

Filling Gaps and Setting Boundaries: Examining Utilization of Health and Social services at JeffHOPE Student Run Clinics

Journal of Primary Care & Community Health
Volume 12: 1–7
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DOI: 10.1177/21501327211037532
journals.sagepub.com/home/jpc



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Abstract

The objective of this study was to describe the frequency that healthcare and social support services offered by JeffHOPE, a student run clinic for people experiencing homelessness in Philadelphia, PA, were utilized by patients. This study also aimed to investigate where patients would seek medical care on a given day had they not been able to access JeffHOPE. This study was conducted via mixed methods consisting of retrospective chart review of patient encounter records and a patient survey conducted weekly throughout 2019, both at a single clinic site, and retrospective chart review of January through March 2020 records at 5 clinic sites. This study found that the frequency of services utilized varied between clinic sites, and that Pharmacy and Procedure committees were the most utilized when examining the combined clinic data. Additionally, the survey found that JeffHOPE provided medical care to those that otherwise would not have sought it. Clinics also served as an alternative to accessing care for non-emergent issues in an Emergency Department (ED) for some patients, but for others it replaced seeing their primary care provider (PCP). This study confirmed that the services offered by JeffHOPE are well-utilized by patients experiencing homelessness in Philadelphia. It also revealed that while the organization's medical services filled care gaps and potentially decreased unnecessary ED visits, they were also sometimes accessed in lieu of a PCP visit. A focused effort on linkage to formal primary care services for all JeffHOPE patients and expanding collection of more granular data to all clinics represent important future endeavors for this student run organization.

Keywords

student run clinic, access to care, community health, emergency visits, health promotion, primary care, underserved communities, homeless care

Dates received: 13 May 2021; revised: 12 July 2021; accepted: 19 July 2021.

Introduction

Homelessness remains prevalent in Philadelphia, PA with 19 988 unique persons served by the Office of Homeless Services (OHS) in 2020, and 5634 people experiencing homelessness at a point in time count in January 2020.¹ The United States homeless population experiences strikingly poor health outcomes with mortality rates ranging from 3 to 10 times higher than the general population.^{2,3} The high mortality rate may be due to several factors including food insecurity, infection, violence, cigarette smoking, recreational drug use, and high rates of cancer and heart disease.^{2,4-9}

The expansion of Medicaid under the Affordable Care Act increased coverage of the homeless population from 45% in 2012 to 67% in 2014, still leaving a significant portion uninsured. Unfamiliarity with Medicaid qualifying criteria, unstable residence, language barriers, and lack of

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Table 1. JeffHOPE Clinic Sites.

Site	Description
Acts Christian Transitional Services (ACTS)	Emergency shelter for women experiencing homelessness and their children at a private location to protect residents fleeing domestic violence
The Salvation Army Eliza Shirley House (ES)	Emergency shelter for women experiencing homelessness and their children
Our Brother's Place (OBP)	Emergency shelter for men that helps initiate linkage to permanent housing
Prevention Point Philadelphia (PPP)	Homeless drop-in respite and harm reduction center for all genders offering emergency beds, supplies and counseling for safer drug use and sex work, free meals, and social services
Sunday Breakfast Rescue Mission (SBRM)	Emergency shelter for men where they can stay up to 30 days that helps initiate linkage to permanent housing

Table 2. JeffHOPE Committee Services.

Committee	Description
Advocacy	Addresses social determinants of health via navigating healthcare systems and public services (ie, arranging doctor's appointments, assisting with insurance applications, housing program applications, getting government ID)
Education	Counsels and provides weekly check-ins on improving diet and nutrition, exercise, smoking cessation, mental health, and sexual health behaviors
Kids	Present at women and children's shelters only, provides structured educational and play activities and organizes supplies donations and holiday celebrations for shelter youth
Medical team	Medical students in their first through fourth years present clinic patients to resident or attending physicians, who treat patients accordingly
Pharmacy	Dispenses medications, both over-the-counter and those prescribed by onsite physicians, and provides instructions for use
Procedures	Dispenses wound-care supplies and performs blood draws, urine dipstick tests, glucose checks, and pregnancy tests
Research	Optimizes clinic flow, implements quality improvement initiatives, and administers patient surveys
Screening	Performs screening tests and counseling in case of positive result for HIV, Hepatitis C, Hepatitis B, Gonorrhea, Chlamydia, and Syphilis

transportation have been identified as barriers to unhoused people obtaining insurance.^{4,10,11} Lack of insurance in this group leads to significant and costly emergency department (ED) usage for non-emergent healthcare needs.¹²

