Review Board of the University of Alabama at Birmingham. Individuals qualified as homeless if they were not currently living in a home, apartment, or trailer that they own or rent.

Sample

Prior funded research within Birmingham's homeless population achieved a representative sample by active selection within designated locations (streets, shelters, and housing programs) to obtain proportions that match communitywide census data for balance of gender, race, and location.¹⁵⁻¹⁷ This survey, utilizing two volunteer medical students and a faculty member, set out to obtain a sample through collaboration with four facilities serving different components of Birmingham's homeless population (shelter-users, rehabilitation program participants, and "rough sleepers"/street-dwelling homeless), while aiming for a gender balance to match community census data. Among the 4 facilities included, 2 combined emergency shelter and recovery programs for homeless men (1 for men only, $n=50$; 1 for men and women, $n=50$); 1 provided overnight and long-term assistance to homeless women and families ($n=50$); and 1 provided daytime services for persons living on the streets ($n=50$). Interviewers were required to achieve overall gender balance of 60 % men and 40 % women, based on prior census data. Interviewers approximated a random sample within shelter common areas by directing their approach with a manual spinner, alternately proceeding from the center and from the perimeter of shelter common areas to solicit participants. Interviews occurred in a private space. Incentives for participating in the survey were a pair of socks, deodorant, and Gatorade. Informed consent was obtained using procedures approved by the Institutional Review Board of the University of Alabama at Birmingham.

Participants were screened and excluded if they had already participated in the survey, had been in Birmingham <30 days, or were <19 years old (Alabama's legal age of majority). Of 266 homeless persons approached, 51 (19.2 %) declined participation, 9 (3.4 %) were excluded during the screening, and 6 surveys (2.9 %) were stopped after discovering that the person was unable to participate or had not been in Birmingham at least 30 days, resulting in $n=200$ (75.2 % of persons approached). Although the protocol excluded persons who did not speak English, no persons unable to speak English were found, consistent with prior studies showing that Birmingham homeless are primarily local in origin.¹⁵

Measures

In addition to demographic information and several items related to homelessness and health status, the survey evaluated participants' access to different types of health services (general health, specialty, mental, child, dental, and prescription medicine). The participants were asked if, "since you became homeless," they needed to see a health care provider for each of several types of care and about their need for medication. For example, for specialty care, the query was "have you needed to see a specialist doctor who focuses on a particular medical problem, surgical care, or OB/GYN care for women's problems." For each type of care where a need was affirmed, unmet need was determined if the respondent affirmed the following: "At least once, you could not get this type of care at all."

Queries pertaining to where care was sought occurred at the end of the survey. For this section, the interviewer read a list of 17 community health care facilities. For each facility, the respondent was asked to report if he or she had ever tried to obtain

care (for any reason). For places where care was sought, respondents were asked if they actually received care and to rate how “easy or hard” it was to obtain (easy, not easy or hard, not hard). Finally, for respondents who described a place as “hard” to get care, they were asked “why was it hard to get care?” Interviewers briefly annotated the reasons articulated by the respondent in free text.

Characteristics relevant to predicting health care utilization were assessed by survey and organized according to an adaptation of the Behavioral Model.¹⁸ *Predisposing* characteristics were gender, age, race, homeless duration, time spent on the streets (unsheltered status), and military service history. *Enabling/impeding* characteristics were assessed by asking participants if they experienced specific problems while trying to seek each type of health care. These problems included could not pay for services, did not have an access card for the place, did not know where to go, experienced transportation problems, office or clinic hours were inconvenient, did not have someone to watch one’s children, and long waiting times. Additional measures included source of income and insurance status. *Need* variables included general self-reported health status (excellent, very good, good, fair, and poor), presence of any one of ten chronic health problems (cancer excluding skin cancer, chronic lung disease/emphysema/asthma/bronchitis, congestive heart failure, diabetes, heart attack, pneumonia, stroke, high blood pressure, depression/anxiety/schizophrenia/posttraumatic stress syndrome, and HIV), and the likely presence of an alcohol or drug problem, utilizing the validated two-item conjoint screen for primary care, with reported sensitivity and specificity of 79 and 78 %, respectively.¹⁹

