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Health insurance coverage and healthcare utilization among homeless young adults in Venice, CA

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ABSTRACT

Background Homeless young adults are a vulnerable population with great healthcare needs. Under the Affordable Care Act, homeless young adults are eligible for Medicaid, in some states, including California. This study assesses homeless young adults' health insurance coverage and healthcare utilization prior to Medicaid expansion.

Methods All homeless young adults accessing services at a drop-in center in Venice, CA, were invited to complete a self-administered questionnaire; 70% of eligible clients participated ($n = 125$).

Results Within this majority White, heterosexual, male sample, 70% of homeless young adults did not have health insurance in the prior year, and 39% reported their last healthcare visit was at an emergency room. Past year unmet healthcare needs were reported by 31%, and financial cost was the main reported barrier to receiving care. Multivariable logistic regression found that homeless young adults with health insurance were almost 11 times more likely to report past year healthcare utilization.

Conclusions Health insurance coverage is the sole variable significantly associated with healthcare utilization among homeless young adults, underlining the importance of insurance coverage within this vulnerable population. Service providers can play an important role by assisting homeless young adults with insurance applications and facilitating connections with regular sources of health care.

Keywords health services, socioeconomic factors, young people

Introduction

Homeless young adults are a marginalized, vulnerable population with great healthcare needs and little access to healthcare services. The national point-in-time estimate conducted in 2013 found 40 727 unaccompanied homeless 18–24 year olds in the USA on a single night in January 2013, with California hosting the largest number of unaccompanied homeless young adults.[1] Many barriers, including long wait times to receive services, concern about social service involvement (e.g. child welfare), financial costs, distrust of adults, cultural insensitivity, discrimination and lack of health insurance, government identification, appropriate healthcare facilities and/or providers, knowledge of where to seek care and healthcare system navigation, and transportation, contribute to limited access and receipt of health care for homeless young adults.[2–6] With the implementation of the Affordable Care Act (ACA), homeless young adults now have health insurance opportunities. Under Medicaid expansion, in some states, homeless young adults meet the new eligibility requirements allowing non-disabled, childless adults with incomes under the 133–138% Federal Poverty Level to qualify for Medicaid.[7–10] Additionally, homeless young adults may continue on their parents' health insurance plans (if there is a relationship) until the age of 26 years.[10]

Presently, there is limited and outdated research concerning homeless young adults' health insurance coverage. Research, primarily from the 1990s, indicates that 23–63% of homeless young adults have health insurance.[4,11–14] This varies by

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geographic location, age, and sampling (e.g. foster care, street based). Of San Francisco street young adults seeking care who knew their health insurance, Medicaid and HMO coverage were the most common.[11] Among Baltimore homeless 12–17 year olds in foster care, 74% reported Medicaid coverage, compared with <1% of their homeless peers who were staying on the street or living 'doubled up;' yielding 47% coverage across the whole sample.[12] In 2003, 63% of Los Angeles County female homeless young adults reported having public insurance, and 29% were uninsured.[14] In 2007, only 23% of Midwest former foster care homeless young adults reported having insurance.[13]

Health insurance may be a more tangible opportunity for homeless young adults to increase access to and use of healthcare services, and potentially become housed. Previous studies have shown that health insurance is associated with the receipt of healthcare services and improved health,[14,15] which in turn is associated with housing opportunities.[15,16] Thus, this article examines homeless young adults' health insurance coverage and use of healthcare services in the previous 12 months, at a time when the ACA only allowed for increased young adult coverage, prior to Medicaid expansion.

Common health conditions experienced by homeless young adults

One-quarter of homeless young adults reported experiencing serious health problems in the prior year.[3] In a prior study, homeless young adults rated sexually transmitted infections, HIV/AIDS, cuts, injuries, substance use, pregnancy, depression and skin conditions as their top health concerns.[17] Additional common physical and mental health issues affecting homeless young adults include malnutrition, respiratory infection, gum disease, cavities and missing teeth, lice, scabies, asthma, diabetes, substance use-related complications and suicidal ideation.[2,11,12,18] Baltimore homeless young adults staying on the street or couch-surfing were more likely to be diagnosed with seizure disorders and less likely to be diagnosed with asthma or obesity than their peers who were in the foster care system.[12] A qualitative study of homeless young adults in Seattle found that most homeless young adults recruited from street locations reported their last 'illness experience' was associated with substance use, including injection abscesses and withdrawal symptoms.[19] Most homeless young adults who were recruited from a healthcare clinic reported their last healthcare visit was due to the flu or a respiratory illness (e.g. bronchitis).[19]