Student-Run Clinics (SRCs) serving unhoused people are in a unique position to address non-emergent needs and can provide primary-care related services to the uninsured for little to no cost.¹³ SRCs have continued to expand with 208 clinics at 86 American Association of Medical College (AAMC) member institutions in 2014 compared to 111 clinics at 49 AAMC institutions in 2005.¹⁴ SRCs have been shown to successfully manage hypertension, help facilitate smoking cessation, and decrease ED utilization.¹⁵⁻²⁰

JeffHOPE (Thomas Jefferson University Health Opportunities, Prevention, and Education) SRC was established in 1992. JeffHOPE is unique in providing services at 4 shelters and 1 drop-in homeless respite center (Table 1).

Each clinic is staffed by medical student-led committees—Advocacy, Education, Procedures, Screening, Pharmacy, Research, Triage, and Kids—and a physician-led medical team (Table 2). While JeffHOPE is a robust organization supporting underserved patients in Philadelphia, little has been published on the efforts of the organization. This report focuses on evaluating utilization of JeffHOPE's committee services to characterize the impact of the program on unhoused people in Philadelphia.

Methods

A retrospective chart review was performed on patients seen at the Our Brothers Place (OBP) Clinic during January through November 2019 and all 5 clinic sites January through March 2020. A survey was also performed at OBP, where the primary author oversaw collection of patient

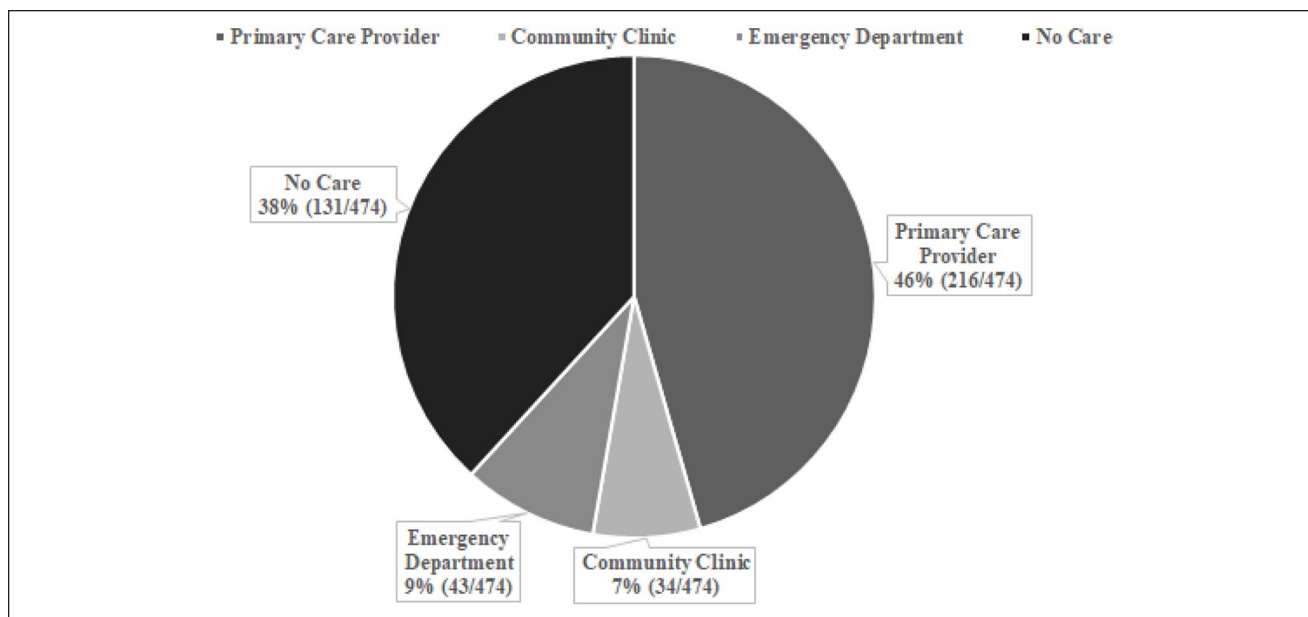


Figure 1. Responses to survey conducted at OBP clinic in 2019 asking participants where they would have gotten medical care for their current chief complaint if JeffHOPE was not available.

