

Preferences for Sites of Care Among Urban Homeless and Housed Poor Adults

Thomas P. O'Toole, MD, Jeanette L. Gibbon, MPH, Barbara H. Hanusa, PhD,
Michael J. Fine, MD, MSc

OBJECTIVE: To describe sources of health care used by homeless and housed poor adults.

DESIGN: In a cross-sectional survey, face-to-face interviews were conducted to assess source of usual care, preferred site of care for specific problems, perceived need for health insurance at different sites of care, and satisfaction with care received. Polychotomous logistic regression analysis was used to identify the factors associated with selecting non-ambulatory-care sites for usual care.

SETTING: Twenty-four community-based sites (i.e., soup kitchens, drop-in centers, and emergency shelters) frequented by the homeless and housed poor in Allegheny County, Pa.

PARTICIPANTS: Of the 388 survey respondents, 85.6% were male, 78.1% African American, 76.9% between 30 and 49 years of age, 59.3% were homeless less than 1 year, and 70.6% had health insurance.

MAIN RESULTS: Overall, 350 (90.2%) of the respondents were able to identify a source of usual medical care. Of those, 51.3% identified traditional ambulatory care sites (i.e., hospital-based clinics, community and VA clinics, and private physicians offices); 28.9% chose emergency departments; 8.0%, clinics based in shelters or drop-in centers; and 2.1%, other sites. Factors associated with identifying nonambulatory sites for usual care included lack of health insurance (relative risk range for all sites [RR] = 3.1–4.0), homelessness for more than 2 years (RR = 1.4–3.0), receiving no medical care in the previous 6 months (RR = 1.6–7.5), nonveteran status (RR = 1.0–2.5), being unmarried (RR = 1.2–3.1), and white race (RR = 1.0–3.3).

CONCLUSIONS: Having no health insurance or need for care in the past 6 months increased the use of a non-ambulatory-care site as a place for usual care. Programs designed to decrease emergency department use may need to be directed at those not currently accessing any care.

KEY WORDS: homeless; health service utilization; emergency department care; preferences for care.

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Why, where, and when someone accesses health services have broad implications for public health and health systems management. The health care patterns of urban homeless adults and other low-income population groups are of particular concern given their high rate of use of acute care services, the conversion of many medical assistance programs to managed care, and the impact of the social environment on disease presentations. Determining which factors contribute to a person's decision to seek care at a given site can be useful in efforts to redirect nonacute services away from emergency departments and promote utilization of primary care and preventive services.

The previous literature has typically focused on overall utilization patterns and barriers to care, or site-specific utilization patterns of persons seeking health care. In a community-based survey of urban homeless and housed poor adults, the 6-month health service utilization rate was 62.7%.¹ Those persons residing in emergency shelters and transitional housing units had higher rates than those doubled-up with a family or friends or renting or owning their dwelling.¹ This study also found health service utilization associated with white race, having one or more comorbid conditions, having health insurance, and having higher levels of social support. In a study of homeless veterans entering a domiciliary program in Los Angeles, 67% were noted to have had at least one outpatient appointment in the previous 6 months, with health service utilization associated with residential stability and usual sleeping place, health insurance, and education level.²

In a study of homeless and housed poor families in Los Angeles, the majority in both groups reported having a regular provider for preventive and illness-related care. However, more than half reported at least one barrier to seeking care. Lack of transportation, high cost, not knowing where to go, and waiting too long for an appointment were all cited as barriers.³ Difficulty meeting sustenance needs was a factor in determining discretionary care cited in a community-based survey of homeless adults encountered in public enclaves in Los Angeles.⁴

For many homeless persons, the emergency department is the primary source of regular care^{3,5}; however, it is unclear whether this is by default when no other care is available or is due to other identifiable factors. A study of New York homeless adults residing in an emergency shelter found that 27.2% had gone to an emergency department in the preceding 6 months. Utilization in this study was significantly associated with comorbid mental health and substance abuse conditions.⁶ Homeless adults identified through a medical record review were admitted 5 times more often to acute care hospitals and 100 times more often to psychiatric hospitals than the general population.⁷ In a survey of emergency department users at one large urban center, factors associated with selecting the emergency department as the source of usual care

Received from the Center for Research on Health Care and the Division of General Internal Medicine, Department of Medicine, University of Pittsburgh, Pittsburgh, Pa (TPO, JLG, BHH, MJF).