Locations of care

Emergency care is the most common source of care for homeless young adults; homeless young adults are stereotyped as only seeking care at emergency departments once the health condition has become too severe to overlook.[12] Forty-four percent of homeless young adults in Baltimore reported accessing services at an emergency department in the prior year.[20] Forty-six percent of San Francisco homeless young adults reported that they sought care at a hospital the last time they needed health care; 17% at a healthcare clinic catering to street young adults (i.e. one of the study sites), 9% at a private doctor's office and 8% at a community medical clinic.[11] Hospitals and emergency departments were the most common sources of care for urgent and/or complicated health issues, while mobile health clinics and free clinics were the most common for non-urgent health conditions for homeless young adults.[2] Some homeless young adults do not want to seek health care at community clinics because of homeless stigmatization.[21]

Current place of stay may impact homeless young adults' healthcare utilization. Nationally, homeless young adults who were staying in shelters were more likely to report a regular source of healthcare and physical exam within the previous 2 years,[3] and less likely to have been seen in the past year in the emergency department, than those staying on the street.[3,12] However, among sheltered young adults, those without a regular source of care were more likely to use emergency departments and clinics (i.e. shelter, runaway young adults specific, public health) than their peers with a regular source of care.[3]

Because of the implementation of the ACA, homeless young adults now have expanded health insurance opportunities, and assessing the impact of these opportunities is critical to mobilizing efforts to insure these vulnerable young adults. This article examines a sample of homeless young adults surveyed prior to the full implementation of the ACA to assess homeless young adults' health insurance coverage and the associations between health insurance coverage and healthcare utilization.

Methods

Recruitment and procedures

All persons who accessed a drop-in center for homeless youth of ages 12–25 years in Venice, CA, in May–June 2013 were invited to participate in this study, as a part of a larger longitudinal trend study. Drop-in centers are one of the most utilized services among homeless young adults, particularly street-based young adults.[22] Healthcare utilization questions were only included in the final study panel. Participants who agreed to participate completed an informed assent/consent. Of the 178 eligible clients, 23 refused to participate and 13 only completed the consent process, yielding a response rate

of 70.2%; 125 participants (including 31 follow-ups) completed the computerized self-administered questionnaire. The questionnaire was available in English or Spanish and was available with or without audio computer-assisted self-interview (ACASI), based on the participant's preference. All procedures were approved by the authors' Institutional Review Board.

Measures

Demographic questions were created by the authors. Homelessness characteristics were derived from items written by the authors. Participants were asked to identify their current place of stay, with response options aided by Tsemberis and colleagues.[23] Literal homelessness is operationalized as staying in a public place, bus, car, street, beach, tent or campsite, abandoned building or shelter.[23] First age of homelessness experience was assessed with an open-ended question: 'How old were you the first time you became homeless or did not have a regular place to stay?' Participants were also asked whether they were currently a traveler, defined as 'someone who moves by themselves or with friends from city to city after a short period of time'.

Homeless young adults were asked about their history of sexual behaviors, substance use, violence experiences and justice system involvement. The sexual initiation item was adapted from the Centers for Disease Control and Prevention's Youth Risk Behavior Survey (YRBS).[24] Lifetime history of exchange sex was assessed with a dichotomous response to 'Have you ever exchanged sex (oral, vaginal, or anal) for money, drugs, a place to stay, food or meals, or anything else?' Lifetime history of pregnancy or impregnating someone was adapted from the California Health Interview Survey (CHIS),[25] with 'How many times in your life have you ever been pregnant or got someone else pregnant? Include a current pregnancy'. Past 30-day substance use frequency was assessed with items adapted from the YRBS[24] for substances listed in Table 1. Lifetime experience of sexual abuse was adapted from the trauma statements in the UCLA Post-Traumatic Stress Disorder (PTSD) Index for DSM-IV.[26] A follow-up question assessed whether sexual abuse occurred while homeless. Items adopted from the YRBS[24] asked participants about their past year frequency of involvement in a physical fight and injuries from a physical fight; follow-up participants were asked about the previous 6 months. A dichotomous item adopted from the YRBS[24] assessed whether the participant experienced intimate partner violence (IPV) in the previous 12 months; follow-up participants were asked about the previous 6 months. Dichotomous items assessing participants' history of arrest and time in a correctional facility (e.g. jail) were adopted from