Analysis

We examined unmet need for care in these categories: (a) general medical, (b) specialty care, (c) mental health, (d) dental, and (e) medications. Unmet need for care of children was queried for descriptive purposes but not modeled due to low numbers. For purposes of illustration, comparable estimates of unmet need for general medical care, mental health care, medications, and dental care were obtained from a 2003 national survey of persons obtaining care at federally funded HCH programs.⁸ Multivariable adjustment through logistic regression was used to identify independent predictors of unmet need. Given a modest sample size and to avoid model overfitting, we selected representative variables, a priori, including predisposing, enabling/impeding, and need categories, based on our clinical interest (e.g., street homelessness) and evidence of relevance in prior studies of homeless samples.^{3,4,8,20} We separately iterated a final model with an alternate measure of homeless status (chronic homelessness) and with inclusion of military service history. To assure model stability, we reduced the degrees of freedom for some variables by simplifying them into binary form. For example, self-report of having any one of four queried psychiatric diagnoses was classed as “mental problem.” Similarly, in multivariable models, Blacks ($n=148$) was compared to White/Other, where “Other” consisted of 2 Native Americans and 1 Asian.

Among the five sites where care was most commonly sought, we described the percentage of respondents who sought care at each one and the percentage who reported inability to obtain care at that site. Because a respondent could report having sought care at multiple sites (making a chi-squared test inappropriate), a statistical comparison of site accessibility was calculated with a repeated-measures logistic regression in which “seeking care” (or alternately “inability to obtain care”) was the outcome variable and “site” was a predictor variable. For this analysis, the unit of analysis is “care-seeking episode.” An individual who sought no care

contributes zero observations and an individual who sought care at three different sites contributes three observations, and the generalized estimating equation framework includes variance adjustment to address the correlated nature of care-seeking episodes by a single individual.

RESULTS

Despite its more limited sampling strategy, this survey approximated Birmingham's 2005 community survey in relation to demographics, living circumstances, and health need (Table 1). As in prior reports, health vulnerabilities among Birmingham's homeless were notable, including prevalence of addiction (54 %), self-reported mental illness (46 %), as well as reported diagnoses of hypertension (46 %) and diabetes (21 %). Fewer than 20 % reported their general health as excellent or very good.

The prevalence of unmet health care needs is shown in Table 2, calculated with respect to persons having the need in question and also with respect to all persons surveyed. For illustrative purposes, the findings are shown alongside analogous results from a 2003 US national sample of HCH program users⁸ (Table 2). For four types of care, the majority of persons endorsing a need for care indicated it went unmet: specialty, mental, dental, and medications. Nearly half the persons requiring general health care reported unmet need. Almost a quarter of persons reported their children had gone without needed care. When unmet need was compared to results seen among persons accessing HCH programs in 2003, the results in Birmingham were similar to the national sample.⁸

Table 3 documents the most common barriers to obtaining care among persons reporting they needed it. Inability to pay (and its corollary, lack of an "access card" for subsidized care at the local safety net hospital) was extremely prevalent, affecting a majority of persons with the reported need in four of six categories queried. Lack of transportation and the problem of not knowing where to obtain care generally affected one quarter to one half of respondents for every type of need queried. Excessive waits and inconvenient hours, although commonly cited, were slightly less prevalent.

In multivariable models (Table 4), the directions of association between hypothesized predictors and unmet need were typically similar across different types of care, although not always significant. For example, having health insurance was associated with a lower likelihood of unmet need for dental care (odds ratio [OR], 0.29, 95 % confidence interval [CI], 0.10–0.84) and prescription medications (OR, 0.36; 95 % CI, 0.16–0.79), with a nonsignificant (but similar point estimate) for general, specialty, and mental health care. African Americans were less likely to report unmet need for general medical care (OR, 0.38; 95 % CI, 0.17–0.85). Wide CIs precluded significant associations of race with other care types, but point estimates fell below 1.0 for all care types other than mental health care. In separate models (not shown), military service history and chronic homelessness were nonsignificant across models and did not alter the associations found.