Address correspondence and reprint requests to Dr. O'Toole: Welch Center for Prevention, Epidemiology and Clinical Research, Johns Hopkins University, 2024 E. Monument St., Suite 2-600, Baltimore, MD 21205-2223.

included family income less than \$30,000, having been refused care in an office or clinic in the past, not having a chronic illness, and the impression that the emergency department visit cost is equal to or less than an office visit.⁸

Less is known about regular sources of care and factors that contribute to identifying care sites. In a survey of homeless and near-homeless adults in Los Angeles, 57% reported a source of usual care, with 55% identifying a hospital outpatient or community clinic and 23% identifying an emergency department. Having a regular source of care was dependent on several factors including age, race, gender, competing needs, long-term homelessness, and social isolation.⁹ However, these data are limited to one city (Los Angeles) and may not be generalizable to other cities or regions with different outreach, delivery systems, and public insurance programs. We report our findings from a community-based survey of urban homeless and housed poor adults in Pittsburgh, Pa, and describe factors associated with having a specific site of usual care and factors specific to selecting the emergency department for medical care.

METHODS

We conducted a cross-sectional survey of homeless and housed poor adults in Allegheny County, Pennsylvania, using a community-based, population-proportionate sampling scheme. The study was conducted over a 5-month period with random selection of interview sites conducted every 2 weeks.

Study Population

Inclusion criteria for this study were (1) homeless or housed poor individuals aged ≥ 18 years; (2) residence in Allegheny County (includes City of Pittsburgh and surrounding communities) for 6 months or more at the time of the interview; and (3) provision of informed consent to participate. The 6-month residency requirement was adopted to ensure that participants would have adequate time to familiarize themselves with area resources.

Our definition of homelessness included any person who either lacks a fixed, regular, and adequate nighttime residence, or has a primary nighttime residence that is a supervised or publicly operated shelter designed to provide temporary living accommodations, an institution that provides a temporary residence for individuals, or a public or private place not designated as a regular sleeping accommodation for human beings, as defined by the Stewart McKinney Homeless Assistance Act (Pub L No. 100-77, 1987). For this study, we modified this definition to include only those individuals who had been homeless for at least the majority of the previous 6 months. Individuals encountered at soup kitchens or drop-in centers who had spent the majority of the previous 6 months in an

apartment or house that they owned or rented were also interviewed and classified as housed poor.

Exclusion criteria were (1) acute intoxication, (2) non-verbal, abusive, or inappropriate behavior at the time of the baseline interview as determined by the interviewers, (3) non-English speaking, (4) spending the majority of the past 6 months incarcerated or hospitalized in an acute or chronic care facility, or (5) evidence of severe dementia determined by a Short Blessed Test score of more than 20. The Short Blessed Test is a validated, 6-item test of cognitive function whose score is highly correlated with the results of the Mini-Mental State Examination.^{10,11}

Those meeting the definition of homeless or housed poor were classified on the basis of where they spent the majority of their nights during the previous 6-month period. The categories were (1) unsheltered, (2) emergency-sheltered, (3) sheltered in transitional housing or single room occupancy (SRO) units, (4) doubled-up with family or friends, and (5) housed poor. Individuals had to have been living in the same sheltering arrangement for at least 3 of every 4 weeks per month for the previous 6 months (i.e., at least 75% of the time over the past 6 months). Fifteen individuals did not stay in any one sheltering arrangement for a majority of the previous 6 months and were categorized as "combination" sheltered. Their results were not significantly different from those in other categories.