Table 1 Demographic and lifetime experiences of Venice, CA, homeless young adults ($n = 125$)

	n	%	*Mean*	*SD*
Age (range: 18–28)			21.78	2.23
Gender				
Male	89	71.20		
Female	36	28.80		
Sexual identity				
Heterosexual	100	80.00		
Bisexual	19	15.20		
Gay/Lesbian	2	1.60		
Questioning	3	2.40		
Race/Ethnicity				
White	68	54.40		
Black	20	16.00		
Hispanic/Latino	8	6.40		
Other	11	8.80		
Mixed	18	14.40		
High school education and above	98	78.40		
Foster care experience	29	23.20		
Homelessness experiences				
Current traveler	59	47.20		
Literally homeless	86	68.80		
From Los Angeles	33	26.40		
Age of first homelessness experience (range: 0–28)			16.94	4.47
Sex behaviors				
Ever pregnant/impregnated someone	52	41.60		
Age at first vaginal/anal sex (years)			14.65	2.20
Ever exchanged sex	22	17.60		
Substance use (past 30 days)				
Binge drink	61	48.80		
Marijuana	96	76.80		
Cocaine	17	13.60		
Crack	12	9.60		
Heroin	12	9.60		
Methamphetamine (meth)	28	22.40		
Ecstasy	14	11.20		
Prescription drug misuse (PDM)	23	18.40		
Injection drug use	11	8.80		
Violence experiences				
Sex abuse, lifetime	36	28.80		
Sex abuse, while homeless	22	17.60		
Involved in physical fight	62	49.60		
Hurt in fight (of those in a fight)	17	27.42		
Intimate partner violence (IPV) experience	25	20.00		
Justice system involvement				
Ever arrested	62	49.60		
Ever spent time in jail	70	56.00		

Continued

Table 1 Continued

	n	%	*Mean*	*SD*
Time in jail while homeless (of those who have ever been in jail)	45	64.29		
Mental health symptoms				
Post-Traumatic Stress Disorder (PTSD)	27	21.60		
Major depression symptoms	62	49.60		
Suicidal ideation	26	20.80		
Suicide attempt	15	12.00		

Add Health.[27] We asked whether or not jail time occurred while homeless.

Mental health symptoms were also assessed. Past month symptoms of PTSD were assessed with the four-item Primary Care PTSD (PC-PTSD).[28] Past week major depression symptomatology was assessed with the 10-item Center for Epidemiologic Studies Depression (CES-D).[29,30] Past 12-month history of suicidal ideation and attempts were assessed with items adopted from the YRBS[24] and dichotomized for analyses. Follow-up participants were asked about their past 6-month experiences of suicidal ideation and attempts.

Several items measured homeless young adults' healthcare needs and service utilization. Participants rated their overall health with an item adopted from the RAND Medical Outcomes Study.[31] Using items adapted from the CHIS,[32] participants reported their health insurance coverage in the past year. Response options for health insurance type were not mutually exclusive. A series of questions with items adopted and adapted from the National Survey of Homeless Assistance Providers and Clients[33] then assessed participants' last and past year healthcare experiences (i.e. when and where). Questions further assessed the reasons for seeking health care at prior visits. Response options to these questions were informed by previous literature concerning homeless persons' healthcare needs.[11,34–39] We then asked participants whether they needed to see a physical or mental healthcare provider in the past year, but were unable to. For those who responded 'yes', a subsequent question with response options adopted and adapted from Wojtusik and White[39] assessed the reasons for why they were unable to seek care. Three questions written by the authors assessed participants' current prescription drug behaviors.