Among outpatient clinics, care was most often sought at the HCH program (51 %), the free clinic (31 %), a county hospital clinic (23 %), and at two EDs (Table 5). Inability to obtain care was most common at the HCH program (15 % of persons who sought care there) and the county hospital clinic (13 %). In a statistical comparison (Table 5), treating the free clinic as referent, the HCH program was the place where care was most likely to be sought (OR, 3.1; 95 % CI, 2.2–4.4). It is also

TABLE 1 Characteristics of the Birmingham homeless shelter sample (2010), the Birmingham probability sample (2005), and homeless US adults (2003)

	Birmingham		USA
	2010 ^a	2005 ^b	2003 ^c
	n=200	n=161	n=966
Predisposing			
Age, years; mean $\pm$ SD	45 $\pm$ 10	41 $\pm$ 10	41
Male, %	60	66	58
Female, %	40	34	42
Race			
Black, %	74	66	38
White/other, %	26	34	62
Veteran, %	20	21	12
Chronically homeless ^d , %	44	29	35
Recently unsheltered ^e , %	23	30	NR
Living with own children, %	10	5	NR
Enabling/impeding			
No health insurance, %	69	75 ^f	60 ^g
No health insurance and no “safety net” hospital access card, %	44	75 ^h	60 ^g
Need			
Hypertension, %	46	40	29
Diabetes, %	21	9	9
HIV, %	2	8	3.5
Addiction screen—positive ⁱ , %	54	59	65
Mental illness ^j , %	46	43	48
General health status			
Excellent, %	9.0	16	9.8
Very good %	10.5	N/A	18
Good, %	34	38	28
Fair/poor, %	48	46	44

^aSample of 200 persons in 2010, devised from 4 Birmingham shelters, including a day shelter for street homeless

^bSystematic representative sample of 161 homeless persons obtained in 2005, across 20 service locations (see text)¹⁷

^cNational sample of clients of federal HCH programs, as reported by Baggett et al.⁸

^d“Chronically homeless” defined based on self-report of >1 year continuous homelessness or ≥ 4 episodes in 3 years

^eAffirmation of “unsheltered” in the 2010 survey is based on participant’s endorsement of where he/she had “most often spent the night” in the past week. In the 2005 survey, this was based on at least one night unsheltered in the last 2 weeks

^fEstimate of uninsured status in Birmingham 2005 sample is based on slightly different methodology as reported in the “Methods” section

^gThe 2003 National HCH Survey did not distinguish “insurance” from other forms of subsidized health care access provided by state and county institutions, so the same number is reported for both categories

^hThe 2005 Birmingham survey lacked a query regarding access card for the safety net hospital, so the same number is reported for both categories

ⁱPositive addiction screen is based on positive two-item conjoint screen²¹ (Birmingham, 2010), self-reported addiction problem (Birmingham, 2005¹⁰) or past-year at-risk use or treatment (USA sample, 2003^{5,6})

^jMental illness is based on (a) affirmation of having been diagnosed with any of the following: depression, anxiety, schizophrenia, or posttraumatic stress disorder (2010 Birmingham sample) and (b) affirmation of having “ever had a problem in your life with mental illness or nerves” (Birmingham, 2005¹⁰) or past treatment for mental or emotional problems (USA sample, 2003⁵)

TABLE 2 Persons reporting unmet need for care among Birmingham homeless (*n*=200) in 2010 and among homeless US adults (*n*=966) in the HCH user survey

Type of health care	Birmingham (2010), <i>n</i> =200			USA (2003), <i>n</i> =966
	Reporting need for care, <i>n</i> (%)	Percent reporting unmet need (among persons affirming need for care)	Percent reporting unmet need (among all respondents)	Percent reporting unmet need (among all respondents)
General	153 (77)	46	36	32
Specialty	83 (42)	51	21	^a
Mental	77 (39)	51	20	21
Medications	140 (70)	57	39	36
Dental	124 (62)	84	52	41
Care for a child	13 (7)	23	2	^a

^aNeed for specialty care and care for one's child were not assessed in the national survey of HCH users (2003)

the place where the odds of care not being obtained were highest (OR, 7.5; 95 % CI, 1.6–35.8).