information and administered the survey. The 2019 chart review data consisted of chief complaints and specific services utilized. The survey consisted of demographic questions (age and race), insurance status, and where patients would have sought care on the date of the survey if not at JeffHOPE. Patients could select from: Primary Care Provider (PCP), Emergency Department (ED), Community Clinic, or No Care. The authors were interested in investigating if JeffHOPE was uniquely addressing patient needs not able to be met elsewhere, or if it was inadvertently replacing patients' primary care providers, which is not a goal of the organization. The 2019 chart review data was organized and analyzed using Research Electronic Data Capture (REDCap) and the survey data was organized using Microsoft Excel.

Data collected during January 1st through March 31st 2020, prior to clinic closure due to the COVID-19 pandemic, was available for review from all 5 clinic sites. Due to limited funding for EMR infrastructure and research, each clinic site utilized a free EMR in differing ways, so the data reviewed in this portion of the study consisted only of which committees patients utilized, without demographic data. Patients across all clinics could see multiple committees depending on triage screening and patient request. The scope of practice of each committee is described in Table 2. Committee members documented when they felt services outside their scope were warranted, and additional committee members would see the patient. For the patient complaints of symptomatic cold relief and headache, Pharmacy would screen patients for needing additional medical

evaluation (Supplemental Figure 1). If the patient answered "Yes" to any question, they were evaluated by a medical team instead of only by the Pharmacy committee. Frequency tables were used to organize this data using SAS 9.4 (SAS Institute) and REDCap. This study was approved by the Institutional Review Board of Thomas Jefferson University.

Results

From January 24th through November 14th 2019, OBP served 720 patients. The average age of the patients was 54.1 ± 11.6 years. About 58.8% of patients identified as African American, 29.0% of patients identified as Caucasian, and 4.4% identified as Hispanic. About 94.1% of patients reported having health insurance. Of those who responded to the question about alternative places for care ($n=474$), 45.6% (216/474) patients said they would have visited their PCP and 38.2% (181/474) responded they would have not received care at all. About 9.1% (43/474) reported they would have gone to the ED and 7.2% (34/474) reported they would have gone to another free community clinic (Figure 1). Of medically-related (not social needs) chief complaints ($n=301$), the most common included Cold Relief (25.6%, 77/301), Chronic Pain (19.9%, 60/301), and needing Vitamins (17.9%, 54/301) (Table 3).

At OBP in 2019, 19.6% (141/720) of total patients utilized the Advocacy committee. The most common need was making primary care appointments (58.2%, 82/141). A small percentage of patients required assistance with health insurance (9.9%, 14/141) or obtaining dental care (6.4%,

Table 3. Descriptive Data of Services Provided at OBP in 2019.

	Patients at OBP (n=720)
Medical team	9.2% (66/720)
Chief complaint	
Headache	2.3% (7/301)
Respiratory complaint	7.6% (23/301)
Chest pain	1.3% (4/301)
Abdominal pain	2.0% (6/301)
Chronic pain	19.9% (60/301)
Diabetic exacerbation	0.7% (2/301)
Vitamins	17.9% (54/301)
Soft tissue infection	8.0% (24/301)
Cold relief	25.6% (77/301)
Acute heart failure exacerbation	0.7% (2/301)
Psychiatric	1.7% (5/301)
Other	18.9% (57/301)
Advocacy	19.6% (141/720)
Primary care appointment	58.2% (82/141)
Health insurance	9.9% (14/141)
Government benefits	2.1% (3/141)
Eye care access	2.1% (3/141)
Dental care access	6.4% (9/141)
Other	17.0% (24/141)
Education	24.6% (177/720)
Smoking cessation	53.1% (94/177)
Hypertension education	20.9% (37/177)
Anxiety/depression counseling	21.5% (38/177)
Other	6.2% (11/177)
Procedures	24.2% (174/720)
Blood glucose testing	71.3% (124/174)
Wound care	18.4% (32/174)
Blood draw	8.1% (14/174)
Urine analysis	5.2% (9/174)
Nail care	3.5% (6/174)
Other	2.3% (4/174)
Screening	8.9% (64/720)
HIV	71.9% (46/64)
Hepatitis C	60.9% (39/64)
Hepatitis B	51.6% (33/64)
Syphilis	46.9% (30/64)
Gonorrhea/Chlamydia	50.0% (32/64)
Pharmacy	35.6% (256/720)