Subject Identification and Recruitment

We attempted to capture a representative sample of homeless and housed-poor adults by interviewing subjects at 24 sites throughout the City of Pittsburgh and Allegheny County. These sites represent all locations identified by outreach workers, area homeless persons, and from lists supplied by Allegheny County and the United Way as being frequented by homeless persons. Only 2 of the 24 sites did not grant permission to conduct interviews. We avoided conducting interviews at times when any health care or outreach services were being provided on-site.

The sites were categorized into three groups, depending on which population would most likely be encountered there. The first group was unsheltered enclaves, which included soup kitchens, drop-in centers, and public parks. The second group was emergency shelter sites. The third group was transitional or supportive housing that consisted of bridge housing units. Four sites from each of these three categories were randomly selected proportionate to their estimated population and ordered every 2 weeks as the sites for interviews for that 2-week period. The interviewers visited each site sequentially, interviewing the first 10 to 15 consenting individuals per category. This arrangement was adopted to represent the spectrum of sheltering arrangements in our sample of urban poor adults and because of the transient nature of the homeless population and the impact of monthly entitlement

checks on sheltering arrangements. A list of all participants previously interviewed, along with their social security numbers, aliases, and birth dates, was distributed to the interviewers every 2 weeks to help prevent enrolling the same person twice.

Data Collection

The survey was administered from March 31 to August 19, 1995, by two trained interviewers. Both interviewers were directly observed and critiqued prior to beginning data collection by the principal investigator (TPO) to maximize reliability. Their surveys were reviewed each week for completeness throughout the 5-month study. Interviews took between 35 and 45 minutes to complete. Respondents were paid \$5 for completion of the survey.

Survey Instrument

The survey collected information on respondent demographic characteristics, comorbid physical and mental illnesses, and related health service utilization for the 6 months prior to the interview (incorporating the time period of September 1994 to May 1995). It also included questions on past experience and satisfaction with care at identified health care sites, preference for care at these facilities, reasons for not seeking care when needed, and the need for health insurance in accessing care. Demographic questions included portions of the Basic Shelter Inventory.^{5,12} Respondents identified their source of usual care, if any, from a list of generic health care settings. Satisfaction with care ever received at different health care sites was also assessed. A 5-point Likert scale was used to rate satisfaction with care ever received (1 = definitely to 5 = never). The individual questions were rescaled from 0 to 100 (highest is better). The overall satisfaction score was the sum of the individual questions regarding the subject's perception of care received at a particular site.

Knowledge of health care resources was assessed by posing seven different health care scenarios and asking which specific type of facility the subject would use to seek care in that scenario. The seven scenarios were an acute medical problem (e.g., cold or flu, muscle aches, sprains, or cuts), a chronic medical problem (e.g., high blood pressure or arthritis), a physical examination when feeling well, a sexually transmitted disease, excessive drug or alcohol use, preventive health care or screening (e.g., HIV testing, routine immunizations, or tuberculosis testing), and psychiatric illness. This section also identified all sites where care was received in the previous 6 months. Individuals were also asked whether health insurance was necessary for each of the seven health care scenarios as well as at each type of health facility listed. Reasons for not seeking care were obtained for all individuals who ever reported needing medical attention but did not go to a provider.

Methods of Analysis

Univariate comparisons among groups that reported different sites of usual care were done with Pearson χ^2 statistics for categorical data and analyses of variance (ANOVA) for continuous data. Only factors with univariate associations at $p < .10$ were considered in the regression analysis. These factors included any care in the previous 6 months, marital status, length of time homeless, veteran status, insurance status, race, gender, and medical and psychiatric comorbidities. Polychotomous nominal logistic regression analysis was used to identify the factors associated with selecting non-ambulatory care sites for usual care. Log likelihood statistics were used to eliminate candidate predictors in a backward stepping procedure. After factors with significant multivariate associations ($p < .05$) were identified, two-way interactions between factors were assessed for statistical significance. Comparisons of responses by the same individual between all pairs of sites for care and types of care were done with McNemar's statistics for dichotomous data and paired t -tests and repeated measures of ANOVA for continuous data. A two-sided α of 0.05 was used to define statistical significance for all statistical analyses. SPSS version 8.0 (SPSS Inc., Chicago, Ill, 1997) and Stata version 5.0 (Stata Corp., College Station, Tex, 1997) were used for the analyses.