Analyses

Following descriptive analyses, we performed univariable analyses (i.e. χ^2 tests and *t*-tests) assessing healthcare use. Healthcare user was defined as seeing a healthcare provider within the past year. This dichotomized variable was conservatively created using the item assessing when their last healthcare visit was and how many healthcare visits they had in the prior year, eliminating any discrepancies. The independent variables included in the univariable analyses were the previously described demographic characteristics, homelessness characteristics, lifetime history experiences and current risk behaviors. Following methods by Hosmer and Lemeshow,[40] all independent variables significant at $P < 0.05$ in the univariable analyses were subsequently included in multivariable logistic regression analysis for past year healthcare utilization, controlling for demographic variables. All analyses were conducted in Stata 13.0 (StataCorp LP College Station, TX, USA).

Results

The majority of participants are male (71.2%), heterosexual (80.0%), White (54.4%) and high school graduates (78.4%), as shown in Table 1. The mean age of the sample is 21.8 years old. (Despite the agency's target population of 12- to 25-year-old homeless youth, some participants fell outside of the age range, as they were still seeking services at the drop-in center.) About one half (47.2%) of the participants identify as a current traveler and 68.8% are experiencing literal homelessness. Twenty-nine percent of homeless young adults reported ever experiencing sexual abuse; 61.1% of those experienced sexual abuse while homeless. In the past year, 49.6% were involved in a physical fight, and 20.0% experienced IPV. More than half (56.0%) have ever spent time in a correctional facility, of which 64.3% spent time in a correctional facility while homeless. One-fifth of participants experienced recent suicidal ideation, and 12.0% made at least one recent suicide attempt. Twenty-two percent of homeless young adults met criteria for PTSD[28] and 49.6% experienced significant depressive symptoms in the past week.

Table 2 describes the homeless young adults' healthcare seeking behaviors. Only 13.6% of the participants rated their overall health as 'fair' or 'poor'. Seventy percent of homeless young adults did not have health insurance in the previous year. Of those with health insurance, 45.7% reported their insurance was through their parents, whereas 34.3% had Medicaid. Fourteen percent of participants have not received any healthcare in their lifetimes. Of those who have, the emergency room (38.7%) was the most common source of care for the last healthcare visit. For 44.8% of participants, the main reason for their last healthcare visit was for emergency care.

Within the past year, one half of the sample reported having between two and four healthcare visits. Again, the emergency room (45.3%) was the most frequent source of

Table 2 Healthcare service utilization ($n = 125$)

	n	%
Self-rated health		
Excellent	35	28.00
Very good	35	28.00
Good	38	30.40
Fair	12	9.60
Poor	5	4.00
Health insurance coverage in past year		
Yes	35	28.00
No	88	70.40
Type of health insurance, of those with insurance (not mutually exclusive)		
Through parents	16	45.71
Private, through work	5	14.29
Private, through school	1	2.86
MediCal or Medicaid	12	34.29
Healthy families	1	2.86
VA	1	2.86
Other	2	5.71
Last doctor visit		
Within past month	23	18.40
1–6 months ago	25	20.00
6–12 months ago	17	13.60
1–2 years ago	18	14.40
Over 2 years ago	22	17.60
Never	17	13.60
Location of last doctor visit[a]		
Emergency room	41	38.68
In hospital, overnight	10	9.43
In hospital, not overnight (outpatient)	13	12.26
At drop-in center, shelter, other program	4	3.77
Mobile health clinic	3	2.83
Community health clinic	13	12.26
Private doctor's office	16	15.09
Jail/Prison	6	5.66
Reason for last doctor visit[a]		
Emergency care	47	44.76
Chronic health problem	5	4.76
Acute illness	19	18.10
Preventive care	23	21.90
Mental health	9	8.57
Other	2	1.90
In past year, where sought care		
Emergency room	29	45.31
In hospital, overnight	9	14.06
In hospital, not overnight (outpatient)	13	20.31
At drop-in center, shelter, other program	6	9.38
Mobile health clinic	4	6.25
Community health clinic	15	23.44
Private doctor's office	7	10.94
Jail/Prison	3	4.69
Number of past year visits[b]		
1	18	32.73
2–4	27	49.09
5–10	5	9.09
10+	5	9.09
Reasons for doctor visits in previous year[b]		
Emergency care	26	40.63
Chronic health problem	7	10.94
Acute illness	16	25.00
Preventive care	17	26.56
Mental health	10	15.63
Other[c]	3	4.69
Needed to see doctor in past year, but unable?		
Yes	39	31.20
No	59	47.20
Did not need care	27	21.60
Why unable to see doctor? (Of those who indicated unable to)		
Could not afford it	23	58.97
Could not get appointment	0	0.00
Long wait to be seen	1	2.56
Did not have transportation	4	10.26
No one to watch kids, pets or stuff	1	2.56
Healthcare staff disrespectful	0	0.00
Afraid to get arrested	0	0.00
Did not know where to go	4	10.26
Did not have proper ID	3	7.69
Not US citizen	1	2.56
Other	2	5.13
Reason for doctor visits in previous year when could not get care		
Emergency care	15	12.00
Chronic health problem	5	4.00
Acute illness	10	8.00
Preventive care	8	6.40
Mental health	11	8.80
Other[d]	2	1.60
Supposed to be taking prescription drugs?		
Yes	31	24.80
No	94	75.20
Of those supposed to be taking prescription drugs, able to?		
Yes	16	51.61
No	14	45.16