The free clinic was routinely described as the place where it was “easy” to obtain care (86 %), with the HCH program and the university ED less commonly so. The county hospital clinic and county ED were most likely to be characterized as places where it was “hard” to obtain care. In available free text statements, wait times were mentioned for all three outpatient clinics and the two EDs (Table 6). However, respondents also reported challenges in documenting eligibility (at the HCH program and the county hospital clinics). One noted better responsiveness for homeless persons with Medicaid, compared to homeless persons without Medicaid (HCH).

DISCUSSION

The present survey of homeless persons utilizing four shelters in Birmingham, AL found a population with substantial health care needs, with nearly half having

TABLE 3 Perceived barriers to obtaining health care and prescription medications among homeless persons reporting an unmet need

	General health care <i>n</i> =153	Specialty health care <i>n</i> =83	Mental health care <i>n</i> =77	Dental care <i>n</i> =124	Care for a child <i>n</i> =13	Prescription medications <i>n</i> =140
Could not pay for services	106 (69 %)	53 (64 %)	35 (46 %)	98 (79 %)	5 (39 %)	89 (64 %)
Did not have an access card for the service provider/hospital/clinic	85 (56 %)	38 (46 %)	24 (31 %)	64 (52 %)	4 (31 %)	50 (36 %)
Did not know where to go	51 (33 %)	22 (27 %)	21 (27 %)	65 (52 %)	5 (39 %)	25 (18 %)
Transportation problems	78 (51 %)	37 (45 %)	33 (43 %)	55 (44 %)	4 (31 %)	53 (38 %)
Office or clinic hours were convenient	29 (19 %)	18 (22 %)	15 (19.5)	12 (9.7 %)	3 (23 %)	15 (11 %)
Did not have a baby sitter or someone to watch children	3 (2.0 %)	4 (4.8 %)	2 (2.6)	3 (2.4 %)	3 (23 %)	2 (1.4 %)
Had to wait too long to be seen	79 (52 %)	24 (29 %)	19 (27 %)	21 (17 %)	6 (46 %)	23 (16 %)

Percentages will total to >100 % as respondents could endorse more than one barrier

TABLE 4 Factors associated with unmet need for general health care, specialty care, mental health care, dental care, and prescription medications among homeless persons in Birmingham, AL

	Unmet need for general health care, AOR (95 % CI)	Unmet need for specialty health care, AOR (95 % CI)	Unmet need for mental health care, AOR (95 % CI)	Unmet need for dental care, AOR (95 % CI)	Unmet need for prescription medications, AOR (95 % CI)
Number of persons with unmet need (of 200)	153	83	77	124	140
Predisposing					
Sex (male vs female)	0.86 (0.40–1.86)	1.79 (0.59–5.47)	0.36 (0.12–1.09)	0.73 (0.22–2.41)	0.61 (0.27–1.38)
Race (Black vs White)	0.38 (0.17–0.85)	0.39 (0.12–1.21)	1.21 (0.42–3.48)	0.60 (0.16–2.21)	0.48 (0.20–1.14)
Age (≥ 45 vs < 45 years)	0.72 (0.33–1.55)	0.42 (0.14–1.31)	1.10 (0.38–3.20)	0.62 (0.20–2.00)	0.62 (0.27–1.38)
≥ 1 night on street in last 7 days	1.50 (0.66–3.420)	0.61 (0.18–2.05)	3.48 (0.93–13.03)	1.86 (0.47–7.44)	2.28 (0.93–5.61)
Enabling/impeding					
Health insurance	0.49 (0.22–1.07)	0.38 (0.14–1.05)	0.35 (0.12–1.06)	0.29 (0.100–0.84)	0.36 (0.16–0.79)
Need					
Mental health problem	2.42 (1.15–5.09)	2.52 (0.92–6.910)	2.00 (0.49–8.00)	1.05 (0.60–3.07)	1.25 (0.58–2.67)
Addiction screen positive	1.01 (0.49–2.11)	0.92 (0.32–2.68)	2.06 (0.70–6.08)	1.35 (0.40–3.90)	1.07 (0.51–2.28)
Health status	0.92 (0.39–2.50)	1.32 (0.32–5.47)	1.03 (0.23–4.61)	0.73 (0.19–2.76)	0.79 (0.28–2.27)