RESULTS

Of the 399 individuals who completed the survey, reflecting more than a 90% response rate, 11 (3%) were excluded for the following reasons: Short Blessed Test score was above 20 ($n = 3$); individual was interviewed twice ($n = 3$); and individual had resided in Allegheny County less than 6 months ($n = 5$). Of the 388 individuals who met all eligibility criteria, 115 (29.6%) were emergency sheltered, 79 (20.4%) unsheltered, 74 (19.1%) bridge housed, 55 (14.2%) housed poor, 50 (12.9%) doubled-up with friends or family, and 15 (3.9%) combination sheltered.

Demographic and Clinical Characteristics

As shown in Table 1, the study population was predominantly male (85.6%), African American (78.1%), and 30 to 49 years of age (76.9%). The overwhelming majority resided in Allegheny County for at least 10 years (88.6%), and most were homeless less than 1 year (59.3%). Most individuals graduated from high school (70.6%), and 29.6% reported current employment in some capacity. Overall, 70.6% had health insurance, with 57.5% receiving either Medicaid fee-for-service or Medicaid managed care coverage. Almost two thirds of all respondents (62.7%) reported accessing health care services during the previous 6 months. The majority experienced high levels of alcohol and drug problems in their lifetime (73.7%).

Table 1. Demographic and Clinical Characteristics of Homeless Persons

Characteristics	Total (n = 388), %
Age, years	
18–29	13.5
30–49	76.9
≥50	9.6
Male gender	85.6
African American	78.1
Years in Allegheny County	
<1 (6 mo–1 yr)	3.7
>10	88.6
Months homeless	
<12	59.3
12–24	21.5
>24	18.7
Marital status	
Single, never married	57.5
Separated, divorced, or widowed	33.8
Married	8.8
Education (≥high school)	70.6
U.S. veteran	33.5
Employed (full-time or part-time)	29.6
Health insurance	
Medicaid (fee-for-service)	40.2
Medicaid (HMO)	17.3
Veterans Administration	5.4
Private	3.6
Medicare	3.1
None	29.4
Medical comorbidities (≥1)	30.2
Psychiatric comorbidities (≥1)	36.9
Alcohol or drug problems (ever)	73.7

Self-Reported Sources of Usual Medical Care

Among all respondents surveyed, 350 (90.2%) were able to identify a source of usual medical care when sick or in need of advice from a doctor or nurse. Overall, 51.3% identified a traditional ambulatory care site, which included hospital-based, community, and VA clinics and private physician's offices. Emergency departments were the next most often reported site (28.9%) of usual care, while 9.8% reported no source of usual care (Table 2). When presented with specific health care scenarios, more individuals reported they would go to a traditional ambulatory care site for a physical examination (61.2%), for preventive care (60.6%), for a chronic medical problem (60.3%), or for an acute or episodic medical problem (59.5%) than those who reported this as their usual site of care (51.3%, $p = .00$).

Factors Associated with Site of Usual Care

Polychotomous logistic regression with respondents choosing traditional ambulatory sites as the reference group indicated that choosing the emergency department for usual care was associated with having no health insurance,

homelessness for more than 2 years, receiving no medical care in the previous 6 months, nonveteran status, and being unmarried (Table 3). Selecting shelter-based clinics for usual care was associated with having no health insurance, homelessness for more than 2 years, and white race. Factors associated with no site of usual care were having no health insurance, receiving no medical care in the previous 6 months, and nonveteran status.