9/141). About 24.6% (177/720) of patients utilized the Education committee. Smoking cessation (53.1%, 94/177) was the most utilized service, followed by Anxiety/Depression counseling (21.5%, 38/177) and Hypertension education (20.9%, 37/177). The Procedures committee served 24.2% (174/720) of patients. Blood glucose measurements (71.3%, 124/174), wound care (18.4%, 32/174), and blood draws (8.1%, 14/174) were the most common

services. About 8.9% (64/720) of patients utilized the Screening committee services. Patients were tested for the following infectious diseases: HIV (71.9%, 46/64), Hepatitis C (60.9%, 39/64), Hepatitis B (51.6%, 33/64), Gonorrhea/Chlamydia (50%, 32/64), and Syphilis (46.9%, 30/64). Pharmacy committee served 35.6% (256/720) of patients, often for symptomatic cold relief, pain related complaints, and vitamin distribution.

From January 1st through March 31st 2020, the total number of patient encounters at all 5 JeffHOPE clinic sites was 582. At ACTS (n=112), the pharmacy committee was the most utilized service, representing 43.8% (49/112) of total encounters at this site, followed by the medical team (33%, 37/112), and education committee (15.2%, 17/112). At ES (n=26), the medical team was the most utilized (65%, 17/26), followed by the screening (50%, 13/26), and pharmacy (46.2%, 12/26) committees. At OBP (n=271), the pharmacy committee was the most utilized, (41.7%, 113/271), followed by the procedures (39.5%, 113/271), and education (19.5%, 53/271) committees. At PPP (n=44), the medical team was the most utilized service (65.9%, 29/44), followed by the advocacy committee (43.2%, 19/44). The pharmacy and procedures committees were utilized with the same frequency (22.7%, 10/44) at PPP. Lastly, at SBRM (n=129), the advocacy committee was the most utilized service (41.9%, 54/129), followed by the pharmacy (32.6%, 42/129) and education committees (27.1%, 35/129) (Figure 2).

Discussion

Like other SRCs, JeffHOPE was established to provide primary-care-related services. Since the expansion of Medicaid in Pennsylvania, this aim has been refined to helping patients obtain insurance and connecting them to long-term primary care, while addressing acute medical needs, and offering social and emotional support.²¹⁻²⁴ JeffHOPE clinics provide valuable services that may decrease ER utilization for non-emergent medical concerns. Perhaps more importantly, they support handoff of patients to long-term sources of primary care and social services, and provide support for improving their health behaviors. Ideally these services help patients to access consistent, preventive care and decrease risk factors for morbidity and mortality related to homelessness.²⁻⁴

Pharmacy and Procedure committees were the most frequently used in combined clinic data. Pharmacy committee offers acute interventions for straightforward medical complaints such as colds or musculoskeletal pain, and address patients' inability to afford over the counter medications at community pharmacies. Blood glucose testing is a major service offered by the Procedures committee for patients whom JeffHOPE was a major source of support and