[a]Of those who did not report 'never' seeing a doctor.

[b]Of those who reported receiving health care within the past year.

[c]'Other' responses include: 'cannabis', 'personal stuff'.

[d]'Other' responses include: physical therapy, 'swollen neck'.

care followed by a community health clinic (23.4%). Emergency care (40.6%) was the most frequent reason for seeking care, followed by preventive care (26.6%) and an acute illness (25.0%).

One-third of participants reported having unmet healthcare needs in the previous year. The majority (59.0%) of those who had unmet healthcare needs reported that financial cost was the main reason why they could not seek care. When they needed care, 12.0% reported it was for emergency care, 8.8% for mental health care and 8.0% for an acute illness.

One-quarter of participants reported that they are supposed to be taking prescription medication. However, 45.2% reported that they were unable to be taking the prescriptions as directed because of being unable to refill a medication (14.3%, $n = 2$), losing the medication (14.3%, $n = 2$), having the medication stolen (14.3%, $n = 2$), affordability (57.1%, $n = 8$), not liking the side effects (14.3%, $n = 2$), not believing in taking medication (21.4%, $n = 3$) and not having a doctor (7.1%, $n = 1$); these reasons were not mutually exclusive (not in table).

As shown in Table 3, only having health insurance was significantly related to healthcare utilization ($P < 0.01$); 36.1% of homeless young adults with health insurance sought health care in the prior year, compared with only 4.4% of those with health insurance who did not seek care. Table 4 presents the multivariable logistic regression for healthcare utilization in the past year, controlling for demographic characteristics. Homeless young adults with health insurance were 10.9 times as likely to have received health care in the previous year than those who did not have health insurance.

Table 3 Univariable analyses for healthcare utilization ($n = 109$)

	Healthcare user (n = 86)	*Non-healthcare user (n = 23)*	χ^2/*t-test*
Age	21.72 (2.32)	22.30 (1.89)	1.11
Gender			0.49
Male	70.93	78.26	
Female	29.07	21.74	
Sexual identity			2.17
Heterosexual	78.82	91.30	
Bisexual	16.47	8.70	
Gay, lesbian, questioning	4.71	0.00	
Race			0.99
White	50.00	60.87	
Black	18.60	13.04	
Latino	6.98	4.35	
Mixed	10.47	8.70	
Other	13.95	13.04	
High school education or more	80.23	65.22	2.31
Foster care	29.11	23.81	0.23
Homelessness experiences			
Current traveler	46.43	47.83	0.01
Literally homeless	76.00	66.67	0.74
From Los Angeles	29.27	30.43	0.01
Age of first homelessness experience	16.96 (4.48)	17.61 (3.99)	0.62
Sexual behaviors			
Ever pregnant/ impregnated someone	47.06	31.82	1.65
Early sexual debut	41.18	30.43	0.88
Exchanged sex	24.32	16.67	0.48
Substance use (past 30 days)			
Use hard drugs[a]	41.86	30.43	0.99
Prescription drug misuse	15.85	21.74	0.44
Binge drink	56.63	36.36	2.86
Marijuana	76.16	78.26	0.04
Violence experiences			
Sex abuse, lifetime	26.83	27.27	<0.01
Sex abuse, while homeless	56.00	44.44	0.35
Involved in physical fight	57.14	34.78	3.62
IPV experience	24.10	17.39	0.46
Justice system involvement			
Ever arrested	54.22	43.48	0.83
Ever spent time in jail	59.52	59.09	<0.01
Mental health			
PTSD	23.17	13.64	0.95
Major depression	55.56	39.13	1.94