Satisfaction with Care Received

The vast majority of respondents who had received care in one of the four settings (emergency department, hospital-based clinic, shelter-based clinic, or community clinic) reported the staff was respectful (range, 84.2%–93.3%), the care received was helpful (range, 80.3%–87.2%), and all questions were answered (range, 78.4%–83.3%). Very few respondents reported difficulty getting to the site of care (range, 3.6%–8.8%). Except for shelter-based clinics, where fewer respondents (23.3%) reported a long wait for care, there was no difference among sites for long wait before being seen (range, 31.0%–31.9%). Only 5.8% of emergency department patients and 4.8% of community clinic or private physician's office patients reported being treated worse because they were homeless, compared with 2.6% of hospital-based clinic patients and 1.5% of shelter-based clinic patients (Table 4).

The overall satisfaction score was highest among those individuals who had received care at a shelter-based clinic (77.7). This was followed by those treated at a community clinic or private physician's office (75.5), hospital-based clinic (75.3), and the emergency department (72.8). Comparison of facility satisfaction among patients who had used more than one type of facility indicated that shelter-based care was rated higher than care in either an emergency department ($F_{17,160} = 3.4$) or a hospital-based clinic ($F_{16,110} = 5.6$) ($p = .00$).

Reasons for Not Seeking Care

In total, 136 (35.0%) of the individuals reported experiencing an episode of illness in which they felt they needed medical attention but did not seek it. Comparing individuals whose source of usual care was ambulatory care sites versus those who used emergency departments, the reasons for not seeking care rated as "very important" were (1) no transportation (54.9% vs 46.4%), (2) no identification (51.9% vs 40.0%, $p = .01$), (3) "don't care what happens" (46.2% vs 20.0%, $p = .01$), (4) "can't keep an appointment" (46.2% vs 30.4%), (5) "ask too many questions" (35.3% vs 8.9%, $p = .00$), and (6) "can't afford it" (23.5% vs 33.9%). Issues specifically related to how they expected to be treated or whether they were embarrassed about their homeless state were not commonly cited.

Table 2. Homeless Cohort Self-Reported Source of Usual Care and Site of Care for Each Health Care Scenario

Site	Usual Source of Care, % (n = 388)	Chronic Care, % (n = 385)	Physical Examination, % (n = 384)	Acute or Episodic Care, % (n = 384)	Preventive or Screening Care, % (n = 384)
Ambulatory care site*	51.3	60.3	61.2	58.8	60.4
Emergency department	28.9	28.6	25.5	27.6	22.9
Shelter or drop-in center clinic	8.0	9.1	10.4	10.6	10.4
Other†	2.1	2.1	2.9	2.1	6.0
No source	9.8	—	—	—	—

*Ambulatory care site includes hospital-based clinics, community and VA clinics, and private physicians' offices.

†Other includes street outreach team (n = 4), plasma center (n = 1), county health department (n = 1), or combinations of sites that could not be categorized (n = 2).

Perceived Need for Health Insurance

When queried about the importance of having insurance in different settings, most individuals reported that health insurance was necessary to be seen in a private physician's office (74.4%), a hospital-based clinic (67.4%), and an emergency department (53.2%) ($p < .05$ for all pairwise comparisons: e.g., private physician's office vs hospital-based clinic, $p = .00$; hospital-based clinic vs emergency department, $p = .00$). Only 29.5% felt it was necessary to have health insurance to be seen in a community clinic, and 6.5% reported it necessary at a clinic based in a shelter or drop-in center (McNemar, $p = .00$). Most individuals reported it was not necessary to have health insurance in any of the seven health care scenarios. Care for a chronic medical problem had the highest perceived need for health insurance (45.7%) followed by acute or episodic care (39.3%), psychiatric care (36.6%) and care related to substance abuse (35.4%) ($p < .05$ for all pairwise comparisons).