Each column represents a separate multivariable logistic regression model. Variables included in the model are those shown in the rows

hypertension, over a fifth with diabetes, and close to half reporting mental illness. On an item concerning general health, which has previously been shown to predict both mortality and hospitalizations,^{21,22} fewer than 20 % reported their general health to be excellent or very good. By contrast, 65.6 % of respondents to the National Health Interview Survey regarded their health as excellent or very good.²³

This report suggests that, when health care needs are experienced among homeless persons in Birmingham, AL, those needs are often not met. In our survey,

TABLE 5 Nonreceipt of care and ease of access according to sites where care was sought among the five most commonly utilized sites ($n=200$)

	Clinics			Emergency departments	
	HCH	Free clinic	County hospital clinic	County hospital ED	University ED
Sites where care was sought					
Number of respondents who ever “tried” to obtain care at site (% of 200)	117 (59 %)	62 (31 %)	46 (23 %)	101 (51 %)	83 (42 %)
Odds ratio for care sought by site (relative to free clinic)	3.1 (2.2–4.4)	1.0 (referent)	0.7 (0.4–1.0)	2.3 (1.6–3.2)	1.6 (1.1–2.3)
Sites where care was not obtained despite being sought					
Number of respondents who assert that they could not obtain care (% among persons who sought care)	17 (15 %)	1 (1.6 %)	6 (13 %)	7 (6.9 %)	4 (4.8 %)
Odds ratio for care not obtained (relative to free clinic)	7.5 (1.6–35.8)	1.0 (referent)	6.6 (1.3–32.6)	4.5 (0.9–22.4)	1.9 (0.3–12.7)

TABLE 6 Statements regarding why care was hard to obtain at three outpatient clinics and two EDs

Site	Example statements
HCH clinic	Have to wait too long for appointments, always need referral or have to pay Seen quicker now with the Medicaid. Last time she had no insurance and she now sees a huge difference in the way she is treated now Long wait (9 h), only give prescriptions (but) they do not fill them
County hospital clinic	They take too long to see you. Waited 11 h and still did not get seen Needed a blue card (county health system access card) and did not have one
Free clinic	You have to be dropped off and wait about 4 h
County hospital ED	Because of the (county hospital access) card situation, it is very hard to get a card. You must show that you get mail in Alabama. Even though they will send appointments in the mail, you cannot use that to verify your address The wait is too long
University hospital ED	Slow. They need to tend to patients quicker Staff assume since you are homeless that you (the homeless patient) just want a place to stay

the proportion who at least once could not obtain needed care since becoming homeless was high, exceeding 50 % for some categories (>75 % for dental care). In this sample, the most commonly endorsed barriers to obtaining care were cost-related in nature. A federally funded HCH program stood out both as the most commonly utilized site of care and also as the place where efforts to obtain care were proportionately less likely to succeed.

Problems for homeless persons requiring specialty medical care have not previously been reported. Homeless persons often have conditions requiring specialty care, including traumatic fractures, neurologic disorders, gynecologic problems, and medical conditions such as diabetes and heart disease.^{24,25} Challenges to obtaining specialty care have previously been identified for Medicaid-insured populations²⁶ and community health center patients.²⁷

A prior report, using an omnibus query about unmet health care needs in general, found that unmet need had risen from 32 % (1995) to 54 % (2005) and that this change was not explained by changes in the characteristics or size of the homeless population.¹³ This new report shows that unmet need was common for all types of care.

Survey results indicate that inability to pay, access card eligibility, wait times, inconvenient hours, and transportation issues were all seen as barriers to care. The relatively common report of inability to obtain care at safety net entities was troubling, and the barriers mentioned by survey respondents (Table 6) agreed with anecdotal observations of the research team. Eligibility determination issues apply to the county hospital clinic (but not its ED), where would-be patients must produce either documentation of county residency or an identity card issued by the local homeless services system. Similar and sometimes more stringent restrictions operate at the federally funded HCH program. To avoid inadvertently providing free care to persons with capacity to pay for it, the program requires written referral documents from shelters and a separate eligibility evaluation process for unsheltered persons. The HCH's homeless medical outreach activities were reduced in 2005 and eliminated shortly thereafter.