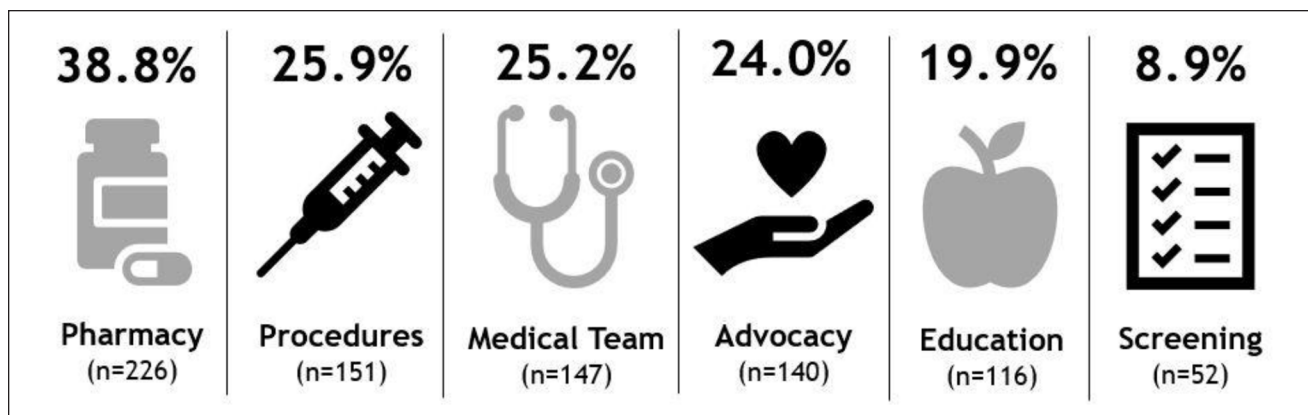


Figure 2. January through March 2020 combined data from retrospective chart review showing the percentage of the total number of encounters conducted by each committee, across all 5 clinics.

education in management of diabetes. The management of these conditions at SRCs can decrease ER utilization while familiarizing patients with the clinic as a resource for addressing other health and social needs.

While Advocacy services were the most frequently utilized only at SBRM, they are essential in accomplishing JeffHOPE's mission to connect patients to community resources. Applying for benefits such as Medicaid and Food Stamps, or finding PCPs and long-term housing are challenging tasks for patients, and community social workers are frequently burdened with a high volume of clients. Therefore, SRCs such as JeffHOPE can help to increase a community's pool of people with knowledge of social services working to support underserved patients. Additionally, SRCs can contribute to communicable disease surveillance in their at-risk patients, as has been accomplished by the JeffHOPE Screening committee with the identification of a significant portion of new Hepatitis C cases in the homeless population of Philadelphia.²⁵

The findings of this study are valuable for informing the ongoing efforts of JeffHOPE and should be considered by other SRCs. Given that the survey administered at OBP showed that a portion of patients were seeking care at JeffHOPE as an alternative to a PCP, the organization must direct efforts toward tracking which patients access formal primary care services. People experiencing homelessness face a high chronic disease burden, and should be regularly accessing preventive care and chronic disease management from a PCP.² Although the medical teams at JeffHOPE are physician-led, there are multiple limitations on providing the same care offered in formal primary care settings. These limitations include inability to support continuity with a single provider due to scheduling conflicts, lack of a robust EMR that can access prior hospital and ambulatory care encounters, and few lab studies that can be performed on site. Therefore, there are several logistical barriers that, at

present, make JeffHOPE clinics most appropriate for management only of acute medical needs and offering social and emotional support services. JeffHOPE, and other SRCs with similar resource limitations, must aim to be available, approachable, and well-equipped enough that patients will seek their services as an alternative to the ED for non-emergent concerns, but also make it known that there is a boundary between their services and those of a primary care medical home.

This study has several limitations. This is the first attempt to capture large amounts of data across multiple clinic sites. The study team was limited by lack of an efficient EMR that supported clinic flow while allowing data collection. The questionnaire about alternatives to JeffHOPE for care was administered at OBP, a men's only shelter and had a limited response rate, so additional surveys including women and children should be administered. Collecting data on clinic services provided to patients in a manner that would not disrupt workflow, meant that patient descriptors were not available for review in the 2020 data, because protected health information could not be efficiently collected and stored on a free cloud-based system. Due to the COVID-19 pandemic, clinic operations were suspended in March, limiting the amount of data gathered in 2020. To streamline the process of data collection in 2021, JeffHOPE has developed a RedCap survey form with a mobile application platform to improve accessibility for all committee members to record data. Additionally, future Research committee members will be uniformly trained on data collection methods to ensure consistent data is obtained from all clinic sites, providing more opportunities for data-driven improvement of patient care.

Conclusion

Homelessness remains a prevalent issue in the US. SRCs contribute to addressing the healthcare challenges and social

factors causing the high mortality rate in people experiencing homelessness. JeffHOPE continues to provide immediate medical care to patients while also serving to educate and connect them to long-term primary care. The retrospective portion of this study described the services utilized by our patients across 5 clinic sites. The study also attempted to capture the specific needs of patients to improve the services provided. With the implementation of a new research data collection tool, JeffHOPE will expand research operations to demonstrate the efficacy of interventions provided by the organization and, importantly, inform improvements to services to better meet the needs of patients.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: The publication of this article was supported by the Sidney Kimmel Medical College Scholarly Inquiry program.

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Supplemental Material

Supplemental material for this article is available online.

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