DISCUSSION

This study of urban homeless and housed poor adults shows that the majority of individuals identify traditional ambulatory care sites for usual care. The propor-

tion of individuals in our sample who reported having a source of usual care (90.2%) and who selected a traditional ambulatory care site for usual care (51.3%) is much higher than previously reported among homeless and near-homeless adults in a community-based survey in Los Angeles and homeless persons interviewed at four emergency shelters in Baltimore.^{5,9,13,14} This may reflect the large proportion of insured persons in our sample, the selection criteria that excluded new arrivals who might not have known what resources were available, or the higher levels of satisfaction associated with ambulatory care sites. Our findings are consistent with the results from in-depth interviews of chronically homeless older men in Seattle who reported greater concern with the quality of provider interactions than with traditional issues of access.¹⁵ Sheltering status among subgroups of homeless persons and housed poor in our sample was not associated with different rates of self-identified sources of usual care.

Individuals who selected the emergency department as their source of usual care tended to have no health insurance, were nonveterans, single, had not used health care services in the past 6 months, and had been homeless longer. They also selected the emergency department regardless of health care scenario, despite lower levels of satisfaction with care previously received there. These

Table 3. Factors Associated with Site of Usual Health Care for Homeless Cohort*†

Factor	Emergency Department (n = 112) RR (95% CI)	No Source of Usual Care (n = 38) RR (95% CI)	Shelter-Based Clinic (n = 29) RR (95% CI)	Nonspecifiable (n = 8) RR (95% CI)
Uninsured	3.10 (1.8, 5.5)	3.95 (1.8, 8.5)	3.21 (1.3, 7.7)	1.85 (0.3, 10.41)
Unmarried	2.94 (1.0, 8.3)	1.20 (0.4, 4.0)	3.12 (0.4, 24.9)	0.93 (0.1, 8.6)
Homelessness > 2 years	2.37 (1.2, 4.5)	1.42 (0.5, 4.0)	2.95 (1.2, 7.4)	1.58 (0.2, 14.9)
No health care past 6 mo	2.12 (1.2, 3.8)	7.48 (1.7, 32.9)	1.57 (0.6, 3.9)	4.55 (0.5, 39.5)
Nonveteran status	1.92 (1.1, 3.4)	2.49 (1.0, 6.0)	0.97 (0.4, 2.2)	0.90 (0.1, 6.3)
Race (non-African American)	1.00 (0.5, 1.9)	1.59 (0.6, 3.9)	3.27 (1.4, 7.6)	3.97 (0.9, 17.7)
Gender (male)	0.94 (0.4, 2.0)	0.29 (0.1, 1.3)	0.49 (0.1, 2.4)	5.62 (0.9, 34.0)

*Items in boldface were significant in the polychotomous logistic regression. The comparison group was traditional ambulatory care sites. RR indicates relative risk; CI, confidence interval.

†The overall pseudo- R^2 for the model was .10.

Table 4. Homeless Persons' Attitudes Regarding Medical Care Received by Site of Care*

Attitudes	Emergency Dept, % (n = 354)	Hospital-Based Clinic, % (n = 269)	Shelter or Drop-in Center, % (n = 193)	Community Clinic or Private Physician, % (n = 125)
Staff was respectful	84.2	93.1	93.3	88.2
Care received was helpful	80.3	87.2	84.1	85.7
Staff was sensitive to needs	76.5	88.4	88.2	86.6
All questions answered	78.4	82.5	80.0	83.3
Received all care needed without being referred	70.9	82.5	73.3	68.3
Had a long wait	31.6	31.9	23.3	31.0
Had a hard time getting there	6.6	7.7	3.6	8.8
Overall satisfaction score, [†] mean	72.8	75.3	77.7	75.5

*Proportions answering definitely or mostly on a 5-point Likert scale.

[†]The overall satisfaction score is the sum of 7 individual questions regarding the subject's perception of care received at a particular site. The scale is from 0 to 100 (highest is better). If the overall score had ≤ 2 missing values, the score was computed as follows: $(7 / (7 - \# \text{Missing}))$ multiplied by the overall score.

individuals are likely to have fewer social supports or knowledge of community services available. To redirect care to more appropriate ambulatory settings may require emergency department's support and education on what services are available and how they can be accessed.