Informed speculation can help to explain the degree to which these findings may generalize beyond Birmingham. A restrictive health care safety net may be more characteristic of poorer communities in politically conservative states, although economic stresses on the health care safety net are now widespread.²⁸ Despite a call by the Institute of Medicine for systematic safety net measurement,²⁹ there exist no reliable and comparable measures of safety net strength across localities.³⁰ Because local funds play a major role in funding county hospitals and because Birmingham's surrounding county has had major financial problems,³¹ survey responses concerning the county hospital are likely to be driven by local conditions.

By contrast, the accessibility of this community's federally funded HCH programs probably reflects a combination of national and local influences. When HCH programs first began in the late 1980s, there was programmatic emphasis on tailoring services to meet the unique needs of a population poorly served by mainstream institutions.^{32,33} As funding was brought under a common federal legal umbrella in 1996, requirements on HCH programs were simplified.¹⁰ HCH programs retain funding by documenting a number of patient encounters. However, to date, they have not been required to demonstrate market penetration within a catchment area. Street and shelter outreach^{34,35} is itself optional; indeed, the program in Birmingham terminated all such outreach prior to 2010. Of 208 federal HCH programs, only 15 had designated staff in the role of "outreach workers."³⁶ A federal requirement that individual health centers evaluate eligibility and assign fees based on a sliding scale can result in eligibility procedures that are more or less onerous to potential clients. For example, requiring letters from shelters, when shelter beds are available for a small minority of homeless individuals, may represent a barrier.

This survey is subject to limitations. Homeless persons' self-report of service utilization is broadly but not completely accurate;³⁷ nevertheless, perceived unmet need for care remains a widespread and accepted standard for national assessments of health care access.³⁸ The time frame referenced in the present survey, "since you've been homeless," was chosen specifically to permit comparability to past surveys conducted in Birmingham. However, this choice introduces uncertainty in comparison to a 2003 national survey, which referenced the past 12 months.⁸ Since roughly two thirds of our sample had been homeless <12 months (a shorter time window for unmet need) and one third had been homeless >12 months (a longer period), it is possible that reports from the Birmingham sample may underrepresent the prevalence of unmet need had a 12-month time frame been queried across all persons. Additionally, this study's statistical models for independent predictors of unmet need are somewhat underpowered and would have gained by including indicators such as competing priorities² and experience of physical or sexual assault.⁴ Finally, since this survey was collected in 2010, it likely underestimates deficits in access to care as the last 2 years have seen a destabilization of the county hospital finances, closure of its ED (the second most utilized site of care in our sample), and a loss of primary care staff from the outpatient service.³⁹ Although the etiology of Birmingham's safety net financial dysfunction is distinctive, similar stresses are projected for safety net hospitals in those states declining Medicaid expansion under the Affordable Care Act as a result of legally mandated reductions in federal payments to hospitals caring for a disproportionate share of the poor (disproportionate share hospital payments).⁴⁰

CONCLUSION

A prior report described a decline in access to health care for homeless persons in Birmingham.¹³ This report underscores that access problems afflict a substantial minority and often the majority of homeless persons requiring each type of care queried, including primary and specialty care. With the Patient Protection and Affordable Care Act to expand Medicaid eligibility in 2014, access to specialty care may hinge in part on how states set Medicaid reimbursement rates for such care. Access to general health care will depend in part on the requirements applied and the resources available to over 200 community health centers that receive federal funds specifically for the care of homeless persons. Additionally, new efforts to spur the Patient-Centered Medical Home model within federally sponsored HCH programs provide fresh impetus for funders and programs to consider methods to assure optimum accessibility for this population.⁴¹ Free clinics tend to operate with fewer resources but are subject to fewer bureaucratic requirements. Further research is needed to determine the role that such programs can play in assuring homeless persons' access to health care.

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