Discussion

Main findings of this study

Before the full implementation of the ACA, only 28% of homeless young adults in Venice, CA, reported having health insurance. Despite the low rates of insurance coverage, homeless young adults in Venice reported high rates of healthcare visits in the prior year, with 82% stating they had between one and four visits. In a multivariable model, health insurance was found to be significantly associated with accessing health care. It may be that homeless young adults with health insurance were utilizing their coverage for care, and that homeless young adults without insurance coverage were seeking care at sites that do not require proof of insurance (likely an emergency room or free healthcare clinic).

What is already known on this topic

The health insurance rates found in this study (28%) are lower than older reports (47–60%)[4,11,12,14] and similar (23%) to a more recent study.[13] Compared with other homeless young

Table 3 Continued

	Healthcare user (n = 86)	*Non-healthcare user (n = 23)*	χ^2/t-test
Suicidal ideation	21.43	13.04	0.80
Physical health			
Have health insurance	36.05	4.35	8.79**
Fair/poor health	13.95	17.39	0.17
Supposed to be taking prescriptions	25.58	17.39	0.67

[a]Hard drugs include any use of cocaine, crack, heroin, methamphetamine or ecstasy in the past 30 days.
$^{**}P < 0.01$.

Table 4 Multivariable logistic regression of healthcare utilization in past year ($n = 108$)

	OR	*95% CI*
Age	0.93	0.73, 1.19
Male	0.73	0.20, 2.75
Race (White = 0)		
Black	2.33	0.54, 10.09
Hispanic/Latino	1.48	0.14, 15.95
Other/Mixed	1.06	0.29, 3.88
Lesbian, gay, bisexual or questioning	2.21	0.35, 14.16
High school education or more	1.72	0.58, 5.15
Have insurance	10.91	1.37, 87.15*

$^{*}P < 0.05$.

adult samples, this study has a smaller proportion (14%) of homeless young adults who self-rate their health as fair or poor (22–26%).[3,13] Additionally, a greater proportion (82%) of homeless young adults in the current study reported between one and four healthcare visits in the prior year, compared with 62% of Midwest homeless young adults.[4] Unlike other studies,[3,5] female young adults were not more likely to use healthcare services than their male peers.

What this study adds

Health insurance coverage is the single predictor of healthcare service receipt among homeless young adults, adding to and updating prior literature.[14,15]

Limitations of this study

As with other cross-sectional studies, these associations cannot be interpreted as causal. Furthermore, we cannot determine whether insurance coverage at the time of the interview was the same coverage (or lack of coverage) at service utilization.[15] Additionally, the study relies on self-report; we were unable to verify healthcare utilization with medical records. Because of the timing of the study, there is limited external validity with the now full implementation of the ACA. However, not all states are participating in Medicaid expansion; thus, these findings may be more appropriate for those states. Moreover, being eligible for Medicaid does not ensure homeless youth will be covered, and the results of this study underscore the importance of coverage to healthcare utilization. Due to the small sample size and single site, we are unable to generalize the findings much beyond the study population. Because of the uniqueness of the US healthcare system, these findings cannot be generalized to the international community.

With the ACA and Medicaid expansion, more homeless young adults may attain health insurance. A preliminary qualitative study of healthcare providers in Medicaid expansion areas found that patients who became covered under Medicaid expansion were able to access more services, including specialty services, medications and medical supplies, and mental health care.[41] Although, Medicaid eligibility varies from state to state, and is not transferable across states. Thus, homeless young adults who may be covered in one place may not be in another, a particular problem for the subset of homeless young adults who move from city to city regularly. However, health insurance cannot be the end-all-be-all. Health navigators and service providers need to help connect homeless young adults to care (e.g. determining location and appropriateness of services).[7,15] Because homeless young adults have difficulty accessing healthcare services, healthcare visits should include comprehensive healthcare services (e.g. exams, laboratory tests, psychological screening).[11] Healthcare providers must also be aware of associated treatment and follow-up costs (e.g. filling prescriptions, further transportation).[2] Furthermore, positive experiences with healthcare providers will promote homeless young adults' willingness to return for care and promote healthier outcomes.[6]

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