The 28.9% of our sample who identified the emergency department as their source of usual medical care is comparable to the 23% reported for homeless adults in Los Angeles using similar sampling techniques.⁹ That study found that having no source of regular care (including emergency department care) was associated with being male, young, Hispanic, having competing needs, social isolation, nonveteran status, and longer duration of homelessness. It did not find any association with Medicaid coverage or poor health status. In our study, we found that those who chose an emergency department or shelter-based clinic as their site of usual care had similar associated factors as those having no source of usual care. Duration of homelessness was a factor only for emergency department and shelter-based care, while age and gender were not associated with source of care in our study. The significant role of health insurance in our study may reflect differences in outreach and delivery of services or the accessibility of health care services to those with Medicaid coverage in Pittsburgh compared with Los Angeles. It may also be a surrogate marker of engagement in other social services or outreach programs that connect an individual with primary care services at traditional ambulatory sites. Our data do suggest that factors associated with identifying no source of usual care are similar to identifying an emergency department for usual care and should be evaluated as part of a continuum of less use of health care, inadequate access to care, or knowledge of available health services.

Having no source of usual medical care or using the emergency department for usual care were associated with not having received care in the previous 6 months. The higher frequency of use among respondents who identify traditional ambulatory sites for usual care may

reflect greater health care needs or poorer health status in this subgroup. Alternatively, it may reflect efforts in emergency departments to redirect patients to more appropriate settings for routine or more frequent care needs. This is consistent with findings from a prospective study of homeless patients seen in an emergency department where a homeless-specific intervention reduced the frequency of subsequent visits.¹⁶

In identifying alternatives to the emergency department, it is important to note the reasons identified for not seeking health care. Overall, 35.1% of those interviewed reported they did not seek health care at a time when they felt it was needed. Four of the top five reasons represent structural or system-based barriers to care (transportation, identification, scheduling, and cost). These reasons for not seeking care are similar to those reported in other studies among homeless populations.³ Our findings underscore the importance of issues in addition to health insurance that affect access to health services, particularly the structural and systematic barriers to care that many health settings pose.

Although we had presumed that the perceived need for insurance would be a deterrent to seeking care, this was a secondary factor. The majority of individuals felt that health insurance was necessary to receive care at various health care sites, yet fewer felt it was necessary to have health insurance in any of the health care scenarios. The perception of health insurance requirements at health care facilities is most likely related to the high rate of insured individuals in this sample (70.6%). Reasons why specific health care scenarios are seen as less likely to require health insurance are not as clear. Medicaid or Medicare coverage is often available for individuals with a chronic medical condition, which is often not the case for those needing care for acute or episodic problems or substance abuse.

This study has several limitations that are important to acknowledge. First, our data were self-reported and

subject to potential recall bias. Second, our classification of health services into seven health care scenarios may have been too general. For example, acute or episodic care did not distinguish acute upper respiratory infections from lacerations or abrasions. Further review of medical records is required to more precisely describe the reasons for seeking care, the types of care provided, and the appropriateness of the care received. Finally, our definition of homelessness required a minimum of 6 months in order to qualify for the study. This excluded those who were homeless for shorter intervals or who were new to the area. However, we believe the shorter-term homeless persons were represented in the housed-poor category because the majority of their time was spent in a domiciled arrangement. Nevertheless, our results cannot be extended to those persons who are new to the area.

In summary, we found that most urban homeless and housed-poor adults in this sample were able to identify a source of usual care and that care was typically at a traditional ambulatory care site. Those persons with no source of usual care were similar to those seeking usual care at an emergency department or shelter-based clinic, suggesting that these responses need to be viewed as a continuum of inadequate access to or knowledge of available health care services. Although health insurance was a significant factor in determining source of care, other factors such as duration of homelessness, infrequent care, and nonveteran status were also important and may be surrogate measures of engagement in other social services and support efforts. Efforts to redirect primary and nonacute care away from emergency departments and improve access to regular care need to focus on outreach, education, and medical insurance coverage. These efforts need to be targeted to persons who have been homeless long term or who infrequently access services and who may especially benefit from primary and preventive health care.

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